

The Significance of “On Denoting”

No one doubts that “On Denoting” marks a significant change in Russell’s philosophical views.¹ My main aim in this essay is to see exactly what the significance of the article is in the development of Russell’s philosophy, and thus of twentieth-century analytic philosophy more generally. My interest is thus in the consequences of the view set forth in OD, not in Russell’s reasons for coming to hold that view. The two issues, however, cannot be completely separated, partly because the general issue of the significance of OD is confused by some of Russell’s statements of his reasons for adopting the views of that article. One such statement is as follows:

[Meinong] argued, if you say that the golden mountain does not exist, it is obvious that there is something that you are saying does not exist—namely the golden mountain; therefore the golden mountain must subsist in some shadowy Platonic world of being, for otherwise your statement that the golden mountain does not exist would have no meaning. I confess that, until I hit upon the theory of descriptions, this argument seemed to me convincing.²

This sort of statement suggests the following account of Russell’s reasons for adopting the view of OD. According to Russell’s views before OD, the meaningfulness of a sentence such as “The golden mountain does not exist” or “The present king of France is bald” demanded that there be a golden mountain or a present king of France. Russell’s theory of meaning thus committed him to accepting the being (or the subsistence, as it is sometimes put) of nonexistent golden mountains, kings of France, and even worse ontological excesses involving round squares, even primes other than 2, and what not. The significance of OD, according to this account, is that it reformed Russell’s theory of meaning in such a way that he could accept the meaningfulness of the sentence “The king of France is bald” without having to accept that there is, in any sense, a king of France; similarly, the existence of meaningful sentences that purport to be about golden mountains, round squares and so on is shown not to imply that these expressions correspond to objects that have being.

This account is misleading both in its implications about Russell's views before OD and, consequently, in its claim about Russell's reasons for abandoning those views in favor of the OD view. An understanding of exactly how the account is misleading will put us in a better position to assess the significance of OD. I shall, therefore, adopt the following strategy. In section I, I shall set out the relevant views of Russell from the period before OD. In section II I shall draw upon these views to argue that the preceding account of Russell's reasons for adopting the OD view is incorrect. This section will be largely negative in its immediate aim. I shall not attempt to give Russell's actual reasons for adopting the OD view, though I shall indicate the direction in which I think those reasons lie. In section III, finally, I shall discuss the significance of OD for Russell's philosophy. I shall argue, in particular, that a number of fundamental ideas of twentieth-century analytic philosophy, ideas that we take for granted, can be seen as coming into Russell's philosophy through that article. My claim will be that it is hard for us fully to assess the significance of that article precisely because we do take those ideas for granted.

I

Two general doctrines of Russell's from the period before OD are directly relevant. The first, to which I shall return in the last section, is that Russell's concern in this period is never with words and sentences, but with propositions and their constituents.³ On one of the rare occasions when he talks explicitly about words he says:

*Words all have meaning, in the simple sense that they are symbols which stand for something other than themselves. But a proposition, unless it happens to be linguistic, does not itself contain words: it contains the entities indicated by words. Thus meaning in the sense in which words have meaning is irrelevant to logic.*⁴

By a proposition's being "linguistic" Russell here means that it is *about* words, in which case it would (as we shall see in a moment) *contain* words. But in general a proposition is not made up of words, or of ideas; propositions are objective non-mental entities that are, as Russell puts it, "independen[t] of any knowing mind" (*Principles*, p. xvii). Although Russell does talk about meaning in the sense in which words have meaning, he does so only to dismiss this sense as philosophically irrelevant: he is certainly not concerned to advance any theory of meaning in this sense. Thus his statement that words are all "symbols which stand for something other than themselves" is not to be taken as a philosophical theory of meaning,⁵ and when Russell speaks of "the entities indicated by words" he is not using "indicate" as a technical term.

The second general doctrine that will be relevant is one that we have already anticipated. This is that a proposition, in the standard case, *contains* the entities

that it is about (and thus the entities indicated by the words that express it). Thus the proposition expressed by the sentence “Socrates is mortal” contains Socrates, or Socrates is a *constituent* of the proposition (as is mortality and, it seems, a relation between them—though this last point is problematic.) It may seem obscure and paradoxical to claim that anything so concrete as a human being could be a constituent of anything so abstract as a proposition, but this is Russell’s claim.⁶ Some of the air of paradox may be dispelled by remarking that the distinction between abstract objects and concrete objects is not a fundamental one for Russell. Human beings and propositions, numbers and mountains, all *are*, or have being, in exactly the same sense. Human beings happen to have the additional property of *existing* at some moments of time and points of space (and not at others), but it is being, not existence, that is Russell’s fundamental (and in a sense his only) ontological category. Thus for Russell human beings and propositions are not so heterogeneous as to make it absurd that a proposition should contain a human being. It is Russell’s view, then, that the constituents of a proposition in general include the things which that proposition is about. This doctrine is clearly stated in his correspondence with Frege. Taking as an example perhaps the most concrete object that he could think of, Frege had said “Mont Blanc with its snowfields is not itself a component part of the thought that Mont Blanc is more than 4,000 meters high” (letter of November 13, 1904). Russell’s reply, in a letter dated the December 12, 1904, is as follows:

I believe that in spite of all its snowfields Mont Blanc itself is a component part of what is actually asserted in the *Satz* “Mont Blanc is more than 4,000 meters high.” We do not assert the thought, for this is a private, psychological matter: we assert the object of the thought, and this is, to my mind, a certain complex (an *objectiver Satz*, one might say) in which Mont Blanc is itself a component part.⁷

(I leave the German *Satz* untranslated here. In its first use one might substitute “sentence” or “statement.” In the second use, Russell seems to use *objectiver Satz* as German for “proposition.” His claim is that the object of thought is objective, neither psychological nor made up of words, and can have things as concrete as mountains among its components.)

