





Herbert Hochberg • Introducing Analytic Philosophy  
Its Sense and its Nonsense

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Studien zur Logik, Sprachphilosophie und Metaphysik

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Herbert Hochberg

# Introducing Analytic Philosophy

Its Sense and its Nonsense  
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## PREFACE

*Absorption in language sometimes leads to a neglect of the connexion of language with non-linguistic facts, although it is this connexion that gives meaning to words and significance to sentences.*

Bertrand Russell, 1950

The book attempts to sketch, not work out in detail, an account of reference, meaning, truth and intentionality that stays within the “linguistic turn” characterizing twentieth century analytic philosophy. But it seeks to avoid following the contemporary variants of analytic philosophy that have turned from the analysis of things and facts to a preoccupation with and virtual worship of language and its use. The classical focus on ontology, combined with careful and precise formulations, that marked the writings of the early founders of the analytic tradition, has degenerated into the spinning of intricate verbal webs of analysis. The latter supposedly yield “theories of meaning” but more often signal the rebirth of idealism in the guises of “anti-realism” and “internal realism.” The focus on the world, as what words are about, is often lost as “analytic philosophers” concentrate on language itself—the world being “well lost,” in Nelson Goodman’s honest words. Such trends, oddly enough, have come to typify both the analytic tradition and what some call “continental philosophy.” We shall also note examples of a remarkable combination of arrogance towards and ignorance of the philosophical tradition that is displayed in some writings within the analytic tradition, including influential works. A number of the details supporting the themes that will be set out have been addressed in earlier essays and books that are cited at appropriate places. Others, as is invariably the case, remain to be spelled out.

I am indebted to discussions, as well as e-mail “dialogues,” in recent years with Per Lindström and D. M. Armstrong. Ignacio Angelelli’s knowledge of Frege and the history of logic and his forthcoming review “On neo-Fregeanism” have also been of help, as has R. Grossmann’s familiarity with the intricacies of Meinong’s thought.

*Austin, Texas  
November, 2002*





# CONTENTS

## PREFACE

## INTRODUCTION

## CHAPTER 1: THE LINGUISTIC TURN

1a. Frege: Reference and Meaning	19
1b. Frege's Context Principle and Dummett's Linguistic Turn	39
1c. Frege's Objects and Quine's Criterion of Commitment	58
1d. Bradley and Bosanquet on Predication and Judgment	61
1e. Russell's Analysis of Definite Descriptions	70
1f. Meinong's Pure Objects of Thought: The Turn to Intentionality	72
1g. Predicates, Propositional Functions and Properties	78
1h. Reincarnating Meinong: Searle's Intentional Speech Acts	82

## CHAPTER 2: DESCRIBING AND DENOTING

2a. Russell's Critique of Frege	89
2b. Facts and the Analysis of Judgment	99
2c. Referring to Facts	112
2d. Strawson's Critique of Russell	115
2e. On Distinguishing Descriptive from Referential Use	129
2f. Kripke's Causal Theory of Reference	131

## CHAPTER 3: MEANING, TRUTH AND ANTI-REALISM

3a. Tarski's Conception of Truth: Twisting the Linguistic Turn	147
3b. Positivism and Pragmatism in Carnap and Sellars	156
3c. Truth: Davidson's Fast Track to the Meaning of "Meaning"	174
3d. Dummett's Anti-Realism: Meaning as Use and Truth as Proof	200
3e. Quine's Attack on Dogma: Analyticity and Meaning	215

## CHAPTER 4: FACTS, INTENTIONS AND ABSTRACTION

4a. Facts: Problems and Solutions	219
4b. Truth and Modality	229
4c. Meaning and Intending	245
4d. Access to The Abstract	252
References	273
Index	279

