Presupposition and assertion in the semantic analysis of nouns and verbs in English

D. Terence Langendoen

In this paper it will be argued that the presupposition-assertion distinction that is appropriate for the semantic analysis of verbs is inappropriate for the analysis of nouns, and that as a consequence lexical entries for nouns need not take note of this distinction.

The need for the presupposition-assertion distinction in the semantic analysis of verbs may be illustrated by means of examples that have recently been insightfully discussed by Fillmore (this volume). Fillmore points out that if one compares the sentences:

(1) Harry criticized Mary for writing the editorial
(2) Harry accused Mary of writing the editorial

one finds in (1) that Harry presupposed Mary was responsible for writing the editorial and that he asserted that writing the editorial was bad; whereas in (2) that Harry presupposed that writing the editorial was bad and that he asserted Mary was responsible for writing the editorial. In other words, the verbs criticize and accuse are converses of each other with respect to what is asserted and what is presupposed by the subject when these verbs are used as main verbs in sentences.

The standard test for the claim that such-and-such is presupposed in a sentence is to see whether it is preserved under negation. Thus, if we examine the negative counterparts to (1) and (2), namely:

(3) Rocky didn’t criticize Max for spending the loot.
(4) Rocky didn’t accuse Max of spending the loot.

we find that, indeed, the presuppositions of (1) and (2) are preserved. In (3), Rocky still presupposed Max was responsible for spending the loot, and in (4) he still presupposed that spending the loot was bad.

Harris Savin (personal communication) has recently suggested that the negation test can be generalized: presuppositions admit of no adverbial modification whatever, so that the fact that they are unaffected by negation is merely a special case of this more general principle. To see this, consider the examples:

(5) Rocky rightfully criticized Max for spending the loot.
(6) Rocky rightfully accused Max of spending the loot.

* This work was sponsored in part by ARPA, Grant no. DAHC 15 68 G-5 to the Rockefeller University.

[341]
Notice that examples (5) and (6) differ in the way in which the adverb *rightfully* modifies the main verb. In (5), Rocky’s assertion that spending the loot was bad is further asserted by the speaker to be rightful, whereas in (6) his assertion that Max was responsible for spending the loot is asserted by the speaker to be rightful. In neither case, however, is Rocky’s presupposition affected by the adverb. Similarly, in the sentences:

(7) Rocky harshly criticized Max for spending the loot.
(8) Rocky harshly accused Max of spending the loot.

we note that in (7) it is Rocky’s assertion that spending the loot was bad which the speaker considers harsh (implying perhaps that Rocky considered spending the loot to be very bad), whereas in (8) it is Rocky’s assertion that Max was responsible for spending the loot which is considered harsh (with no implication that Rocky considered spending the loot to be very bad). Thus again the presuppositions are seen to be unaffected by the adverb.

It has been assumed that the semantic structure of nouns similarly reflects the presupposition-assertion distinction that we have seen to be relevant for verbs (see McCawley, 1968: 267–8; Langendoen, forthcoming: Chapter 5). Thus, it has been argued, to take a familiar example, that in the sentence:

(9) My neighbor is a bachelor.

it is presupposed that my neighbor is an adult, human, male and asserted that my neighbor has never been married. The negation test mentioned above has been used to support this claim, for it has been observed that the sentence:

(10) My neighbor isn’t a bachelor.

would be an unusual device for communicating information concerning my neighbor’s physical maturity, species, or sex, but not concerning his marital status. There is, however, a slight equivocation here; it is said that to use (9) or (10) to assert my neighbor’s maturity, species, or sex would be unusual, not ungrammatical, whereas to use *accuse* where one should have *criticize* would result, presumably, in ungrammaticality.

Indeed, we find that our predisposition toward interpreting the predicate noun *bachelor* as presupposing adult, human, male of its subject only holds when that subject refers to an individual, but not when it refers to a group. If we compare example (10) with (11):

(10) My neighbor isn’t a bachelor.
(11) None of my neighbors are bachelors.

we notice that in (11) there is no predisposition on our part to presuppose that the subject refers to a group of males, unlike the situation in (10), in which normally we would presuppose that the subject does refer to a male individual. The reason for this is simply that one is more likely to know an individual’s sex rather than his marital status, given that one knows just one of these facts, whereas when dealing with a group, neither characteristic of members of the group is more likely to be known.

