

**Reference.** Barbara Abbott. Oxford: Oxford University Press, 2010. Pp. Xii + 308.

Certain linguistic expressions are routinely used to single out particular things. Traditionally they have been called *singular terms* and at least since Porphyry's *Isagoge* they have been much discussed in philosophy and logic. Barbara Abbott's book, the second in the new *Oxford Surveys in Semantics and Pragmatics* series, provides perhaps the best succinct, state of the art overview of what contemporary formal semantics has discovered about them.

There has never been much agreement about exactly which expressions are singular terms. Frege referred to them as 'proper names' (*Eigennamen*) but in addition to genuine proper names he included pronouns and definite descriptions in this category as well. He also came up with what counts today as the standard semantic characterization: singular terms are the expressions which refer to objects (*Gegenstände*). This falls short a genuine definition for at least two reasons. First, some singular terms (e.g. 'Optimus Prime', 'Connecticut's first prime minister', 'the largest prime number') don't seem to refer to anything at all. Perhaps one could say that these still purport to refer to objects, but this makes it sound like empty singular terms fail in what they are supposed to do, and it is hard to make sense of the implied teleology. (Frege thought empty singular terms are an anomaly which should be eliminated from ideal languages.) Second, it is not clear what objects are supposed to be if 'Napoleon', 'now', 'the center of the solar system', 'the height of the Eiffel Tower', 'this itchy feeling in my knee' all refer to an object. (Frege says something substantive about what object are *not*: functions.) At best we can say that objects are whatever singular terms refer to (or whatever is such that there could, *in principle*, be singular terms referring to them), but then it is not informative to say that singular terms are those expressions which refer to objects (or those expressions which could, *in principle*, refer to objects).

As long as we are dealing with artificial languages, the definitional problem can be bypassed through stipulation: we can say that singular terms are such-and-such elements of the lexicon plus all the ones that are generated through such-and-such rules. But this won't work when it comes to natural languages, like German or English.

Syntactically speaking, the expressions that have traditionally been categorized as singular terms make up a rather unnatural sub-class of noun phrases: they include some but not all nouns ('Fido' and 'Canis Familiaris' yes, 'dog' no), some but not all pronouns ('I' and 'this' yes, 'myself' no), some but not all complex phrases ('the dog' and 'that dog' yes, 'a dog' no). Some followers of Frege have suggested identifying singular terms by their logical behavior – i.e. providing a list of inference patterns that are valid whenever we substitute singular terms for certain schematic letters within them, but invalid when the substituted expression is something other than a singular term. Unfortunately, even paradigmatic singular terms have occurrences where they behave logically in ways singular terms are not supposed to – 'If you yell 'Fido' at a dog show, all the *Fidos* will start barking', 'Last night I heard *this dog* barking outside and I could not sleep', 'If a farmer owns a dog, he treats *it* better than his donkey', '*The dog* reached Australia about five thousand years ago', etc. Such sentences will falsify the relevant inference patterns, unless it can be argued that they don't really contain singular terms.

The fact that we lack a useful pre-theoretic characterization of singular terms does not mean that we cannot end up with a good post-theoretic one. We can start by listing the types of expressions that intuitively have frequent referential uses (proper names, indexical pronouns, definite descriptions, possessive NP's, demonstrative descriptions), try to provide adequate semantic analysis for each, and see whether some generalization emerges. If so, the category of singular terms is vindicated. This is the path semanticists in the last fifty or so years have taken and which Abbott's book also follows. After surveying the inspiration for modern accounts of these expressions (Mill, Frege, and Russell) and providing the necessary background in formal semantics (Carnap, Montague, and Partee) Abbott presents the state of the art on the interpretation of proper names, definite descriptions, and indexicals. She also discusses related matters, such as the semantics of plurals and generics, the connection between definiteness and referentiality, and the behavior of various noun phrases in discourse. And at the end of the book she identifies a common thread that links the previous discussion: the appeal to *individual concepts* – i.e. functions from indices (world-time point, or perhaps situations) to individuals. I will focus in my review largely on this common thread.

Abbott interprets definite descriptions uniformly as individual concepts: the semantic value of ‘the present king of Spain’ is a function that assigns to each pair of a world  $w$  and a time  $t$  the unique thing that is king of Spain in  $w$  at  $t$ , if there is such a thing. (What, if anything is assigned to the pair if Spain has no king or more than one king in  $w$  at  $t$  is left open.) This is standard fare and when combined with appropriate rules for handling scope it delivers the usual truth-conditions for sentences in which this description occurs. (Whether it delivers Russellian or Strawsonian truth-conditions depends on how the open question is resolved.) What is less common is Abbott’s suggestion that we interpret referential uses of definite descriptions as constant individual concepts: thus the semantic value of a referential use of ‘the present king of Spain’ is a partial function that assigns to each pair of a world  $w$  and a time  $t$  Juan Carlos Alfonso Víctor María de Borbón y Borbón-Dos Sicilias if he exists in  $w$  at  $t$  and is undefined otherwise. If we assume, as Abbott argues (150-2) we should, that referential uses of definite descriptions are semantically distinct from attributive ones, this too gets us the right truth-conditions. Finally, somewhat unusually, she claims that constant individual concepts are the appropriate semantic values of proper names and deictically used pronouns as well. So, in the end, she takes individual concepts to be the semantic values of all expressions that are traditionally taken to be singular terms.