## INTRODUCTION

Philosophy in the twentieth-century took what Gustav Bergmann, once a member of the Vienna Circle, memorably characterized as a “linguistic turn.” (The phrase was popularized by being used as the title of a collection of essays edited by R. Rorty and was possibly inspired by the title of Schlick’s 1930-31 paper “The Turning Point in Philosophy.”) Bergmann meant something, in the 1940s, far different than Michael Dummett did in his repeating the phrase in the 1990s, as we will note. One manifestation of that turn is seen in the preoccupation with theories of meaning and of reference, while another is seen in the phrase “philosophy of language” itself. While philosophy always involved a concern with language and the analysis of meaning, as is evident to even a casual reader of Plato’s dialogues, there was a significant shift of focus in the late nineteenth and early twentieth century, particularly in Great Britain, in Germany and Austria and, as is less well known, in Sweden. One sign of the change was the shift of interest to the “analysis” of key terms and phrases, such as “some thing,” “the,” “there is,” “number,” “a,” “good,” “every thing,” “exists” and so forth, in the writings of Frege in Germany, Moore and Russell in England, of C. von Ehrenfels, Husserl and Meinong in Austria, and of P. Wikner, A. Hägerström and A. Phalén in Sweden; while another was the focus on scientific concepts on the part of the positivists of the Vienna Circle and the Berlin Group and their resultant concern with “philosophy of science.” One simple cause of this was the logical positivists assuming that, as traditional philosophical questions and statements were meaningless, the task of philosophy was shifted to the analysis of the concepts and language employed in the various sciences. Another was that many of the members of “the Circle” had themselves been trained as mathematicians and scientists, rather than as philosophers. As the sciences dealt with questions of fact and with theories about the world, philosophy was derivatively concerned with questions about the methods and statements of the empirical sciences (physics, psychology, etc.) and the formal sciences (mathematics, logic)—what is “a proof,” “a theory,” “induction,” “confirmation”—what is “the logic” of

measurement, the meaning of “probability”? Viewing the shocks produced by developments in physics as resulting, in part, from uncritical use of critical concepts was another influence, as was the impact on the positivists of Frege, Russell, Moore and Wittgenstein. Even the writings of Nietzsche and Freud were factors, as they suggested that traditional philosophical systems, like theological ones, were better understood as reflections of personality characteristics and unconscious drives, as rationalizations rather than as rational constructions. Hence philosophers were to be understood in psychological and causal terms, rather than judged by the merits of their arguments. Paradoxically, the psychoanalytic concepts themselves gave rise to further issues regarding their scientific status, empirical basis and meaning. It is often overlooked that the Circle’s “membership” included psychoanalysts, while other members were well read in psychoanalytic literature.

According to Plato, Socrates was wise. Assume that Plato’s judgment is true, and, hence, that the sentence “Socrates is (was) wise” is true. Suppose that the same judgment was made by both Wikner and Russell. Two questions that traditionally arise are: (1) What furnishes the basis or ground for a judgment being true? That is, in virtue of what is the judgment true? What is it to be true and just what is Truth? (2) What provides the basis or ground for truly asserting that different individuals have the same thoughts or make the same judgments—or that one person has the same thought at different times? In virtue of what is the content of the judgments, made by different people and expressed in different languages on different occasions, said to be the same? These are two classical questions that give rise, in the one case, to “theories of truth” and, in the other, to “theories of meaning.” Thus one hears that true sentences like “Socrates is wise” and “Sokrates är vis” correspond to facts or have facts as their grounds of truth and that the different sentences express the same “proposition” that constitutes their meaning or provides the content of the judgments that they are used to express. In appealing to facts—existent states of affairs in Wittgenstein, facts that have “being” in Moore—to explain the notion of truth, each of the Cambridge trio proposed a version of what has come to be called a “correspondence theory of truth.” They all, in one way or another, took a judgment expressed by a sentence like “Socrates is wise” to be true if a certain fact existed. This meant that in addition to taking Socrates as the object that the judgment was about (and thus, as such terms are used, the subject that wisdom was ascribed to),

they acknowledged, in the early 1900s, something else in order to account for the truth of the judgment. Clearly Socrates could be the object of such a judgment even if he was not wise, and thus Socrates, as a particular object, did not suffice for the judgment being true. For the Cambridge philosophers more was required—the property that he exemplified and the fact that he did exemplify it. (I ignore the once popular view that properties are not recognized in the *Tractatus*.) Thus, consider another (presumed) truth about Socrates—that Socrates was bald. Since Socrates is the wise and bald individual that both judgments are about, it appears obvious, if not trivial, that what distinguishes the relevant facts is that one involves the attribute or property of being wise, while the other involves the attribute of being bald. The shifts from “is wise” to “being wise” or “having wisdom” and from “is bald” to “being bald,” or to speak of his “baldness,” signal shifts in what is being talked about—the subject of discussion. In speaking about attributes, and classifying them as attributes, one classifies them much as one classifies Socrates as a person or as the subject that is said to have various attributes—a subject that we would not classify as an attribute of anything, as it makes no sense to attribute Socrates to some subject. And, if one judges that “Socrates is wiser than Plato” one judges that a relation holds between them and not that an attribute holds of each one.

