

RUSSELL ON MEANING AND DENOTATION:
THE ARGUMENT OF 'ON DENOTING'

By

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**RUSSELL ON MEANING AND DENOTATION:
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ABSTRACT

The aim of the thesis is twofold. Firstly, it is argued (1) that Frege's theory of meaning ('Sinn') and denotation ('Bedeutung') is the first successful non-psychologistic response to what has been called 'the puzzle of identity' and (2) that, where Frege's theory differs most significantly from the theory of meaning and denotation developed by Russell in The Principles of Mathematics and in his unpublished manuscripts on logic of 1903-1905, Russell was right. Secondly, it is shown that Russell was again right when he claimed that the central argument of 'On Denoting' completely discredits both his own and Frege's theory of meaning and denotation. An interpretation of the relevant passage of 'On Denoting' is put forward. The discussion makes evident that it is virtually impossible to disentangle that argument if one ignores his unpublished work on the topic.

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This essay is dedicated to Nicholas Griffin, my supervisor. His intellectual ability is well-known, but his willingness always to help a slow and perplexed supervisee beyond the call of duty may not be.

It is understood that quotations from Russell's unpublished manuscripts in this thesis is for the purpose of this thesis only and that it may not be transferred to any other writing for publication, unless by agreement of the Permissions Committee of the Bertrand Russell Archives, McMaster University.

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ABBREVIATIONS

Works by Russell:

AMR	"An Analysis of Mathematical Reasoning" (1898)
POM	<u>The Principles of Mathematics</u> (1903)
DVD	"Dependent Variables and Denotation" (1903)
PAD	"Points About Denoting" (1903)
MD	"On Meaning and Denotation" (1903-1904)
OF	"On Fundamentals" (1905)
OD	"On Denoting" (1905)
PM	<u>Principia Mathematica</u> (1910)

Works by Frege:

CN	"Conceptual Notation" (1879)
FC	"Function and Concept" (1891)
SM	"On Sense and Meaning" (1892)
CSM	"[Comments on Sense and Meaning]" (1892-1895)
BLA	<u>The Basic Laws of Arithmetic</u> (1893)
RH	"Review of Husserl, <u>Philosophie der Arithmetik I</u> " (1894)
PS	"A Critical Evaluation of Some Points in E. Schröder, <u>Vorlesungen über die Algebra der Logik</u> " (1895)
DM	"Logical Defects in Mathematics" (1898/99-1903)

SN	"On Mr. Schubert's Numbers" (1899)
RT	"Reply to Mr. Thomae's Holiday <u>Causerie</u> " (1906)
IL	"Introduction to Logic" (1906)
LM	"Logic in Mathematics" (1914)
PMC	<u>Philosophical and Mathematical Correspondence</u> (1980)

INTRODUCTION

This is an essay about the rise and fall of the notion of meaning - the notion Frege called 'Sinn' and the closely related notion which Russell referred to as that of a 'denoting concept', a 'denoting meaning' or a 'denoting complex'.¹ A re-evaluation of the reasons for the introduction of the meaning/denotation distinction certainly requires almost as much justification as the more contentious announcement of the distinction's demise. I shall approach the justification for the distinction primarily from the Fregean side of the issue.

Despite the obscurities which mire the exposition in The Principles of Mathematics, it is fairly easy to understand that Russell had grand plans for the distinction 'between a [denoting] concept as such [i.e. a meaning] and what the concept denotes [i.e. the meaning's denotation]' (POM 502). According to him, an analysis of denoting, the 'logical relation' holding between a meaning and its denotation, is the essential element in an explanation of 'the fact that description is possible' (POM 53), and he is convinced that '[t]he whole theory of definition, of identity, of classes, of symbolism, and of the variable is wrapped up in the theory of denoting' (POM 54). Whether or not Russell's plans for the notion of denoting fully came to fruition, there can be no doubt that he was able to show why '[t]he connection of denoting with

¹ In order to avoid an unnecessary - and ultimately confusing - proliferation of technical terms, I shall adopt Russell's rendering of Frege's 'Sinn' and 'Bedeutung' as 'meaning' and 'denotation' respectively (cf. OD 108). The exception to this policy is the title of Frege's 'Ueber Sinn und Bedeutung', for which I shall keep Max Black's translation ('On Sense and Meaning') both because it would be obviously improper to change the article's title and because one of Russell's unpublished manuscripts to be discussed here is entitled 'On Meaning and Denotation'. As for Russell's terminology, I shall make it clear that he uses the three terms interchangeably when I get around to discussing his theory in chapters 2 and 3.

the nature of identity is important, and helps...to solve some rather serious problems' (POM 63). Moreover, in 'On denoting' he presents three puzzles 'which a theory as to denoting ought to be able to solve' (OD 110) - one of which is the puzzle of identity, which he had already discussed on section 64 of POM - and the implication is clear that the theory of meaning and denotation does solve those puzzles. Thus, Russell offers what seems to be an abundance of reasons for accepting the distinction. In chapter 2, we shall see that one of his unpublished papers on the theory of meaning and denotation² provides fresh evidence for an understanding of the obscure but fundamental claims that denoting is a 'logical relation' and that this logical relation is involved in 'the fact that description is possible'. These two claims remained largely unjustified in the Principles, and yet, as we shall see, they are crucial to an understanding of why Russell found the distinction appealing and of why he (rightly) thought that it had been mishandled by Frege. But, despite the obscurities, it does seem easy to understand why Russell thought he needed the distinction.

Not so, as far as Frege is concerned. We know he thought the distinction had promoted 'a thoroughgoing development of my logical views' (BLA 6), because the Begriffsschrift notion of a 'judgeable content'³ 'has now split for me into what I call "thought" and "truth-value", as a consequence of distinguishing between [meaning] and denotation of a sign' (BLA 6-7). 'How much simpler and sharper everything becomes by the introduction of truth-values', he claimed, 'only detailed acquaintance with [The Basic Laws] can show' (BLA 7). But he also

² All of his unpublished papers mentioned in this essay will appear in the forthcoming vol. 4 of The Collected Papers of Bertrand Russell. The copyright for Russell's unpublished manuscripts is a property of The Bertrand Russell Archives, McMaster University.

³ This is Baker's and Hacker's rendering of Frege's 'beurtheilbarer Inhalt'.

claimed that he did 'not fail to see that [the view according to which a proposition has both a meaning and a denotation] may at first seem arbitrary and artificial, and that it would be desirable to establish my view by going further into the matter' (FC 145n). This is exactly what he attempted in 'On Sense and Meaning'. The problem we are up against in chapter 1 is that Frege's one piece of evidence for introducing the meaning/denotation distinction - the single piece of evidence for the distinction produced, not only in that paper, but anywhere in the whole Fregean corpus - was that the distinction provides a solution to the puzzle of identity, a puzzle to which, however, he thought he already had a solution in Begriffsschrift.⁴ Thus, the question we tackle in chapter 1 is: why was the earlier solution to the puzzle unsatisfactory? There does not seem to be a persuasive answer in 'On Sense and Meaning'. The discussion of this question in chapter 1 - which is what I primarily have in mind when I propose to examine the rise of the notion of meaning - aims to show, first, that the view of identity statements from which the Begriffsschrift solution to the puzzle arises belongs to a tradition which can be traced back to Locke in modern times and which, chiefly through Lotze's work, seems to have gained universal acceptance in the last quarter of the nineteenth century; and second, that the earlier solution to the puzzle was indeed hopelessly flawed and that there is some textual evidence, other than the claims of 'On Sense and Meaning', for believing that Frege knew it.

⁴ In their zeal to remind us that Frege's primary concern in dealing with the meaning/denotation distinction was to identify the two truth-values as the denotations of propositions, not to lay down the cornerstone of the 'philosophy of language' of Dummettian fame, Baker and Hacker have been themselves misleading by minimizing the importance of the puzzle of identity to Frege (cf. Baker and Hacker, pp. 282-7). There should be no question that he expected the distinction to be found plausible solely on account of its providing a solution to the puzzle. I cannot believe that Baker and Hacker would disagree, but the polemical concerns in their exposition may have caused some confusion on this point.

But this is, ultimately, a story of failure - indeed, a story of Fregean failure. In 'On Denoting', Russell claimed that his new 'theory of denoting' (OD 105) - a theory which he thought might be found 'somewhat incredible' (OD 107) and dismissed out of hand 'on account of its apparently excessive complication' (OD 119) - was built upon the ashes of both Frege's theory of meaning and denotation and his own, which, as he rightly observed, 'is very nearly the same as Frege's' (OD 104n). This essay's raison d'être is to show that the central argument of 'On Denoting' does in fact seem to prove, as Russell claimed, 'that the whole distinction of meaning and denotation has been wrongly conceived' (OD 113). If I am successful, it should be clear from my reconstruction of the argument in chapter 3 that there is absolutely no basis for denying that Frege's theory is as ravaged by the argument as Russell's own earlier theory. Russell's argument is indeed as powerful as he thought it was: as we shall see, it holds against any theory in which a distinction of meaning and denotation satisfies the following two conditions: firstly, the meaning of an expression is conceived in such a way that, when the meaning is expressed, what we talk about is the expression's denotation; secondly, the relation of the meaning to the denotation is many-one, that is, for any given denotation, there are more meanings than one that denote it. There will be no doubt that in Frege's theory (and in Russell's of the Principles) the distinction of meaning and denotation satisfies these two conditions. If I am right about the argument, the time has come to acknowledge its importance in the history of philosophical semantics.

After many years of complete neglect, the market has been flooded with attempts to

disentangle the central argument of 'On Denoting'.⁵ This, of course, is both a tribute to the paper's importance and evidence of its rhetorical bankruptcy. On behalf of my own interpretation, I should note that, to my knowledge, this is the only interpretation which satisfies two conditions which I deem necessary for success in such an enterprise. First, any minimally plausible reading of the argument should take into account Russell's unpublished work on the theory of meaning and denotation, which has been available to researchers at The Bertrand Russell Archives (McMaster University) for more than twenty years. In particular, it must not be ignored that the argument was developed in five paragraphs of 'On Fundamentals', an unpublished manuscript '[b]egun June 7' (OF 1), 1905, on the first page of which Russell wrote: 'Pp. 18ff. contain the reasons for the new theory of denoting'. On page 18 of that paper, he started a series of 39 numbered paragraphs the last five of which contain what would turn out to be a draft of the relevant passage of 'On Denoting'. (In paragraph 40 of OF, what became known as 'the theory of descriptions' emerges.)⁶ It has been universally acknowledged that Russell's unpublished manuscripts on logic are exceedingly difficult, but the effort to understand them is a requirement on any serious attempt to interpret the claims of 'On

⁵ Some of the best-known interpretation have been effectively criticized by Blackburn and Code.

⁶ Blackburn's and Code's ingenious interpretation fails to satisfy this condition. I cannot here dispute their claims in detail, but I believe my reader will notice that, if I am right, their reading is vitiated at the outset by their failure to understand what Russell meant when he stated that 'the relation of the meaning to the denotation is not merely linguistic through the phrase' (OD 111). Nevertheless, both their paper and their exchange with Geach (in which they surprisingly get nailed for their mistaken views on what undoubtedly was for Russell a very important distinction between proper names and denoting phrases) are still among the most important papers on the topic in my opinion, despite the fact that I find their interpretation radically flawed. See Blackburn and Code (1978a, 1978b and 1979) and Geach (1978, and 1979).

Denoting'. As chapters 2 and 3 should show, my interpretation of the argument is based on my understanding of what seems to me a consistent set of Russellian views which includes the series of 39 paragraphs from 'On Fundamentals' as well as a large number of passages from some other of his unpublished manuscripts for the period 1903-1905 and from The Principles of Mathematics. I have proceeded on the hope that the reader will have a clear grasp of this consistent set of Russellian views as defined by the passages actually quoted and will then be able to identify as belonging to the set a number of other passages which I have not had occasion to discuss here. At all events, regardless of whether my interpretation should be considered satisfactory, if an understanding of the passages discussed here should be found indispensable for a correct understanding of the argument and of why Russell thought Frege had mishandled the meaning/denotation distinction, the effort put into this project will have been sufficiently rewarded.

The second requirement for a plausible interpretation is that it should account for each and every claim made in the relevant passage of 'On Denoting'. The sheer abundance of published and unpublished material which can be used to clarify the terminology involved, plus the circumstantial but overwhelming evidence of Russell's lucidity and sense of purpose, should suffice to disqualify any interpretation on which a given claim is either explicitly dismissed as irrelevant or unintelligible or glossed over on promises of large-scale clarification. We need to understand each and every claim and how they are supposed to fit together!⁷ This is not, of course, to suggest that we cannot find fault with the exposition in OD. The paper suffers from

⁷ This requirement would seem to disqualify both Hylton's and Wahl's interpretations, although these are two interpretations which have benefited from the use of Russell's unpublished material. I shall take a close look at them in the Conclusion.

some horrible problems of exposition. For instance, it seems obvious that the passage in which the three puzzles are presented ('A logical theory may...seems equally impossible', pp. 109-11) has been painfully misplaced: it should have been inserted before the paragraph where he launches the attack on the theory of meaning and denotation on page 108 ('The above breach of the law of contradiction...') in order not to disrupt the discussion of the theory. This would have prevented the misperception that the argument may not concern Frege.⁸ Problems of this kind are not uncommon in the Russellian text. But the reader of Russell should know that the obscurities in his text are typically due to omission, compression, abridgement. His claims may be false and his arguments invalid, but this is not a writer whose claims can be plausibly deemed irrelevant or nonsensical. If need be, the commentator must, therefore, either admit to being unable to account for a given claim or else explain why Russell's claims are believed to be inconsistent.

Obviously, the above two conditions will not suffice to rule out some consistent but lunatic interpretation. Such a risk is slightly diminished if we further demand observance of the principle of charity: interpretations on which the argument 'seems to prove that the whole distinction of meaning and denotation has been wrongly conceived' are to be preferred. This essay offers one such interpretation.

⁸ Both Chrystine E. Cassin's and Michael Pakaluk's attempts to understand the relevant passage of 'On Denoting' have suffered from such a misperception.

CHAPTER ONE

'WE MUST DISTINGUISH BETWEEN [MEANING] AND [DENOTATION]'⁹

According to Frege, the notion of meaning should be accepted because it provides a solution to what has often been called 'the puzzle of identity' (cf. SM 157-158). The puzzle arises from our inability to explain why a cognitively non-trivial statement of the form $\lceil a=b \rceil$ can be obtained from a trivial statement of the form $\lceil a=a \rceil$ by mere substitution of co-referential singular terms (signs, names, referring expressions). The problem can be presented as follows. Assume that the meaning¹⁰ of a (meaningful) singular term is exhausted by the object it stands for, or denotes. (I shall refer to this as 'the puzzle's assumption'.¹¹) Now, suppose that you know the object which is in fact denoted both by 'the morning star' and by 'the evening star', and that, for each of these singular terms taken severally, the object it denotes is known to you as its denotation. You will now find that you still may not know that 'The

⁹ Frege, 'Function and Concept', p. 145.

¹⁰ This is, of course, a pre-theoretical notion of meaning. It has the same role in the discussion as Nathan Salmon's equally pre-theoretical notion of 'cognitive information content', his variant for Frege's 'cognitive value'. See Salmon, p. 11.

¹¹ It is true that, as C.J.F. Williams (p. 1) has noted, the puzzle of identity 'proceeds from...the assumption that a statement of identity asserts a relation'. I have not made this assumption explicit in my formulation of the puzzle because it was not put into question by any of those with whom we shall be concerned in this essay. The reader is, however, cautioned against Williams' formulation of the puzzle. From the fact that a statement of identity that asserts a relation between a thing and itself must be necessarily true, it obviously does not follow, as he seems to imply, that it must be 'the most trivial of tautologies' (p. 1). Yet, without the tacit conflation between triviality and necessary truth, Williams has no puzzle. In fact, the distinction between necessity and contingency, which is conspicuous in his account, seems to have no role whatsoever in a correct formulation of the puzzle. The puzzle seems to be purely epistemic: it has nothing to do with what is or is not contingent, but only with the conditions for a priori knowledge.

morning star is the same as the evening star' is a true proposition. But you supposedly know everything that is required for you to have knowledge of that proposition's truth! In other words, if the meaning of the singular terms is exhausted by their denotations and one knows both the denotation of each term and the meaning of the identity statement, it would seem that one ought to know that the identity statement is true. But one may not.¹²

The puzzle has become associated with Frege's name, and has even been called 'Frege's puzzle' by some¹³, though it is not in fact a Fregean discovery. Some version of the problem

¹² Salmon has rashly put forward the provocative thesis according to which the puzzle of identity 'pace Frege...has virtually nothing to do with identity' (p. 12). He claims that 'formally analogous puzzles...arise with certain constructions not involving the identity predicate or the identity relation' (p. 12). For example, from both the puzzle's assumption and the assumption that 'Scott' and 'the author of Waverley' have the same denotation, we conclude that, if George IV wished to know whether Scott had written Waverley, then he wished to know whether the author of Waverley had written Waverley - which is something not even George IV can be accused of. That the examples he offers do not include identity seems very doubtful. But whether Salmon is right or wrong in believing that there are other puzzles besides that of identity which have the same form and which 'pose the very same set of questions and philosophical issues in the very same way', he would surely have to concede that the puzzle of identity itself involves identity.

¹³ Salmon does seem to think the puzzle is originally Frege's. It is not. It is a well-known fact that the theory of meaning and denotation ostensibly arises from Frege's dissatisfaction with the existing answer to the problem at the time he wrote 'On Sense and Meaning'. Frege is explicit about that: the aim of the article is to justify the retraction of a view on the problem he used to hold and to defend the proposed distinction between meaning and denotation, especially as applied to propositions, which is where he expects it to meet with greater resistance. Nowhere in the whole Fregean corpus does he claim to have discovered the puzzle. Granted, Frege does seem to have been the first to have formulated the problem clearly, and to the extent that he did do so, it is natural to have him as the primary source for the problem. But it remains that the puzzle is not Frege's as, for instance, Russell's Paradox is Russell's. Even if Salmon's label is to be deemed an innocuous anachronism, the anachronism should be all the more evident to him when he says that 'Mill solved Frege's Puzzle' (p. 162)!

must have been known to Locke. As I have suggested elsewhere¹⁴, awareness of the puzzle must be assumed if one is to be able to explain (in an enlightening way) some very evident discrepancies in his account of identity statements on chapter eight of Book IV of the Essay.

Locke's initial characterization of 'identical propositions' is that they are those 'wherein the same Term importing the same Idea, is affirmed of it self' (IV.viii.3), and he offers, by way of illustration, a number of instances of the pattern $\lceil a=a \rceil$, 'A law is a law', 'A soul is a soul', etc. Instances of such a pattern belong to the more inclusive class of what he calls 'trifling propositions'. A few paragraphs later, however, in his concluding remarks to the chapter (paragraphs 12 and 13), he seems inadvertently to extend the characterization of identicals to cover instances of the form $\lceil a=b \rceil$, such as 'Parsimony is frugality', 'Gratitude is justice' (i.e. non-trivial identity statements). To Locke's credit, this is no superficial discrepancy. As it turns out, his unwillingness to distinguish bona fide identicals from non-trivially true identity statements can be justified by his commitment to an idealist version of the puzzle's assumption - the view that the meaning of a sign is exhausted by the idea it stand for.¹⁵ Such a commitment is at work in a remark that nicely captures the essence of his conception of a trifling proposition: 'he trifles with Words', says Locke, 'who makes such a Proposition, which when it is made, contains no more than one of the Terms does, and which a Man was supposed to know before'

¹⁴ See deAlmeida. My concern there was to show that a justification can be found within Locke's conceptual framework for his notion of a 'trifling proposition'. But such a justification, I argue in that paper, does not allow him consistently to accommodate his response to what was in fact the puzzle of identity. The paper was not, however, intended specifically as offering a discussion of his reaction to the puzzle.

