CHAPTER 1

THE TRADITIONAL DESCRIPTIVIST PICTURE

The modern discussion of reference begins with the reaction of Gottlob Frege and Bertrand Russell to an initially attractive but overly simple conception of meaning and reference. The conception is based on the observation that the most important feature of language is our ability to use it to represent the world. Different sentences represent the world as being different ways, and to sincerely accept, or assertively utter, a sentence is to believe, or assert, that the world is the way the sentence represents it to be. The reason sentences are representational in this way is that they are made up of words and phrases that stand for objects and the properties we take them to have—physical objects, people, ideas, institutions, shapes, sizes, colors, locations, relations, and the rest. What it is for language to be meaningful is for it to have this representational capacity. But if meaning is essentially representational, it would seem that the meaning of any word or phrase should be just what it represents, or stands for. In short, the meaning of an expression is the thing it refers to; and the meaning of a sentence is determined by the words that make it up.

Although attractive, and even undeniable in its broad outlines, this picture gives rise to puzzles in particular cases that led Frege and Russell to suggest significant modifications. In "On Sense and Reference," Frege considered an instance of the general problem posed by the observation that substitution of coreferential terms in a sentence sometimes changes meaning.[1] For example, in each of the following cases he would contend that the (a) sentence differs in meaning from the (b) sentence, even though they differ only in the substitution of terms that designate the same individual.

1a. The first Postmaster General of the United States was the author of *Poor Richard's Almanac*

  b. The first Postmaster General of the United States was the first Postmaster General of the United States.

---

[1] Gottlob Frege, "On Sense and Reference," in Peter Geach and Max Black (eds.), *Translations from the Philosophical Writings of Gottlob Frege* (Oxford: Basil Blackwell, 1970).

2a. Benjamin Franklin was the first Postmaster General of the United States.

  b. Benjamin Franklin was Benjamin Franklin.

3a. Ruth Marcus is Ruth Barcan.

  b. Ruth Marcus is Ruth Marcus.

In each case, this contention is supported by three facts: (i) a person can understand both sentences, and so know what they mean, without taking them to mean the same thing, or to have the same truth value; (ii) a person who assertively uttered the (a) sentence typically would be deemed to have said more, and conveyed more information, than someone who assertively uttered the (b) sentence; and (iii) the (a) and (b) sentences would standardly be used in belief ascriptions, *x believes that S*, to report different beliefs with potentially different truth values. If, on this basis, one agrees that the (a) sentences differ in meaning from the (b) sentences, then one must reject either T1, T2, or T3.

T1. The meaning of a genuinely referring expression is its referent.

T2. Both singular definite descriptions—i.e., expressions of the form *the so and so*—and ordinary proper names—e.g., *Benjamin Franklin*, *Ruth Barcan*, and *Ruth Marcus*—are genuinely referring expressions.

T3. The meaning of a sentence, of the sort illustrated by 1–3, is a function of its grammatical structure together with the meanings of its parts; in these sentences, substitution of expressions with the same meaning doesn't change meaning.

Whereas Frege rejected T1, Russell rejected T2. However, both agreed that the meaning of an ordinary proper name is not its bearer, and the meaning of a singular definite description is not the unique object that it denotes.

According to Frege, ordinary proper names and singular definite descriptions are terms that purport to refer to unique individuals. However, the meaning, or sense, of such an expression is never identical with its referent; instead, it is something that determines reference. For example, the meaning, or sense, of the description *the even prime number* is something like the property of being both an even number and prime (and being unique in this); its referent is whatever has this

property—the number 2. Although different singular terms with the
same sense must have the same referents, terms with the same referents
may have different senses. This explains the difference in meaning be-
tween the (a) and (b) sentences in (1) and (2). The explanation is ex-
tended to the sentences in (3) by Frege's contention that, like descrip-
tions, ordinary proper names have senses that determine, but are
distinct from, their referents. This is, of course, consistent with there
being certain contrasts between names and descriptions. One such con-
trast is that most ordinary names are grammatically simple, and so, un-
like descriptions, their senses are not determined by the senses of their
grammatically significant parts. Because of this, it is common for differ-
ent speakers to use the same name to refer to the same object, even
though they associate it with different properties, or senses. Although
Frege doesn't dwell on this, the illustrations he provides support the
contention that he regarded the sense of a proper name n, as used by a
speaker s at a time t, to be the same as that of some description *the D*
associated with n by s at t. Thus, he may be seen as adopting T4.[2]

> T4. An ordinary proper name, n, as used by a speaker s at a time
> t, refers to (denotes) an object o iff o is the unique object
> that has the property expressed by *the D* (associated with n
> by s). When there is no such object, n remains meaningful
> while failing to refer to (denote) anything. In general, the
> meaning (for s at t) of a sentence … *n* … containing n is the
> same as the meaning (for s at t) of the corresponding sen-
> tence … *the D* … that arises by substituting the description
> for the name.