What all this suggests, as it did to Russell, Wittgenstein and Moore, is that the facts that are the “truth grounds” of the various judgments are of different kinds. One kind involves an object having an attribute (such as *wisdom*), while another kind involves two objects standing in a relation (such as *being wiser than*). Facts can then be thought of as relatively complex, since specifying the facts that we are talking about in terms of one or more objects *and* an attribute or relation suggests that the latter are components of facts, as the term “Socrates” and the predicate “is wise” are obvious linguistic components of the sentence “Socrates is wise.” Taking facts to be required as truth grounds of simple judgments like those we have considered, Russell and Moore argued that attributes, in addition to “particulars” or “individual objects,” were required as constituents of facts and as the basis for correctly classifying diverse particulars as wise or bald. Thus, in early papers and books both Russell and Moore tried to prove that universals—as common attributes of objects and as relations between objects—existed, as did the particulars that exemplified them. They also argued that the only viable account of truth was a correspon-

dence theory, according to which existent facts grounded the truth of simple judgments expressed by sentences of forms like “Socrates is wise” and “Plato is wiser than Socrates.”

This led to a number of further questions. Suppose, for example, that we recognize colors and shapes as such attributes: being red and being square, say. Is there also the compound attribute of being red and square? Is being red one attribute or is “red” a general term covering a number of more “determinate” attributes—the diverse shades of red? Are there contradictory attributes, like being both round-and-not-round? Are there other kinds of facts, such as negative facts that ground the truth of judgments expressed by sentences like “Socrates is not alive”? Are there general facts in virtue of which judgments like “All men are mortal” are true? What is the basis, if any, for the “rules” governing logical inferences and truths, such as: “If all men are mortal and Socrates is a man it follows that Socrates is mortal”? Is such a basis, if there is one, an *objective* ground for logical truth and valid inference, or are such matters based on conventions embedded in our linguistic habits and social customs or in “normative” features of social life, and, hence, like ethical norms? If attributes are common properties, what are the particulars or individuals that are instances of the attributes and what is the “connection” they have to the attributes that they are said to instantiate or exemplify? How do a particular and an attribute combine to form a fact? Is a particular object simply the *sum* of or *composed of* its attributes, or is it something quite distinct from them but which combines with them, and if so, what? Thus, one heard of “substrata” or “bare” or “thin” particulars that were simply “thises” without qualities.

It is sometimes difficult to see the point of such issues. Dummett has put the problem concisely: “The two most abstract of the intellectual disciplines, philosophy and mathematics, give rise to the same perplexity: what are they *about*?” (2002, 19) This perplexity has been particularly prominent in the twentieth century and, as one of the consequences of “the linguistic turn,” has led to the idea that such questions are pointless or meaningless. A sensitivity to problems about “meaning” came to be seen as a guide for avoiding the pitfalls of philosophical perplexity that departures from ordinary usage give rise to. The problematic nature of the questions themselves seems especially noticeable when one asks about whether there are such *things* or *entities* as meanings, given that the words and sentences that we normally use clearly do *have*

meaning. For asking a question about the meaning of a given word is usually understood as asking for a definition of the term or an explanation of how it is used in various contexts—the sort of explanation found in dictionaries, where the meaning is often clarified by providing examples of use in various sentences. Thus one may well be puzzled by what philosophers are getting at by proposing “theories” of meaning and debating the relative merits of alternative views, especially when one reads about propositions being entities that are expressed by sentences and about “concepts” being what words “mean.”

Yet, it is not difficult to see how such notions arise. For, while sentences in different languages are literally different sentences containing different words, they are often said to state or express the same *thing*. A proposition, taken as what is expressed by a sentence, seems to be somewhat like a common property, such as a color or shape, of various particular things. Yet it is clear that a person can have a cold without there being some thing that is the cold had by the person, which is quite unlike there being a ticket when someone has a ticket in hand. And it would seem that to speak of a word having a meaning is not at all like having a ticket and somewhat more like someone having a cold. A meaningful expression has certain uses and not others; a person having a cold will do certain things, like sneeze, and, very likely, not others, like say “I hope it gets worse.” Yet, we do speak of understanding the meaning of a word like “red” in terms of knowing what color red is—what color the word “red” refers to or represents—just as we speak of understanding which person is “meant” by understanding which person is referred to by the use of a name on some occasion. And, if one does not think of the meaning as the, or a, referent in such cases, what is a viable alternative account? In responding, one might naturally ask why one raises such questions? Why not simply explain the meaning of words in terms of other words we understand, as we do when we explain a term or phrase to a child or to someone who is not a native speaker of our language? This is what some philosophers have done, while others have looked to various sciences to avoid traditional philosophical perplexity.