¹⁵ In chapter 2, I shall discuss some of the complications arising for a representative idealist such as Locke from his commitment to the puzzle's assumption.

(IV.viii.7). True identity statements, then, come readily to mind. If an instance of $\lceil a=b \rceil$ is true, that is so because the value of \underline{a} 'contains no more' than - stands for the same idea as - the value of \underline{b} does, and therefore, on present showing, there is no theoretical reason to distinguish that instance of $\lceil a=b \rceil$ from an instance of $\lceil a=a \rceil$ ¹⁶. Yet, Locke fully understands that true propositions of the form $\lceil a=b \rceil$ cannot plausibly be deemed trifling unless one can explain how, at first sight, they do not appear to be so. How, then, is one to reconcile these opposing forces? It seems clear that Locke is here engaging the puzzle of identity.

Locke apparently found no difficulty extricating himself from the tension created by a puzzle he never took the trouble to formulate in words. An instance of $\lceil a=b \rceil$, he concludes, only seems to say something about what the values of \underline{a} and \underline{b} denote. In fact, because both terms denote the same idea (if the proposition is true), and 'since no...Idea can be the same with any other but it self, when its...Name is affirmed of any other Term, it can signify no more but this, that it may, or ought to be called by that Name; or that these two Names signify the same Idea' (IV.viii.12). Therefore, he trifles with words, who, pretending to convey 'real knowledge', knowledge about the denotations of terms, produces no more than merely 'verbal knowledge', since he makes statements which 'contain nothing in them, but the Use and Application of...Signs' (IV.viii.13). For, '[h]owever specious [those identity statements] may at first sight seem, yet when we come to press them, and examine nicely what they contain, we shall find, that it all amounts to nothing, but the signification of [their] Terms' (IV.viii.12).

¹⁶ Although Locke does not consider explicitly the case of identicals containing singular terms, the general characterization of identicals as trifling propositions - propositions in which both subject and predicate terms stand for the same idea, as we have just seen - makes it clear that his view on the nature of identicals is sufficiently general for our purposes.

What we call 'a non-trivially true identity statement' is, on the Lockean picture, an expression of this degenerate form of knowledge, 'verbal knowledge': 'there our Thoughts stick wholly in Sounds, and are able to attain no real Truth or Falshood' (IV.viii.13).

It is very hard indeed to overestimate the impact of this Lockean doctrine. By mid-nineteenth century, this Lockean account of non-trivial identity statements already seemed to have become a philosophical commonplace. Thus it reappears, with an aura of settled truth, in J.S. Mill's A System of Logic, perhaps the most widely read logical treatise of its time. Mill's discussion of his 'propositions merely verbal' (chapter VI of Book I) is distinctively Lockean in all its essentials. More to the point, when it comes to accounting for 'that limited and unimportant class [of propositions] in which both the predicate and the subject are proper names' (p. 91), he confidently asserts that 'all the signification conveyed is, that both the names are marks for the same object'. It stands out clearly from his dismissive treatment of such propositions that Mill's commitment to the view that all there is to a proper name's meaning is the object it denotes does warrant his unproblematic espousal of the Lockean view.¹⁷

A number of other influential philosophers who were involved with themes in the foundations of logic exemplify the pattern. In fact, because nobody - before Frege - seemed to have felt tempted to question the view that the meaning of a sign (a singular term) is only what

¹⁷ Two cautionary remarks are called for. First, I have pretty much ignored Mill's hint to the effect that this was a doctrine he learned from Hobbes - 'a great writer', according to him, 'and a great thinker for his time, but inferior to Locke not only in sober judgement but even in profundity and original genius' (p. 112n). Mill does make that suggestion, but he does not positively identify Hobbes as his own source for the doctrine. Moreover, the apparent acknowledgment comes from a passage in which Hobbes' semantic views are on the whole ridiculed. Secondly, it should be kept in mind that the distinction between denotation and connotation was not conceived as applying to proper names, including 'abstract names' such as 'whiteness'.

it stand for, anyone who cared at all to inquire into the question of non-trivial identity statements was bound to come up with a variation on the theme of verbal knowledge. Lotze, for one, writing in the early 1870s, may have given the Lockean view a touch of refinement by pointing out that instances of the form $\lceil a=b \rceil$ must be theoretically distinguished from the genuinely trifling instances of the principle of identity, $\lceil a=a \rceil$, if we are to be able to settle 'the question of the discovery of mathematical truth' (p. 505). This, of course, was to be accomplished within the purview of the puzzle's assumption, which he seems to have never dreamt of challenging. But whereas Mill regarded a proposition such as 'Tully is Cicero' as one of a 'limited and unimportant class', apparently endorsing the Lockean disdain for all expressions of verbal knowledge, Lotze was quick to acknowledge, in 'that very different application of the principle [of identity], by which two...quantities compared are pronounced equal to each other', a 'fruitful method' of discovery (p. 506). 'If I am answered', he says, 'that [in an equation] the quantitative values of the two different terms in the comparison have not been made identical as an after result of [an] operation [such as the one exemplified in ' $\sqrt{4}=2$ ', whereby a given quantity is seen to be identical to some other quantity] but were so always, and that the identity was merely concealed under the different forms in which the two were originally presented, or that the one form of expression merely sets the problem of which the other gives the solution, - such a reply expresses precisely my own view' (p. 506). He then notes what sets his position apart from Locke's and Mill's: 'only that [this reply] takes as self-evident that which I cannot regard as being such' (*ibid.*). Those who have inadvertently spoken as if any proposition in which identity is claimed were a mere instance of the principle of identity have failed to notice that 'the value of the entire mathematical process depends...upon the fact that different paths

have [in a non-trivial equation] led to the same goal, that is to say, that it has been found possible to affirm the equality of different things' (p. 506). 'Everything turns therefore on our right to affirm identity of the different, and this right does not follow, at all events as an immediate consequence, from the purport of the law of identity' (p. 507). And, upon obtaining this result, Lotze is prepared to follow Kant in his account of the grounds for 'our right to affirm identity of the different', of how it is 'found possible' to affirm identity of the different. 'It is not then the bare logical principle of Identity', he finally explains, 'but the perception of quantity, the peculiar nature of which makes it possible to frame a countless number of propositions in content identical yet in form synthetic, which at once guarantees the truth of arithmetical reasoning and is the source of its fruitfulness' (p. 509).

The above account of non-trivial identity statements immediately prompts two considerations which are relevant to our concerns. First, it clearly is either objectionably incomplete or inconsistent. On the one hand, Lotze seems to have slammed the door on non-mathematical statements such as Mill's 'Tully is Cicero', for his explanation turns on 'the peculiar nature' of mathematical ideas, or of the perception of such ideas. Yet, he had initially made the sweeping promise to account for 'the nature of judgments synthetic in form but identical in content' (p. 507). Is he now - or was he ever - prepared to contend that the only judgments which meet such a description are mathematical judgments, other instances of the form $\lceil a=b \rceil$ requiring independent explanation? Nothing in the text suggests he is. On the other hand, if he is, as it seems, addressing the problem of non-trivial identity statements in general (including non-mathematical examples), it cannot be the peculiar nature of mathematical ideas 'which makes it possible to frame a countless number of propositions in content identical

yet in form synthetic'.

Secondly, and more significantly, we have to ask: just what are the 'different things' the equality of which 'it has been found possible to affirm' in the case of non-trivial identity statements? If we press this question, we readily see that Lotze is firmly placed within the tradition of verbal knowledge. Obviously, what hides behind this term-of-art, 'the different', simply are 'the different forms of expression' under which the identity of 'the one and the same self-identical value' (p. 506) was 'concealed'. And what is affirmed in a non-trivial equation can be nothing other than that the two terms (signs, names, 'forms') flanking the equals sign are identical in content. We can now see clearly that this kind of approach to the problem of non-trivial identity statements - the problem of 'judgments synthetic in form but identical in content' - has led to a distinction between identity simpliciter and 'identity of content' - the latter, following Whitehead (as will shortly be seen), I shall call 'equivalence'. Equivalence is a relation which has been tacitly defined by Lotze for 'forms of expression' in order to account for the non-triviality of some identity statements: two different forms (signs, names) are equivalent if and only if they share their content (i.e. their denotation). Thus a judgment is a judgment of equivalence if and only if it is of the form $\lceil a=b \rceil$; judgments of the form $\lceil a=a \rceil$ being regarded as instances of the principle of identity. Apparently unaware of the fact that he is introducing a distinction between identity and equivalence, Lotze misleadingly asserts that judgments of equivalence arise from a different 'application' of the principle of identity. But, plainly, the distinction between the trivial and the non-trivial applications of the principle just is a distinction between the two notions involved in each 'application'. It is important to realize that the distinction between identity and equivalence emerges in Lotze's work as a natural

development of the 'verbal knowledge' view of non-trivial identity statements. Indeed, it may even seem misleading to speak of a 'natural development': Lotze's distinction organically belongs to the 'verbal knowledge' view.

The need for dispensing with the notion of identity altogether was felt by two influential Lotze readers, Bradley and Bosanquet, from an even broader epistemological perspective. Their contribution to a debate about the puzzle of identity is, perhaps, slightly more elliptical. In their works, the puzzle is automatically bypassed (and is not, to my knowledge, explicitly discussed) by their finding the very notion of identity unintelligible. For both of them, that seems to follow rather smoothly from the primacy given to the fundamental epistemological principle according to which, in Bradley's words, 'in every judgment of every kind a synthesis is asserted' (p. 142). On such a principle, the production of (true) judgments of identity is precluded by a shortage of the materials upon which the mind is supposed to perform the synthesizing operation which is characteristic of judgment, given that the phenomenal counterparts of the subject and predicate terms will be the same item. But they seem to have felt that this line of argument proves too much: the same conceptual move that excludes judgments of identity apparently excludes all analytical judgments, a most undesirable result.¹⁸ The rationale seems to be that, if the niche

¹⁸ I have tried elsewhere to show that Locke, proceeding also from a synthetic conception of judgment (though he would not call it that) found himself bogged down in the same predicament, to which he responded with the notion of verbal knowledge. See deAlmeida 1991. The reason I have not emphasized this point in my discussion of Locke here is that one does not need to fully understand the process by which trifling propositions in general are generated in his epistemology in order to understand that he feels pressured into introducing a distinction within the class of trifling propositions, namely, the distinction between those trifling propositions which express verbal knowledge and those which do not express (propositional) knowledge of any kind, that is, between those identity statements which instantiate the form $\lceil a=b \rceil$ and those which instantiate the form $\lceil a=a \rceil$. To feel so pressured is to be as involved with the puzzle as one needs to be.

of analytical judgments is annihilated, no room is left for purely logical judgments, and the so-called logical laws would be considered as 'unmeaning', in Bradleian idiom, as the most trivial of platitudes. We thus find them hard-pressed to justify the possibility of an analytical judgment such as the logical law of identity, usually represented as 'A is A'. The law cannot assert identity, 'for', as Bradley put it, 'identity without difference is nothing at all' (p. 141). It therefore seems to be a useless tautology' - which, as I understand, is supposed to be what results from a sterile manipulation of words, not from an epistemically relevant mental act. Bosanquet fully concurred: 'If [the law] means that A is A and no more, or is mere A, then it is aggressively untrue, for it denies the synthesis of differences which alone can make a judgment' (p. 207).

Bradley's facile response to the tension originated by coupling a synthetic conception of judgment with his unwillingness to declare the law of identity 'a useless tautology' is one according to which (somehow!) '[the law's] essence is to emphasize sameness in despite of difference' (p. 142-143). Bosanquet, for his part, seems to follow suit in a passage that certainly deserves to be quoted in full:

[W]e can only assign a meaning to the law 'A is A' if we take the repeated A to be not a specification of the identical content, but an abstract symbol of its identity. The law will then mean that, in spite of or in virtue of the differences expressed in a judgment, the content of judgment is a real identity, that is to say, has a pervading unity. It says that there is such a thing as identity in difference, or in other words, there is such a thing as affirmation - synthesis of differences referred to reality - which yet is true, that is to say, does not interfere with (but in fact is indispensable to) identity. (pp. 207-208)

For Bradley and Bosanquet, therefore, relief from direct involvement with the puzzle of identity seems to have been achieved by a none too sober attempt to dispel the perceived triviality of 'a=a', thus blurring the parameters within which the problem arises.

The litany of identity in difference seems to have been well-known to Whitehead, who had been influenced by both Bradley and Lotze¹⁹ and who was very much concerned with the need to explain the 'importance' of non-trivial mathematical equations. Apparently unwilling to tackle that doctrine of 'pure Logic' down to its least accessible metaphysical and epistemological details, he tries to provide his own parochial approach to the problem of non-trivial identity statements by associating two ideas. On the one hand, he claims to have learned from Lotze that '[t]he idea of equivalence must be carefully distinguished from that of mere identity' (pp. 5-6). 'Equivalence', he explains, 'implies non-identity as its general case. Identity may be conceived as a special limiting case of equivalence' (p. 6). On the other hand, drawing on the psychological work of G.F. Stout (p. 3), he would have us believe that mathematical signs are different in nature from signs of other types, such as words. 'In the use of expressive signs' - the kind of signs which constitutes natural language - 'the attention is not fixed on the sign itself but on what it expresses; that is to say it is fixed on the meaning conveyed by the sign'. By contrast, 'it is not always necessary for the attention to dwell on the complete meaning [of a sign] while using [substitutive signs]' - the kind of signs constituting mathematical discourse.²⁰ Bringing these two ideas together, Whitehead claims to be concerned only with 'assertions of equivalence as contained in a calculus [of substitutive signs]'. His answer to the

¹⁹ In addition to these two sources, he also acknowledges his debt to Mill and Jevons on matters of 'pure Logic' (p. x).

²⁰ The distinction between expressive and substitutive signs appears to be wholly based on psychological assumptions, for Whitehead, having made the point about the distribution of attention in the case of substitutive signs, hastens to add that, 'with all this allowance it remains true that language when challenged by criticism refers us to the meaning and not to the natural or conventional properties of its symbols for an explanation of its processes' (p. 3).

question of why such assertions are 'important' is the one we have now come to expect from someone with his philosophical background: '[t]he sole direct statement [conveyed] by an equation such as '2+3=3+2'] is that the two different things 3+2 and 2+3 are in point of number [identical]' (p. 7).²¹

Whitehead's tortured account of non-trivial identity statements evidently raises more questions than it answers. It is not altogether clear whether equivalence has been conceived of in such a way as to apply across the board to all instances of the form ' $a=b$ '. When he speaks of 'assertions of equivalence as contained in a calculus [of substitutive signs]' (my emphasis), does he make room for non-mathematical assertions of equivalence? Would he acquiesce if we were to propose that 'Tully is Cicero' asserts that the two different names 'Tully' and 'Cicero' are 'in point of denotation' identical? As we have seen, Lotze, from whom he claims to have borrowed the notion of equivalence, does seem to have attempted a general explanation of 'the nature of judgments synthetic in form but identical in content'. But if this is so in Whitehead's case, it would seem to pre-empt whatever explanatory role has been assigned to the notion of a substitutive sign - regardless of whether that notion has been ill-conceived or not. The mistake would then relocate to his belief that '[t]his discussion leads us at once to comprehend the essence of a calculus of substitutive signs' (p. 7). At all events, from our standpoint, it does

²¹ The word he uses here is 'equivalent', but this seems to me an obvious slip of the pen. The purpose of his remark is, precisely, to justify the claim of equivalence by specifying an aspect in which identity obtains, namely, 'the fact that both sides [of the equation] represent a common five-ness of number' (p. 7). The situation would, however, become complicated beyond intelligibility unless we take this previous remark with a large pinch of salt: 'the sign = is taken to denote that the signs or groups of signs on either side of it are equivalent, and therefore symbolize things which are so far equivalent' (p. 5). Does equivalence hold as much of the symbolized as it does of the symbols?

not so much matter to find the precise location of Whitehead's weak spots as it does to realize that his work is yet another instance in which the notion of identity seems to succumb to the crushing influence of the 'verbal knowledge' tradition.

But there is, perhaps, no better instance of that than Frege's own Begriffsschrift, ironically enough, one of the most original works in the whole history of logic. Although no reference is given in the text to verify the hypothesis, his notion of 'identity of content' seems to have been derived from Lotze's Logic. Like Lotze, for whom 'the value of the entire mathematical process depends upon...the fact that [in an equation] different paths have led to the same goal', Frege is keenly aware that the view according to which, when two different names are connected in a proposition by a symbol representing identity of content, the proposition 'signifies the circumstance that the two names have the same content...gives the impression, at first, that what we are dealing with pertains merely to the expression and not to the thought' (p. 124). Perhaps Locke and Mill did surrender to such a first impression. But not Lotze and surely not Frege: 'different names for the same content are not always merely an indifferent matter of form; but rather, if they are associated with different modes of determination [of the common content], they concern the very heart of the matter. In this case, the judgment as to identity of content is, in Kant's sense, synthetic' (p. 126).

This is the 'verbal knowledge' view of non-trivial identity statements polished to perfection. There actually seems to be nothing in paragraph eight of Begriffsschrift that we have not already found in connection with Lotze, except for one thing. Amidst the apparent tranquility of Frege's dissertation on identity of content, we find this potentially subversive remark: 'Although symbols are usually only representatives of their contents - so that each

combination [of symbols usually] expresses only a relation between their contents - they at once appear in propria persona as soon as they are combined by the symbol for identity of content, for this signifies the circumstance that the two names have the same content. Thus, with the introduction of a symbol for identity of content, a bifurcation is necessarily introduced into the meaning of every symbol, the same symbols standing at times for their contents, at times for themselves' (CN 124). As we shall shortly see, insurmountable problems are involved in the 'bifurcation'. But, at this point, suffice it to note that Frege seems to have been the only representative of the 'verbal knowledge' tradition to have acknowledged the fact that the notion of equivalence (or 'identity of content') imposes the systematic ambiguity of signs (the 'bifurcation') described in the above passage from Begriffsschrift on anyone who accepts such a notion. This was a genuinely Fregean achievement.

And then we have 'On Sense and Meaning'. There certainly is no need for yet another description of how the meaning/denotation distinction, formally introduced in that article, solves the puzzle of identity. That is a well-known story. What does not seem to be as well-known is why Frege felt compelled to break up with the 'verbal knowledge' tradition by rejecting the solution to the problem advocated in Begriffsschrift. Unlike Russell, who first credited the theory of meaning and denotation with providing a solution to puzzles in which the notion of identity plays no part²², Frege's one piece of evidence for the theory is the puzzle of identity. We are then faced with the question: how is the rejection of the Begriffsschrift solution to the

²² Cf. OD 110-111. Of the three puzzles which, according to him, 'a theory as to denoting ought to be capable to solve', the first is the puzzle of identity. The second puzzle involves the law of excluded middle and the third one arises from negative existentials. Neither is nearly as historically important as the puzzle of identity. This is why I do not discuss them in what follows.

puzzle to be justified?

If we turn to 'On Sense and Meaning' for an answer, it's surprising how little we get. On the face of it, all there is to it is a sudden change of heart. The allegation seems to be that the early view is purely and simply based on a crude misrepresentation of the facts: it fails, he claims, because it does not allow for the expression of 'proper knowledge' (p. 157) by non-trivial identity statements. A proposition of the form $\ulcorner a=b \urcorner$ cannot, after all, express an assertion about the values of \underline{a} and \underline{b} , for what we intend to talk about when we make a statement of that form is supposedly what those values denote, not the values of \underline{a} and \underline{b} themselves. Frege could actually have borrowed Locke's terminology and proclaimed that an instance of $\ulcorner a=b \urcorner$ is expected to convey 'real knowledge', not just 'verbal knowledge'. But it is important to acknowledge the radical nature of the move made in 'On Sense and Meaning'. What Frege is there saying is not just that a (true) statement of the form $\ulcorner a=b \urcorner$ cannot be only about signs, cannot 'pertain merely to the expression' - for this is a thesis of Begriffsschrift. The SM view is that a statement of identity is not at all about signs; that it is a mistake to think that such a statement has anything whatsoever to do with the signs. Isn't it surprising that Frege should now claim to have been mistaken as to what a statement of identity is about? Maybe the early view simply became counterintuitive to him. Maybe his intuitions simply changed. Or maybe he finally realized he had accepted a counterintuitive view on authority to begin with.