I turn now to *denoting*, understood as a technical term of Russell’s view in *Principles*.⁸ The Russellian doctrine that the things that are the subject matter of the proposition are also, in the ordinary case, constituents of the proposition is crucial to an understanding of denoting. That notion is to be understood as a mechanism for bringing about exceptions to this general rule. The proposition expressed by “Socrates is mortal” *contains* Socrates and is *about* Socrates. The proposition expressed by “The teacher of Plato is mortal,” however, contains the denoting concept *The teacher of Plato*, but it is not *about* that denoting concept—it

is about Socrates. Denoting is Russell's explanation of—or at least his label for—this kind of (supposed) phenomenon. Thus he says:

A concept *denotes* when, if it occurs in a proposition, the proposition is not *about* the concept, but about a term connected in a peculiar way with the concept. (*Principles*, 56)

"Term" here is used simply to mean "thing" or "object," in the widest possible sense—everything, Russell says, is a term (see, e.g., *Principles*, 47). "Denoting" is Russell's name for the "peculiar way" in which a concept may be connected with a term or combination of terms; in the technical sense it is not a relation between words and things but a relation between things of a particular kind (denoting concepts) and things in general. It is in virtue of this relation that a proposition may be *about* things which it does not contain: if a proposition contains a denoting concept it is about the things which that concept denotes, and not about the denoting concept itself. Denoting is a relation between a denoting concept and the object (or objects) it denotes. It is in no sense a psychological or linguistic relation, as Russell makes quite clear:

The notion of denoting, like most of the notions of logic, has been obscured hitherto by an undue admixture of psychology. There is a sense in which *we* denote, when we point to or describe, or employ words as symbols for concepts; this, however, is not the sense that I wish to discuss. But the fact that description is possible . . . is due to a logical relation between some concepts and some terms, in virtue of which such concepts inherently and logically *denote* such terms. It is this sense of denoting which is here in question. (*Principles*, 56)

The presence of a denoting concept in a proposition is indicated by the fact that a denoting phrase occurs in sentences expressing the proposition. Denoting phrases are, typically, phrases formed with "a," "any," "all," "every," "some," or "the." (I shall call phrases formed with "the" definite descriptions, and phrases formed with one of the other words indefinite descriptions.) As an example of the use of the theory of denoting concepts, consider the proposition expressed by the sentence "I met a man." What constituent of this proposition corresponds to the words "a man"? One might be tempted to say that, if Jones is the man I met, then Jones is the corresponding constituent of the proposition. A moment's thought, however, shows that this sort of answer will not do. To begin with, it seems to have the consequence that the two sentences, "I met a man" and "I met Jones," express the same proposition in the case where it is in fact Jones whom I met. This is most implausible. Worse, the suggested answer seems to leave us with no account at all of the proposition expressed by "I met a man" if this sentence occurs in a hypothetical context or is negated or is simply false. If, in fact, I met no one then I can still *say* "I met a man" and express a proposition thereby, and

this proposition is presumably the same one I would have expressed by the same words if I had in fact met Jones. It is, after all, the same proposition that would be false in the one case and true in the other. Russell's answer to this sort of difficulty is to say that the proposition in question contains the denoting concept, *a man*. Similarly, we have also the denoting concepts *some man*, *every man*, *any man*, and *all men*. Each of these denoting concepts, Russell says, denotes a different combination of men. Thus he says that *all men* denotes all men taken together, whereas *every man* denotes all men taken severally rather than collectively; *a man* denotes the constant disjunction of men; and so on (see *Principles*, 59–61). Russell devotes considerable subtlety to discussing the exact nature of each of these combinations of objects.

It is important to realize that Russell's reasons for developing the theory of denoting concepts go right to the heart of his philosophy at this period. He does not hold the theory because it enables him to solve some puzzles that he just happens to come across. On the contrary, the theory of denoting is directly connected with the attempt to reduce mathematics to logic that is the overarching aim of *Principles*. The most important link here is the variable. The propositions of logic and mathematics, according to Russell, are wholly general in nature. They contain no constants except logical constants; all their other constituents are variable (*Principles*, 8). The variable, according to Russell, is "the characteristic notion of Mathematics" (*Principles*, 87), and an understanding of the nature of the variable, he says, is "absolutely essential to any theory of Mathematics" (*ibid.*). It is in terms of denoting that Russell attempts to give an explanation of the variable, and thus of generality. The denoting concept *any term* is closely connected with the variable; the variable is explained by means of this denoting concept, and thus also by means of the theory of denoting. Thus it is that Russell can say that "*any* is presupposed in mathematical formalism" (89). Because the theory of denoting concepts explains the nature of generality, it also explains how we can talk about the infinite:

With regard to infinite classes, say the class of numbers, it is to be observed that the concept *all numbers*, though not itself infinitely complex, yet denotes an infinitely complex object. *This is the inmost secret of our power to deal with infinity*. An infinitely complex concept, though there may be such, certainly cannot be manipulated by the human intelligence; but infinite collections, owing to the notion of denoting, can be manipulated without introducing any concepts of infinite complexity. (*Principles*, 72; emphasis added)

Further indication of the importance to Russell of the problems that he attempted to solve by the theory of denoting comes in a passage of the preface of *Principles*. Russell is writing of the development of his intellectual concerns that led him to write the book: "I was led to a re-examination of the principles of Geometry, thence to the philosophy of continuity and infinity, and thence, with a view to dis-

covering the meaning of *any*, to Symbolic Logic" (p. xvii). Russell introduces the theory of denoting primarily in the hope of explaining the variable, and thus the nature of generality, which he holds to be essential to logic and mathematics.

The reasons that we have so far discussed for the introduction of denoting apply to indefinite descriptions; rather different considerations apply to definite descriptions. Such phrases, according to Russell, indicate denoting concepts that in turn denote the individual uniquely described by the definite description (if such there be). Here again there is a connection with the reduction of mathematics to logic. The application of denoting to definite descriptions is crucial to Russell's account of the role of definition in mathematics: to define an object (or a class), we find a class or a class of classes) of which it is the sole member; we can then define it as *the* member of that class (cf. *Principles*, 31, 63). More generally, denoting explains how a statement of identity can ever be informative. If a proposition corresponding to such a statement simply contained the same object twice over, then it is hard to see how it could be other than trivial. But on Russell's account an ordinary statement of identity (i.e., one that is *not* trivial) corresponds to a proposition that contains on the one hand an individual and, on the other hand, a denoting concept that, it is claimed, uniquely denotes the given individual; or it contains two distinct denoting concepts that it is claimed, uniquely denote the same individual. I shall quote Russell at some length on this point:

But the question arises: Why is it ever worthwhile to affirm identity? This question is answered by the theory of denoting. If we say "Edward VII is the King," we assert an identity; the reason why this assertion is worth making is that, in the one case the actual term occurs, while in the other a denoting concept takes its place. . . . Often two denoting concepts occur, and the term itself is not mentioned, as in the proposition "the present Pope is the last survivor of his generation." When a term is given, the assertion of its identity with itself, though true, is perfectly futile, and is never made outside the logic-books; but where denoting concepts are introduced, identity is at once seen to be significant. (*Principles*, 64)

II

The theory of denoting concepts is rejected in OD—later uses of the word "denotes" by Russell are not in the technical sense but as synonyms for "indicates" or "refers." We have now seen enough of the theory to discuss what changes in Russell's philosophical views are effected by this rejection. I shall, to begin with, argue that the theory of OD—the theory of nondenoting, if you like—is not required to free Russell from a commitment to the being of the present king of France and his like. This is not to say that Russell in *Principles* does not accept the being of entities that seem to be no more respectable than the king of France. In a notorious passage he admits chimeras and Homeric gods as among the things

that *are* (427). What I do wish to claim is that the theory of denoting concepts gives Russell a way of avoiding such ontological commitments, so that it cannot be held that such avoidance is possible only after OD. The supposed ontological commitment arises from the old problem: unless something *is*, in some sense, how can we say anything about it? How can we even deny that it is? The influence of this problem on Russell is clear. The passage about Homeric gods continues: "...if they were not entities of a kind, we could make no propositions about them" (*Principles*, 427). This argument is straightforward only so long as you hold it to be true, without exception, that the entities which a proposition is about—or purports to be about—must occur in the proposition. For then an entity must indeed be, in some sense, if there is to be a proposition that purports to be about it. But the theory of denoting concepts is, as I emphasized, a means of allowing exceptions to the general rule that the things a proposition is about must occur in the proposition. According to the theory of denoting concepts, the proposition expressed by the sentence "The present king of France is bald" does not contain the present king of France; it contains a denoting concept, *the present king of France*, and this is not an actual or possible human being of any kind, bald or not; it is a denoting concept. But then, given the theory of denoting concepts, it is far from obvious that the possibility of propositions that purport to be about the present king of France is enough to show that there *is* a present king of France. The question turns on whether there can be denoting concepts that do not denote anything. Russell's view, even in *Principles*, is that there can be such denotationless denoting concepts. He says this explicitly in section 73: "It is necessary to realize, in the first place, that a concept may denote although it does not denote anything." This admission raises certain problems for Russell, some of which have to do with the null-class, which he changed his mind about in the course of writing *Principles*. But in spite of these problems his view is clear: there can be denoting concepts that do not in fact denote anything.

Russell in *Principles* thus has resources at his disposal that would enable him to deny being to the present king of France. He can do this while still accepting that the sentence "The present king of France is bald" expresses a proposition. According to the theory of denoting concepts, this proposition does not contain the present king of France (as the corresponding proposition about Socrates would contain Socrates); it contains instead the denoting concept *the present king of France*. Given that a denoting concept may lack a denotation, nothing in Russell's account of the proposition demands that there be a present king of France, in any sense of "be." If Russell did not explicitly draw this conclusion in *Principles* it is perhaps because at that stage he saw no reason to deny being to the present king of France, but also because the sort of puzzles that are associated with the alleged king were simply not on his mind when he wrote the book. It was, I think, Russell's renewed study of Meinong between 1903 and 1905 that led him to consider these issues seriously.⁹ When he does consider them seriously, he

uses the theory of denoting in just the way that I suggested to deny being to the present king of France. He also treats at least some proper names in the same way that he treats definite descriptions. I quote from "The Existential Import of Propositions," written before OD:¹⁰

"The present king of England" is a denoting concept denoting an individual; "The present king of France" is a similar complex concept denoting nothing. The phrase intends to point out an individual, but fails to do so: it does not point out an unreal individual, but no individual at all. The same explanation applies to mythical personages, Apollo, Priam, etc. These words have a meaning, which can be found by looking them up in a classical dictionary; but they have not a *denotation*; there is no individual, real or imaginary, which they point out. (Lackey, p. 100; *Mind*, 1905, p. 399)

The theory of denoting concepts—the theory that is rejected in OD—thus allows Russell to claim that there need be no object corresponding to a definite description or a proper name, even though that description or that name has a use in sentences that express propositions. Before he wrote OD Russell had come to recognize this and to exploit the theory of denoting concepts to show that there need be no king of France, even though we can meaningfully say "The king of France is bald." Getting rid of the present king of France and his like cannot, therefore, have been the reason for rejecting the theory he held before OD.

Russell's later statements about OD, as we have seen, stress the ontological economy which that article effected. One might therefore think that reasons for rejecting the pre-OD theory had to do with a desire to avoid the need for denoting concepts. The relevant ontological economy, on this view, would have to do not with the king of France but with the denoting concept *the king of France*. This view is perhaps encouraged by Russell's own insistence on the need for a "robust sense of reality" in logic.¹¹ Denoting concepts, mysterious and unexplained entities, might seem to offend a robust sense of reality just as much as nonexistent kings of France; and for Russell to talk about the latter when he means the former is perhaps an understandable piece of carelessness. There thus seems to be some reason to think that Russell adopted the OD theory for the sake of the ontological economy that it effected by eliminating the need for denoting concepts. In fact, however, this view is also seriously misleading. The issues here are extremely complex, and I shall not discuss them in any detail. I shall instead simply make two rather dogmatic remarks. First, there is no sign that Russell in 1905 was much concerned with ontological economy for its own sake. The rejection of the theory of denoting concepts was based not on a desire to eliminate entities but on difficulties that arise within that theory when it is thought through. Some of these difficulties come to the surface in the notorious "Gray's *Elegy*" passage of OD (pp. 111–113); other difficulties are discussed by Russell in works that are still unpublished.¹² Second, OD did have crucial ontological consequences for

Russell's philosophy, but these consequences are quite different in kind from the elimination of denoting concepts (see pp. 100–101, below). One can thus explain the connection that Russell makes between OD and ontological economy without supposing that this economy consisted in the elimination either of the king of France or of the corresponding denoting concept.