Putting matters somewhat differently, we may say that if the presupposition-assertion distinction for nouns is appropriate, there is a considerable degree of freedom that one has in shifting various aspects of their meaning from the assertive
Presupposition and assertion in semantic analysis

side to the presuppositional side, and back again. Thus, we would be obliged to conclude that a sentence such as:

(12) My cousin isn’t a boy any more.

is ambiguous, depending upon whether the speaker is asserting that his cousin has grown up (presupposing that his cousin is male), or that his cousin has changed sex (presupposing that his cousin is young). Or, that for a word like alligator, one can presuppose only that its referent is a physical object, asserting everything else (in the semantic representation of alligator), on up to presupposing that its referent has all the properties alligators share with crocodiles, asserting only that it differs from a crocodile just in those respects that they are assumed to differ.

One consequence of our ability to shift the semantic content of nouns with relative freedom is that there can never be two nouns in a language which designate the same objects but which differ in the way in which criticize and accuse differ. For example, suppose there were a device which poached eggs and which operated by means of an internal combustion engine. We claim that there could be no language with two nouns, say bnik and ftik, such that when one said:

(13) That is a bnik.

one would be presupposing that the device poached eggs and asserting that it is powered by an internal combustion engine, and conversely when one said:

(14) That is a ftik.

In order to account for the semantic properties of predicate nouns that we have noted, we find that there is no need to appeal to the presupposition-assertion distinction that is relevant for verbs anyway; these properties are consequences of the syntactic form of the definition of nouns. Typically, a nominal definition takes on the form:

(15a) an x that S

or:

(15b) a part (piece, etc.) of an x that S

where x is a noun of more general meaning and that S is a restrictive relative clause. Now, if we examine a negative sentence in which the predicate nominal overtly has the syntactic structure of such a definition, for example:

(16) John isn’t a headwaiter who begins insulting you the minute you sit down.

we observe that under its most immediate interpretation, it is synonymous with an otherwise identical sentence, in which the negative appears in the relative clause:

(17) John is a headwaiter who doesn’t begin insulting you the minute you sit down.

Let us suppose that the placement of the negative in (17) corresponds most directly to its deep structure placement. Then, (16) is obtained by the familiar negative-raising transformation which relates also such sentences as:

(18) Matthew doesn’t seem to appreciate Mark’s sense of humor.

(19) Matthew seems not to appreciate Mark’s sense of humor.

* If this analysis is correct, then the complex noun phrase constraint of Ross (1967) will have to be formulated so as to permit the extraction of the negative element from within complex predicate noun phrases.
Returning to simple predicate nominal sentences such as \( \langle 10 \rangle \):

\( \langle 10 \rangle \) My neighbor isn't a bachelor.

and paraphrasing it by substituting for bachelor its definition man who has never been married, we obtain:

\( \langle 20 \rangle \) My neighbor isn't a man who has never been married.

If we suppose that \( \langle 20 \rangle \) has been obtained by negative-raising, just as \( \langle 16 \rangle \) has, then \( \langle 20 \rangle \) is synonymous with:

\( \langle 21 \rangle \) My neighbor is a man who has been married at some time.

(the double negation has been removed from the relative clause of \( \langle 21 \rangle \) to make its surface structure grammatical). But \( \langle 21 \rangle \) is a paraphrase of the usual sense given to \( \langle 10 \rangle \) – it affirms that my neighbor is indeed an adult, human, male (i.e., a man) and denies only that he has never been married.

We leave open the question whether negative-raising has actually applied in the derivation of sentences like \( \langle 10 \rangle \). Within the generative semantics framework, presumably the rule would be said to apply to an abstract structure having the components of \( \langle 21 \rangle \), yielding \( \langle 20 \rangle \), which in turn would yield \( \langle 10 \rangle \) upon lexical insertion. Within interpretive semantics, the rule need not be assumed to have applied; the scope of the negation being a matter for the rules of semantic interpretation to handle.\(^a\)

The flexibility inherent in the interpretation of predicate nominal sentences can be made a consequence of the flexibility of the definition of nouns, a flexibility which is permitted by the syntactic form of those definitions. Rather than saying that a noun is precisely defined by a particular expression of the form \( \langle 15 \rangle \), let us say that this form is instead a definitional schema, where \( x \) may be chosen to be any noun in the hierarchical structure of which the noun is part, and where that \( S \) then specifies the remaining semantic content. It will be observed that this precisely characterizes the flexibility that nouns possess.

\( \text{Rockefeller University} \)

\( \text{REFERENCES} \)

Fillmore, Charles J. Types of lexical information. This volume.


\(^a\) Various difficulties have been glossed over in the present account. Notice that although the noun headwaiter itself has a definition of the form \( \langle 15 \rangle \), the negative which appears in \( \langle 16 \rangle \) can only originate in the overt relative clause, as in \( \langle 17 \rangle \), not in the covert relative clause in the definition of headwaiter. Also, it should be observed that the element corresponding to \( x \) in \( \langle 15 \rangle \) in the definitions of nouns need not be an actually occurring noun in English.