This line of explanation may well settle the historical question - the question of why he actually thought he needed an alternative to the early view.²³ But it surely does not settle the

²³ But take notice of the following remark: 'What we apparently want to state by $a=b$ is that the signs or names 'a' and 'b' designate the same thing, so that those signs themselves would be under discussion' (SM 157). This should weaken the case from intuitions

philosophically important question of whether - intuitions aside - the early view was internally doomed, that is, doomed under the pressure of more imposing conceptual difficulties. It is not very easy to see that it was. As I have noted, in the absence of further evidence indicating that the early view was unduly parochial, the issue of non-trivial identity statements should have been a dead issue for Frege. The puzzle of identity had already been solved.

On the historical side - but only on the historical side - it helps to notice that his case against the Begriffsschrift solution in 'On Sense and Meaning' seems founded upon a thorough misrepresentation of his own earlier view. His previous position on the matter was not as frivolous and bizarre as he would now have us believe. As we have seen, the information conveyed by a non-trivial identity statement is not just that the terms flanking the sign for identity of content coincide in what they are signs of. A statement of such a kind had not been conceived as being about an accident of linguistic usage, an accident of human decision. On the Begriffsschrift view, the circumstance that two names have the same content is 'not always merely an indifferent matter of form': 'if they are associated with different modes of determination [of the common content], they concern the very heart of the matter'. The statement is indeed about the names, and it admittedly purports to inform us that those two names are names of the same object, but each name is supposedly 'associated' with a different 'mode of determination'. This presumed 'association' is supposed to have, somehow, a bearing on the information imparted by the statement. Now, of course, just what it is for a 'mode of determination' to be 'associated' with a name is far from clear. Perhaps Frege could have mounted an assault on the early view by pressing this point. But, just as clearly, this is what he

considerably.

was not in a position to do, for the fact that the early view did arise from an attempt to avoid the kind of frivolity he now condemns seems to have been entirely ignored!²⁴ Thus, from a philosophical standpoint, his case against the Begriffsschrift solution does not seem to have had anything more solid than reformed intuitions to hang on to. In fact, given his apparent misunderstanding of the early view, it would now seem that the theory of meaning and denotation may have actually arisen from an undignified mistake, rather than from any perceived improvement in the department of intuitions.

On the philosophical side, however, the situation brightens up considerably if we go look for evidence elsewhere in the Fregean corpus. In a letter to Frege, late in 1896, Peano complains that 'there is a great divergence of opinions among authors about the concept of equality; and a study of that question would be very useful' (PMC 119). (Peano adds rather naively: 'especially if it was conducted with the aid of symbols rather than in words'.) Frege's response to this is remarkable for its lucidity and firmness. It reveals, I think, as deep an understanding of the problems introduced by the puzzle - especially the temptation to dispense with the notion of identity - as one is likely to find. I must quote from his reply to Peano at some length.

As far as the equals sign is concerned, your remark that different authors have different opinions about its meaning leads to considerations that are both surprising and not very favourable to mathematics. If we consider that very many mathematical propositions present themselves as equations, and if we place this against your remark, we get the result that mathematicians agree indeed on

²⁴ Moreover, it is hard to see that he could have turned against the Begriffsschrift notion of an associated 'mode of determination' and still retained the later view according to which a 'mode of presentation' of the denotation is 'contained' in the meaning of a sign (cf. SM 158). For an instructive discussion of the Fregean notion of a 'mode of presentation', see Baker and Hacker, pp. 300-314.

the external form of their propositions but not on the thoughts they attach to them, and these are surely what is essential. What one mathematician proves is not the same as what another understands by the same sign. We only seem to have a large common store of mathematical truths. This is surely an intolerable situation which must be ended as quickly as possible. As far as I am concerned, I take identity, complete coincidence, to be the meaning of the equals sign... What stands in the way of a general acceptance of this view is frequently the following objection [emphasis added]: it is thought that the whole content of arithmetic would then reduce to the principle of identity, $a=a$, and that there would be nothing more than boring instances of this boring principle. If this were true, mathematics would indeed have a very meagre content. But the situation is surely somewhat different. (PMC 126)

There follows a convoluted, somewhat elliptical exposition of the puzzle and of how it is solved by the meaning/denotation distinction at the end of which he concludes: 'So nothing stands in the way of my using the equals sign as a sign of identity' (PMC 128).

Clearly, Frege was well-aware of the fact that the Begriffsschrift solution was based on the view that there cannot be non-trivial statements of identity which are not purely verbal. In the passage quoted above, the puzzle is explicitly claimed to have been the obstacle to a general acceptance of the view that the equals sign denotes identity in non-trivial equations. And the confusion as to how that sign should be interpreted really seemed to have been endemic among the mathematicians and philosophers of his time. We have seen how Frege himself was at one time held captive by the prevailing ideology of equivalence, or identity of content. After the theory of meaning and denotation is adopted - but not, to my knowledge, before that - he makes a habit of taking to task those of his contemporaries who, knowingly or otherwise, espoused views that favoured equivalence over identity as a way around the difficulties involving identity statements. Thus, in response to an inquiry by Paul Linke, in which Linke submits the view according to which the equals sign in mathematics should be interpreted as signifying, not identity, but 'equality' - where '[e]quality is a special case of difference and means identity of

several different objects in a certain respect or with reference to an (ideal) characteristic mark'

(PMC 95) - Frege replies:

I should speak of 'agreement' instead of 'identity' here; for properly speaking different objects cannot be identical at all, though they can agree in some respect, e.g., in colour. If equality is not identity but agreement in some respect, then the word 'equal' is almost without content, unless one adds to it in what respect the agreement is meant; for if two objects are given, it will almost always be possible to specify some respect in which they agree. Most mathematicians probably think that the equals sign does not mean identity. But asked what it means, or in what respect what is designated on the left- and right-hand sides [of an equation] agrees, they would probably give very different answers. (PMC 95-96)

The point is driven home in a much more irritable mood in his critique of Thomae (RT 344-345). This is how the passage ends:

[Do thinkers of Mr. Thomae's kidney] really want to become serious about...identity? No: that they certainly do not! Things are supposed to become identical by being equated - as if that mattered to the things themselves. But distinguishable: yes, that they must remain. And to use Mr. Thomae's phrase the external sign of this feeble behaviour is the word 'equal'. (RT 345)

Many of his contemporaries are castigated for 'this feeble behaviour': Peano, Linke, Thomae, Husserl (RH 200-201), Schröder (PS 223), Schubert and Dedekind (SN 269-70). Apparently, the criticism was made possible solely by Frege's adoption of the theory of meaning and denotation.

But what is the net philosophical profit of the foregoing investigation? It does show, I think, in a way that may be new to the literature on the genesis of the meaning/denotation distinction, that Frege was indeed very much aware of the fact that the Begriffsschrift solution to the puzzle was hostile to the notion of identity. I believe it brings to the fore an essential aspect of his involvement with the puzzle which seems to have been neglected by commentators. What it does not do, however, is give us a reason of paramount philosophical importance to

justify as radical a move as the one Frege makes in 'On Sense and Meaning': in the absence of a cogent argument to the effect that a solution to the puzzle based on the notion of equivalence must be flawed, we are back to square one. To my knowledge, no such argument is to be found in the Fregean corpus.

It is true that we have identified a pocket of obscurity in the way he had spoken in Begriffsschrift of the 'association' of a 'mode of determination' with a given name. Does a name designate its 'associated' mode of determination? If not, how is the mode of determination communicated by the name? This is, no doubt, a pressing question, but it points to mere obscurity: it does not seem to me to provide the kind of leverage that Frege needed in order to sustain a challenge of such magnitude against the philosophical and mathematical establishment of his time. By all means, it seems *prima facie* preferable to concoct some less drastic explanation for the recalcitrant 'association' than to claim discovery of a wholly new breed of abstract entities, meanings.

There is a hypothesis we have not yet examined. It might be suggested that Frege's antipsychologism had already committed him to the admission of a class of entities whose ontological status is indistinguishable from the one he was to grant meanings later on, namely, Begriffsschrift's judgeable contents. So, the argument would proceed, the meaning/denotation distinction may have arisen from an inquiry into the constitution of judgeable contents: he might have arrived at the distinction by ruling out both ideas, on the one hand, and abstract and physical objects, on the other, as possible constituents of judgeable contents (cf. PMC 153, 157, 163; IL 187, 191). This seems to me a curious thesis. Both of the assumptions upon which it rests are unequivocally true of Frege's philosophy, and, consequently, it does seem to show that

something ontologically and semantically akin to meanings was indeed necessitated by some basic tenets of Fregean antipsychologism. If it ultimately fails to solve the problem we are up against, as I believe it does, that is simply because the evidence for its truth has nothing whatsoever to do with the puzzle of identity, and so nothing whatsoever to do with the Begriffsschrift solution to that puzzle. Now, even if it could be shown that antipsychologism alone would have originated the meaning/denotation distinction, there would seem to be no reason to believe that the distinction should automatically be applied to non-trivial identity statements. Unless the Begriffsschrift solution could be shown - again, by cogent argument rather than by appeal to changing intuitions - to be intrinsically defective, it could have actually coexisted with the meaning/denotation distinction as Frege's official solution to the puzzle! I cannot see why it could not. The crucial point is this: unless the Begriffsschrift solution can be proven defective, there is no superior reason for Frege to challenge the 'verbal knowledge' tradition, even if the ontology of meanings can be defended on other grounds. So the question which motivated this discussion - to wit: why should the meaning/denotation distinction be regarded by Frege as a philosophically rewarding solution to the puzzle vis-à-vis the early view? - seems to remain as pressing as it ever was.

We have been examining what I would consider to be circumstantial evidence of variable quality against Frege's early doctrine of equivalence. I now want to argue that it is flatly untenable. While discussing his misrepresentation of the early view in 'On Sense and Meaning', I suggested that the view is not as frivolous and bizarre as he made it look in that article - only because I am prepared to claim that Begriffsschrift's solution to the puzzle actually is a whole lot more frivolous and bizarre than Frege would there have us believe. The insurmountable

difficulty, as I have indicated, is 'the bifurcation': the fact, cleverly observed by him, that 'with the introduction of a symbol for identity of content, a bifurcation is necessarily introduced into the meaning of every symbol, the same symbols standing at times for their contents, at times for themselves'. Thus the early view is that a symbol 'appears in propria persona' if and only if it denotes itself. But can we make sense of the notion of self-denotation? Is it at all intelligible? I must confess that it strikes me as an unqualified piece of nonsense. However, in order to make sure that my objection will not turn into a case of conflicting intuitions, I would like to assume that there can be such a thing as self-denotation: just as we find that one can, for instance, represent oneself in a court of law, let us for the moment assume that self-denotation is a legitimate reflexive relation. On the Begriffsschrift view, then, every symbol has two denotations - its ordinary denotation (a human, a number, an absurd theory...) and its special denotation (the symbol itself). Supposedly, when a symbol (a singular term) occurs in an identity statement, the propositional context, as it were, cancels the symbol's ordinary denotation - or the symbol's relation to its ordinary denotation, be this as it may - and activates the symbol's special denotation. Now, if it is granted - as I believe it should be - that the 'activation' process requires that it be possible to distinguish between the symbol and its two denotations, then a symbol's special denotation can never be activated, given that, ex hypothesi, the symbol is identical to its special denotation!²⁵ Again, we proceed from the assumption that a symbol has two denotations, and we expect the propositional context - or the judging subject, it does not matter which - to select one of the symbol's denotations, its special denotation, to

²⁵ I naturally assume the indiscernibility of identicals, the thesis according to which $(\forall x)(\forall y)(\forall \phi)[x=y \supset (\phi x \equiv \phi y)]$. For the distinction between this and other identity principles, see Griffin 1977, pp. 1-2).

be that which is talked about in an identity statement. But for this to be accomplished, we must be able to distinguish the special denotation from the symbol; otherwise, there will be no reason to think that we are talking about the symbol itself rather than about its ordinary denotation. But this is to require that we be capable of distinguishing between the identical, which is impossible.

It seems clear that there is no such requirement for legitimate reflexive relations: it is not a feature of our understanding of reflexive relations that we must be able to distinguish the referent from the relatum. If, as my own defense attorney, I am allowed to walk around the courtroom as I speak, that is not because the law allows me, qua attorney, to walk around, while, at the same time, demanding that my client remain seated: that is because the law allows the defendant himself to walk around if he is his own attorney. If I am defending myself in a case in which I face the death penalty, it is not reasonable for me to expect the security personnel to let me, qua attorney, walk unaccompanied down the hall to the men's room. So the idea of self-denotation does not seem to be on a par with other reflexive relations, such as self-defense. Somehow, a process of selection between two (supposedly) equally legitimate denotations must take place, and so we must be able to conceive of the symbol as a denoted object which is, to that extent, distinct from the object which simply does the denoting. But we cannot consistently do so.

Once we understand Frege's stultifying proposal for self-denotation, it becomes clear that the Begriffsschrift view is not a 'metalinguistic' account of non-trivial identity statements, as it has been rashly supposed to be in the literature.²⁶ It is a minimal requirement on any

²⁶ The Begriffsschrift view is deemed 'metalinguistic' by Williams (p. 8) and 'metatheoretic' by Salmon (p. 51).

legitimately metalinguistic view that the metalanguage be distinct from the object-language, even if their symbols share all their physical and syntactical properties. For the very same reason, any theory which legitimately allows for the 'systematic ambiguity' of symbols - such as Russell's theory of types - still is committed to distinguishing between a symbol and its various denotations. The problem with Frege's notion of systematic ambiguity - as I have tried to point out - is that it is self-defeating: because one of a symbol's two denotations is the symbol itself, it becomes impossible even to make sense of the idea that the symbol is systematically ambiguous!²⁷ If I am not mistaken, the idea of self-denotation is alien to all of the best-known semantic views to be found in the philosophical literature.

It is interesting to note that a different epistemological setting, such as Locke's representative idealism, may allow for a legitimate claim to systematic ambiguity, however intrinsically problematic the notion of systematic ambiguity may ultimately prove to be. I have suggested elsewhere²⁸ that Locke's account of non-trivial identity statements can be accommodated within his system only if the terms of an identity statement are supposed to stand for ideas of themselves in that context. There is no evidence that Locke understood this. Nor is there, to my knowledge, evidence that any representative idealist has ever put forward such a proposal. But this does seem to be the only way a representative idealist could possibly account for any talk about language. However, as we know, this was not an alternative for

²⁷ Baker and Hacker are essentially right when they say that, in Begriffsschrift, 'the antinomy [of identity] was resolved by attributing a systematic ambiguity to all names' (p. 281). This no doubt was what Frege thought he was doing. The big problem, which they fail to notice, is that the attempt to establish the ambiguity via self-denotation is necessarily abortive.

²⁸ See deAlmeida.

Frege, who was never committed to an idealist version of the puzzle's assumption and whose main philosophical motivation was antipsychologism. As an antipsychologist who accepted the 'verbal knowledge' solution to the puzzle, he felt attracted to the catastrophic notion of self-denotation.

I certainly cannot establish beyond the shadow of a doubt that Frege must have become aware of how grotesque the idea of self-denotation is. (As I have indicated, I do not believe that the historical question can be settled as conclusively as the philosophical one from the textual evidence available.) But there is what seems to me compelling evidence that he could have understood the problem. In a paper dated between 1898 and 1903, in which he criticizes Riemann for ignoring the need for quotation marks when speaking of symbols, Frege remarks: 'Even I wouldn't have found this precaution necessary if experience had not taught me how far one must avoid anything that could in any way encourage the mathematical sickness of our time, [that] of confusing the sign with what is signified' (DM 158). In his merciless onslaught of 1899 on Schubert's work in the foundations of mathematics, he notes '[the application of a principle which] has been used repeatedly by mathematicians, but [which] has never been clearly expressed in words and ...has never been given a name. I should like to call it the principle of the non-differentiation of the different. It stipulates - to put it briefly - that a sign is not to be distinguished from what it designates' (SN 262). Perhaps even more interesting is the following fragment from a paper written in 1914, in which Frege claims to be explaining the lure of doctrines of equivalence.

[W]hen we write down ' $5=3+2$ ' the [denotations] of the signs to the left and right of the equals sign don't just agree in such and such properties, or in this or that respect, but agree completely and in every respect...But surely the two signs are different; one can see at first glance that they are different! Here we come

up against a disease endemic among mathematicians, which I should like to call 'morbus mathematicorum recens'. Its chief symptom is the incapacity to distinguish between a sign and what it designates. (LM 224)

The passage in which the disease seems to have been first diagnosed probably is the most interesting of all: the passage from the introduction to The Basic Laws in which he explains the changes in his logical theory.

Instead of the three parallel lines [of Begriffsschrift for identity of content] I have adopted the ordinary sign of equality, since I have persuaded myself that it has in arithmetic precisely the meaning that I wish to symbolize. That is, I use the word "equal" to mean the same as "coinciding with" or "identical with"; and the sign of equality is actually used in arithmetic in this way. The opposition that may arise against this will very likely rest on an inadequate distinction between sign and thing signified. Of course in the equation " $2^2=2+2$ " the sign on the left is different from that on the right; but both designate or denote the same number. (BLA 6)

In a note added to the above passage, the reader is referred to 'On Sense and Meaning', which, as we know, is silent of Frege's own failure to distinguish between sign and thing signified in Begriffsschrift.

CHAPTER TWO

'THE LOGICALLY IMPORTANT MATTER IS THE RELATION BETWEEN [THE MEANING AND THE DENOTATION]'²⁹

I believe we can safely conclude from the brief historical inquiry of the preceding chapter that by the time Frege hit upon the meaning/denotation distinction the philosophical imagination had failed to devise any successful non-psychologistic response to the puzzle of identity. We have seen that Frege's own early attempt at disposing of the problem relied on the vexing notion of self-denotation - of which we have tried but failed to make sense. I have also suggested that the puzzle may find a solution within the Lockean tradition only if one is prepared to accept - as everyone except Frege seems to have been - the mediation of ideas between symbols and the objects of discourse, and then, based on this, endow all symbols with systematic ambiguity, so that they may conveniently perform the double duty of standing either for ideas of ordinary items or for ideas of themselves, which ever may be required in a given circumstance. But if one cannot accept that ideas should have a role to play in a semantic theory, talk about language does seem to require that symbols may on occasion stand for themselves.³⁰ However, whereas any theory which legitimately allows for systematic ambiguity may ultimately run into problems of its own, a non-psychologistic theory in which the injury of systematic ambiguity is compounded with the insult of self-denotation is surely a prime example of philosophical failure. This is, in

²⁹ Russell, 'On Meaning and Denotation', p. 7.

³⁰ It should be borne in mind that Frege did not possess a distinction of object-language and metalanguage. Thus any reading of the self-denotation view along these lines can surely be deemed anachronistic.

a nutshell, the background for the Fregean breakthrough of 1892.

Both Frege's and Russell's solutions to the puzzle are well-known - the first (originally) from 'On Sense and Meaning' and the second from the Principles, section 64 - and I shall not describe them here. In what follows, while discussing some fundamental aspects of Russell's theory of meaning and denotation which have not, in my opinion, been satisfactorily explored in the literature, or which have not yet, to my knowledge, been explored at all, I shall try to supply the reader with all the necessary - and, hopefully, jointly sufficient - elements for the understanding of the central argument of 'On Denoting', an argument which was designed to substantiate the claim that the distinction between meaning and denotation had been ill-conceived. It seems to me that, for the sake of clarity, this can best be accomplished if the discussion is conducted as a commentary on six important Russellian theses, the last two of which are crucial for a justification of that claim. The four theses to be discussed in this chapter offer a partial view of Russell's theory at its most mature. What I call 'Russell's theory' is the consistent set of his views on the matter containing the series of 39 numbered remarks initiated on p. 18 of the unpublished paper 'On Fundamentals' written in the summer of 1905.