III

I turn now to the issue of the general significance of OD for Russell's philosophy. Besides the ontological consequences of the article, this significance consists chiefly in the effects it has on Russell's view of the nature of propositions, of their relation to sentences, of philosophical analysis, and thus of the aim and nature of philosophy itself. These changes contribute to the development of a conception of logical form, and to the idea that words and sentences might themselves be of philosophical interest. In *Principles*, as we have seen, Russell's view is that propositions and their constituents are what is philosophically important, and that words and sentences are more or less irrelevant. Russell continues, after OD, to hold that words are not philosophically important for their own sake, but he is subject to pressures that force him to make them the subject of explicit attention.

Let us now turn to the details of OD to see why it should have the consequences I have attributed to it. "The principle" of the new theory of OD, Russell says, is "that denoting phrases never have any meaning in themselves, but that every proposition in whose verbal expression they occur has a meaning" (OD, Lackey, p. 105). I shall explain this. Consider the sentence "All numbers are prime." This is a meaningful sentence; for Russell it is thus the verbal expression of a proposition. The *Principles* theory of denoting took it for granted that this proposition would contain a constituent corresponding to the words "all numbers"; since this phrase is a denoting phrase, that constituent is not all the numbers but rather the denoting concept *all numbers*. Whether there actually is anything that this denoting concept denotes is, as we have seen, a further question. The words "all numbers," according to the *Principles* view, thus indicate or stand for a constituent of the proposition that is expressed by the sentence in which those words occur. In the sense of "meaning" in which it is words that have meaning, those words have a meaning; their meaning is the denoting concept for which they stand. The new theory advanced in OD also has to account for the fact that a sentence such as "All numbers are prime" expresses a proposition. The new theory, however, does not presuppose that this proposition contains a constituent corresponding to or indicated by the words "all numbers." In fact, the theory claims that there is no such constituent: this is what Russell means in OD and later by saying that denoting phrases are "incomplete symbols" or have "no meaning in themselves" or "no meaning in isolation." The theory then goes on to explain how sentences containing denoting phrases can express propositions, even though denoting phrases have no meaning in themselves.

I shall put the point of the previous paragraph in a slightly different way. Meinong, according to Russell's account, seems to have been willing to argue as follows:

1. "The king of France is bald" expresses a proposition.
- hence: 2. "The king of France" is a meaningful expression, which therefore corresponds to a constituent of the proposition.
- hence: 3. the king of France is, in some sense.

The *Principles* theory of denoting concepts enables one to block this argument by denying the step from (2) to (3). "The king of France" corresponds to a constituent of the proposition, but this constituent is a denoting concept, not an actual or possible king.¹³ The OD theory, by contrast, blocks the argument by denying the step from (1) to (2). The phrase "The king of France," according to that theory, corresponds to no constituent of the proposition that is expressed by a sentence containing those words; we are misled into thinking that there is such a constituent because we take the form of the sentence closely to resemble the form of the proposition that it expresses. The theory is then left with the task of explaining the true form of the propositions expressed by "The king of France is bald" or "All numbers are prime" in such a way as to make it clear that the propositions contain no constituents corresponding to the denoting phrases "the king of France" and "all numbers." The details of the way in which the theory accomplishes this task are familiar enough to require only a very brief explanation. Russell takes as fundamental and indefinable the variable and the notion of a proposition containing a variable and the notion of a proposition containing a variable being "always true," or true for all values of the variable, as we might put it (OD, Lackey, p. 104). The proposition corresponding to "All numbers are prime" is then said to contain, beside these notions, the properties or propositional functions . . . *is a number* and . . . *is prime*. Spelled out, the proposition has this form:

"If x is a number, then x is prime" is always true.

Or, in quantificational notation:

$(x) (Nx \supset Px)$.

If this is the true form of the proposition, then it is clear that the proposition contains no constituent corresponding to "all numbers." " $(x) (Nx)$ " is patent nonsense, while " $(x) (Nx)$ " is a sentence saying that all objects are numbers, and this is certainly not what "all numbers" stands for. Definite descriptions are treated in a way that is slightly more complicated, but with the same results. Denoting concepts disappear in favor of the variable, the notion of a proposition containing a variable being "always true," and propositional functions; with the denoting concept eliminated there is no constituent of the proposition that could be held to correspond to, or to be indicated by, the definite description.

A general consequence of the new theory put forward in OD is that the grammatical arrangement of words in a sentence will in most cases be a poor guide to the logical arrangement of constituents in the proposition that the sentence expresses. Grammatically, the sentence “The king of France is bald” is a subject-predicate sentence, as is “Socrates is bald.” We have seen that the theory of denoting concepts gives a complex account of the corresponding proposition, but this account preserves the segmentation of the sentence. According to the theory of denoting concepts, the proposition contains one constituent corresponding to the subject-phrase (“the king of France”) and one constituent corresponding to the predicate-phrase (“is bald”). That the constituent corresponding to the subject-phrase is a denoting concept does not alter the fact that the proposition is segmented into subject-constituent and predicate-constituent. For all its complexity, the theory of denoting concepts does not call this segmentation into question. The form of the proposition, and the way in which it divides into logical units, is taken to be identical with the superficial form of the sentence and the way in which it divides into grammatical units. (Similar remarks apply to sentences that contain indefinite descriptions, provided that one holds that such sentences also have a subject-predicate form—and it is the most superficial form that is in question here.) Now Russell in *Principles* had assumed that the superficial grammatical form of a sentence is in general a good guide to the form of the proposition it expresses:

Although a grammatical distinction cannot be uncritically assumed to correspond to a genuine philosophical difference, yet the one is *prima facie* evidence of the other, and may often be most usefully employed as a source of discovery. Moreover, it must be admitted, I think, that every word occurring in a sentence must have *some* meaning; a perfectly meaningless sound could not be employed in the more or less fixed way in which language employs words. The correctness of our philosophical analysis of a proposition may therefore be usefully checked by the exercise of assigning the meaning of each word in the sentence expressing the proposition. (*Principles*, 46)

OD does away with the idea of a congruence between sentences and propositions. There comes to be a sharp break between the grammatical form of the sentence and the form of the proposition it expresses—logical form, to anticipate a later terminology. This is perhaps clearest in the case of definite descriptions. The proposition expressed by “The king of France is bald” has a structure that is most accurately reflected by the sentence:

$$(\exists x) (Fx \ \& \ Gx \ \& \ (y) (Fy \supset y = x))$$

or, in prose (following Russell’s example in OD):

It is not always false of x that x is the king of France and that x is bald and that “if y is the king of France then y is identical with x ” is always true of y .