The main benefit of this uniformity is that we can avoid certain difficulties when it comes to empty descriptions and names. ‘The present king of France’ gets a regular semantic value, so there is no worry about how ‘The present king of France does not exist’ manages to express something true. Since  $\llbracket \textit{the present king of France} \rrbracket^{w,t}$  is undefined if  $w$  is the actual world and  $t$  the present time, so it is true that this value of the function does not exist. If the description is used referentially, we still get a semantic value – the function from worlds and times that is undefined throughout its domain. The same holds for ‘Santa Claus’ (113) which entails that ‘Santa Claus does not exist’ is necessarily and eternally true, just as Kripke said it is. (Lewis thinks Santa’s non-existence is a contingent matter but philosophers by and large have tended to side with Kripke when it comes to proper names.) Abbott’s neo-Fregean semantics is immune to most objections that have plagued its descriptivist predecessors (e.g. it guarantees rigidity for all proper names and does not require that competent users of the name should have

substantive descriptive information associated with it) and does better than direct reference theories when it comes to empty names. Of course, the proposal does not solve all the problems with empty names – for example, we still need an account of why ‘Santa Claus is different from Rudolph’ seems true despite the identity of  $[[Santa\ Claus]]^{w,t}$  and  $[[Rudolph]]^{w,t}$ . At a certain point everyone will have to appeal to pragmatics when it comes to empty names, but it is probably a good idea to try to handle the bulk of the data semantically. (I briefly note that the theory defended Mark Sainsbury’s *Reference without Referents*. Oxford: Clarendon Press, 2005, is another promising alternative to standard theories of proper names. Unfortunately, it is not discussed in the book under review.)

Abbott makes an interesting suggestion for a further employment of individual concepts in semantics: they could be used to capture the difference between non-specific and specific uses of indefinites. The idea is that indefinites quantify over individual concepts – non-specific indefinites over variable ones, specific indefinites over constant ones. Thus, on its non-specific reading, ‘Mary had lunch with a logician’ says that there is an individual concept  $f$  such that  $f(\langle w, t \rangle)$  is a logician in  $w$  at  $t$  and Mary had lunch with  $f(\langle w, t \rangle)$  in  $w$  at  $t$ , while the specific reading says that there is a constant individual concept  $g$  such that  $g(\langle w, t \rangle)$  is a logician in the *actual* world at the *present* time and Mary had lunch with  $g(\langle w, t \rangle)$  in  $w$  at  $t$ . Abbott remains non-committal about this proposal, and says that she is not sure whether it is ultimately workable (270).

A significant problem is that the semantics envisioned fails to generalize to numerical indefinites. To see why, consider the sentence ‘Mary had lunch with seventeen logicians’. This sentence is false relative to  $\langle w_0, t_0 \rangle$  if Mary has lunch with just one logician in  $w_0$  at  $t_0$ , but if non-specific indefinites really quantified over variable individual concepts we would predict otherwise. For, presumably, there is *some* world  $w_1$  and time  $t_1$  such that Mary has lunch with seventeen logicians in  $w_1$  at  $t_1$ . Now, since Mary has lunch with a logician in  $w_0$  at  $t_0$ , we know that there is an individual concept  $h$  whose value at  $\langle w, t \rangle$  is someone who is a logician in  $w$  at  $t$  and Mary had lunch with  $h(\langle w, t \rangle)$  in  $w$  at  $t$ . But there are also sixteen other functions that differ from  $h$  only in which logician they assign to  $\langle w_1, t_1 \rangle$  among those with whom Mary had dinner in  $w_1$  at  $t_1$ . These functions all assign to  $\langle w_0, t_0 \rangle$  the single logician with whom Mary had lunch in  $w_0$  at  $t_0$ , but – assuming indefinites quantify over individual concepts – they nonetheless

guarantee that ‘Mary had lunch with seventeen logicians’ comes out true relative to  $\langle w_0, t_0 \rangle$ . This problem does not arise for specific readings because there is a one-to-one correspondence between individuals and constant individual concepts. But there are many more variable individual concepts than individuals, which makes the former unsuitable quantificational proxies for the latter.