Before I turn to the six Russellian theses, two preliminary points should be made. When I assume knowledge of both Frege's and Russell's solutions to the puzzle, I naturally assume it understood that they are formally identical. For both of them, the puzzle is to be solved by distinguishing the object of reference, the denotation, from the object which occurs in the Fregean thought or Russellian Proposition³¹. The latter is the meaning expressed by the

³¹ Following Geach (pp. 51-2), I use 'Proposition', with a capital 'p' to designate what Russell called 'an objective proposition' (PMC 169; cf. POM 47), thus retaining the word 'proposition' in the sense it has had in the logical tradition. Russell engendered confusion by

(complex) singular term occurring in the verbal expression of the thought or Proposition. This meaning is a representative, as it were, of the denotation and may be all we have knowledge of (are acquainted with) when we use that singular term. It is because Russell's and Frege's theories coincided in the way the relation between the meaning and the denotation had been conceived that Russell could legitimately claim to be in a position to refute both theories with a single argument.

But for the reader fully to appreciate what I have to say, it should also prove necessary to bear in mind some of the most striking points of divergence between them. As we know, their views developed within two considerably different sets of circumstances. This is most

using 'proposition' to designate both the linguistic item and the objective complex it is supposed to express. (He very rarely used 'sentence' to designate the linguistic item.) The Russell reader should be accustomed to the constant shifts in his text from talk about language to talk about what expressions designate. (Thus when he uses the words 'verb', 'adjective', 'predicate', 'subject', he as a rule intends to talk about what those words designate, the constituents of Propositions, not of propositions.) I shall try to mitigate the problem by making editorial amendments when I quote from the texts, although it is sometimes hard to be sure what is meant when the word 'proposition' is used. (It should, at all events, be noted on Russell's behalf that, when we find it hard to decide which is meant, it often does not matter which.) The broad criterion I use is that, when talk of constituents is involved, it usually seems appropriate to infer that Propositions are meant. But this won't be of any help in many cases.

Intimately related to this problem is the fact that Russell used quotation marks to talk both about expressions and about their meanings. Thus in POM he says that '[o]f the concept "any number", almost all the propositions that contain the phrase "any number" are false. If we wish to speak of the concept, we have to indicate the fact by italics or inverted commas' (POM 53). (Note that here 'propositions' must refer to the linguistic items.) He seems almost unbelievably insensitive to the fact that, by using the same typographical device to designate both linguistic and non-linguistic items, he creates unnecessary confusion. And so was Frege, who, as Russell rightly notes (POM 502), does seem to have thought that when 'one wishes to talk about the words themselves or their [meanings] [emphasis added]...the words are in this case enclosed in quotation marks' (SM 159). Confusion may be avoided if we follow Griffin (1980, note 2) and use slashes to mention Propositions and denoting complexes. Thus in quotations from Russell I replace his quotation marks by slashes wherever it seems appropriate to do so (as noted, there will be doubtful cases).

evidently reflected in their divergent accounts of the nature of thoughts or Propositions. Russell's disillusionment with idealism led - largely through Moore's influence - to the view that the objects of knowledge usually are, themselves, the constituents of Propositions, which are neither linguistic nor mental artifacts. The crucial Moorean distinction between the concepts of being and existence (as put forward in 'The Nature of Judgment', a paper extracted from Moore's second Fellowship Dissertation) made it possible for Russell to defend such an apparently bizarre doctrine of propositions, as that put forward in the Principles.³² Frege's antipsychologism, by contrast, was much more simple-minded - because much less epistemologically involved. He believed he could purge logic of all psychologistic intrusion simply by positing objective thoughts and postulating that we have the ability to apprehend them, but not the power to assemble them, as the idealists had always assumed, given that the elements which constitute a thought are not subjective. These elements are not ideas, they are mind-independent objects other than the actual objects of knowledge; for the view that the objects of knowledge themselves could be constituents of thoughts could not even be entertained seriously, he thought. I shall not here inquire into the origins of Russell's and Frege's views to try to understand why they developed as they did. What needs to be known about this is already on record.³³

³² Just how much of Russell's first theory of propositions is owing to Moore's influence is not very easy to determine. But I am inclined to believe that the distinction between being and existence is originally Moore's. The reader is referred to Griffin (1991, pp. 296-309) for a well-informed discussion of the issue.

³³ For a discussion of Frege's antipsychologism, see Baker and Hacker (especially chapter 2). As for the origin of Russell's first theory of propositions, together, Griffin (1991, chapter 7) and Hylton (1990, especially pp. 117-43, 171-4) have said virtually all that needs to be said on the matter. I must, however, note that I do object to some of Hylton's remarks. For

The two men were often at cross purposes on the nature of thoughts and Propositions. When Russell asked to know why it should be impossible for a class, the object itself, to be a constituent of a thought (PMC 156), all a puzzled Frege could say in reply three months later was: 'Can any class whatever be a component part of a thought? No more than the planet Jupiter can' (PMC 157). To Frege's horror, Russell insisted the following year, virtually without elaboration, that 'in spite of all its snowfields Mont Blanc itself is a component part of what is actually asserted in the proposition "Mont Blanc is more than 4000 meters high"' (PMC 169). About ten years later, we find Frege explaining to Philip Jourdain that one has to admit that a proper name has meaning, and that it is the meaning of the name that occurs in a thought, because, he says, 'that part of the thought [that Etna is higher than Vesuvius] which corresponds to the name "Etna" cannot be Mount Etna itself; it cannot be the [denotation] of this name. For each individual piece of frozen, solidified lava which is part of Mount Etna would then also be part of the thought...But it seems to me absurd that pieces of lava, even pieces of which I had no knowledge, should be parts of my thought' (PMC 79). As I hope to show in the following discussion of aspects of Russell's theory, his unpublished work seems to give us an opportunity to reconsider the most popular view on this point of contention.

I now turn to the Russellian theses.

(1) '[T]here is no backward road from denotations to meanings' (OD 112)

It should be granted that the theory of meaning and denotation may at first seem simply

instance, I find particularly disturbing his claim that Moore and Russell 'take for granted an extreme and naive realism' (p. 172) in a work so many pages of which have been devoted to providing an account (and a generally reliable one) of the arguments by which they arrive at their doctrine of propositions.

to be a non-psychologistic mirror-image of representative idealism. The interesting point to which a formal analogy might stick is that, in both cases, the constituents of what we think - whether Locke's mental propositions (Essay, IV.v.5; cf. deAlmeida) or Fregean thoughts - are not the objects of reference, the objects one talks about.³⁴ If one wishes to speak about one's own ideas, or about the meanings of words, such ideas or meanings will be represented in one's mental propositions or Fregean thoughts, as the case may be, by other ideas or meanings suitably related to those objects of reference. But there are two fundamental points of disanalogy between the theory of meaning and denotation and representative idealism which it should prove useful to examine.

Representative idealism rests upon an attractively simple - if simple-minded - semantic plan: a word stands for an idea in one's mind, and this, in turn, (typically) stands for an extramental item. As we know, this original plan is immediately subjected to a number of revisions with a view to accounting for meaningful discourse in which, for whatever reasons, there is reference-failure. The theory allows for reference-failure by means of the well-known division of ideas into simple and complex. But the introduction of complex ideas - ideas for which there need be no ideatum - defaces the original semantic plan beyond recognition (often producing outlandish results). We cannot here pursue a more detailed understanding of the troubles besetting representative idealism even within the confines of Locke's epistemology.. Many of the details are irrelevant to our present concerns. What really matters is to understand the relevant implications of the most characteristic thesis of representative idealism: the thesis that

³⁴ This, of course, is only partially true of Russell's theory, in which both meanings and the objects of reference can occur in Propositions.

ideas are signs of their ideata (cf. Locke IV.v.2).

It may seem that Locke himself didn't. It is not immediately obvious that he could consistently hold both the view according to which '[w]ords in their primary or immediate Signification stand for nothing, but the Ideas in the Mind of him that uses them' (III.ii.2) and the view that, '[b]ecause Men would not be thought to talk barely of their own Imaginations, but of Things as really they are...they often suppose their Words to stand also for the reality of Things' (III.ii.5). Locke was not the only one to be embarrassed by the intricacies of a semantic view he does not seem to have fully understood. It is also instructive to ask why Mill may have thought he could consistently criticize all subjective idealists 'from Descartes downwards' (p. 87) for failing to observe with sufficient clarity 'that propositions (except sometimes when the mind itself is the subject treated of) are not assertions respecting our ideas of things, but assertions respecting the things themselves' (p. 88), and yet, in the same breath, maintain that '[w]hen we impose a proper name...[w]e put a mark, not indeed upon the object itself, but, so to speak, upon the idea of the object' (p. 35). Certainly, Mill's evasive 'so to speak' should be viewed with as much suspicion as Locke's claim that, although a word's 'primary or immediate' signification is the idea it designates, it is 'also' supposed to designate the idea's ideatum. Given that, as representative idealists, neither ever claimed that words are immediately connected to extra-mental objects, it is not at all clear at first how words can be about anything other than the ideas for which they are supposed to stand. I should like to argue that such an imbroglio stems from their failure to recognize - with absolute clarity, at any rate - an essential property of the relation holding between a sign and what it signifies.

It may be fitting to think that a sign is essentially like a mirror: just as a mirror simply

is a medium through which the eye reaches out to the object toward which the mirror is directed, a sign is the medium through which the mind seizes what the sign signifies. Ideally, a mirror does not distort what we see through it, and what we see is the object reflected in the mirror, not the mirror itself. Thus the semantic scheme of representative idealism - in its original innocence, at any rate - is in effect like a system of mirrors. Very much like the flow of light through the mirrors, if a word is a sign of an idea and this idea is, in turn, a sign of an extra-mental item, then, by using the word, we refer to what the idea designates, not to the idea itself. The idea is merely the medium through which a word is connected to an ideatum. If the analogy is at all clarifying, it reveals an important property of the designation relation, the relation holding between a sign and what the sign signifies: transitivity. A sign of an idea of a thing is a sign of a thing. It is interesting to note that Locke was confident that this much had been accomplished in his epistemology as far as simple ideas were concerned. He thought that, via the refutation of the innateness thesis (in Book I of the Essay), he had ensured 'that simple Ideas are not fictions of our Fancies, but the natural and regular productions of Things without us, really operating upon us' (IV.iv.4). From our perspective, this amounts to guaranteeing that simple ideas are signs: they are guaranteed their ideata, and so, because to be a sign is to stand for something, simple ideas are signs.

Thus we can see that the mediation of ideas between words and things is semantically insignificant: the rationale for their introduction is wholly based on epistemological concerns. It is due to the belief that '[t]is evident, the Mind knows not Things immediately, but only by the intervention of the Ideas it has of them' (IV.iv.3) - together, of course, with a number of unwarranted psychological assumptions tending to ensure intersubjectivity.

From these considerations, we can conclude that ideas formally differ from meanings on two points. First, the existence of an ideatum is a necessary condition for the existence of a simple idea, whereas this is not the case with meanings. The difference in question follows immediately from the view that ideas are signs of their ideata. By contrast, the admissibility of a meaning does not depend on its having a denotation. Meanings are not signs. 'In grasping a [meaning]', Frege explains, 'one is not certainly assured of [denoting] anything' (SM 159).

Secondly, and most importantly, whereas the relation between idea and ideatum is one-one, the relation between meaning and denotation is many-one. When Mill grudgingly concedes that, in imposing a proper name, we put a mark, 'so to speak', on our idea of the object being named, rather than on the object itself, he undoubtedly assumes that one's idea is qualitatively identical with the idea excited in an interlocutor's mind when that proper name is used in communication. For all intended purposes, there is only one idea for each ideatum, and in this resides whatever hopes a representative idealist may have for securing intersubjectivity. (The fact that a more accurate description of the process would probably be that what we actually have are different instances of the same idea, tokens of the same type, clearly seems philosophically irrelevant to the idealist.) To persist with the earlier metaphor we might say that, under the same conditions, the image on your mirror is the same as the image on mine - and this is the only reason why mirrors are useful to us. On the other hand, as far as the relation between meaning and denotation is concerned, Russell reminds the reader at a crucial juncture in 'On Denoting' that 'there is no backward road from denotations to meanings, because

every object can be denoted by an infinite number of different [meanings]³⁵ (OD 112-3). Of course, the theory's solution to the puzzle of identity turns precisely on this: that knowing the denotation of two singular terms which express different meanings does not necessitate knowing that they are co-referential when they are in fact co-referential. Co-referentiality must be established by further evidence: 'a special act of recognition is required', as Frege once put it (PMC 152).

So, we can see that the mediation of ideas between words and what they are about is significantly different in nature from the mediation of meanings between words and their denotations. The introduction of meanings was a formal innovation viv-à-vis representative idealism. If Frege and Russell had posited meanings as extra-mental entities mediating between words and things but had failed to endow them with the two formal properties just described, they would have been antipsychologist logicians all the same, but would have been unable to construct a semantic doctrine which accounts for reference-failure - as theirs does because of the first property - and solves the puzzle of identity - as theirs also does because of the second property.

(2) '[S]ingle words...designate without expressing [meanings]' (MD 4)

Unlike Frege, who maintained that '[every lexical sign] must somehow have a [meaning]' (PMC 79; cf. SM 159), Russell thought that 'single words...designate without expressing [meanings]...[b]ut when a phrase contains several words, not simply juxtaposed, but in any way combined so as to acquire unity, then the phrase...expresses a...meaning' (MD 8). This is one

³⁵ Russell wrote 'denoting phrases'. The reason for this amendment will shortly be explained.

of the most salient points on which their versions of the theory differed.

Their disagreement on this point seems intimately related to their disagreement on the larger issue, noted earlier, as to whether the objects of knowledge may or may not conceivably be constituents of Fregean thoughts or Russellian Propositions: if a word cannot contribute its denotation to the thought expressed by the proposition of which it is a constituent, then it would seem - to Frege - that it must somehow contribute a meaning. Reasoning along these lines, it may indeed seem that the view according to which simple expressions also express meanings has been validly inferred from the perceived impossibility of having the objects of knowledge themselves as constituents of thoughts - which, in turn, results from unstated metaphysical and epistemological assumptions in Frege's philosophy, or, if you will, from plain old, philosophically unadulterated common sense. This may well be an accurate description of Frege's conceptual mechanics.³⁶ The evidence that this actually is what he had in mind is overwhelming. But the point is not merely historical. From such a point of view, an answer to the question of whether Frege rightly concluded that simple expressions have meaning would seem to be parasitic on the larger epistemological dispute as to whether the objects of knowledge not only can, but - as Russell claimed following in Moore's footsteps - should, be conceived to be constituents of thoughts or Propositions. If this is the right perspective on the dispute concerning thesis 2, we must acknowledge that Frege emerges well in the debate, for it then takes an elaborate epistemological doctrine to sustain a challenge to the view that simple

³⁶ See Baker and Hacker, pp. 308, 323.

expressions have meaning.³⁷ But, as it turns out, this way of viewing the matter is largely illusory. It gives the Fregean position too much credence too soon. In what follows, we shall see that Russell's work in the unpublished manuscript 'On Meaning and Denotation' gives us the means to understand that the Fregean thesis according to which single words express meanings can be faulted on purely semantic grounds, that it does not in fact depend on a broader epistemological dispute.

Notice, to begin with, that Frege's terminological practice tended to obscure the relations between the various elements of his triple-layered semantics. He often spoke, in an objectionably casual manner, of the denotation of a word ('By employing a sign we express its [meaning] and designate its [denotation]' [SM 161], emphasis added) even though he was well-aware that there is no immediate connection between word and denotation, that 'it is via a [meaning], and only via a [meaning] that a [word]³⁸ is related to an object' (CSM 124). As he put it in SM (p. 159), '[t]he regular connection between a sign, its [meaning], and what it [denotes] is of such a kind that to the sign there corresponds a definite [meaning] and to that in turn a definite thing [denoted]' (emphasis added).

Russell certainly found such a use of elliptical language (when one speaks of the denotation of an expression) ill-advised, for it may indeed distract from the fact that it is

³⁷ It surprises me that, having followed Frege along this path (ibid.), and being clearly as outraged as he was by the Russellian view of Propositions (cf. ibid., p. 50), Baker and Hacker shouldn't have arrived at more sympathetic conclusions about the Fregean position - considering the fact that their charge of large-scale inconsistency (cf. ibid., 322-32) could still be maintained.

³⁸ Frege uses 'proper name' in the original but the statement can be made absolutely general, as this is followed in CSM by the observation that '[a] concept-word must have a [meaning] too'. Also, see the chart describing his view in his letter to Husserl of 24 May 1891 (PMC 63).

meanings, not the words which express them, that are the real agents of reference.³⁹ In one of his earliest manuscripts on the theory of meaning and denotation, he notes that '[w]e ought to say that the meaning which is expressed denotes the denotation' (DVD 6).⁴⁰ The same terminological point is made in 'On Denoting' when he remarks that '[t]he right phrase, on the view in question, is that some meanings have denotations' (p. 112). But it is important to note that in 'On Denoting' he is willing to comply with Frege's terminological stipulations ('In this theory...we shall say both of the [denoting] phrase and of the meaning [it expresses] that they denote a denotation' [p. 108, note 3]) because Frege is the one who is being ostensibly criticized, and Russell took Frege's terminology to be the established one. Thus when he says that 'every object can be denoted by an infinite number of different denoting phrases' (OD 112-3), we see an attempt to comply with a terminology he finds objectionable, even if occasionally harmless.

But this relatively frivolous point about terminology actually is just the tip of an iceberg. In his critique of Frege in the Principles, Russell charged that 'Frege...does not seem to have clearly disentangled the logical and linguistic elements of naming: the former depend upon denoting, and have, I think, a much more restricted range than Frege allows them' (POM 510). We can easily gather from the text what he means by 'a much more restricted range', which is precisely the point we first raised at the beginning of this section: Frege's theory of meaning and denotation, he claims, 'is more sweeping and general than mine, as appears from the fact

³⁹ I borrow this phrase from Baker and Hacker (pp. 316-7).

⁴⁰ This manuscript has been dated from probably July 1903 by Professor Alasdair Urquhart, editor of the forthcoming vol. 4 of The Collected Papers of Bertrand Russell.

that [for Frege] every proper name is supposed to have the two sides [of meaning and denotation]. It seems to me that only such proper names as are derived from concepts by means of the can be said to have meaning, and that such words as John merely [designate] without [expressing a] meaning' (POM 502). But there is no attempt in POM to substantiate that charge by means of argument, and the whole discussion of denoting complexes⁴¹ is, by his own admission (cf. POM 65), so sketchy that it is very hard to collect from it the elements for an argument tending to settle the dispute.

Much more, however, is found if we turn to the unpublished papers on logic Russell wrote mostly during 1903, particularly 'On Meaning and Denotation'.⁴² To expose adequately the relevant elements of his doctrine for a justification of thesis 2 - and to clarify his terminology as we go along - I shall quote extensively from that manuscript. The following is almost all the text we need:

The phenomenon to be considered in what follows is an exceedingly familiar one. It is simply the fact that, instead of directly mentioning an object, it is possible to describe it...Such phrases [as "the present Prime Minister of England"] may be regarded as names for that which they describe; but they differ from names in the narrow sense by the fact that they do describe that which they name. A name in the narrow sense is merely a symbol arbitrarily selected to designate some object; but a description is not arbitrary, [its meaning] being determined by the designations of its parts. It is this fact which is to be analyzed...[T]he relation [between words and what they stand for] appears to be exactly the same

⁴¹ In his unpublished work, Russell used 'denoting concept' and 'denoting complex' interchangeably. In POM he opted for the former; in OD, for the latter. My reasons for preferring 'denoting complex' will shortly become apparent.