There is a fundamental difference between the structure of the subject-predicate sentence that would normally be used to express the proposition and the sentence (whether in symbols or in prose) that is said to express the proposition in a way that accurately reflects its structure. There is no similarity of form between them. The gap here is so marked that the form of the sentence cannot be taken as even an approximate guide to the form of the proposition it expresses.

This contrast between grammatical form and logical form has crucial consequences for Russell's view of philosophical analysis and of philosophy itself.¹⁴ According to *Principles*, the process of philosophical analysis does not affect the way a proposition divides into units. This segmentation was assumed to be the same as that of the sentence; the form or structure of a proposition was not a primary concern in analysis. Philosophical analysis was chiefly concerned with the entities making up the proposition, not with the form of the proposition. We have already seen that Russell's account, in *Principles*, of the proposition expressed by "All numbers are prime" would take it for granted that this proposition contained one constituent corresponding to "all numbers" and another corresponding to "is prime." The philosophical work, on this account, is to analyze these constituents (or, in the case of simple constituents, to perceive them clearly). This is, in fact, what most of the philosophical analysis in *Principles* does. It analyzes particular concepts, such as *is prime*, or *is a number*. This sort of philosophical analysis takes the form of a proposition and its segmentation into units for granted, and is primarily concerned to analyze those units.

The conception of philosophical analysis that comes to dominate Russell's work after OD is crucially different. Here the main work of analysis concerns the form of propositions, or logical forms; the chief problem is to find the logical form that is masked by the grammatical form of a given sentence or kind of sentence. The analysis of a particular expression comes to be, generally, a matter of analyzing the sentences in which the expression occurs to find the logical form of the propositions that such sentences express. Alongside these specific results about particular concepts there are also general results about all propositions of a given form, or about what logical forms a proposition can have. Russell comes to see philosophy as consisting largely, at least, of discovering, investigating, and cataloguing logical forms. The study of logical forms is, Russell claims, a part of logic, and it is this part of logic that he has in mind when he speaks of logic as the essence of philosophy¹⁵ or when he says that "philosophy . . . becomes indistinguishable from logic."¹⁶ Contrasting philosophy with the synthetic method of the special sciences, Russell says:

. . . in philosophy we follow the inverse direction: from the complex and relatively concrete we proceed towards the simple and abstract by means of analysis, seeking in the process, to eliminate the particularity of the original subject-

matter, and to confine our attention entirely to the logical *form* of the facts concerned. (KEW, pp. 189–90; emphasis in the original)

I turn now to what I take to be the ontological significance of the conception of philosophical analysis that is introduced in OD. This significance is that sentences that appear to be about entities of one kind are shown by the analysis to be really about entities of a different kind. As an example, consider the definition that forms the basis of Russell's mature theory of types. Russell assumes that there are propositional functions, i.e., intensional entities that yield propositions when applied to objects. I shall follow Russell in using expressions of the form " $\psi\hat{z}$ " or " $\phi!\hat{z}$ " to refer to these entities. Where f is any property of propositional functions, we can introduce symbols of the form " $f\{\hat{z}(\psi z)\}$ " by means of the following definition:¹⁷

$$f\{\hat{z}(\psi z)\} = df (\exists \phi)[(x)(\phi!x \equiv \psi x) \ \& \ f\phi!\hat{z}].$$

In virtue of this definition, the truth-value of " $f\{\hat{z}(\psi z)\}$ " depends only upon the extension of the propositional function $\psi\hat{z}$. The symbol " $\hat{z}(\psi z)$ " thus operates (in the context " $f\{\hat{z}(\psi z)\}$ ") as if it stood for an extensional entity – the class of objects of which the propositional function $\psi\hat{z}$ is true. But in fact the symbol " $\hat{z}(\psi z)$ " does not stand for any kind of entity: it is an incomplete symbol. The definition gives a sense to expressions of the form " $f\{\hat{z}(\psi z)\}$," and shows that some such expressions can be true, without implying that there is an entity for which " $\hat{z}(\psi z)$ " stands. Sentences that appear to be about classes are shown to be in fact about propositional functions, so that the truth of such sentences is shown not to imply the existence of classes. Analyzing sentences (which appear to be) about classes shows that the truth of these sentences does not require that there be classes. In such a case analysis is elimination.

It is important to realize that the use made of the notion of an incomplete symbol in the theory of descriptions does not have the sort of ontological consequences I emphasized in the previous paragraph. What is crucial to those consequences is the idea that we can have a body of *true* sentences (which purport to be) about classes without supposing that there are classes. The analogue of this does not hold for definite descriptions. There is no body of truths (which purport to be) about the present king of France, and there could be no body of truths about the present queen of England if there were no such woman.¹⁸ The theory of descriptions claims that propositions expressed by sentences that contain definite descriptions do not themselves contain entities for which the definite descriptions stand. But if such sentences are true then there must be such entities, even though they are not in the corresponding propositions. If it is true to say "The F is G ," then there must be a unique entity that is F . When we are dealing with a body of true sentences (of the ordinary kind), e.g., when we are analyzing a theory we hold to be true, the significance of the theory of definite descriptions is not onto-

logical but, in the broad sense, epistemological. The theory changes the account of the entities that must be in the propositions corresponding to the sentences (and thus of the entities with which we must be acquainted in order to understand the sentences), but it does not change the account of the entities that there must be in the world in order for the sentences to be true.

