DISCUSIÓN

A NOTE ON IDENTITY, REFERENCE AND LOGICAL FORM

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Consider the following two simple sentences:

(*a*) Cicero is Roman
(*b*) Cicero is Tully

There are at least two alternative traditions accounting for the *prima facie* logical dissimilarity between (*a*) and (*b*). The first tradition, which is a bit older and more established than the other, accounts for the difference here by positing a logical ambiguity for the copula 'is'. According to this view the 'is' of (*a*) is the 'is' of predication, while the 'is' of (*b*) is the 'is' of identity. The second tradition, recently defended by S. Read,[1] accounts for the difference by preserving the univocity of 'is' and, instead, positing alternative roles for predicates. According to Read the predicate of (*a*) plays a referential role. Obviously, while the first tradition seeks to reject the categorical (*i.e.* subject-predicate) analysis of (*b*)-like sentences (identities), the second seeks to preserve it.

Defenders of the view that identites are noncategorical are able to produce an argument for this. We believe their argument is valid but unsound, since their conclusion is false. Defenders of the view that identities *are* categorical hold what we believe to be the correct view, but often for the wrong, or confused, reasons. In the brief remarks which follow we want to suggest an argument in favour of the categoricity of iden-

[1] "Identity and Reference," *Mind*, 87 (1978), pp. 533-552. Cf. T. Burge, "Reference and Propre Names," *Journal of Philosophy*, 70 (1973).

tities, but which, unlike Read's position, does not rely on the notion of a variety of roles for predicates.[2]

The argument for treating identities as logically noncategorical goes like this.

(1) In any categorical the subject refers and the predicate attributes.
(2) In any identity both terms refer.
(3) Therefore, identities are never categorical.

This argument is closely tied to the view that the role a term plays in any sentence is uniquely determined by the type of term it is. Quine, for example, takes simple categoricals such as (a) to illustrate the "basic combination,"[3] a sentence joining a singular term to a general term. Singular and general are term-types. In a basic combination something is referred to and something applies to it (is attributed to it). Such a sentence, then, must provide a position for a referring term (the "referential position") and a position for an attributing term (the "predicative position"). A referential position can only be filled by a term suited to the role of referring. Singular terms (particularly pronouns) are so suited. A predicative position can only be filled by a term fit for the role of predicating. General terms are so fit. It follows from this that any sentence in which a singular term is in apparently predicative position (e.g. 'Tully' in (*b*)) is not a basic combination (i.e. is noncategorical).

Now the argument above is formally valid. It represents Quine's position. By rejecting its conclusion, (3), those of us who wish to maintain the categoricity of identities must reject (1) or (2) or both. Read has elected to reject (1) while retaining (2). This is why he must allow for two kinds (or uses) of predicates — attributing *and* referring. The need to admit referring predicates can be avoided, however, by rejecting (2)

[2] Read would identify 'referring term' with 'singular term' and 'attributing term' with 'general term,' a confusion, as we shall see below, shared by others.
[3] *Word and Object*, Cambridge, Mass.: MIT, 1960, p. 96.

rather than (1). This move would maintain the old view that predicates only attribute, while forcing one to allow singular terms to be genuine predicable (i.e. attributing) terms. So, in (*b*) is 'Tully' a referring predicate or an attributing singular?

Geach has claimed that

> It is logically impossible for a term to shift about between subject and predicate position without undergoing a change in sense as well as a change of role. Only a name can be a logical subject; and a name cannot retain the role of a name if it becomes a logical predicate. . .[4]

For Geach names and predicables constitute two logically heterogeneous types of terms (names are syntactically simple, while predicables (= sentence minus a name) are syntactically complex). Each term-type is such that it is fit to play only a single logical role in any sentence. To allow a name to ostensibly play the role of a predicable (as 'Tully' in (*b*)), which is to "predicate", is to alter its type (from name to predicable).

Both Quine and Geach hold a view which ties term-type to sentential role. But they have different responses to sentences in which the "wrong" type of term plays the role of predicate (e.g. (*b*)). Quine responds by saying that in such cases we preserve term-type ('Tully' is still a singular term), but then reject its apparent role ('Tully' is not really a predicate). Thus the need for identities, which are logically noncategorical and in which both terms refer. Geach responds by saying that in such cases we preserve sentential role ('Tully' does play the role of predicate), but then reject its apparent term-type ('Tully' is not really a name).

It should be clear that Geach would stand with us in rejecting (2) rather than (1). Nonetheless, there is here, in the expositions of Quine, Read, and even Geach, a massive tangle of crucial distinctions. A clear defense of the categoricity of

[4] *Logic Matters*, Oxford: Basil Blackwell, 1972, p. 48.

identities[5] can only come after the following three pairs are made distinct: subject/predicate, singular/general, referential/attributive. Those who reject (3) must take a sentence to consist, logically, of a subject and a predicate.[6] Both subjects and predicates are syntactically complex, consisting of a term plus a formative (traditionally, a *categorical* plus a *syncategorical*). A subject is a term plus a quantifier, and a predicate is a term plus a qualifier. It is important to realize that subjects and predicates are not terms. They are sentence parts. While terms are syntactically simple, sentence parts are syntactically complex.

Any term can occur either as a subject term or as a predicate term. Thus, for example, statements of identity are viewed as simple categoricals. We will say that a term is any word or phrase (many-worded term), whether singular or plural, active or passive, concrete or abstract, which has both a denotation and a connotation.[7] Words and phrases such as 'man', 'dog', 'Socrates', 'happy', 'red', 'unmarried', 'happily married' are terms, but 'some', 'no', 'if', 'but', 'are', 'not', 'the', 'of', and 'and', are not. These words ("functors") are used either to form terms from words, complex terms from simpler terms, parts of sentences from terms, or sentences from parts of sentences.