⁴² According to Professor Urquhart, 'On Meaning and Denotation' was probably written late in 1903, but he thinks there is also evidence for a dating of April 1904. This last date seems to me more plausible because 'On Meaning and Denotation' is far more polished than the other pre-OF papers. 'Points About Denoting' is preparatory for 'On Meaning and Denotation' and has been dated from 1903.

whether we use a name in the narrow sense, such as "Arthur Balfour", or a description, such as "the present Prime Minister of England". The words, in either case, are a symbol for the object: this relation I shall speak of as that of designating the object. Now the discussion of this relation belongs to the theory of language, or, in a larger sense, to the general theory of symbolism. It is not a fundamental logical relation, and is not relevant to the points which we have to discuss...Considered as names, ["Arthur Balfour" and "the present Prime Minister of England"] are on a par: both designate a certain man...But names, throughout what follows, are never in question. (MD 1-2)

The [expressions] which have to do with both [meaning and denotation] have [different relations] to the two: the denotation is what they designate (in the sense already explained), and the meaning may be said to be what they express. But both designating and expressing have to do with language: the logically important matter is the relation between what is expressed and what is designated. For when one name both designates and expresses, this is not arbitrary, but is due to a relation between the objects designated and expressed. This relation is what I shall call denoting. Thus it is the meaning, not the name, which denotes the denotation; and denoting is a fact which concerns logic, not the theory of language or of naming. (MD 7)

The essence of what Russell means when he describes the relation between a meaning and its denotation, namely, denoting, as a 'logical relation' (cf. OD 111) is not at all hard to grasp - although his remarks on this seem undeniably cryptic. An example may help clarify the matter. It is (today) true that Walter Scott may variously be designated as 'Walter Scott', 'the author of Waverley', 'the author of Ivanhoe', 'the author of Kenilworth', etc. But it is obvious that only one of these names resulted from an act of arbitrary imposition. Somebody decided that Scott was going to be called 'Walter Scott', but nobody ever decided that Scott could be referred to as 'the author of Waverley', not even Scott himself upon completion of the novel (in fact, he decided he would not be so called). As Russell would later note, Scott 'was the author of Waverley at a time when no one called him so, and he would not have been the author [of Waverley] if everyone had called him so but someone else had written Waverley (PM 67)'. Genuine names are arbitrarily related to that of which they are names. But descriptions are

logically related to what they designate in this sense: that, when its constituent words are grammatically put together, the resulting grammatical unit, the description, expresses a meaning, and the object expressed, the meaning, in effect picks out, or determines, the object designated by the description in a way which transcends - which is independent of - the kind of cognitive and volitive acts on the part of a subject which are involved when a genuine name is used to baptize an object. Such a process is independent of the relevant cognitive act insofar as I do not need to know - to be acquainted with - the person who is the author of Waverley in order successfully to designate him, and insofar as the truth or falsehood of what I say about him when I use that description is not affected by the fact that I may believe that the person I refer to is the one who wrote Don Quixote. And it is likewise independent of the relevant act of volition insofar as my decision to call the man who wrote Quixote 'the author of Waverley' does not ensure my talking about Quixote's author when I use that description to refer to him. Thus - on strength of a prior antipsychologist stance - the analysis of the 'exceedingly familiar phenomenon' which gives rise to a distinction - within the old category of 'singular terms' - between descriptions and genuine names at once justifies the introduction of meanings and circumscribes their jurisdiction, as it were.

Let us pause for a moment. Much is yet to be seen for us to be in a position to claim full grasp of Russell's doctrine as presented in the above quotation. But it seems that enough has already been said to warrant the conclusion that the Fregean view according to which every expression, be it simple or complex, expresses a meaning must be wrong. I have tried to provide a careful account of Russell's distinction between descriptions and proper names in such a way as to make evident that it arises from fairly platitudinous considerations - leaving the more

controversial aspects of his doctrine out of sight for the time being. It seems undeniable that Frege never contemplated the need for such a distinction, effectively missing the opportunity for a revision of his theory when he relegated the matter to that well-known evasive footnote in 'On Sense and Meaning', where he says that, '[i]n the case of an actual proper name such as "Aristotle" opinions as to the [meaning of the name] may differ' (p. 158, note 4).

As we know, much criticism has been levelled against the Fregean claim that simple expressions have meanings. Chief among which, perhaps, is the allegation that we cannot 'make sense' of such a claim⁴³, given that the meaning that has supposedly been 'attached' to a proper name by somebody cannot be immediately read off from the name by somebody else. It is hard to see how the complaint can carry any weight on its own: after all, the history of philosophy abounds with reputable theses which make no sense if taken at face-value. Moreover, it is not immediately obvious that Frege could not have maintained that a proper name always is a defined symbolic abbreviation whose meaning is revealed by a description. But I am inclined to believe that Frege's theory hits rock bottom when we finally notice that it fails to take into account the fact that a description has, as it were, a life of its own, whereas a proper name is brought into life by fiat. If Russell is right in concluding that the relation between a name and its designatum is fundamentally different from the relation between a descriptive phrase and its designatum, Frege's theory is hopelessly incorrect. A proper name could be a defined symbol, but in fact it is not, and no theory can make it so as long as we perceive that names and

⁴³ According to Baker and Hacker, '[t]he real question is not how Frege would have proceeded in answering questions about the senses of simple expressions, but how to make sense of this notion' (p. 308). I am puzzled by the implication that how Frege might go about defending that notion cannot possibly have a bearing on whether or not it is ultimately seen to make sense.

descriptions behave differently.

Now, it should be clear that it is immaterial to the controversy to note, on Frege's behalf, that his ultimate reason for postulating that names express meanings is that they must contribute something (other than themselves) to the thoughts expressed by the propositions of which they are constituents and that this something can be neither an idea nor the object designated. For the claims upon which Russell's distinction between names and descriptions is based should appear uncontroversial to Frege, and they involve no epistemological considerations. I believe that even those who sympathize with Frege's epistemological concerns in the dispute - who cannot, under any circumstance whatever, accept that pieces of 'frozen, solidified' lava should be part of a thought about Mount Etna - will be willing to concede that thesis 2 is justified by what can be immediately and safely inferred from mere observation of Russell's 'exceedingly familiar phenomenon' - those platitudes concerning the semantic properties of names and descriptions.

Another important consequence of the foregoing is that we should now be able to understand the claim - which seems mysterious in 'On Denoting' - that 'the relation of meaning and denotation is not merely linguistic through the phrase: there must be a logical relation involved, which we express by saying that the meaning denotes the denotation' (OD 111). A 'merely linguistic' relation, for Russell, is the one arbitrarily established between a name and the object it designates, whereas the relation connecting a descriptive - or 'denoting' - phrase with the object denoted by the meaning it expresses is deemed 'logical' in the sense already explained.

I noted above that we are not yet in a position to claim complete understanding of the text

from 'On Meaning and Denotation'. The following Russellian claim may still seem shrouded in mystery: '[unlike a name in the narrow sense] a description is not arbitrary, [its meaning] being determined by the designations of its parts'.⁴⁴ How is this to be understood? How do the designations of a descriptions' parts determine the meaning expressed by the description? To my knowledge, Russell's most articulate answer can be gathered from the following passage.

The fact from which our discussion starts is embodied in this, that the whole phrase ["the present Prime Minister of England"] designates something of which the designations of the parts are not parts. There is some object involved, of which England, [the concept /Prime Minister/, the present time] etc., are parts; but this object is not the designation of the phrase, since England is not part of Mr. Arthur Balfour. Thus we were led to assume an object, called the meaning of the phrase, or that which the phrase expresses, of which England, etc., [are] parts...' (MD 13)

Notice that the transition from the first to the second claim - from the obvious to the contentious - seems to be a non sequitur. The fact that the designations of the description's parts are not parts of the description's designation surely does not necessitate that there should be something of which they are parts. Moreover, from what has so far been seen, meanings have not been introduced in order to provide a receptacle, as it were, for the designations of a description's parts, as Russell seems to suggest. Their introduction results solely from the need for an explanation of the fact that a description is not connected with its designation by an act of purely arbitrary imposition.⁴⁵

⁴⁴ In fact, Russell wished to call the meaning itself a 'description': 'The meaning may be called a description of the entity, and the phrase may be called a descriptive phrase' (MD 7). But it seems obviously more congenial to use 'description' and 'descriptive phrase' as synonyms, which is what I have been doing.

⁴⁵ Equally baffling is the following remark: '/The father of Socrates/ contains Socrates, but his father did not. This is the ultimate ground for distinguishing meaning and denotation; and this ground seems irrefutable' (MD 96).

Legitimate as these complaints may be, they actually steer us away from a correct understanding of his view on the nature of meanings. I believe we already have all the necessary conceptual resources to understand the claim that the objects designated by the parts of a description are parts of the meaning - the 'denoting complex' - expressed by the description. Bizarre as such a claim may seem, it is an immediate consequence of the distinction between names and descriptions. That distinction is the basis for a division of all subpropositional expressions into two categories: those which do and those which do not express meanings. An expression which has meaning contributes that meaning - that denoting complex - to the Proposition in whose verbal expression it occurs; an expression which does not have meaning, a single word, must contribute the only object it can contribute to the Proposition, its designation. And, of course, it is again its designation that a single word contributes to the denoting complex expressed by the description of which it is a constituent. As Russell notes, 'there is only a single object for the [single word], namely the object which it designates' (MD 4). Thus every meaning is a complex, and, necessarily, a complex constituted either by other complexes or by the actual entities designated by the single words which compose the denoting phrase or proposition expressing the meaning. This conclusion cannot be consistently resisted within Russell's theory. But a sine qua non condition on any challenge posed against it from the outside is that it should embody a solution to the puzzle of identity which is not oblivious to the 'exceedingly familiar phenomenon'.

It seems fair to say that Russell's conclusions can be avoided only if one starts from a radically different set of premises. Frege's premises - insofar as they led to a solution of the puzzle of identity by the agency of meanings which are formally identical with the Russellian

denoting complexes - were not sufficiently different from Russell's for Frege to believe he could escape the grip of the powerful gravitational field created by the distinction between names and descriptions. It was an overdose of common sense that gave him the illusion that he could.

(3) 'A complex has both being and meaning' (OF 18)

If a denoting complex is the meaning expressed by a descriptive, or denoting, phrase, what does Russell mean when he speaks of 'the meaning of a denoting complex' (cf. OD 112), or 'the meaning of the meaning' (cf. OF 36)? Can a denoting complex, which has been supposed to be a meaning, also have a meaning? It is to the clarification of this point that I now turn.

It should, first of all, be understood that Russell's use of the term 'complex' is such that it also applies to Propositions. Complexes are of two kinds: denoting and undenoting, i.e., propositional. What they have in common is that they all are complex entities, they all have being, a notion which is familiar from the Principles: '[b]eing is that which belongs...to everything that can possibly occur in any [P]roposition' (POM 449). Only 'certain complexes', however, namely, subpropositional complexes - all of POM's 'denoting concepts' - 'have the property of denoting something other than themselves, and...when such complexes are constituents of [P]ropositions, the [P]ropositions are not about the complexes, but are about what the complexes denote' (MD 30).

Now, there was a time - before he wrote 'On Meaning and Denotation' - when Russell was inclined to believe that Propositions also denoted. '[I]t seems', he thought, 'consonant to common sense to hold that a true [P]roposition denotes a fact, while a false one denotes nothing' (PAD 5). To show why he found it tempting to believe that a fact is the denotation of a

Proposition, and especially why he found it convenient to adopt a terminology according to which, '[i]n a complex, we must distinguish the meaning and the denotation', I must quote at some length from the passage of 'Points About Denoting' in which he is most articulate on the issue. (The reader is cautioned against interpreting the Russellian term 'complex' as referring to linguistic entities, denoting phrases or propositions. 'Complex' always refers to what phrases or propositions express.)

When a denoting phrase occurs in a proposition, does that which is denoted form a constituent of the [P]roposition or not?

Recurring to Smith's wife, let us baptize her Triphena. Then /Triphena is Smith's wife/ is a significant [P]roposition, but /Smith's wife is Smith's wife/ is a tautology. Thus it would seem that Triphena is not a constituent of the latter, for if she were, there could hardly be any difference of the two [P]ropositions. Nevertheless, "Smith's wife has blue eyes" is a statement about Triphena. Hence a difficulty.

In this matter, I suggest the following compromise. In a complex, we must distinguish the meaning and the denotation... Thus in /Smith's wife has blue eyes/, I should say that Smith and wife and the meaning (not the denotation) of /Smith's wife/ are constituents of the total meaning, but none of them are constituents of the denotation [i. e., of the fact denoted], whereas Triphena herself is a constituent of the denotation. But if I say "Triphena has blue eyes", then Triphena is a constituent both of the meaning and of the denotation. This raises curious points with regard to identity: two complexes may be identical in denotation and different in meaning, though the converse is apparently impossible. (PAD 3-4)

The above view was short-lived. In 'On Meaning and Denotation' Russell provided arguments which he thought showed that Propositions do not denote, and which were such as to 'overcome the reasons which made it appear necessary to suppose that [P]ropositions have the two sides [of meaning and denotation]' (MD 29). I cannot examine these arguments here. But, in any case, what matters most to our present concerns is to note that, on the assumption that Propositions denote, Russell held that two Propositions could be said to differ in meaning though they could properly be said to be identical in denotation. It seems to me that it was from his

earlier claim that Propositions have both meaning and denotation that his later unfortunate tendency to speak as if complexes have meaning as well as denotation arose. Thus the following remark, for instance, is couched in typically confusing Russellian jargon: 'Whenever a denoting [complex] occurs in a [P]roposition, it is the meaning, not the denotation, that occurs' (OF 16). But there seems to me to be no evidence that he ever was genuinely confused about it, that he may actually have thought that the meaning is something different from - perhaps a property of - the complex which is said, no doubt misleadingly, to have it. It surely is nevertheless surprising that he should have let such a terminological impropriety go unnoticed in his unpublished work for so long.

The problem seems to dawn on him rather abruptly in 'On Fundamentals', half-way through the passage in which he develops the fatal argument against the distinction of meaning and denotation. 'The phrase "the meaning of a denoting complex"', he suddenly notes, 'is wrongly formed...When we distinguish meaning and denotation, in fact, we must be dealing with the meaning: for the meaning has denotation and is a complex, and there is not something other than the meaning, which can be called the complex and be said to have both meaning and denotation. The right phrase is that some meanings have denotations' (OF 36). Most of this passage reappears verbatim in 'On Denoting'. I believe we can now see, for the reasons adduced here and in the previous section, that its point is largely terminological. From our vantage-point, the passage does not, in itself, reveal any important discovery, but it may indeed seem hopelessly mysterious to the ill-prepared reader of 'On Denoting'.

(4) 'A complex may occur as [entity] or as meaning' (OF 18)

Far more worrisome are the problems introduced by thesis 4. It should, to begin with,

seem evident that there is equivocation of some kind here, that occurring as meaning must be of an entirely different nature than expressing a meaning. The latter, as we know, is a property of denoting phrases and propositions, whereas the former is supposed to be a property of the complexes they express. What then does it mean to 'occur as meaning'? To be sure, this is one of the most insidious terminological problems of Russell's unpublished work. a mess of truly nightmarish proportions. But, again, although he did not establish the necessary distinctions explicitly (we must bear in mind that this is unpublished work we are dealing with), it is virtually impossible to believe that he would have been unable to clarify the matter had he felt the need to do so.

Occurrence as meaning is one of the oldest Russellian notions. Already in 'An Analysis of Mathematical Reasoning' (1898), his first major work on logic, Russell proposes to account for the unity of a Proposition (then called a 'judgment') by identifying one of its constituents as responsible for holding all other propositional constituents together in an organic whole (cf. AMR 174-6). The element so characterized is the propositional relation or predicate (the 'predicating predicate', as Griffin [1991, p. 278] has aptly dubbed it on analogy with the 'relating relation' of POM), also called 'meaning', usually represented in the verbal expression of a Proposition by a verb or a combination of verb and adjective. The same account of the unity of complexes in general - for which, instead of 'complexes', he uses the term 'unities' - is maintained in POM, with only minimal terminological change.

Given any propositional concept, or any unity...its constituents are in general of two sorts: (1) those which may [always] be replaced by anything else whatever without destroying the unity of the whole; (2) those which have not this property. Thus in /the death of Caesar/, anything else may be substituted for Caesar, but a proper name must not be substituted for death [in the denoting phrase], and hardly anything can be substituted for of. Of the unity in question,

the former class of constituents will be called terms, the latter concepts. (POM 508)

Thus when a concept performs its uniting duty in a complex, it is said (in OF) to occur in the complex as meaning. In this regard, it is remarkable how little Russell's views and terminology changed from the 'Analysis' to 'On Fundamentals'. 'In every complex', he notes, 'at least one constituent occurs as meaning. It is the constituent occurring as meaning that gives form and unity to the complex; otherwise [the complex] would merely be several detached entities' (OF 33). The technical term 'meaning' from the 'Analysis' is retained here in its original sense in 'On Fundamentals'. There is some new jargon: the identification of the two modes of occurrence in a complex corresponding to the POM distinction between terms and concepts, namely, 'occurrence as entity' and 'occurrence as meaning', has led to the distinction of 'entity-positions' and 'meaning-positions' in complexes (cf. OF 18). And the phenomenon in question may now have been characterized with a little more precision than before: 'An entity A may occur in a complex B in such a way that any entity, simple or complex, may be substituted for A in B without loss of significance; or A may occur in such a way that it can only be significantly replaced by an entity of a certain sort;' (OF 24). But this is what Russell essentially had in mind when he introduced the term 'meaning' in 1898. The source of confusion is that, since 1902, he has also been using 'meaning' as his English rendering of Frege's 'Sinn'. This was a most unfortunate terminological novelty of the Principles (although we must note on Russell's behalf that the term 'meaning' was not there used in its original 1898 sense, nor was it ever again so used in his subsequent published work). Nevertheless, unnerving as the terminology is, I believe it must be admitted that, on a closer look, the two senses of 'meaning' - as applying to the complexes expressed by denoting phrases and

propositions and as describing a manner of occurrence in a complex - remain reasonably easily distinguishable throughout his unpublished work.

Greater difficulties and less generous conclusions await us as we turn to the substance of thesis 4. It is hard to see, as we follow the discussion regarding that thesis in 'On Fundamentals', that complexes may indeed be capable of occupying meaning-positions. Addressing the case of propositional complexes first, we should normally think that some propositional functions (or functional expressions), both intensional and extensional, are defined only for propositions, that nonsense is generated if they are applied to arguments other than propositions. Russell, however, considers these cases but concludes that they do not in fact involve meaning-positions. Thus discussing the manner of occurrence of /Scott was the author of Waverley/ in /People were surprised that Scott was the author of Waverley/, he admits that it may at first seem to be a meaning-occurrence, given the distinct impression that we shall get nonsense from the substitution for the atomic Proposition of an entity which is not a Proposition, but concludes that such an impression is produced by a verbal mirage: that a paraphrase of the original molecular proposition can be found in which the presumed meaning-occurrence (in the Proposition expressed) is seen to be an entity-occurrence. For him, the possibility of the paraphrase warrants concluding that the occurrence actually is an entity-occurrence: '[In /the belief that B caused surprise/] if B is not a [P]roposition, we get nonsense, but it is only necessary to substitute /the belief that B was true caused surprise/ [for the original Proposition], and it becomes evident that now B occurs as entity' (OF 19) - given that the substitution of, say, Socrates for B supposedly will not generate nonsense.

Essentially the same analytical approach is expected to dispose of the impression that

truth-functional connectives are to be flanked by propositions exclusively, as we can see from Russell's ruminations in a passage which I should like to quote at some length.