Quine, in speaking of “epistemology naturalized,” suggests the replacement of traditional epistemology or theory of knowledge by the psychology and social psychology of the learning process—thereby replacing philosophical questions by “scientific” questions. This is also reflected in his suggesting, in the style of classical logical positivism, that this will do “in so far as

philosophy of science is philosophy enough”—which, being less extreme, allows him to address classical questions in the philosophy of logic and mathematics, as well as philosophical questions about the concepts of science. One need only recall that some of the positivists of the Vienna Circle rejected the classical philosophical questions and answers as “meaningless” and to be replaced, in a progressive and scientific age, by the logical analysis of the concepts, methodology and theories of the various sciences, including the formal sciences of logic and mathematics. In this spirit, Quine goes further and replaces epistemological questions by questions in behavior psychology and social psychology. This tendency to replace philosophical questions by other questions is also seen in philosophers who shift the focus from questions about what “concepts” are to questions about what it is to “possess a concept,” and then take the latter as the ability to use language appropriately in various situations.

Yet the contrast between philosophical and non-philosophical questions is easily seen in the context of mathematics. Consider elementary arithmetic—the arithmetic of the natural numbers with the operations (functions) of addition and multiplication. We all know the basic truths and even immediately recognize as true some truths about the numbers that we might not have thought of before, such as that every collection of natural numbers contains a number less than all the other numbers in the collection. You just have to think about it a moment. But when we talk about numbers (let alone “collections”), recalling Dummett’s question, what are we talking about? What is the subject matter of elementary arithmetic? It is very easy to reply: “numbers, of course!” But, then, are there really numbers? And do the numerals “mean” or refer to such “entities”? If they do not so refer, what are we talking about? And, if they do not mean what they refer to, what do the numerals and the function signs mean? It is helpful to keep arithmetic in mind when one thinks about questions of language, meaning and reference. For, it is obviously one thing to learn to add and multiply; it is quite another thing to ask, if one does, what one is talking or writing about when one “does” those operations and why the arithmetical truths are true. Some find the philosophical questions intriguing, if puzzling, while others find them to be a waste of time or even not to be sensible questions at all. But arithmetic is a helpful subject matter for seeing the difference between philosophical questions about arithmetical



truths and “objects” and “ordinary” arithmetical questions—questions that lie *within* the subject itself.

This book will be, in part, a commentary on ideas of Russell, Moore and Wittgenstein, that remarkable Cambridge trio that not only contributed to the history of philosophy but greatly influenced its course in the last century. We will also consider a number of contemporary philosophers who have commented on and discussed themes found in the Cambridge trio, in some cases in significant works of their own, and are part of what has come to be called “the analytic tradition.” But we begin with three earlier figures that provide a background for that tradition—Gottlob Frege, Francis Herbert Bradley and Alexius Meinong.



## CHAPTER 1

### THE LINGUISTIC TURN

#### 1a. Frege: Reference and Meaning

Frege ingeniously used a few basic ideas to attempt to resolve a number of fundamental philosophical problems. Like Bradley, he saw a problem in the analysis of predicative judgments that led to holding that the existence of facts grounded their truth and falsity. Suppose we consider a tentative answer to the question raised earlier about the judgment that Socrates is wise to be the following. We distinguish the sentence “Socrates is wise” (a linguistic item) from the thought that the sentence *expresses* (is used to express)—as the “thought” expressed is not itself a linguistic item, whether or not someone’s having such a thought is dependent on the person’s ability to use language. And we make a further distinction. Let two people think that Socrates is wise. Consider each to have a particular state of mind, where we need not consider or be concerned with whether such a state of mind is taken as a mental state or a brain state (or some other neuro-physiological state) or a disposition to behave or what have you—matters that arise in the philosophy of mind. We merely distinguish the particular states of each person from the common thought that those states are cases or instances of. In a way it is much like the case of Plato and Socrates being wise. We have, as we are considering matters, the attribute of wisdom that characterizes the two distinct persons. Similarly we can distinguish the thought that Socrates is wise from the individual cases of thinking—the various cases of making such a judgment—that our hypothetical persons are presently engaged in. Thus the notion of a “thought” is used in two senses—in speaking of an occurrence particular to a given person and of something common to different occurrences in diverse people or in the same person at different times. If I think that Socrates is wise on Tuesday

and, again, on Wednesday, the thought that I had on Tuesday differed, in one sense, from the one on Wednesday, which is why I can be said to have had the thought twice—on different occasions. In another sense, it was the “same” thought that occurred on both occasions. So, if we speak in terms of mental states, we can say that two mental states of the same kind are involved. They are of the same kind since they are both thoughts with the same content.