The notion of an incomplete symbol thus has an ontological significance that is not exploited in the theory of descriptions. This sort of ontological significance, unlike the elimination of the king of France, is something that could not readily be duplicated by the theory of denoting concepts. The idea that analysis is elimination is not explicitly contained in OD, but it is a natural consequence of the conception of analysis that this article introduces. For Russell the paradigm of eliminative analysis was the definition I gave earlier as an example, i.e., the definition of statements that purport to be about classes in terms of propositional functions. In spite of its simplicity, this definition was of crucial importance to Russell. By showing that there need be no classes, the analysis seemed to enable him to find an escape from the class paradox.¹⁹ This is why he frequently links the theory of descriptions with the paradox, although the connection is by no means obvious on the face of it. He says, for example:

When the *Principles of Mathematics* was finished, I settled down to a resolute attempt to find a solution to the paradoxes. . . . Throughout 1903 and 1904, my work was almost wholly devoted to this matter, but without a vestige of success. My first success was the theory of descriptions. . . . This was, apparently, not connected with the contradictions, but in time an unsuspected connection emerged. (MPD, p. 79)

Strictly speaking, the connection here is not directly with the theory of descriptions but rather with the notion of an incomplete symbol. But Russell introduced the notion of an incomplete symbol in the context of the theory of descriptions, and once introduced the notion rather obviously lends itself to the sort of ontological use that makes the elimination of classes possible.

Although the analysis of sentences containing class expressions was, for Russell, the paradigm of eliminative analysis, the idea of analysis as elimination came to be central to other parts of his philosophy. This can be clearly seen in two areas that were among his major concerns in the period (roughly) 1905–18. The first is his theory of judgment. The basis of this theory is that judgment is not a two-place relation, between a person and a proposition, but a many-place relation between a person and the various entities that (according to the old view) are constituents of the proposition. (This theory is usually known as the "multiple-relation theory," for this reason.) A corollary of this is that there are no propositions. Phrases that appear to refer to or express propositions are said to be incomplete symbols;²⁰ such phrases can occur meaningfully in various contexts even though there are no propositions.

The second major concern of Russell's is his epistemology. This is both more complicated and more interesting from the present point of view, for it shows the contrast between the two uses of incomplete symbols that I have distinguished. Before 1913 or 1914 Russell only employs the nonontological use of incomplete symbols in his discussion of sentences that appear to refer to physical objects. He thus holds that if our ordinary and scientific beliefs are correct then there really are physical objects quite independent of sense-data. We cannot grasp propositions containing physical objects, but our real interest is in the truth or falsity of these propositions. There is thus a problem about what principles of inference it is legitimate to use in deriving these propositions from propositions about sense-data. There is also a more subtle issue about how we understand such propositions at all. Russell's answer is that in a sense we do not. The propositions that we are really interested in are *described* by propositions that we *do* grasp (see "Knowledge by Acquaintance and Knowledge by Description," *Mysticism and Logic*, p. 158).

This curious position results from the fact that Russell uses the theory of descriptions to eliminate physical objects from the propositions expressed by certain sentences that might appear to be about physical objects, without taking the further step of eliminating physical objects from the world. So while physical objects do not occur in any proposition that we can directly grasp, still there must be physical objects if those propositions are to be true. In 1913 or 1914 he takes the further step and analyzes sentences that appear to be about physical objects in such a way that the existence of physical objects is not required for the truth of those sentences. Such sentences now appear to express propositions that neither contain nor describe physical objects; the sentences are true provided that sense-data occur in the right patterns. This is the view that physical objects are "logical constructions" or "logical fictions." With this view there are no longer ungraspable propositions that are merely described by the propositions we do grasp. The problem of inference to the unknown disappears and is replaced by the problem of showing that it is possible to analyze or translate sentences about physical objects into sentences about sense-data. Russell was sufficiently impressed by this new technique to say, "The supreme maxim in scientific philosophizing" is "Wherever possible, logical constructions are to be substituted for inferred entities" ("The Relation of Sense-Data to Physics," *Mysticism and Logic*, p. 115).²¹

A further important feature of the new conception of analysis is that nothing in the process of analysis itself enables us to tell when analysis is complete.²² Analysis is complete when the true form of the proposition has been attained, but Russell has no clear criterion for when this has happened. When we have substituted a definite or indefinite description for each denoting phrase, we may well find that our descriptions contain proper names that may in turn need to be analyzed as definite descriptions. Russell's examples, "The king of France" and "The author of *Waverley*" make this clear, since both "France" and "*Waverley*" are

themselves names. It is also true that we cannot think of successive stages in the analysis as closer and closer approximations to the true form of the proposition. The reason for this is that carrying the analysis a stage further, analyzing something previously left unanalyzed, may yield a sentence of completely different form. There is no reason to think that every stage of analysis yields a form that is closer to the true form of the proposition than are all previous stages, so the picture of closer and closer approximations to the real form of the proposition cannot be applied. What this suggests is that there is a need for external constraints on the process of analysis that are not intrinsic to the process but are imposed upon it. There is no explicit sign that Russell is aware of this need, but it may have affected him nevertheless. In particular, one of the reasons for the importance of the notion of acquaintance may be that it provides an external constraint on the process of analysis. The notion of acquaintance is present in Russell's philosophy from *Principles* onward, but its role becomes much more important in OD and after. One reason for this may be that the notion of acquaintance tells you what the ultimate entities of analysis are: they are the entities with which you are acquainted. The process of analysis is complete—and the true form of the proposition discovered—when all entities with which you are not acquainted have been eliminated. The new conception of analysis thus demands that the notion of acquaintance should bear much more weight than it had done before OD. On the other hand, it is also true that this conception of analysis makes possible a more realistic notion of acquaintance, i.e., one more closely tied to actual sensory experience.²³ Because analysis is indefinitely extendable, any putative object with which it is implausible to say that we are acquainted can be thought of as analyzable, and thus as not being an object of acquaintance. (Strictly one should say: expressions that might appear to refer to objects with which we are not acquainted can be thought of as analyzable.)