The first thing to be decided is whether p and q occur as meanings or as entities in " $p \supset q$ ". If " $p \supset q$ " means "If p , then q ", p and q must occur as meanings; for this form of words is meaningless unless p and q are propositions. But if " $p \supset q$ " means "if p is true, then q is true", then p and q occur as entities. The same holds if we take " $p \supset q$ " as expressing an indefinable relation of entities, holding unless p is a true entity and q is an entity which is not true...We should commonly say "the fourth proposition of Euclid implies the fifth"; and this is only valid if p and q occur as entities in " $p \supset q$ ". This alternative is therefore to be adopted. (OF 28)

What remains of the view that propositional complexes can occur as meanings - which is a view he does not retract - is hard to understand. To be sure, what is hard to understand is not so much the nature of the phenomenon under consideration when he cryptically remarks that, '[w]hen a [P]roposition is asserted, we may say in a sense [emphasis added] that the whole [P]roposition occurs as meaning' (OF 34). The sense in which he finds it (marginally) appropriate to say that a Proposition 'occurs as meaning' is clarified by the explanation in the following passage.

If I say "Socrates is a man", I do not say anything about /Socrates is a man/. If I say "It is true that Socrates is a man", the [P]roposition /Socrates is a man/ occurs as entity, and I assign to it the predicate /true/; but the [P]roposition now asserted, namely /It is true that Socrates is a man/, does not occur as entity, and nothing whatever is said about it. Thus to affirm a [P]roposition is not to say that it is true, but to say something about the constituents of the [P]roposition. Thus the [P]roposition occurs (if it can be said to occur at all [emphasis added]) in a way which is not so much analyzable as already analyzed; we are concerned, not with the whole [P]roposition, but with the relations of its parts. This is important as throwing light upon the occurrences of complexes as meanings. (OF 34)

What is difficult to understand in the above passage is why he thinks that stretching the terminology to breaking point - as he admittedly does - should be considered 'important as throwing light upon the occurrences of complexes as meanings'. If an asserted Proposition

cannot in any easily recognizable sense of the expression be said to 'occur' in any meaning-position, how and where do complexes occur in meaning-positions?

I submit that there can be no satisfactory answer to this question in Russell's theory simply because thesis 4 is false: as it turns out, a complex can never occur as meaning in another complex. We have seen how he proposed to dispel the impression that some functions are defined only for propositions through paraphrastic methods. We have, further, seen that the case for saying that an asserted Proposition 'occurs as meaning' (somewhere!) rests on a blatant abuse of the terminology. We can now close the case on thesis 4 by considering denoting complexes: where can they be shown to occur as meanings? If Russell knew the answer to this question, he neglects to provide it in 'On Fundamentals', for nowhere does he identify a single case of meaning-occurrence of a denoting complex. Nor could he, for it is immediately evident that a denoting complex can always be replaced by its own denotation in a Proposition salva significatione (though not, of course, salva veritate), this being acknowledged by Russell himself as one of its essential properties.

The reason why he held on to thesis 4 is, in my opinion, very interesting. Russell decided at a very early stage in the development of the theory - for no good reason, it seems to me - that '[a]ll complexes are concepts' (OF 30), as he stated with perhaps unprecedented clarity in 'On Fundamentals'. If complexes are concepts, then, of course, given the definition of a concept as the element which can occur as meaning in a complex, thesis 4 readily follows. But it is clearly erroneous to believe that complexes are concepts, and this is why I have avoided the terminology of denoting concepts throughout this essay. If we look closely at the passages of POM where such a terminology originated, we shall find that no reason is ever offered in

support of the view that the so-called 'denoting concepts' are concepts. Certainly, just from the fact that '[p]redicates...are concepts' (POM 45) and that '[a] predicate always gives rise to a host of cognate notions' (ibid.), it is rash to infer, as he seems to do, that such cognate notions are likewise concepts! From the fact that 'denoting concepts...are derived from class-concepts' (POM 74), it is again rash to conclude that they themselves must be concepts! As it turns out, Russell's 'denoting concepts' are not concepts: they contain concepts but clearly behave like terms. It is no doubt surprising that he should have made such a big mistake in the Principles, but, perhaps, even more surprising that it should still have eluded him when he found himself involved in a wild goose chase after meaning-occurrences of complexes at a certain point in 'On Fundamentals'. I must, however, note on his behalf that he did not chase for long: the next few paragraphs of the paper would show that the theory of meaning and denotation should simply be abandoned rather than refurbished. We shall now see why.

CHAPTER THREE
 'THE WHOLE DISTINCTION OF MEANING AND DENOTATION HAS BEEN
 WRONGLY CONCEIVED'⁴⁶

Russell's case against the theory of meaning and denotation arose from the surprising discovery encapsulated in the following claim:

(5) '[A] meaning cannot be got at except by means of denoting phrases' (OD 111)

It is easier to appreciate the significance of thesis 5 and understand the argument which proves it if, before considering Russell's treatment of the thesis in 'On Denoting', we turn to the passages of 'On Fundamentals' in which he is more articulate about it. The matter is discussed in OF in two passages. I shall quote them both in succession even at the cost of redundancy, because some redundancy may prove useful here. This is how Russell first formulates and justifies thesis 5 at the beginning of 'On Fundamentals':

It seems that if we wish to put a denoting meaning [i.e., a denoting complex] in an entity-position, and say something about the meaning itself, we can only do so by means of a denoting [complex]; for if, instead of a denoting [complex], we put the meaning in question, then, since the position is an entity-position, we shall be talking unintentionally about the denotation of the meaning instead of about the meaning. Thus a denoting meaning can only be spoken of by means of denoting [complexes] which denote the meaning in question. This is what inverted commas [our slashes] do: they give a denoting [complex] which denotes the meaning of what is

between the inverted commas [i.e., between the slashes].(OF 7)

And this is how he recasts the explanation of slashes (his 'inverted commas') in the first of the five paragraphs of 'On Fundamentals' (paragraphs 35 to 39) in which the case against the meaning/denotation distinction is developed:

⁴⁶ Russell, 'On Denoting', p. 113.

The use of [slashes] may be explained as follows. When a [complex] has meaning and denotation, if we wish to say anything about the meaning, we must put it in an entity-position; but if we put it itself in an entity-position, we shall be really speaking about the denotation, not the meaning, for that is always the case when a denoting complex is put in any entity-position. Thus in order to speak about the meaning, we must substitute for the meaning something which denotes the meaning. Hence the meanings of denoting complexes can only be approached by means of complexes which denote those meanings. This is what complexes in [slashes] are. If we say '/any man/ is a denoting complex', /any man/ stands for /the meaning of the complex /any man//, which is a denoting [complex]. (OF 35)

The nature of the phenomenon examined in the above passage does not seem at all hard to understand. If we wish to talk about a denoting complex, the denoting complex to be talked about cannot itself occur as subject (i.e., occur as term, or as entity) in the Proposition which purports to be about it, because, whenever a denoting complex occurs as a subject in a Proposition, the Proposition is about the complex's denotation, not about the complex⁴⁷. This shows that denoting complexes are terms sui generis, for every other entity which occurs as a term (or 'as entity') in a Proposition occurs in such a way that the Proposition is about that very entity. So, to talk about a denoting complex, we must have a representative of the complex occurring in the Proposition which is to be about the complex, and such a representative can only be a denoting complex which denotes the complex we wish to talk about. All this seems very clear in Russell's exposition. But he does not succeed in clearly drawing our attention to some of the bewildering consequences of the phenomenon under observation.

One of these consequences has to do with the use of slashes. We can now understand that the expression constructed when a denoting phrase is enclosed by slashes cannot be a name of

⁴⁷ In fact, this is the case whenever a denoting complex occurs in a Proposition. For denoting complexes can only occur as terms, never as meanings - despite Russell's occasional suggestions to the contrary (as we have seen under thesis 4 above).

a denoting complex, but must be a denoting phrase expressing a complex which denotes the complex we wish to talk about. That is to say, we can now see that it is impossible to talk about a denoting complex by designating it - by giving it a proper name. A denoting complex can be talked about only if we denote it - that is, only if we use a denoting complex which denotes the complex to be talked about.

To expose the problem more clearly, let us suppose we wish to speak about the complex /the centre of mass of the Solar System/, and say of this complex that it contains the Solar System as a constituent. We could conceivably give the complex a name, say, the letter 'C', and frame the proposition 'C contains the Solar System'. However, because, when a proper name occurs in a proposition, its designation occurs in the Proposition expressed, we shall be saying that the centre of mass of the Solar System contains the Solar System, which is obviously not what we meant. We intended to speak of the complex /the centre of mass of the Solar System/, but, by giving the complex a proper name, we had the complex itself occurring in the Proposition, and so, because the complex is a denoting complex, the Proposition turns out to be, not about the complex, but about what the complex denotes, which is not what we intended to speak about.

This argument - which I think is implicit in the above passages from OF - leads to the surprising conclusion that '[a] meaning cannot be got at [i.e., cannot be talked about] except by means of denoting phrases'.⁴⁸ Thus, when we use slashes to talk about denoting complexes,

⁴⁸ In reviewing the literature after this chapter had been written, I was surprised to learn that, according to Blackburn and Code, a version of this argument had been presented to them by David Kaplan. Two points should be made. First, they are not sure whether Russell knew that denoting complexes cannot be designated: 'If we suppose that he had come to see this by the time he wrote "On Denoting", we have an explanation for the fact that he is now insisting

we must (unwittingly) have formed descriptive phrases, not proper names, because, as Russell points out, the nature of denoting complexes is such that we cannot designate them. But this does not seem to be the case when slashes are used to talk about propositional complexes. Given that Propositions do not denote, there is no reason why they should not be constituents of (molecular) Propositions which are about them, like any other term. It then is surprising that, having introduced slashes as a device which allows us to refer to meanings in general, we should now, reflecting with Russell on the nature of denoting complexes, come to the conclusion that slashes cannot, contrary to what we had tacitly assumed, form proper names of some among meanings, namely, the denoting ones.

Read against the background provided by the above discussion, the passages of OD in which the discovery of thesis 5 is explained seem very easy to understand. They have essentially the same content as that of the passages of OF I have quoted. (There is a noteworthy difference in the corresponding OD passages, as we shall see. In 'On Denoting', there is no mention of entity-positions. We may wonder whether Russell came to realize that all occurrences of complexes - at any rate, all occurrences of denoting complexes - are entity-occurrences. I don't think he did. But, at all events, it must have been clear to him that he could refrain from speaking of entity-positions in OD and not sacrifice an iota of the explanation previously developed in 'On Fundamentals'.) These are the relevant passages of 'On Denoting':

that senses [i.e., denoting complexes] be introduced by means of definite descriptions.' (p. 76) Second, they believe 'the obvious solution is not to attack Frege, but rather to insist that his three-entity view applies to all referring expressions' (ibid.). Blackburn's and Coon's 'obvious solution' amounts to scrapping the crucial distinction between names and descriptions - which, as we know from the discussion of thesis 2 above, cannot be done. Russell is on much stronger grounds than they have imagined.

The difficulty in speaking of the meaning of a denoting complex [as opposed to its denotation] may be stated thus: The moment we put the complex [C] in a [P]roposition, the [P]roposition is about the denotation [of C]; and if we make a [P]roposition in which the subject is /the meaning of C/, then the subject is the meaning (if any) of the denotation [of C], which was not intended ...[W]henver C occurs without [slashes], what is said is not true of [its] meaning [i.e.. true of the complex itself], but only of [its] denotation, as when we say: The centre of mass of the Solar System is a point.⁴⁹ Thus to speak of C itself, i.e. to make a [P]roposition about the meaning, our subject must not be C, but something which denotes C. Thus /C/, which is what we use when we want to speak of the meaning, must be not the meaning, but something which denotes the meaning. (OD 112)

The passage of 'On Denoting' that we are concerned with in this essay consists of eight paragraphs, the first of which is the one on page 111 beginning 'The relation of the meaning to the denotation...'. Thesis 5 is stated at the end of the third paragraph. Its justification begins on the fourth paragraph, before Russell formulated the fairly articulate explanation in the two passages quoted above, which appear in the fifth and sixth paragraphs. By the time we get to the fourth paragraph, he has already explained that '[w]hen we wish to speak about the meaning of a denoting phrase' - that is to say, about a denoting complex - 'the natural mode of doing so is by [slashes]', and that the task will be 'to consider the relation between C and /C/' as exemplified in the following two sets of propositions:

- (1a) The centre of mass of the Solar System is a point, not a denoting complex.
- (1b) /The centre of mass of the Solar System/ is a denoting complex not a point.

and

⁴⁹ True, this sentence should have been enclosed by quotation marks. My guess is that Russell is trying to minimize the possibility of confusion by eliminating unnecessary quotes. The omission of quotes here seems to me as harmless as when he wrote, in the passage of PAD quoted under thesis 3 above: 'Recurring to Smith's wife, let us baptize her Triphena.' Again, on page 112 of OD, there's another harmless omission of quotation marks when he refers to the sentence 'The curfew tolls the knell of parting day'.

(2a) The first line of Gray's Elegy states a [P]roposition.

(2b) /The first line of Gray's Elegy/ does not state a [P]roposition.

In an attempt to clarify the matter even further, Russell explains (at the beginning of the third paragraph) that 'when C occurs it is the denotation [of C] that we are speaking about; but when /C/ occurs, it is the meaning [of C that we are speaking about]'. (A clearer understanding of what he is up to might be - and actually has been - hindered by the fact that the letter 'C' is used throughout the passage to refer both to a denoting phrase and to what the phrase expresses, a denoting complex. At times, the letter is a name of the phrase; at times, a name of the complex. In fact, it seems largely irrelevant whether the letter 'C' is thought of as designating a denoting phrase or as designating a denoting complex, because, when we look at propositions (1a), (1b), (2a), (2b) - from our vantage-point, at any rate - it should be immediately clear that the subject of the second proposition in each pair refers to the denoting complex occurring in the meaning of the first proposition. And this is all we need in order to understand the relation between C and /C/ and follow the argument. Thus it seems to me that there is, at this point, no reason to be terribly concerned with the use of the letter 'C'. But it remains that, if Russell is right in concluding that the meaning/denotation distinction has been wrongly conceived, we should indeed become increasingly aware of the difficulties involved in speaking about (denoting) meanings, for his claim is supposed to be substantiated by such difficulties.)

On the basis of the information provided in the second paragraph and in the first sentence of the third, Russell invites the reader in the fourth paragraph to consider the difficulties involved in the use of the expressions 'the meaning of...' and 'the denotation of...'. It is crucial to keep in mind that the expressions 'the meaning of ...' and 'the denotation of ...' are

used by him to speak about the meanings and the denotations of denoting complexes, as we can see when, at the beginning of the fifth paragraph, he complains of '[t]he difficulty in speaking of the meaning of a denoting complex'. As we have seen (under thesis 3), the expression 'the meaning of a denoting complex' is confusing, for it seems to suggest that a complex is something different from the meaning which it is said to have. A denoting phrase may properly be said to have meaning, but a denoting complex is a meaning; or, as we may put it, it is the meaning which it is supposed to have. Once this is understood - and Russell makes it clear only in the fifth paragraph - we can see that the problem involving the use of the expression 'the meaning of...' is largely artificial. If the terminological explanation provided in the fifth paragraph had been offered earlier in the passage, the motivation for the first half of the fourth paragraph would have been lacking, for the problem (as we shall now see) can be posed only if the expression 'the meaning of a denoting complex' is legitimate, which he admits it is not.

The problem (or pseudo-problem) involving the expression 'the meaning of...' should not be hard to understand. We wish to speak about the meaning expressed by the denoting phrase occurring in (2a) and say of it that it contains The Elegy, for instance. If we then establish that the letter 'C' and the denoting phrase 'the first line of Gray's Elegy' are to be used interchangeably, when we say

The meaning of C contains The Elegy,

we shall be saying that

The meaning of the first line of Gray's Elegy contains The Elegy,

by substitution of the denoting phrase for 'C'. But this proposition means the same as

The meaning of 'The curfew tolls the knell of parting day' contains The Elegy., which is not what we intended to say.

Thus to speak of the meaning of the denoting phrase, to speak of the complex which contains The Elegy, we must use slashes. For, 'in order to get the meaning we want, we must speak not of 'the meaning of C', but of 'the meaning of /C/' which is the same as /C/ by itself'. As he explains in OF, "'the meaning of C" puts C in an entity-position, and therefore means "the meaning of the denotation of C", whereas what we want [to talk about] is the meaning of the meaning of C, as opposed to the meaning of the denotation of C and the denotation of the meaning of C' (OF 36). So, what we need to say is

The meaning of /C/ contains The Elegy.

But this is hardly news. The problem with the first half of the fourth paragraph is actually threefold. First, the attentive reader of the first three paragraphs would never try to speak of the meaning of a denoting phrase by having the phrase itself occur in the blank of the expression 'the meaning of...'. For as Russell had already stipulated, when C (the phrase) occurs in a proposition, it is the denotation (or the designation) of the phrase that we are speaking about, not the meaning it expresses, i.e., not the complex we want to talk about. So, when he gets to the fourth paragraph, the reader must already know that, to speak about the desired complex, he can use either 'the meaning of the phrase "the first line of Gray's Elegy"' or '/the first line of Gray's Elegy/', i.e. '/C/'. If Russell thought that the need for slashes would be found surprising in the fourth paragraph, he was surely mistaken. Secondly (and more plausibly), he may have thought that what is surprising is that the only available alternatives when we want to speak of the meaning of the denoting phrase - namely, 'the meaning of "the first line of Gray's

Elegy"' and '/the first line of Gray's Elegy/' - are both denoting phrases, i.e. neither is a proper name for the complex. Yet it is not immediately apparent from his compressed exposition that denoting complexes cannot be named. The argument that shows this is most explicit in 'On Fundamentals'. I do think that the argument showing this is implicit in the passages from the fifth and sixth paragraphs quoted above. But I believe the reader will agree that some effort is required to understand why '[a] meaning cannot be got at except by means of denoting phrases'. And if Russell thought this would be understood as early as the fourth paragraph, his expectation was certainly unreasonable. Thirdly, even the attentive reader of 'On Denoting' who has no knowledge of the unpublished work is not in a position - at any rate, by the time he reaches the fourth paragraph - to understand the expression 'the meaning of a denoting complex'. This first occurs in OD at the beginning of the fifth paragraph⁵⁰. But if the reader does not understand what is meant by 'the meaning of a denoting complex', how can he understand what Russell means when he says that, in order to talk about the meaning of the phrase, as exemplified in (1b) and (2b), 'we must speak..of 'the meaning of /C/', which is the same as /C/ by itself'? This should strike the reader as an impenetrable mystery, unless, of course, the reader makes the mistake of interpreting the inverted commas which enclose the letter 'C' as being ordinary

⁵⁰ Although Russell explicitly distinguishes denoting phrases from their meanings, he nowhere in OD explicitly states that denoting complexes are to be identified with meanings. The situation is further complicated by the fact that Russell makes a mistake in a note on Frege (OD 108n) - the only mistake of its kind that I can remember - when he says that, for Frege, 'it is the meanings of the constituents of a denoting complex [my emphasis] that enter into its meaning, not their denotations'. We are in a position to understand that he should have used 'denoting phrase' where he uses 'denoting complex', because, for Frege, it is only expressions that have meanings. This mistake, coupled with the unfortunate expression 'complex denoting phrases' from the previous sentence in the same note, creates a terminological environment which, to put it mildly, is not conducive to clarity.

quotation marks. But in this case, we shall be referring to the letter 'C' when we intended to refer to a denoting complex.