We will take the denotation of a term to consist of all the things to which that term applies (i.e. its extension). A term applies to a thing when it can be used in referring to or in characterizing that thing. Thus, 'philosopher' denotes Socrates, Plato, Aristotle, etc.; 'red' denotes boiled lobsters, the tie I am now wearing, Mars, etc.; 'Socrates' denotes Socrates;

[5] For a recent statement of the debate on this see N. Griffin, "Do We Need Predication?" *Dialogue*, 16 (1977), and my response, "A Note on Predication," *Dialogue*, 19 (1980).

[6] An extended discussion of the theory of logical syntax offered below is found in my "On Propositional Form," *Notre Dame Journal of Formal Logic*, 21 (1980).

[7] I have examined this distinction in greater detail in "Reference and Denotation," *Philosophical Studies* (Ire), 27 (1980).

'even' denotes 2, 4, 6, the number of ears on my head, etc.; and '2' denotes 2.

We take the connotation of a term to consist of the properties which a thing has in virtue of which it is denoted by that term (i.e. its meaning). Thus, 'bachelor' connotes being male, adult, and unmarried; 'red' connotes something like appearing such-and-such a way under conditions thus-and-so; 'Socrates' connotes being a man who lived at a certain place and time, and taught Plato and so forth; and '2' connotes being an even number, prime, and the successor of 1.

A sentence consists of terms and functors. The role that any term plays in a sentence of our language is a function both of its position in the sentence *and* either its denotation or its connotation. We said that some functors form sentence parts from terms. These functors are of two kinds: *quantifiers* and *qualifiers*. In English, quantifiers are words like 'all', 'some', 'every', 'one', 'at least one', 'a', etc., and their synonyms. Words like 'all' and 'every' are *universal* quantifiers. Words like 'some' and 'one' are *particular* quantifiers. Any term may be quantified (either universally or particularly) by being accompanied by a quantifier. In English, qualifiers are 'is', 'is not', 'are', 'aren't', 'was', 'will', 'does', 'did', etc. Words like 'isn't' and 'are not' are *negative* qualifiers. Any term may be qualified (either affirmatively or negatively) by being accompanied by a qualifier. Examples of quantified terms are: 'all men', 'some men', 'every philosopher'. Examples of qualified terms are: 'is happy', 'are philosophers', 'are men', 'isn't Socrates', 'was not red'.

On our theory, a sentence consists (logically) of exactly two parts: a *subject* and a *predicate*. As we have said, every term has both a denotation and a connotation. Some terms denote several things (e.g. 'philosopher', 'red') while others denote just one thing (e.g. 'Socrates', '2'). Now, while terms always denote, quantified terms also refer. Every quantified term refers either to all of its denotation or to an undetermined part of it, depending upon which way it is quantified.

A term refers to all of its denotation when it is universally quantified, and to a part of its denotation when it is particularly quantified. For example, 'philosopher' denotes Socrates, Plato, Aristotle, etc.; 'all philosophers' refers to just what 'philosophers' denotes (viz. Socrates, Plato, Aristotle, etc.); and 'some philosophers' refers to an undetermined part (perhaps all) of the denotation of 'philosophers'. This is the case for all terms, even those with a single denotation. Thus, 'Socrates' denotes Socrates; 'all Socrates' refers to all of what 'Socrates' denotes (viz. Socrates again); and 'some Socrates' refers to a part of what 'Socrates' denotes, which, since the only part of the denotation of 'Socrates' is just Socrates, is, once more, Socrates. In other words, both the universal and particular quantification of singular terms (terms denoting just one thing) are identical to each other and to their denotations. This is reflected in natural language by simply omitting any quantifier from a singular term. Nevertheless, logically, all terms which are used in a sentence to refer, even singular ones, are quantified. It just happens that for singular terms the usual distinction between universal and particular quantification is absent.

The reference of a quantified term depends upon the denotation of that term. The characterization by a qualified term depends upon the connotation of that term. It should be clear that while terms have both denotation and connotation, only quantified terms refer and only qualified terms characterize. And, while both subject terms and predicate terms can be either singular or general, it makes no sense to talk of singular or general subjects and singular or general predicates. 'Singular' and 'general' characterize terms — not sentence parts.

Finally, referential and attributive are the kinds of roles played in a sentence by a subject and a predicate respectively. While terms denote, subjects refer.[8] While terms connote, or have meanings, predicates attribute. While a singular term may denote an individual, it cannot refer to an individual.

[8] *Ibid.*

Reference is a job done by subject (again, a subject is a quantified term and the reference of a subject is determined in part by the denotation of that term).

There is a (natural?) tendency to equate subject, singular term, and referential term on the one hand, and predicate, general term, and attributive term on the other.[9] Yet there are no good reasons for doing so — and many for not doing so. By making clear the distinctions along the lines suggested above we can (contra Quine) claim that (*i*) identities are logically categorical, (*ii*) the predicate of an identity is attributive (as, indeed, all predicates are), (*iii*) the predicate term of an indentity is singular. Moreover, we need not (*iv*) admit the possibility of referring predicates (Read) nor (*v*) identify naming with referring (Geach).

[9] For example, see "Quine's Reply to Strawson," in *Words and Objections*, eds. D. Davidson and J. Hintikka, Holland: Dordrecht, 1975, p. 320.