The contrast between grammatical form and logical form, together with the conception of analysis that accompanies it, forces Russell to pay explicit attention to words and sentences. Language begins to become a subject of philosophical interest in its own right. In part this is something of which Russell is aware and explicitly accepts; in part it is a matter of pressures that force him in a direction his explicit doctrines do not acknowledge. The change in Russell's overt view is to be understood in terms of the break between grammatical form and logical form. The assumption of congruence between sentences and propositions had served, before OD, to make it easy for Russell to ignore words (see, for example, *Principles* 46, quoted earlier, p. 98). That assumption makes words and sentences a transparent medium through which propositions and their constituents may be grasped. The medium may be essential, but just because of its transparency nothing more need be said about it. Words themselves need never be the subject of explicit attention. This sort of attitude is in sharp contrast with Russell's later emphasis on the dangers of being misled by grammar. His later attitude is that the

grammatical form of the sentence will usually be quite different from the logical form of the proposition, and that many philosophical mistakes arise precisely from the neglect of this distinction. Thus in Lecture One of “The Philosophy of Logical Atomism” he says:

Some of the notions that have been thought absolutely fundamental in philosophy have arisen, I think, entirely through mistakes as to symbolism.²⁴

Because Russell comes to believe that symbols are fundamentally misleading, he also comes to think that symbolism is of great philosophical importance—not because it is really the thing we mean to talk about in philosophy but because it will mislead us if we do not pay attention to it. This is quite explicit in a well-known passage, also from Lecture One of “The Philosophy of Logical Atomism”:

There is a good deal of importance to philosophy in the theory of symbolism a good deal more than at one time I thought. I think the importance is almost entirely negative, i.e. the importance lies in the fact that unless you are fairly self-conscious about symbols, unless you’re fairly aware of the relation of the symbol to what it symbolizes, you will find yourself attributing to the thing properties which only belong to the symbol. That, of course, is especially likely in very abstract subjects such as philosophical logic, because the subject-matter that you are supposed to be thinking about is so exceedingly difficult and elusive that . . . you do not think about it except perhaps once in six months for half a minute. (p. 185)

Perhaps more important than this somewhat grudging overt admission of the importance of language is the pressure that Russell is under, contrary to his explicit doctrines, to take language as the real subject with which he is dealing. One way in which this arises is from the fact, which we have already examined, that the new conception of analysis makes it hard to tell when an analysis is complete. The proposition itself, whose form is given by the final stage of analysis, becomes inaccessible, and our attention is focused on stages of analysis that may be short of the final stage. But all that we have at these stages are *sentences*. A single proposition, after all, is expressed equally by the unanalyzed sentence and by the fully analyzed sentence and by all the sentences that constitute the various stages of analysis between the two. So philosophical progress may consist in the transition from one sentence to another. Russell may say that this is progress only because the second sentence more nearly reflects the form of the proposition, but nothing in the process of analysis itself gives these words any force. Once the relation between sentences and the propositions that they express becomes problematic, the idea that one sentence can “reflect” the form of a proposition more accurately than another has to carry more weight than it can bear. As Russell becomes more conscious of symbols—of words and sentences—it becomes

clear that analysis essentially concerns sentences; the references to propositions become *pro forma*.

I have argued that the significance of OD is *not* that it shows that there can be names or definite descriptions that occur in meaningful sentences without referring to anything. The significance of the article has to do rather, I have claimed, with the idea of analysis as elimination, and with the development of certain conceptions of logical form and of philosophical analysis. Perhaps most important, the article is a crucial step on the way to the idea that language is a primary philosophical concern. These ideas are so fundamental to analytic philosophy as it has developed since 1905 that it is hard to put them in a historical perspective. Those who are, even in a remote sense, the heirs of Russell, tend to take absolutely for granted the notion of logical form, the corresponding view of philosophical analysis, and the idea of elimination by analysis. I do not mean that we all accept the philosophical views embodied in these ideas. I mean, rather, that we all take it for granted that there are such ideas, that the philosophical views that they embody are available options—even if we think that these views need to be revised in some way. Such an attitude makes it difficult to appreciate an article whose significance lies largely in its contribution to the development of these ideas. For this requires that we see those ideas as the product of a historical process, that we realize that they were not always philosophical commonplaces but came to be so over a particular period of time and for traceable reasons. In short, we have to cease taking those ideas for granted. This is even more clearly true of the view that language is an important subject of philosophical study. It is hard to detach oneself enough from this idea to ask where it came from, and why it came to have such a hold over so many philosophers. Yet if one takes this idea for granted, it is hard fully to appreciate not only the significance but also the substance of OD. That article was written against the background of a view according to which the question, what are the constituents of the proposition expressed by a given sentence, is a real question with a right answer that is independent of how we choose to analyze the sentence—a fact of the matter that is independent of us. This assumption, I claimed, is one that OD itself helped to undermine, but OD cannot be fully understood unless one realizes that this was Russell's assumption.²⁵

Notes

1. B. Russell, "On Denoting," first published in *Mind* (1905); reprinted in Russell, *Essays in Analysis*, ed. D. Lackey (New York: Braziller, 1973) and cited by page number in Lackey. I shall abbreviate the title of this article as OD, and cite it by page number in Lackey.

2. *My Philosophical Development* (London: Allen & Unwin, 1959), p. 84. See also P. Schilpp, ed., *The Philosophy of Bertrand Russell*. The Library of Living Philosophers (Evanston, IL: Open Court, 1946), pp. 13–14.

3. G. E. Moore, who was closely associated with Russell in this period, manifests a similar lack of interest in words. He makes, for example the following remark about what he means by a "definition of good": "A definition does indeed often mean the expressing of one word's meaning in other

words. But this is not the sort of definition I am asking for. Such a definition can never be of ultimate importance in any study except lexicography. . . . My business is solely with that object or idea, which I hold, rightly or wrongly, that word is generally used to stand for. What I want to discuss is the nature of that object or idea"; *Principia Ethica* (Cambridge: Cambridge University Press, 1903), p. 6.

4. *Principles of Mathematics* (London: Allen & Unwin, 1903; 2nd ed. 1937), section 51, second emphasis mine. I shall quote from the second edition of this book, which is identical with the first except for a new introduction and the consequent renumbering of the pages of the preface. Except for citations from the preface, I cite by section number, not page number. I shall abbreviate this work as *Principles*.

5. Contrast Sainsbury, *Russell*. (London: Routledge & Kegan Paul, 1979), p. 16.

6. Compare Moore, "The Nature of Judgment" (*Mind*, 1899). Moore argues that propositions are made up of what he calls "concepts," which are objective, nonmental entities. He then claims that these concepts also make up the world: "It seems necessary, then, to regard the world as formed of concepts" (p. 182).