Thus it would seem that, from which ever angle you look at it, the first half of the fourth paragraph seems largely irrelevant to our understanding of the problems involved in speaking of meanings. The second half of that paragraph, however, does have a surprise in store for us. It does seem to me to reveal much of the perverse nature of denoting meanings. Although Russell (understandably enough) introduces the discussion of the expression 'the denotation of... ' as if it were only an extension of the previous discussion of the expression 'the meaning of... ', something truly bizarre happens when we try to use that expression to talk about an object which denotes, a denoting complex. This is the problem. Suppose we wish to use the expression 'the denotation of ... ' to talk about the complex /the first line of Gray's Elegy/ - very much, indeed, as we have used the expression 'the meaning of... ' to talk about the same complex. Now, according to Russell's stipulations, the complex will be our denotation; it will be C. So,

(i) $C =$ /the first line of gray's Elegy/.

If C is our complex,

(ii) the denotation of C = 'The curfew tolls the knell of parting day'.

So far so good. Now, in order to use the meaning expressed by 'the denotation of... ', i.e. the complex /the denotation of.../, to talk about our complex C, we cannot have C itself occurring in the complex /the denotation of.../, for otherwise we would be talking about C's denotation, not about C. It thus seems that what we need is /C/, a complex denoting the complex C, which is what we used to talk about C when the complex /the meaning of.../ was in question. Russell then suggests that we need the following:

(iii) /C/ = /the denoting complex occurring in (2b)/

Thus /C/, which denotes the complex we wish to talk about, seems to be what we need. But, if we say

(iv) the denotation of /C/,

we are saying, by substitution in accordance with the above identity (iii),

(v) the denotation of the denoting complex occurring in (2b).

But this is obviously not what we wished to say! For

(vi) the denotation of the denoting complex occurring in (2b) = 'The curfew tolls the knell of parting day'.

It is at once clear that what seems to have gone wrong is that we did not make the right substitution in (v). What we seem to need instead of (v) is

(vii) the denotation of /the denoting complex occurring in (2b)/.

This is no doubt right.

The surprise in the series (i) - (vii) occurs when we remember (what the reader of OD could not do at this point) that slashes form denoting phrases, not names of complexes, and the denoting phrases formed by slashes naturally express complexes which denote the meaning of what is between the slashes. So, when we chose a denoting complex to denote C in (iii), we did not designate such a complex; we described it. But this means that, to speak of C by using the expression 'the denotation of...', we actually used, contrary to what we may have believed, two denoting complexes! To select one denoting complex in (iii) to denote C, we used another denoting complex, namely, the one expressed by '/the denoting complex occurring in (2b)/'. (And we have now just used a third denoting complex, namely, the one expressed by 'the

complex expressed by "/the denoting complex occurring in (2b)"/".)

Thus, the reason we got the wrong denotation in (v) is because we thought - with Russell - that, to use the complex /the denotation of.../ to denote C, all we had to do is use one complex which should then fill the gap in /the denotation of.../. But this is wrong! For when we did fill the gap with a denoting complex which denotes C, we got (v). And (v) does not denote C, as we expected, but denotes C's denotation, as shown in (vi). So, when we wish to denote a denoting complex, as Russell explains, the expression 'the denotation of...' 'does not mean [i.e. does not express something which denotes] the denotation we want, but means [i.e. expresses] something which, if it denotes at all, denotes what is denoted by the denotation we want...[W]hat we meant to have as the denotation was /the first line of Gray's Elegy/'. Thus we have failed to get what we wanted [in (v)]'. We do get what we want in (vii), but it must be noticed that (vii) means the same as

(viii) the denotation of the complex which denotes the denoting complex occurring in (2b).

Thus we see that what fills the gap of /the denotation of .../ is /the complex which denotes the denoting complex occurring in (2b)/, not the only complex we chose consciously (in (iii)), namely, /the denoting complex occurring in (2b)/.

It is not clear whether Russell understood that we ultimately - through painful contortions - can get the denotation we want. If he thought we cannot by any means get it, he was wrong, for we have got the denotation we wanted in (viii). But it should be clear that, to do so, we had to use two denoting complexes, not just - as in the case of the expression 'the meaning of...' - the denoting complex which denotes the complex we wished to talk about. We have to go, as it were, one level higher in the hierarchy of denoting complexes. The source of all evils is that denoting meanings 'can only be approached by means of complexes which denote those

meanings' (OF 35); they never, as it were, appear in person. Denoting complexes cannot be directly named; they 'cannot be got at except by means of denoting phrases'.

This is no doubt hard to live with. But even though Russell has shown that denoting complexes are elusive, slippery entities, he certainly did not think he had already shown, at the end of the fourth paragraph, that the relation of C to /C/ 'is an inextricable tangle [which] seems to prove that the whole distinction of meaning and denotation has been wrongly conceived', as he would ultimately conclude at the end of the seventh paragraph. The basis for this conclusion was an argument developed in the sixth and seventh paragraphs which, together with the argument for thesis 5 which we have been discussing, should provide the desired justification.

Let us take another look at the two pairs of propositions, (1a), (1b) and (2a), (2b), offered by Russell in the second paragraph to help us understand the relation between C and /C/ - that is to say, to help us understand the role slashes have been given in the theory. We know that the expression formed by enclosing the subject of the first proposition (in each pair) within slashes - which gives us the subjects of (1b) and (2b) - is what we need to be able to talk about the meaning expressed by the subject of the first proposition. So, if C is the denoting phrase in the first proposition, /C/ is what we use in the second proposition to talk about the meaning of C. The problem then is how to understand what we have just done, that is, how to understand /C/'s contribution to what is expressed by the proposition in which it occurs.

On a very natural interpretation, it would seem that /C/'s contribution is exactly what we use it to talk about, namely, the meaning of C. Thus, if /C/'s contribution to a Proposition is what we use it to talk about, whenever /C/ occurs in the verbal expression of a Proposition, the meaning of C occurs in the Proposition expressed. This seems perfectly consistent with the

remark, at the beginning of the third paragraph, according to which '[w]e say...that when C occurs [in a proposition] it is the denotation [of C] that we are speaking about; but when /C/ occurs [in a proposition] it is the meaning [of C that we are speaking about]'

The problem with the natural interpretation is that C's contribution to the Proposition in whose verbal expression it occurs is also its meaning; it is not C's denotation, because C is not an ordinary proper name. But, if /C/'s contribution to a Proposition is the same as C's, the meanings of (1b) and (2b) are the same as the meanings of (1a) and (2a) respectively, which is not what we had in mind when slashes were introduced. Therefore, /C/'s contribution to a Proposition cannot be what we use /C/ to speak about. As we have seen, this is to be cashed out as the conclusion that /C/ is not a proper name of C's meaning; /C/ must be a denoting phrase whose meaning denotes C's meaning. We have found that, if C is a denoting phrase, the expression formed by slashes, /C/, which we use to talk about C's meaning, must also be a denoting phrase. Now - using both 'C' and '/C/' as variables ranging over denoting complexes - we are led from this to the conclusion (in the sixth paragraph) that, 'to speak of C itself, i.e. to make a [P]roposition about the meaning [as opposed to making a Propocision about C's denotation], our subject must not be C, but something which denotes C. Thus /C/, which is what we use when we want to talk of the meaning [i.e. of C], must be not the meaning [i.e. not C itself], but something which denotes [C].' As Russell notes at the beginning of the seventh paragraph, 'it would seem that /C/ and C are different entities, such that /C/ denotes C'. 'We have now not one complex with the two aspects of meaning and denotation, but two entities, /C/...and C, the denotation of /C/' (OF 37).

It should be clear that, on what I have called the 'natural interpretation', the

interpretation on which the subject of (1b) or (2a) is a name of the meaning expressed by the subject of (1a) or (2b), all we have is one denoting complex, about which we can, with Russell in OF, speak as if it had two aspects, its meaning and its denotation. We might then say - in none too clear Russellian jargon - that the first Proposition is about the denotation of the complex, and the second is about the meaning of the complex. The whole motivation for the use of slashes was to try to do what we now understand - once we have reached the bottom of the sixth paragraph - cannot be done: we wanted to have the meaning of the complex (i.e. the complex itself) occurring in the second Proposition, but, if it did so occur, we would want also that it just stopped denoting! We have operated hitherto as if the use of slashes might achieve this. But we now realize that such a fancy arises from a misunderstanding of what slashes can do; a fortiori, from a misunderstanding of the nature of denoting meanings. We now know that it is not even legitimate to use the phrase 'the meaning of a denoting complex', which suggests that the meaning is an aspect of the complex to be distinguished from the denotation of the denoting complex. As Russell finally notes, 'when we distinguish meaning and denotation, we must be dealing with the meaning: the meaning has denotation and is a complex, and there is not something other than the meaning, which can be called the complex, and be said to have both meaning and denotation'. Once this has sunk in, we realize that /C/ is not an aspect of C, not something that can be called 'the meaning of C'; /C/ and C are two distinct entities.

This must already look like a crumbling theory, but so far it might appear as if there could be ways of saving it. What, after all, is so repugnant about the view that /C/ and C are two distinct entities? It is at this point, at the bottom of the sixth paragraph, that Russell finishes the job with what I cannot help but deem a stroke of genius. He in effect invites the reader to

consider the following question: if /C/ is a denoting complex, as we have concluded it must be, is C a constituent of /C/? The answer is immediately forthcoming: 'C must not be a constituent of this complex (as it is of /the meaning of C/); for if C occurs in the complex [/C/], it will be its denotation, not its meaning [i.e., not C itself], that will [be talked about], and there is no backward road from denotations to meanings'. That is to say, if C occurred in /C/ - as it does in /the meaning of C/ - we would be talking about C's denotation - or, more exactly, about the meaning of C's denotation, if we take /C/, as seems reasonable to do, to be /the meaning of C/. But how can a complex which is about the meaning of C's denotation be used to talk about C? We cannot have /C/ denoting C if C occurs in /C/, for if C does occur in /C/, /C/ can only be used to talk about C's denotation, not about C. But no talk of the denotation of a meaning could possibly result in talk about a certain particular meaning which denotes that denotation, because, for every object that can be denoted, there are, according to the theory, infinitely many meanings which denote it! So, C cannot occur in /C/. But '[i]n that case', asks Russell in OF (p. 37), 'what is the connection between them?' Just to be told that /C/ and C are different entities and that C is not a constituent of /C/, as he points out in the seventh paragraph, 'cannot be an explanation'. We must now demand an answer to the crucial question: 'where are we to find the denoting complex /C/ which is to denote C?' How can our desire to speak about the complex C lead us to the complex /C/, which is only one among many complexes which we certainly have at our disposal whatever C may be?

There obviously can be no satisfactory answer to this question within the theory of meaning and denotation: 'the relation of /C/ to C remains wholly mysterious'. The question hits the very heart of the whole slash business and shows that it is completely illegitimate as a

means of talking about denoting meanings - some form of philosophical money laundering. When slashes were introduced, it was natural to think that they formed names of denoting meanings. We then found that Russell could prove that '[a] meaning cannot be got at except by means of denoting phrases', and that, therefore, the expression formed by slashes had to be a description of a denoting meaning. And now, to top it off, we find that we cannot even justify the urge to introduce slashes in the first place: there should be no need to produce this particular description which is constructed by means of slashes, for we certainly never thought we were faced with a shortage of descriptions to talk about a given meaning! The slash-description must be an ordinary description! We hoped at first that slashes would take us from a denoting complex to a name which designated it. When that failed, we realized that they took us from the complex to another complex which denoted the first. This indeed they do. But we intended a slash-description to be a privileged description of the complex we wished to talk about. A slash-description, we thought, would express a denoting complex which would contain the complex we wished to talk about as a constituent. We now realize that, if this were the case, the complex we wish to talk about would be introduced directly into a Proposition, and the Proposition would therefore be about the complex's denotation, not about the complex itself. Slash-descriptions were intended, as it were, to bring us face-to-face with a meaning. We should now understand that we have been fooling ourselves: a meaning will never appear in person, as it were. To be sure, we can still talk about meanings; that is to say, for any given meaning, there still are infinitely many descriptions which can be used to talk about it. Thus we can still talk about the meaning expressed by a given description. All that is required, of course, is faith in the existence of meanings. We hear that a denoting phrase is related to this object, the

meaning it expresses. There are rumours of its existence...

In OF, when Russell hits upon the fatal question and realizes that the connection between /C/ and C cannot be explained, he seems to understand that the whole idea of a privileged access to meanings by means of slashes has proven to be a mirage and immediately abandons the theory. In my understanding of the OF and the OD passages, there is a striking symmetry between the two, a perception that is reinforced by the fact that several remarks from the OF passage reappear verbatim, or just slightly paraphrased, in the corresponding OD passage. Accordingly, it seems to me that Russell's case against the theory of meaning and denotation has already been made as soon as the fatal question is put forward in the seventh paragraph. At that point, the reader has certainly seen enough 'rather curious difficulties, which seem in themselves sufficient to prove that the theory which leads to such difficulties must be wrong' (OD 111). And, if anything in the OD passage deserves to be described as 'an inextricable tangle [which] seems to prove that the whole distinction of meaning and denotation has been wrongly conceived' (OD 113), that's the relation of /C/ to C unquestionably. What then, we have to ask, does the passage which begins with 'moreover' - the eighth paragraph, thesis 6 (below) and the sentence beginning with that word in the seventh paragraph - add to the picture? Even if we have understood Russell's case, as I believe we have, this is not a very easy passage to interpret, largely because it has no counterpart in OF for us to rely on. Here we are on our own, as it were. What follows is the interpretation which I think best integrates the passage into the context of Russell's argument. In fact, we shall now see that there is a second argument running parallel to the one we have already discussed.

(6) '[W]e cannot succeed in both preserving the connexion of meaning and denotation and

preventing them from being one and the same' (OD 111).

As it stands, the above claim should strike the reader as absurd. Obviously, if we distinguish a meaning from its denotation, meaning and denotation could not possibly turn out to be the same object. It thus seems clear that Russell must not have meant what he said and that the remark must be taken with a pinch of salt. I propose an amendment and try to justify it in what follows.

It seems that, even if we ignore the problems involved in the relationship between /C/ and C, the simple fact that we are forced to recognize /C/ and C as distinct entities cannot be tolerated. It seems that, if we accept the distinction, we shall have no reason to accept the theory. This is why. We have been led to believe that, 'when [a phrase] C occurs in a proposition, it is not only [its] denotation' that C contributes to the content of the proposition. 'That the meaning is relevant when a denoting phrase occurs in a proposition is formally proved', we have been told, 'by the puzzle about the author of Waverley', i.e. by the puzzle of identity. The difference between 'Scott was the author of Waverley' and 'Scott was Scott', the fact that the former has a property which the latter does not, 'namely the property that George IV wished to know whether [the former but not the latter] was true', is supposed to be explained by the claim that 'the meaning of "the author of Waverley" must be relevant [to a proposition in which it occurs] as well as [its] denotation'. 'Yet, as we have just seen [from the need to distinguish /C/ from C], so long as we adhere to this point of view, we are compelled to hold that only the denotation [of C] can be relevant': C's only contribution to the content of any proposition in which it occurs is its denotation, 'the meaning [of C] being wholly relegated to /C/'. Whenever C is the subject of a proposition, all we talk about is its denotation (or

designation); thus C seems to behave like a proper name, as if it were an ordinary representative of the object we talk about when we use it. But whenever the meaning of the phrase is relevant to what is asserted in a proposition, as it is in (1b) and (2b), the subject must be /C/, not C. It won't help, as we have seen, to use 'the meaning of C', for we shall then be talking about the meaning of the phrase's designation (if there is one) rather than about the phrase's meaning.

Now, the trouble with the division of labor between /C/ and C is that it seems to run against the theory's fundamental contention that the meaning and the denotation are equally relevant when a denoting phrase occurs in a proposition. It is this contention that is supposed to explain George IV's curiosity. Therefore, we must conclude that /C/ and C cannot be two distinct things. Instead, a denoting phrase has, as Russell was in the habit of saying, 'the two sides of meaning and denotation' (OD 109, emphasis added), or 'the two aspects of meaning and denotation' (OF 37, emphasis added). Thus the distinction of /C/ and C must be reconsidered: what we actually have here are not two separate entities. What we have named 'C' and '/C/' must be the two aspects, or the two sides, of one and the same denoting phrase. If the two aspects - which we might label the 'meaning-aspect' and the 'denoting-aspect' - are not combined in one and the same denoting phrase, there can be no solution to the puzzle of identity. 'But the difficulty which confronts us is that we cannot succeed in both preserving the connexion of [meaning-aspect and denoting-aspect in a denoting phrase] and preventing them from being one and the same'. The meaning-aspect of a denoting phrase just is what makes the denoting phrase denote; it is the meaning the phrase expresses.

Thus it would seem that, if we accept that /C/ and C are two distinct entities, the theory is self-refuting, because only C occurs in the proposition which aroused George IV's curiosity;

whereas /C/ occurs, for instance, in the proposition '/C/ is a meaning which denotes Scott', which is like (1b) and (2b). But, if we try to explain the monarch's curiosity by postulating that a denoting phrase such as 'the author of Waverley' has two aspects, one of which C, its denoting-aspect, is what the phrase shares with the proper name 'Scott' and is what guarantees the truth of the proposition (that Scott = the author of Waverley), and the other of which, /C/, its meaning-aspect, is what distinguishes the phrase from the proper name 'Scott', we also incur self-refutation because, according to the theory, what denotes in a denoting phrase is precisely what is supposed to distinguish it from a proper name, namely, the meaning it presumably expresses. However we may understand the relationship between /C/ and C, we are led to the conclusion that the distinction of meaning and denotation is a gigantic imbroglio with an innocent face.

If my reading of the relevant passage of 'On Denoting' is correct, we have understood the reasons for rejecting the meaning/denotation distinction before we could fully understand what Russell said he was going to do. We have seen that the relation which involves 'certain rather curious difficulties' is that between /C/ and C, that this is the relation which he could finally describe as 'an inextricable tangle' and is what we were asked to focus upon in the second paragraph. We knew all along where to find the problems, but it was harder to know how to interpret the statement according to which 'we cannot succeed in both preserving the connexion of meaning and denotation and preventing them from being one and the same'. It is at first hard to understand how the presumed 'connexion of meaning and denotation' could possibly refer to /C/ and C. Indeed, the whole passage is so obscure, and Russell's choice of terminology so inadequate, that it is even hard to understand whether a reference to the relation

between /C/ and C was intended when he speaks of the 'connexion of meaning and denotation'. We finally understood that the attempt to preserve the 'connexion of meaning and denotation' is an attempt to resist the two-entity view of the distinction between /C/ and C. We saw that, if we accept that /C/ and C are two different entities altogether, we run into two insurmountable difficulties. First, we cannot explain how we got /C/, given that /C/ cannot contain C. Secondly, we shall not be able to explain how /C/ contributes to what is asserted in 'Scott is the author of Waverley', which contains C but not /C/, and we shall then be unable to solve the puzzle for the sake of which the very distinction represented by /C/ and C was introduced. Thus we find it necessary to think of /C/ and C as being the 'two sides', or 'two aspects' of one and the same denoting phrase - even though it has already been shown that there is no escape from the two-entity view and that, therefore, this theory has already been refuted. (In OD, but not in OF, Russell is indeed proposing an exercise of overkill.) Now, it seems to me virtually impossible to understand that the 'connexion of meaning and denotation' is supposed to be the connection between the two aspects of a denoting phrase - aspects which are supposed to be represented by /C/ and C - if we remain confined to the eight paragraphs. But, once we turn to page 109 of 'On Denoting', we see that Russell refers to meaning and denotation as being 'the two sides' of a denoting phrase. On page 108, he identifies, 'in a denoting phrase, two elements, which we may call the meaning and the denotation'. In 'On Fundamentals' (p. 37), meaning and denotation are called 'the two sides' or 'the two aspects' of denoting complexes. Thus it is only after we have understood the reasons for his dissatisfaction with the two-entity view and found some crucial terminological clues elsewhere that we can make sense of the intended 'connexion of meaning and denotation'. This is not in fact a connection between a

meaning and its denotation, as Russell's bewildering terminology would have us believe: the connection in question is that of the meaning-aspect with the denoting-aspect in a denoting phrase. The denoting-aspect of 'the author of Waverley' is what accounts for the truth of a non-trivial identity statement such as 'Scott is the author of Waverley' - the fact that 'the author of Waverley' designates the same man as does 'Scott'. And the meaning-aspect of the phrase is what distinguishes it from 'Scott' and what was responsible for George IV's curiosity.