This brings me to the question of reference. One can say that the semantic values of certain occurrences of certain NP’s are individual concepts, and that this makes them on those occasions singular terms. But does this mean that singular terms actually refer? It does if the semantic value of a singular term just *is* its referent. But this isn’t exactly Abbott’s view. She thinks the semantic value of a definite description is always an individual concept but when the definite description is within the scope of a quantifier it lacks a referent. She contrasts the following pair of sentences (278):

- (i) The tallest student in the class (I forgot her name) is waiting outside.
- (ii) The tallest student in the class (which varies from class to class) is always asked to close the blinds.

Suppose the definite description in these sentences designates with respect to any situation the unique entity who is the tallest student in the class. (Here it is better to view individual concepts as functions from situations rather than world-time pairs because the actual world at the present time contains many classes while the situation the speaker is talking of presumably contains just one.) Then for an utterance of (i) to be true, there must be in the situation the speaker talks about a student who is the tallest in the class and that student must be waiting outside. Let’s assume the student whose name the speaker forgot is Clara and she is indeed the tallest student in the class. So, whether the utterance is true depends on how things stand with Clara and she can be considered the referent of the description on this occasion of use. By contrast, the description in (ii) is within the scope of the adverb of quantification, and the truth of an utterance of (ii) does not depend on how things stand with Clara, or any other particular individual. The utterance is true if in all situations under consideration the tallest student in class, whoever that might be, is asked to close the blinds. So, in this occurrence the description has no referent.

Note that that on this view the semantic value of the description is *never* the referent. The semantic value is a function; the referent is an individual that is a value of this function. If there is a referent it can be identified using the semantic value, once we know which situation the speaker is talking about. Whether the referent is properly called “semantic” thus depends on whether this extra step is still part of semantics proper.

Many philosophers of language would deny that it is. As Strawson put it in his famous reply to Russell: “‘Mentioning’, or ‘referring’, is not something an expression does; it is something that someone can use an expression to do.” (Strawson 1950: 342) On this view, semantics is concerned with what is *conventionally encoded*. What situation a speaker is talking about is not a matter of convention, so assigning Clara to this occurrence of ‘the tallest student in the class’ is not a semantic matter. Abbott is sensitive to this challenge (276-8), but ultimately rejects the idea that reference is merely a pragmatic notion. On her view semantics must assign truth-conditions to sentences relative to occasions of use. Let’s grant this, and let’s also assume for the sake of argument that Abbott is right about the truth-conditions of (i): if *o* is an occasion of use where Clara is the tallest student in the class then (i) is true as used in *o*, just in case Clara is waiting outside in the situation spoken of. Does it follow that she is the referent of the description relative to such an occasion of use?

Not really. All we are told about the referent of ‘the tallest student in class’ relative to *o* that it is something whose properties play a role in determining whether (i) is true relative to *o*. Undoubtedly, Clara is such an entity. So is the property of being outside: (i) is true relative to *o* only if this property is instantiated by Clara in the situation spoken of. So is the situation spoken of: (i) is true relative to *o* only if this situation contains Clara waiting outside. So is the actual world: (i) is true relative to *o* only if this world contains the situations spoken of where Clara is waiting outside. Given Abbott’s criterion for semantic reference, any of these entities is as good a candidate for being the referent of the description relative to *o* as Clara. Intuitively, the referent is Clara and not the some property, situation, or world, because on the occasion of use she is the one *the speaker* is talking about. But this is no longer a semantic notion of reference.

My assessment of the dialectic is as follows. One can yield to Strawson’s challenge and reject semantic reference (i.e. the idea that some expressions refer)

altogether. Then the traditional category of singular terms turns out to be a pragmatic, rather than semantic. One can follow Russell in taking a revisionist stance towards singular terms and declare that many noun phrases that were usually viewed as singular terms (e.g. definite descriptions) are something else (e.g. quantificational phrases). Then perhaps one can save semantic reference for expressions within this smaller class. Or one can hold on to semantic reference for all expressions traditionally viewed as singular terms and postulate some sort of lexical or syntactic difference between a sentences in which a given expression has a referent and homophonous sentences in which the expression does not. Abbott suggests a fourth path, which promises semantic reference for all expressions that were traditionally thought to have one without postulating pervasive ambiguity. Alas, this path is probably impassable. To avoid ambiguity we must abandon the idea that a referent is assigned to a noun phrase as its semantic value, but it is hard to see why semantics should be thought of as doing anything besides the systematic assignment of semantic value. Moreover, even if we allow that semantics could do more, it remains unclear how to motivate semantically which entity should be assigned to an occurrence of a noun phrase as its referent.

While my review focused largely on Abbott's own proposals, this is not primarily a book defending a particular take on reference. It is a survey of where semantics stands when it comes to the interpretation of some of the simplest yet most puzzling sorts of expressions: noun phrases that are regularly used to refer. As such, it performs admirably: it is thorough, reliable, and not overly opinionated. I think it will be used with great benefit both by philosophers and linguists.

*Department of Philosophy  
Yale University  
New Haven, CT 06520-8306*

ZOLTÁN GENDLER SZABÓ