7. G. Frege, *Wissenschaftlicher Briefwechsel* (Hamburg: Felix Meiner Verlag, 1976), pp. 250–51. I have followed the translation of Hans Kaal in *Philosophical and Mathematical Correspondence* (Chicago: University of Chicago Press, 1980), p. 169.

8. It is important to note that "denoting" and its cognates are technical terms in Russell's early philosophy. But even in that period he sometimes uses these words in a looser sense, and this becomes more common in OD and after, when there is no longer a use for "denoting" in the technical sense. I shall always use these words with their technical sense. The only serious ambiguity that arises is that Russell constantly speaks of the "theory of denoting" in OD and afterward, meaning the later theory, whereas this name would more naturally be used for the earlier theory. I shall call the earlier view "the theory of denoting concepts" to avoid this ambiguity.

9. See "Meinong's Theory of Complexes and Assumptions" published in *Mind* (1904); and Russell's review of *Untersuchungen zur Gegenstandstheorie und Psychologie*, published in *Mind* (1905). Both of these works are reprinted in Lackey (ed.), *Essays in Analysis*.

10. First published in *Mind* of July 1905; reprinted in Lackey.

11. *Introduction to Mathematical Philosophy* (London: Allen & Unwin, 1919), p. 170. Compare *Logic and Knowledge*, ed. R. C. Marsh (London: Allen & Unwin, 1956), p. 223.

12. See especially "Points About Denoting," "On the Meaning and Denotation of Phrases," "On Meaning and Denotation," and "On Fundamentals," all in the Russell Archives at McMaster University. I am grateful to the Archives for allowing me access to these and other unpublished works of Russell.

13. If one equates a Fregean thought (*Gedanke*) with a Russellian proposition—as Russell is inclined to do—then Frege's view here is analogous to the *Principles* view. The sense (*Sinn*) of "the king of France" is a constituent of the thought expressed by a sentence containing those words, but the king of France himself is not a constituent of that thought. The thought thus contains an entity (a Fregean sense) corresponding to the definite description. The two views are different in ways I shall not attempt to discuss, but the analogy that I have given explains why Russell speaks of his view as "very nearly the same as Frege's." (OD, p. 104; see also *Principles*, 476.)

14. Compare Wittgenstein: "It was Russell who performed the service of showing that the apparent logical form of a proposition need not be its real one." *Tractatus Logico-Philosophicus*, trans. D. F. Pears and B. F. McGuinness (London: Routledge & Kegan Paul, 1961), 4:0031. For the view that the crucial point of OD has to do with the notion of logical form, see also David Kaplan, "What is Russell's Theory of Descriptions?" Reprinted in *Bertrand Russell, A Collection of Critical Essays*, ed. David Pears (New York: Anchor Books, 1972).

15. *Our Knowledge of the External World* (London: Allen & Unwin, 1926; 1st ed. 1914), chapter 2, esp. p. 67.

16. "Scientific Method in Philosophy" (1918, reprinted in *Mysticism and Logic* [London: Allen & Unwin, 1963]), p. 84.

17. See "Mathematical Logic as Based on the Theory of Types," in *Logic and Knowledge*, p. 89; and also *Principia Mathematica*, proposition *20.01, vol. I, p. 190.

18. Taken literally, this claim is false. According to the theory of descriptions there is a body of truths (purportedly about the present king of France [or at least containing the words "the present the

king of France" in subject position)), e.g., "The present king of France does not exist," "It is not the case that: the present king of France is bald," "Either grass is green or the present king of France is bald," and so on. But there can be no true sentences that purport to ascribe an intuitively simple property to the present king of France, i.e., no true atomic sentences containing "the present king of France" in subject position. When I wish to make this qualification I shall speak of true sentences of the *ordinary kind* that purport to be about something.

19. Russell always speaks as if the elimination of classes by defining them in terms of propositional functions were crucial for the solution of the paradox. Unfortunately, it is unclear why he should hold this, for one can state a direct analogue of the class paradox for propositional functions, provided one makes sufficiently strong assumptions about propositional functions. I suspect that Russell's view is that the restrictions that enable one to avoid the paradox are completely arbitrary and untenable if stated as restrictions on classes, but are somehow natural as restrictions on propositional functions. See Warren Goldfarb, "Russell's Reasons for Ramification," this volume.

20. This is importantly distinct from the idea that propositions are themselves symbols, but the distinction is easy to blur. Russell often says that classes (for example) are incomplete symbols, meaning that symbols that appear to refer to classes are incomplete symbols, and that in fact there are no classes (or no classes are being assumed in the theory). This is simply shorthand and does not indicate any confusion on Russell's part. The same shorthand used about propositions, however, is less innocent. Russell does come to hold that propositions are just symbols, and the shorthand both eases and disguises the transition.

21. Russell attributes the use of this technique in physics to Whitehead (see *Mysticism and Logic*, pp. 88, 116). These applications demand considerable logical and mathematical sophistication, but the fundamental technique is the one that Russell had already used in the philosophy of mathematics.

22. I owe this insight to Warren Goldfarb.

23. One cannot, of course, both have a realistic (in this sense) notion of acquaintance and hold that we are acquainted with abstract objects. Russell continues to hold this belief in an unequivocal form until at least 1912—see *Problems of Philosophy*, chapter 5.

24. *Logic and Knowledge*, pp. 185–86.

25. I thank Burton Dreben and Warren D. Goldfarb for their helpful conversations about the subject of this essay, and for their criticisms of an earlier draft. Comments by Thomas G. Ricketts and Catherine Elgin, and a question from Wade Savage, also resulted in changes I am glad to have made.

Note added in proof:

This essay left my hands almost exactly six years ago. There is much in it that I would now put quite differently; to attempt to do so would, however, be to write a wholly new piece. There is, however, one implication that now seems to me definitely wrong. I strongly suggest that Russell's elimination of classes was made possible only by the theory of incomplete symbols introduced in OD, i.e., that no analogue of the definition of (symbols for) classes in terms of propositional functions is possible in the theory of denoting concepts. This now seems wrong; given sufficient ingenuity in manipulating the theory of denoting concepts, I think it can be made to serve this purpose. I think it remains true, however, that Russell thought that the theory of incomplete symbols was required for the elimination of classes.

Peter Hylton, August 1988