Once it is understood that Russell is using 'meaning' and 'denotation' to refer to the two aspects of a denoting phrase, we can make more literal sense of two passages than we could before and we can finally understand a passage that simply made no sense at all before we completely understood the terminology. These are the first two passages with the proposed terminological adjustment:

[I]f C occurs in the complex [/C/], it will be its [denoting-aspect], not its [meaning-aspect] that will occur [in /C/]...

[W]hen C occurs in a proposition, it is not only the [denoting-aspect of C] that occurs...yet, on the view in question, C is only the [denoting-aspect], the [meaning-aspect of C] being wholly relegated to /C/.

When these two passages were mentioned earlier, our understanding of the argument already was such as not to be compromised by the fact that these passages seemed to require some thorough paraphrasing. We are now in a position to make more literal sense of them.

The claim (from the first paragraph) that '[t]he relation of the meaning to the denotation involves certain rather curious difficulties' should seem unintelligible, I contend, unless one realizes that 'meaning' and 'denotation' are here conceived to be the two aspects of a denoting phrase. It is evident that the relation of a meaning to its denotation involves none of the problems Russell has in mind, the problems arising from the distinction of /C/ and C. There

is nothing problematic about the relation of a meaning to its denotation, even when the denotation is a denoting complex. What has been found to be problematic when /C/ denotes C is that we cannot explain why we are drawn to /C/ rather than to any other of the infinitely many denoting complexes which denote the complex C. As we have seen, the problem with /C/ is not that it is a meaning which denotes another meaning, but that we cannot explain how we get it. Thus it is only when we have understood that Russell had made a habit of using 'meaning' and 'denotation' to refer to what should be more properly called the 'meaning-aspect' and the 'denoting-aspect' of a phrase that we can understand why he thinks that '[t]he relation of the meaning to the denotation involves certain rather curious difficulties'. (But recall that, if /C/ and C are two distinct entities, we are stuck with /C/, which we cannot account for.)

With this in mind, it should be clear that we really cannot succeed 'in both preserving the connexion of [meaning-aspect and denoting-aspect in a denoting phrase] and preventing them from being one and the same'. As Russell has pointed out, the meaning-aspect of a denoting phrase vanishes: the meaning-aspect becomes indistinguishable from the denoting-aspect. The problem here is that the theory has been erected upon the premise according to which it is the meaning expressed by a denoting phrase (i.e. its meaning-aspect) that denotes the denotation. Thus, whenever a denoting phrase is used, the meaning is nowhere to be seen; all that seems relevant to the proposition is the phrase's denotation, as if the phrase behaved like an ordinary name. But the theory must still maintain that the meaning and the denotation are equally relevant when a denoting phrase is used. So we can see that the theory of meaning and denotation drives a hard bargain: it aspires to the benefits provided by both /C/ and C while countenancing only C. The theory in effect asks us to recognize /C/ in C. It's as if we were

invited to identify the perfect undercover agent in action.

CONCLUSION

I have moved farther away from the accepted conceptions, and have thereby stamped my views with an impress of paradox. An expression cropping up here or there...may easily appear strange and create prejudice.

(Frege in The Basic Laws of Arithmetic)

[I]t is impossible, even in the most rigid philosophical reasonings, so far to alter the bent and genius of the tongue we speak, as never to give a handle for cavillers to pretend difficulties and inconsistencies. But a fair and ingenuous reader will collect the sense, from the scope and tenor and connexion of a discourse, making allowances for those inaccurate modes of speech, which use has made inevitable.

(Berkeley in Principles)

'How then can we recognize senses?' If this is a serious question to be investigated, it will be a matter of psychology, like the question how we recognize faces or voices. But often it would be a piece of philosopher's nonsense: its latent content would then be 'I have a theory by which we ought not to be able to recognize senses: how do you answer it?' Solvitur ambulando!

(Geach in Russell on Denoting)

We have seen that the puzzling passage of 'On Denoting' contains two arguments. Both of them depend on the basic assumption - discussed under thesis 2 above - according to which a denoting phrase, unlike an ordinary proper name, is not arbitrarily related to its designation. A denoting phrase expresses a meaning, and the meaning expressed may or may not denote, that is, it may or may not connect the phrase to a designation. This is what Russell tries to explain when he cryptically states that 'the relation of meaning and denotation is not merely linguistic through the phrase', but logical (OD 111). The relation between meaning and denotation is not to be defined simply by the relation of each to the phrase. The meaning is supposed to pick out, or determine, the phrase's designation: 'There must be a logical relation involved [between the meaning and the denotation], which we express by saying that the

meaning denotes the denotation' (ibid.).

Based on this assumption only, Russell developed an argument against the theory of meaning and denotation which had not been rehearsed in 'On Fundamentals' - the argument for thesis 6, which was dealt with at the end of chapter 3. This is a fairly simple argument which was muddled by his choice of terminology. It purports to show that, if we assume a distinction of two aspects in a denoting phrase - the aspect in which the phrase is indistinguishable from a proper name, its denoting-aspect, which is what ensures the truth of a non-trivial identity statement, and the aspect in which the phrase differs from ordinary names, its meaning-aspect, which is what accounts for the non-triviality of a non-trivial identity statement - and if we also assume that it is the meaning-aspect of a phrase which denotes, that is, which connects the phrase to its designation, then 'we cannot succeed in both preserving the connexion of [meaning-aspect and denoting-aspect in a denoting phrase] and preventing them from being one and the same' (OD 111). I wholeheartedly agree with Russell that a theory which does not seem to be consistently storable should hardly be found attractive. Thus, I believe that anyone who is as unable as I am to find fault with the above argument would be inclined to consider any available alternatives to the theory of meaning and denotation.

The above is not, however, the argument which originally caused Russell to abandon the theory. The argument which actually led, in 'On Fundamentals', to the rejection of the theory, is the one I call the argument of 'On Denoting'. As we have seen, it shows that there is a surprising 'difficulty in speaking of meanings' (OD 112). The surprise is produced in a number of steps - which I briefly recapitulate. First: we introduce slashes expecting to form names of denoting complexes (denoting meanings), that is, expecting to be able to talk about the meaning

of a given denoting phrase in 'the natural mode of doing so' (OD 111), which is by means of a name formed by a quotational device. Second: we find that we can prove that '[a] meaning cannot be got at [i.e., cannot be talked about] except by means of denoting phrases' (thesis 5), and we then understand that /C/, which is what we use to speak about the meaning of the phrase C, cannot be a name after all but must itself be a denoting phrase. Third: if /C/ is a complex denoting the complex C, we realize that /C/ must not contain C. Fourth: we then ask the fatal question: 'where are we to find the denoting complex /C/ which is to denote C?' We certainly cannot obtain /C/ by going, as it were, backwards from the denotation to a meaning which denotes it. Fifth: we finally understand that, because /C/ cannot be any more intimately related to C than any of the other infinitely many meanings which denote C, there can be no satisfactory answer to the fatal question within the theory. In which case, therefore, the relation of /C/ to C turns out to be 'an inextricable tangle [which] seems to prove that the whole distinction of meaning and denotation has been wrongly conceived' (OD 113).

My interpretation of the relevant passage of 'On Denoting' is radically different from the alternative interpretations of which I am aware. I should like briefly to consider two such interpretations, Hylton's and Wahl's. As I have noted, both fail to satisfy my second necessary condition for success, which demands that every claim be explained and that the relations among them be identified. In particular, both are silent on thesis 6 and it is far from evident how their readings might lead to a clarification of that statement. Nevertheless, I shall momentarily put this serious objection aside and discuss some of their views on the matter.

According to Hylton, 'the problem of the relation of 'C' to C... is no more tractable than...that of the relation of the teacher of Plato to Socrates' (p. 250). (He uses italics where

I have used slashes.) Why is the relation of a denoting complex to its denotation problematic? The problem 'is, of course', Hylton claims, 'that the meaning denotes the denotation' (p. 249). Why is this a problem? For him, this is a problem because, in order to frame a proposition such as '/The teacher of Plato/ denotes Socrates', we cannot have the complex which we claim denotes Socrates itself occurring in the Proposition. Thus in order to frame such a proposition, we need a denoting phrase which expresses a complex denoting the complex which denotes Socrates. Fine. (I shall follow Hylton in calling a denoting concept which denotes a concept the denotation of which is not a concept a 'second-level concept'.) 'But now', he remarks with great alarm, 'it is clear that we are faced with an infinite hierarchy of denoting concepts. There must be a proposition which states that the second-level denoting concept denotes the first-level denoting concept, and in order to be about the second-level denoting concept, this proposition must presumably contain a third-level denoting concept...and so the hierarchy is launched' (p. 25)). Is this a problem? He thinks so, because he feels prepared to claim that the hierarchy involves a vicious regress. As he rightly notes, 'Russell himself, in Principles, distinguishes regresses of implication, which he takes to be benign, from 'regresses of analysis', which are vicious [POM 50-1]. A regress of the latter sort is one which "arises in the analysis of the actual meaning of a proposition"' (p. 151). Why, then, does the hierarchy of denoting concepts involve a vicious regress? Because, Hylton claims, '[f]or denotation to occur at any level it must occur at a higher level' (ibid.). Now, this remark may seem perfectly acceptable on Russell's early theory of judgment: if we can say that a complex denotes an object, there must be, in the realm of sempiternal Propositions, a Proposition which states what we wish to say. Vicious regress can be claimed only if one can show that, in order to grasp a Proposition, we

must first grasp another, and so on. This seems to be exactly what Hylton has in mind: 'At no stage, do we have any reason to believe that denoting is indeed possible; the attempt to resolve our doubts in any one case only leads us to another case of the same sort, for which the same doubts arise' (*ibid.*). Hylton asserts that '[t]he very possibility of one case of denoting requires another, and so on without end' (*ibid.* my emphasis). If what he thinks is a problem for the relation of denoting is in fact a problem, isn't it also a problem for the relation of designating? On his premises, mustn't the possibility of framing the proposition 'Socrates was a man' also 'require' the possibility of framing the proposition "'Socrates" designates Socrates'? Or is it Hylton's contention that the possibility of framing 'Socrates was a man' 'requires' the actual framing of "'Socrates" designates Socrates'? The latter interpretation makes his claim obviously false. But, if what he means is captured by the former interpretation, the regress is entirely harmless. It seems clear to me that Hylton's vicious regress is blatantly artificial. On the one hand, the regress of Propositions, in which Propositions at a higher level are about the denotations in Propositions at a lower level, has to be admitted by Russell's theory, but is entirely harmless. The vicious regress occurs only when we suppose that, in order to grasp a Proposition or effect a denotation at one level, we must grasp a Proposition or effect a denotation at some higher level. But Russell's theory does not commit us to this regress at all. Hylton gets his argument by confusing the Russellian but harmless regress with the vicious one to which Russell is not committed. Clearly, the fact that we may truly assert at a given level that denotation occurs at a lower level is not a necessary condition for denotation to actually occur at the lower level.

Hylton seems to think that his case can be strengthened by making what he believes to

be 'at bottom...the same point in a somewhat different way' (p. 251). However, as far as I can see, his second point is a completely different objection. It relies on what he calls 'the principle of truth-value dependence' (p. 251). This principle says that 'for a proposition containing a denoting concept to be about some other entity is for the truth-value of that proposition to be dependent upon the truth-value of the proposition obtained from it by replacing the denoting concept by the denoted entity' (*ibid.*). Armed with this principle, Hylton can finally produce a vicious regress. 'We have already seen that [the Proposition //the teacher of Plato/ denotes Socrates/] cannot itself contain the denoting concept the teacher of Plato, but would rather have to contain a second-level denoting concept denoting it. But now the effect of the principle of truth-value dependence is to say that the proposition containing the second-level denoting concept depends for its truth-value upon the proposition containing the denoted object. In this case, the denoted object is the first-level denoting concept, so we get back to a proposition containing the first-level denoting concept, the teacher of Plato. Applying the principle once more shows that this proposition (containing the first-level denoting concept) depends for its truth-value upon the corresponding proposition containing the denoted object, i.e., upon the absurdity that Socrates denotes Socrates.' (pp. 251-252) Trouble is, there is no textual evidence whatsoever to suggest that Russell ever held anything like Hylton's principle of truth-value dependence. Hylton believes that 'the introduction of denoting [in POM] constitutes a major alteration in the earlier metaphysics of Platonic Atomism' (p. 208), but he is ready to concede that 'Russell may not have been aware of it at that time' (*ibid.*). It seems to be Hylton's contention that Russell may have thought, by the time he wrote 'On Denoting', that the theory of denoting complexes committed him to something like the principle of truth-value dependence and may have tried to

apply the principle against himself in OD.⁵¹ Hylton's position is apparently that the theory of denoting significantly altered what he calls 'the earlier metaphysics of Platonic Atomism' - i.e. Russell's first theory of propositions - and that Russell's belated awareness of such an alteration erupts with a vengeance in 'On Denoting'. Is there any plausibility to this scenario?

Two facts tell against it. (1) There isn't any 'earlier metaphysics of Platonic Atomism' than the theory of propositions (then called 'judgments') put forward in Russell's 'An Analysis of Mathematical Reasoning', which was written in 1898 largely under Moore's influence. Yet, already in AMR Russell identifies among terms what he calls 'contents', which clearly are embryonic denoting complexes.⁵² This seems to have been ignored by Hylton. (2) Hylton obtains his principle of truth-value dependence from consideration of the following question: 'What is it for a proposition to be about a given term (or combination of terms)?' His principle then purports to offer a definition of aboutness in terms of correspondence for propositions containing denoting phrases: 'The idea of the truth or falsehood of one proposition depending upon that of another is clearly quite alien to Platonic Atomism. It amounts, indeed, to the introduction of something like the correspondence theory of truth for the special case of those propositions which contain denoting concepts: whether such a proposition is true depends upon whether there is a corresponding fact, where a fact is a true proposition which does not contain a denoting concept, or a combination of such propositions.' (p. 209) But the question to which Hylton responds with the principle of truth-value dependence had been considered by Russell

⁵¹ Actually, Hylton suggests more explicitly that the principle of truth-value dependence was known to Russell when he wrote 'On Fundamentals', but, again, no statement of the principle is quoted. See Hylton, pp. 253-4.

⁵² See Griffin 1991, pp. 277-8.

in the following passage of 'On Meaning and Denotation':

With regard to what is meant by saying that a proposition is about an entity, the following theory seems to meet the facts...[I]f a word designates its object, or if a combination of words expresses an object [i.e., a meaning] which denotes an object, then the proposition is about the object designated or denoted as the case may be...[This] principle, however, must not be taken as a definition of about: it is merely an attempt to state the cases in which a proposition is about an entity. What is meant by about it would seem impossible to express in any simpler terms: about must, I think, be accepted as an indefinable. (MD 25)

We are, thus, expected to believe that Russell has, since 1898, been missing opportunities such as the one above to identify a principle whose implications are 'clearly quite alien' to his theory of propositions but finally does so in cryptic form in 'On Denoting'! Hylton's discussion of the OD passage reveals not only a failure to take some of Russell's claims seriously (especially those in unpublished writings⁵³), but reveals a disturbing readiness to impute exotic views to Russell without textual support.

Wahl has been far more careful. Disregarding a number of minor problems, my main objections to his interpretation of the relevant passages of 'On Denoting' and 'On Fundamentals' can be summed up in the following three points.

(1) Because Wahl mistakenly believes that the distinction between 'meaning-occurrences' and 'entity-occurrences' (and the attendant distinction of 'meaning-positions' and 'entity-

⁵³ For instance, he falsely claims that, in OF, '[t]he distinction between "occurring as meaning" and "occurring as being" is one that [Russell] makes for denoting concepts, not for all entities' (p. 254). The distinction can in fact be traced back to some remarks in AMR. But, at all events, Hylton would have avoided making such a mistake if he had paid attention to, among others, the following remark in OF: 'It is possible for what is not a complex to occur as meaning: for example "Socrates differs from Plato" contains "differs" occurring as meaning. But if we say "difference is a relation which holds between Socrates and Plato", then "difference" occurs as entity, since any entity may be substituted for it without loss of significance.' (OF 30)

positions') is a post-Principles conception - whereas, in fact, only the labels are a novelty - he believes that Russell has, in OF, discovered a 'tension between the theory of denoting as originally conceived in Principles and the distinction between elements in a complex being meant, and occurring in meaning-position, and those that occur in entity-position' (p. 28). I have tried to show under thesis 4 that the fundamental insight for the distinction can be traced back to AMR and that it is very prominent in POM under the guise of a distinction between terms and concepts - where it is clear that a concept may be either a 'predicate', which is then 'capable of that curious twofold use which is involved in human and humanity' (POM 45), or a verb, which is then either 'a relation in itself' or 'a relation actually relating' (POM 49). How different is a distinction between the two kinds of constituents of 'unities' (cf. POM 508) from a distinction between meaning-occurrences and entity-occurrences in 'complexes'?

(2) Wahl mentions what I refer to as 'theses 3 and 4' and then says: 'This leads [Russell] to view the "being" of the complex /the prime minister of England/ as just the man himself, Arthur Balfour' (p. 28). This is a serious factual mistake. Russell introduces the series of 39 paragraphs which begins with theses 3 and 4 with the following remark: 'We must not say that the being of a denoting complex is its denotation' (OF 17). This serious mistake plays a crucial role in Wahl's account of the arguments of 'On Denoting' (cf. 30-33).

(3) Wahl believes that, in order to substantiate the claim that there are difficulties in speaking of meanings, Russell must make it absolutely impossible to speak about meanings. As Wahl rightly notes, no problem seems to arise when, in order to speak about a denoting complex, we use another complex which denotes the complex we wish to speak about (pp. 29-30). Wahl should then have understood that the argument of OD is not one according to which

it is impossible to speak about meanings. His move, however, is surprising. Determined to find such an argument, he appeals to the following principle which occurs at the beginning of the series of 39 paragraphs in OF:

When a complex occurs as being, any other complex having the same denotation, or the denotation itself, may be substituted without altering the truth or non-truth of the complex in which the said complex occurs. (OF 18)

This principle is then used in the following argument, which Wahl believes to be what Russell is up to in the first six paragraphs of the OD passage.

Suppose...there were such a concept, \underline{C} , which succeeded in denoting the denoting complex /the present queen of England/. Then the following would be a true proposition: / \underline{C} is a denoting concept/, where \underline{C} is in entity-position. But then, by the account of denoting [i.e. by the above principle from OF 18], the following would also be true, /the present queen of England is a denoting concept/, where /the present queen of England/ is in entity-position, and thus /Queen Elizabeth II is a denoting concept/ would also have to be true. (p. 30)

The problem with Wahl's argument is that Russell had quickly realized that the above principle is a blunder. No sooner had he formulated that principle than he realized that substitution in entity-position can be made only salva significatione, not salva veritate: 'if one of [a Proposition's constituents] is a denoting complex, the substitution of the denotation or of another denoting complex with the same denotation, gives a different [P]roposition. All this is proved beyond question by the Waverley case [i.e. by the puzzle of identity].' (OF 21)

The cumulative power of Russell's arguments is, in my opinion, impressive. But, ultimately, I suppose the die-hard Fregean might still shrug the evidence off. One can always shrug. Anyone who feels attracted to the familiar kind of response exemplified by Geach's charming but dogmatic 'ambulando' solution (cf. Geach 1978) will have probably remained unimpressed. In spite of the many important differences between their interpretation and mine,

Blackburn and Code (1978b) speak also for myself when they note that '[p]erhaps we differ from Geach mainly in supposing that if [the problem posed by Russell in 'On Denoting'] is to be solved it will be cogitando rather than ambulando'.

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