Frege spoke of the “kind” or content of the thoughts, somewhat unfortunately, as a “thought,” while others have spoken of a “mental content” and still others of a “proposition,” as distinct from a sentence or statement that is a linguistic correlate of or is used to “express” such a content. A proposition or Fregean thought or mental content is then what a sentence expresses and is not to be identified with a sentence, written or spoken, which is a linguistic item composed of other linguistic items, subject terms, predicates, verbs, etc. It is common to also distinguish “the sentence” in the sense of a series of words written on a blackboard from “the sentence” of which that particular series of meaningful chalk marks is an instance. Thus just imagine writing the “same” sentence one hundred times, as a philosophical exercise. In one sense there are one hundred sentences, taken as instances of “the sentence,” taken in another sense. Typically one speaks of the many “tokens” of the same “type.” The similarity to the distinction between a common attribute and the various particulars that are instances of it is obvious—and made even more so by recognizing that “type” and “kind” are sometimes used interchangeably.

Since the word “thought” easily lends itself to blending what we just separated, I will use the fairly standard term “proposition” for Frege’s “thought.” We then have a sentence, “Socrates is wise,” a proposition expressed by that sentence, and, let us assume, the fact of Socrates being wise. The sentence expresses the proposition and the existence of the fact is the truth ground or basis for the sentence being true. Once propositions are introduced, along with facts, we face a question about their analysis. In the case of the fact that Socrates is wise we considered that fact to involve Socrates, the attribute wisdom and a connection between them—reflected by the use of the copula “is,” or “has” as used in “Socrates has wisdom.” In the case of the proposition, a similar question arises about its structure and components. It would seem that we cannot identify propositions with facts, since we can have the thought that Socrates is wise, and hence the proposition, even if he

is not wise, and hence there is no fact of Socrates being wise. Again, for the time being, let us assume that this is so and take the proposition to be something else. But then, what is it? Frege took the name "Socrates" to not only have a referent or denotation, the person Plato immortalized in his dialogues, but to have what he called a "sense," a "way" or "manner" of denoting something. The sense was what we understood by the name, and some have taken that to amount to a sort of description of the object referred to, a description like "the teacher of Plato who was put to death in Athens." Though I just provided a linguistic phrase and spoke of a "sort of description," Frege did not take the sense of an expression to be another linguistic item. It was not something linguistic but, rather, what provided the conceptual content or meaning for a linguistic expression on a given occasion of its use. The phrase "the teacher of Plato who was put to death in Athens" might be taken to inform one of the "sense" of the name "Socrates," as I understand it, but on Frege's account such a descriptive expression itself *has* a sense, but *is not* a sense. The sense or meaning of a name or a descriptive expression is a constituent of the proposition expressed by the sentence "Socrates is wise," rather than the linguistic phrase that enters into a further sentence, such as "The teacher of Plato who was put to death in Athens was wise."

One constituent of the proposition expressed by the sentence "Socrates is wise" is then the sense of the name "Socrates." But clearly there must be something else involved in the analysis of a proposition. One might suggest that the other ingredient is the attribute wisdom or "concept" of wisdom, since we are talking about propositions or thoughts, and not facts, and about the sense of the word "Socrates," and not the philosopher the word is used to refer to. Frege spoke of a concept in this connection. Shortly, we shall see why, but for the moment we will simply adopt his usage. Predicate expressions then represent concepts, as names like "Socrates" denote objects. But Frege did not think that the proposition expressed by "Socrates is wise" could be understood as consisting of the sense of the word "Socrates" being connected to the concept of being wise. He believed that thinking so forced one to recognize an additional element of the proposition, a relation or connection between the sense of the subject term and the concept represented by the predicate term. And, once this was recognized, a problem resulted.