It follows from this that (3a) and (3b) differ in meaning for any
speaker who associates the names *Ruth Marcus* and *Ruth Barcan* with
descriptions that have different senses.

A second puzzle for the original conception of meaning and refer-
ence encompassing theses T1–T3 was Russell's problem of negative
existentials, illustrated by (4).[3]

> 4a. Santa Claus does not exist.
>
> b. The largest prime number does not exist.

---

[2] Although Frege seems to have regarded the sense of names to be descriptive, some lati-
tude may be needed—including augmenting the descriptive vocabulary available to the
agent—in specifying the descriptions themselves.

[3] Bertrand Russell, "On Denoting," *Mind* 14 (1905): 479–93.

It would seem, prima facie, that since these sentences are true, there must be no such individuals as Santa Claus or the largest prime number, and hence that the name *Santa Claus* and the definite description *the largest prime number* do not denote, or refer to, anything. T1 and T2 then lead to the result that the name and the description don't mean anything. But surely that can't be right, since if these expressions were meaningless, then either the sentences as a whole would be meaningless, or they would both have the same degenerate meaning, consisting of the meaning of their common predicate phrase, plus a gap corresponding to their meaningless subject expressions. Neither of these alternatives is correct.

The idea behind Russell's solution is illustrated by the proposal that the (b) sentences constitute analyses of the following (a) sentences.[4]

5a. Men are mortal.

  b. $\forall x$ (x is a man $\supset$ x is mortal)

   The propositional function that assigns to any object o the proposition expressed by *x is a man $\supset$ x is mortal* (relative to an assignment of o to 'x') is "always true"—i.e., always yields a true proposition.

6a. Honest men exist.

  b. $\exists x$ (x is a man & x is honest)

   The propositional function that assigns to any object o the proposition expressed by *x is a man* & *x is honest* (relative to an assignment of o to 'x') is "sometimes true"—i.e., sometimes yields a true proposition.

7a. Carnivorous cows don't exist.

  b. $\sim\exists x$ (x is a cow & x is carnivorous)

   It is not the case that the propositional function that assigns to any object o the proposition expressed by *x is a cow* & *x is carnivorous* (relative to an assignment of o to 'x') is "sometimes true"—i.e., it never yields a true proposition.

In each case, the simple subject-predicate grammatical form of the sentence differs from its more complex logical form, which is quantificational. For Russell, this means that it involves the attribution of a

---

[4] I ignore the suggestion of plurality in (6a).

higher order property to a lower level property. Here, one may think of propositional functions as playing the role of properties, and of "sometimes true" and "always true" as expressing the properties of being instantiated and universally instantiated, respectively. Hence, (5) tells us that the property of being mortal-if-human is instantiated by everything, (6) that the property of being an honest man is instantiated, and (7) that the property of being both carnivorous and a cow is not instantiated.

Russell's analysis of sentences containing singular definite descriptions (phrases of the form *the so and so*) is rather complicated.[5] For example, consider (8a), which he paraphrases as (8b), and analyzes as (8c).

8a. The largest prime number is even.

b. There is a number n which has the property of being both (i) even and (ii) identical with absolutely any number m iff m is a prime number which is larger than all other prime numbers.

c. $\exists x\ [\forall y\ (y$ is a prime number $\&\ y$ is larger than all other prime numbers $\leftrightarrow y = x)\ \&\ x$ is even$]$

The propositional function that assigns to any object o the proposition expressed by $\forall y$ *(y is a prime number $\&$ y is larger than all other prime numbers $\leftrightarrow y = x)\ \&\ x$ is even* (relative to an assignment of o to 'x') is "sometimes true"—i.e., the property of being both even and a prime number larger than all others is instantiated.

Russell's analysis of (8a)—which may be seen as equivalent to *The largest prime number exists and is even*—contains his analysis of the "positive existential" (9a).

9a. The largest prime number exists.

b. There is a number n which has the property of being identical with absolutely any number m iff m is a prime number which is larger than all other prime numbers.

c. $\exists x\ \forall y\ [y$ is a prime number $\&\ y$ is larger than all other prime numbers $\leftrightarrow y = x]$

---

[5] For a more thorough explanation of Russell's analysis, see chapter 5 of Scott Soames, *Philosophical Analysis in the Twentieth Century*, vol. 1: *The Dawn of Analysis* (Princeton, NJ: Princeton University Press, 2003), hereafter referred to as *The Dawn of Analysis*.