The sentence "Socrates is wise" has three items: the name "Socrates" that denotes a particular individual, the copula "is" and the concept word

“wise.” We are considering a view that takes the copula (along with the arrangement of the various signs) to represent a relation, which we can call “predication,” that obtains between the sense of the name and the concept to form the proposition. We thus take three “things” to be involved in the proposition. But, the proposition is not just three such things, as it consists of the sense and the concept standing in the predication relation. To see the significance of that we must digress to consider one of Frege’s and Russell’s major innovations in modern philosophy of language and logic: their construal of relations and relational predicates that went along with Frege’s great achievement, the development of predicate logic. But before doing so, we can note that if one considers a language which does not employ a copula like “is” but simply juxtaposes the subject and predicate terms, the predication “connection” would still be represented by the order and arrangement of words. In English, we have such natural forms, without an explicit copula, in sentences like “He lies” as opposed to “He is lying.” The device of juxtaposition is typically used in modern predicate logic, where a symbol pattern like “Fa” is read as “a is F” or “a is an F.” In this context I speak of “predication,” rather than “exemplification” or “instantiation,” since, on Frege’s view, one deals with the connection between the sense of a term, “a,” and a concept, F. But the sense of “a” is not an instance of F—it is not an F—and thus does not exemplify a property in a Fregean proposition, as it does in the atomic facts Russell acknowledged. But the role of a property in a fact and a concept in a proposition may both be said to be predicative, in a “neutral” sense, as they both play a predicative role and are connected to predicate terms.

If one thinks of the judgment that Socrates is wiser than Plato in the way that philosophers and logicians did for centuries, one thinks of Socrates as being what the judgment is about and “being wiser than Plato” as the predicate being ascribed to him. In other words one construes such a judgment along the lines of the judgment that Socrates is wise, except that a more complex predicate expression is involved. It is now a commonplace in elementary logic books to show that so understanding such judgments results in serious limitations imposed on the system of logic. Frege and Russell offered another analysis. The judgment in question is of a different logical structure than judgments of a subject-predicate kind. It is a judgment involving two subjects and a relational concept. Thus, we do not ascribe an attribute, the attribute of being wiser than Plato, to the subject, Socrates. In fact, there is no

attribute involved, there is a relational concept or property—is wiser than—which is said to relate Socrates to Plato. Such a dyadic relation, like all dyadic or two-term relations, requires two subjects to form a judgment, a relational fact or an appropriate sentence—depending on whether we are speaking of a “subject” as a linguistic sign, as what such a sign expresses (means) or as what it refers to. Earlier philosophers and logicians thus misconstrued the structure of relational propositions by taking them to be of subject-predicate form. They thereby failed to recognize that a two-term relational judgment must involve a relational concept (a dyadic relational predicate, a relation) that is distinct from both subject terms (objects) and is of a different logical form. This points to a feature of the use of such expressions in context.

Suppose one says that Stockholm is far away, and someone else responds—“Tokyo is even farther away.” In one clear sense, both statements implicitly speak of cities being “far from” here. Yet, “is far” seems to function like “is wise”—as a one-term or monadic predicate. But that is misleading, as the context supplies the relational setting for the apparent monadic predicate term. The example has some importance as the role played by the contextual setting gives rise to various philosophical problems and disagreements. For the present, having noted that a question of context arises, let us simply stick to the example and apply the pattern of the analysis of the proposition that Socrates is wise, construed in terms of a sense, a concept and a predication relation, to relational propositions.

In the case of the proposition (Fregean thought) that Plato is wiser than Socrates, we then have the relational concept *is wiser than* combining with the terms, the senses of the words “Plato” and “Socrates.” Thus, assuming in the monadic case that we deal with a relation of predication, connecting the “subject” with the “attribute” that is predicated of that subject, one would appear to deal with two relations in a case involving a relation like wiser than. Suppose one now thinks that just as we made the relational predication more explicit, in the above example of the sentence “London is far,” we should do so in the case of the predication relation. The problem this creates is simple, though somewhat tongue twisting. For, if one treats the proposition that Socrates is wise as a relational proposition, with the sense and the concept playing the role of the terms of a dyadic relation of predication, then the relation of predication is playing the role of a two-term relational concept. And, in the case of the judgment that Socrates is wiser than Plato, we would have the re-

lational concept “being wiser than” standing in a predication relation to the pair of terms, the senses of the names “Socrates” and “Plato.” Thus we would have “predication” as a triadic relation that relates a relational concept to two terms—the senses of the terms “Socrates” and “Plato.” But if such predication relations are really relations, they, in turn, are predicated of their terms. Thus, the predication relation, as a two term relation, is a further term that stands in a three-term relation that connects it to the sense of “Socrates” and the concept wisdom, while the three term predication relation, connecting *wiser than* to its subject terms, must itself be a term, along with the latter terms, of a four-term predication relation, and so on *ad infinitum*.

Frege thought such a pattern continues indefinitely and generates a vicious regress in that one never arrives at the analysis of the original proposition. There had been earlier anticipations of the problem that go back to Plato and Aristotle. In the case of Plato the question concerned the role of “participation” that supposedly connected particular things to the forms they “participated” in (as well as a question about connections among the forms themselves). Aristotle noted the problem, and it was apparently one of the motives for his view that forms “inhered” in things—with inherence not being a relation but simply giving rise to a compound entity that was an informed substance (a familiar Aristotelian composite of form and matter). Thus one did not have the facts of Socrates being human and being wise, but, rather, a substance embodying an essence, humanity, and an accident, wisdom. One may speculate that, in a sense, the Aristotelian tradition blocked the consideration of facts, as well as of the different logical forms required for the development of modern logic, by employing just such a pattern. (Though there are suggestions of appealing to facts in the fourteenth century figures Adam Wodeham and Gregory of Rimini, as well as an awareness of issues that facts raise.) Of course this made it difficult, if not impossible, to deal with relational predication, as in “Socrates is wiser than Plato.” For not thinking in terms of facts or states of affairs in such a case invites construing it in terms of one substance, Socrates, embodying the non-essential property (accident) of “being wiser than Plato.” Thus a relation like “is wiser than” is treated in terms of a monadic property “is wiser than x.”

To appreciate Frege’s attempt to resolve the problem, it will help to return to the variant of it that arose in Plato’s reasoning that led him to introduce Platonic forms early in the history of western philosophy. Plato took



there to be a form, wisdom, which Socrates was said to participate in. He thus recognized two kinds of entities—objects and forms—and a connection between them, *participation*. Forms came to be called “universals,” as they were common to the various particulars of the same form or kind. Participation then seemed to be a further common universal, yet it could not itself be a form, since it was what connected forms to their diverse instantiations. To place it “among the forms” would appear to require that it be connected by another relation (or perhaps itself) to the various instantiations of participation. So put, we have the problem Frege seeks to resolve. His solution is simple. The problem with classical realism about universals is that Platonic forms or universal attributes are treated as objects, admittedly of a different kind, but nevertheless as “complete” objects that can serve as terms of relations. For Frege, the Platonic pattern does not recognize the radical difference between concepts and objects. Concepts are “unsaturated” or “incomplete” and thus must function in a predicative role and not as terms of relations. Propositions do not result from the connection of a concept to a sense by a predication tie. They result from the completing of an incomplete concept, like *is wise*, by something, such as the sense of the term “Socrates.” In short, the predicative connection becomes an aspect of the conceptual component of the proposition. The proposition that Socrates is wise has only two constituents: the sense of the term “Socrates” and the concept *is wise*. The copula “is” belongs essentially to the predicate term and does not, itself, represent a predicative connection. The same is true for relational concepts. The relational concept *is wiser than* is doubly incomplete, requiring two senses for its completion to form a proposition like that expressed by “Socrates is wiser than Plato.”

Thus Frege’s analysis is based on a fundamental division between complete objects and incomplete or unsaturated concepts. These are the two basic kinds of entities he is led to in his philosophy of language by his attempt to analyze propositions. Yet, in a way, Frege still recognized a predicative connection. While the proposition expressed by “Socrates is wise” was analyzed into only two constituents—a saturated sense and an unsaturated concept—the object, Socrates, was said to “fall under” the concept, given that the proposition was true. This appears to suggest a connection between the object and the concept, over and above the joining of the sense of the term “Socrates” and the concept in the proposition—especially as Frege appears to

speak of something as “falling under a concept” as if that indicates it “has a property” and he recognizes “falling under” as a relational concept. But Frege does not recognize facts as truth grounds for propositions and rejects a correspondence theory of truth. Yet, if he takes *falling under* as a concept, to say that the object Socrates falls under the concept *is wise* introduces a further proposition, one in which the relational concept *falls under* combines with two terms, the sense of the word “Socrates” and the sense of the concept expression “is wise.” This poses two problems. One concerns the question of the nature of senses of concept expressions; the other concerns what Frege takes to be an account of truth.

Consider Frege’s distinction between sense and reference. The point of it becomes clearer if we consider the name “Socrates” and the descriptive phrase “the husband of Xantippe.” Both may be said to be used to refer to or to denote a particular individual. Yet what we understand when we use the different expressions may also be said to be different in that different propositions are expressed by the sentences “Socrates is wise” and “The husband of Xantippe is wise.” For Frege, “Socrates” and “the husband of Xantippe” have different “senses” but the same denotation. In fact Frege took the expressions to denote the same object since the different senses that they expressed denoted that object. Denotation was basically a relation between the sense of an expression and a referent, and only derivatively a relation between the expression and the referent. This allowed him to hold that “names” like “Pegasus,” which did not refer to anything, were meaningful, in that they had a sense, but did not have a referent. This meant that the referent was not what gave sense or “meaning” to a name. In a way, Frege’s distinction is reminiscent of an earlier and familiar distinction between the connotation and the denotation of a name.