The propositional function that assigns to any object o the proposition expressed by ∀*y [y is a prime number* & *y is larger than all other prime numbers* ↔ *y = x]* (relative to an assignment of o to 'x') is "sometimes true"—i.e., the property of being a prime number larger than all others is instantiated.

With this analysis of (9a) in place, the corresponding Russellian analysis, (4c), of the negative existential (4b) is obvious.

4c. ~∃x ∀y [y is a prime number & y is larger than all other prime numbers ↔ y = x]

It is not the case that the propositional function that assigns to any object o the proposition expressed by ∀*y [y is a prime number* & *y is larger than all other prime numbers* ↔ *y = x]* (relative to an assignment of o to 'x') is "sometimes true"— i.e., the property of being a prime number larger than all others is not instantiated.

For Russell, the virtue of this analysis is that (4b) is no longer seen as containing a constituent—*the largest prime number*—the job of which it is to refer to something (the thing which is supposed to be its meaning) which is then said not to exist. Hence there is nothing problematic, or paradoxical, in recognizing its truth.

Russell is able to give a similar analysis to (4a), since he holds that whenever one uses an ordinary proper name n, one always has some description in mind that one would be prepared to give in answer to the question ***Who, or what, do you mean by n?*** Precisely which description gives the content of the name may be expected to vary from speaker to speaker and time to time. However, whenever a name is used, there is always some description that may replace it, without changing meaning. Since Russell believes this to be true no matter what the grammatical form of the sentence, he is able to agree with Frege both in rejecting the conjunction of T1 and T2, and in accepting T4.[6] It is their common agreement on this thesis that philosophers have in mind when they speak of the traditional Frege-Russell view of ordinary proper names.

Two further points are worth noting. First, unlike Frege, Russell never rejected the idea that the meanings of some expressions are simply their referents; rather, he believed this to be true of a small category of *logically proper names*—including certain demonstratives and

---

[6] Russell would use *denotes* rather than *refers* in T4.

pure indexicals—which have no other function than to refer. For example, he believed that when he said or thought to himself *I am a pacifist* or *This is red* the proposition he expressed consisted, in the first case, simply of the attribution of the property of being a pacifist to Russell himself, with no other descriptive information about him, and, in the second case, of the attribution of the property of being red to the object demonstrated, with no further attribution of descriptive properties to the object. Unfortunately, he combined his acceptance of this category of "names" with severe epistemological restrictions on the things capable of being named—essentially those about which Cartesian certainty is achievable, and mistakes are impossible.[7] Although this made for serious difficulties, including crippling problems explaining the use of such expressions in communication, Russell's embrace of the idea of a logically proper name was historically important in the later development of nondescriptive analyses of ordinary proper names and indexicals.

Second, the traditional Frege-Russell analysis of ordinary proper names was later modified by John Searle and others to incorporate the idea that the meaning of an ordinary name for a speaker, or a community, was not given by a single description, but by an open-ended family of descriptions.[8] On this view, the referent of the name is taken to be whatever object satisfies a sufficient number of a family of associated descriptions, and the meaning of a sentence *n is F* is, roughly, given by the claim **The thing of which most, or a sufficient number, of the claims: it is D1, it is D2, . . . are true is also F**. Two alleged virtues of this variant of the Frege-Russell view are (i) that it captures the Wittgensteinian idea that the meaning of a sentence containing a name is to some degree vague and indeterminate,[9] and (ii) that it accounts for the fact that even when D is one of the descriptions most strongly associated with n by speakers, the sentence **If n exists, then n is D** is not "true by definition"—sometimes, to our surprise, it can turn out to be false, and even when it is true, it often is not a necessary truth.

---

[7] Russell, "Knowledge by Acquaintance and Knowledge by Description," *Proceedings of the Aristotelian Society* 11 (1910–11). For discussion, see pp. 110–13 and 122–26 of Soames, *The Dawn of Analysis*.

[8] John Searle, *Mind* 67 (1958): 166–73.

[9] See section 79 of Ludwig Wittgenstein, *Philosophical Investigations* (New York: Macmillan Co., 1953); for discussion, see chapter 1 of Scott Soames, *Philosophical Analysis in the Twentieth Century*, vol. 2: *The Age of Meaning* (Princeton, NJ: Princeton University Press, 2003), herafter referred to as *The Age of Meaning*.