A question that then arises is whether the sense-reference distinction applies to predicate expressions as well as expressions for objects. Though interpreters of Frege have disagreed about this, it seems clear that a predicate has both a sense and a reference, the latter being a concept—though Frege speaks of the concept both as what is expressed and what is meant (denoted) by a predicate term. But while it is the sense of a term like “Socrates” that enters into the proposition expressed by “Socrates is wise,” it is not the sense of the predicate but the concept itself that is the other constituent of the proposition. (A question arises here about identifying the sense with the concept.

We will briefly return to that below.) The sense of the expression referring to the concept plays different roles. One that is relevant here is that the sense seems to be the relevant constituent of a proposition expressed by a sentence like (C) “Socrates falls under the concept is wise.” A problem, once widely discussed by Frege scholars, was Frege’s insisting that a phrase like “the concept is wise” cannot denote a concept since it must denote something that is an object—for the expression does not play a predicative role in (C), where the predicate is the relational predicate “falls under.” He suggested simply avoiding such expressions as misleading and due to “...the awkward position in which language here finds itself...” (1967, 37). Moore would say something similar about his own talk of facts that did not exist.

The second question, concerning Frege’s account of truth, can be given a more direct answer. Just as Frege took a name like “Socrates” to have both a sense and a reference, he took a sentence like “Socrates is wise” to have a sense, the proposition it expressed, and a referent. But its referent was specified as its truth value—the True, we assume in this case. Sentences with truth values denoted the True or the False, which were objects. The doctrine sounds strange. It is one thing to recognize “senses” in addition to “referents” to account for thoughts and judgments. It is another thing to recognize truth values as objects. To be sure, one who reads logic texts is familiar with the occurrences of the signs “F” and “T” and their being said to designate truth values, as one is familiar with the use of numerals to designate numbers. But in logic classes one no more stops to ask if there really exist truth values than one stops in mathematics classes to ask if numbers really exist. Frege explicitly took there to be such objects. This resulted in part from the application of his sense-denotation distinction to sentences as well as to names like “Socrates,” in part from his division of terms into incomplete terms representing “functions” and complete terms representing objects and in part from his belief that attempts to define “truth” and purported theories of truth, such as the correspondence theory, were inadequate. Frege wrote:

Can it not be laid down that truth exists when there is correspondence in a certain respect? But in which? For what would we then have to do to decide whether something were true? We should have to inquire whether it were true that an idea and a *Reality*, perhaps, corresponded in the laid-down respect. And then we should be confronted by a question

of the same kind and the game could begin again. So the attempt to explain truth as correspondence collapses. And every other attempt to define truth collapses too. For in a definition certain characteristics would have to be stated. And in application to any particular case the question would always arise whether it were true that the characteristics were present. So one goes round in a circle. Consequently, it is probable that the content of the word “true” is unique and undefinable. (1968, 510)

One can imagine him believing that we might as well take true propositions to denote the truth value the True, since it is hopeless to try to provide an account of truth. He may also be claiming that no definition of the predicate “is true” is feasible since such a definition will have to be of the form “ $x$  is true if and only if  $x$  is  $\Phi$ ,” where  $\Phi$  is some condition or “characteristic” had or fulfilled by whatever truth is ascribed to. But, then, one must hold that  $x$  is true if and only if it is true that  $x$  has or fulfills  $\Phi$ . Thus, we would be involved in another vicious circle. Another claim that he could be making is that to offer such a purportedly explanatory definition (as opposed to a stipulation) is to assert that it itself is true. But then we must know what “truth” means in order to offer such an explanation, for we must know that it is true. Thus we cannot explain what it is to be true. Yet another way of construing his argument is to take him to claim that a theory like a correspondence theory proposes a definition of “is true” or claims to “analyze” the notion of truth along the following lines:

- (1) Given any proposition  $p$ ,  $p$  is true if and only if there is a fact that  $p$  corresponds to.

Frege could then argue that (1) is true if and only if there is a fact to which it corresponds. But then we have

- (2) (1) is true if and only if there is a fact that (1) corresponds to.

Hence, by the correspondence theory that offers (1) as an analysis of truth, (2) must be true. But on the correspondence theory, (2) will be true if and only if a further statement holding that it corresponds to a fact is true and so on. Thus, a proposition will be true if and only if there are an infinite number of