AN INVISIBLE PERFORMATIVE ARGUMENT[1]

Evidently, the object NP of verbs like *believe*, *prove*, etc., in sentences like:

(1) (a) I believe that you are a Venusian,
(b) he proved that the judge was an android,

may partake in relations of coreference, as shown, for example, by their serving as antecedents for coreferential pronouns of the ordinary, and appositive relative sorts:

(2) (a) I believe that you are a Venusian although Melvin does not believe it,
(b) he proved that the judge was an android, which surprised me[2].

Consider now sentences like:

(3) Tom believes that you proved it.

What is crucial here is that there are *two* main verbs of the type illustrated in (1), each having its object NP. Thus the object of *believes* is the whole *that* clause, the object of *proved* simply *it*. As seen in (1), the objects of such verbs have independently assignable coreference properties. Suppose we designate the assumed referent of *believes* in (3) as X and of *proved* as Y. Then, it should be possible in principle for X and Y to be coreferents, i.e., for the thing that Tom believes to be the same as the thing you proved. But,

[1] What is invisible here is the performative, not the argument, I hope.

[2] The reference of the relative clause is ambiguous here, since it can also 'modify' the element designated by the whole sentence, that is, the third NP in the performative structure illustrated in (9) below.

G. Lakoff has brought to may attention an extremely important observation of Edward Stephenson bearing on this appeal to what an appositive 'modifies' to support underlying structures like (9). It is assumed that each distinct meaning of an appositive in this sense corresponds to a distinct underlying NP. But as Stephenson observes, we can have appositives in such cases as the following:

(i) I hereby order you to date Greta, which is a mean thing for me to do.

The point is that such an appositive is possible even though the highest visible verb is an explicit performative. This shows at the very least that the use of appositives to uncover underlying arguments is incompatible with the claim that performatives are the highest verb. Following a suggestion of J. Ross (personal communication), I would try to maintain the former and abandon the latter, assuming the highest verb to be something like *do*, with the previous highest performative directly below it. Hence for (i), the appositive relative is 'modifying' the object of *do*, which designates the order.

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and this is the chief observation underlying this publication, this is not in fact possible. There is no such reading of (3) or similar sentences. In fact, it is mind boggling to attempt to construct such readings, which it seems, violate some truly fundamental constraint on the logical structure of propositions.

Let us call this constraint the *Complement Coreference Constraint* (CCC). If we assume that sentential objects like those in (1) have the structure:

(4) NP
|
S

and if, *schematically*, we indicate the intended referent of such an NP with a subscript as:

(5) NP_x
|
S_a

then we can formulate CCC roughly as:

(6) In structure like (5), S_a cannot contain any NP which is a coreferent of NP_x

Observe that this constraint on complement embeddings is essentially he *opposite* of that on relative clause embeddings of all types, where in general the condition holds that the embedded relative clause must contain at least one NP coreferential to the 'head' NP.

My view is that ultimately CCC pertains to pure logical structures, and amounts to a well-formedness constraint on propositional forms based on predicates taking sententially complex arguments.[3] I would thus expect that the analogue of CCC holds in all languages.[4] This is not really pertinent here, however.

What is of chief interest here is how the proper formulation of (6) relates to the theory which says that even surface simple sentences like:

(7) Harry is an android,

[3] Notice this phenomenon is *not* restricted to cases where the sententially complex structure designates a proposition, but also occurs in causative and other constructions where this is not the case:

(i) (a) Harry forced Bill to like it,
(b) I was watching Joan report it.

In (i)a *it* cannot designate the state of affairs which Harry brought about by force; in (i)b, *it* cannot designate the event which I watched.

[4] S. Kuno has kindly informed me that the analogous constraint does indeed hold in Japanese.

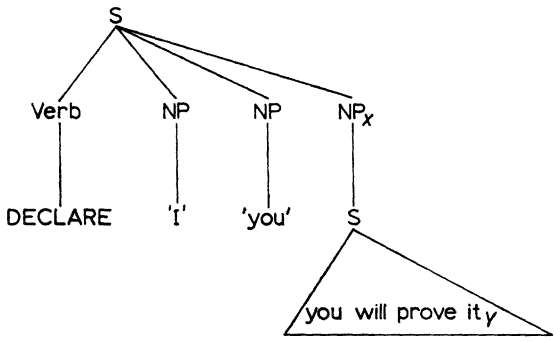
have an invisible higher performative configuration in their underlying structures (cf. Ross, 1970). I believe that (6) provides one of the many arguments for this position. To see this, consider:

(8) you will prove it.

Here *prove* has some object NP; let us refer to its referent as *Y*. Note, however, that (8) as a whole amounts to some assertion, let us refer to it as *X*. A priori, there is nothing to block *Y* from designating this assertion, so that what will be proved is (8). Evidently, no such interpretation of (8) is possible, and the attempt to construct such a reading runs into the same mind boggling perplexities as with (3).

Note, however, that under an invisible performative analysis of sentences, (8) will have roughly an underlying structure of the form:

(9)



But here, NP_x, which designates the assertion made by the speaker, provides a model of the structure in (5), and hence, the reading where $it_Y = NP_X$ would be blocked by (6).

The argument extends to other performative types. Thus given:

(10) (a) will you like it,
(b) don't like it,
(c) oh, you'll like it,

the respective *it* occurrences cannot refer to the question asked, the order given, or the exclamation made.

The constraint in (6) has much in common with perplexities long studied in philosophy and logic involving 'paradoxes of self reference', etc., and can

no doubt profitably be studied against the background work done on these problems.

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REFERENCES

Ross, J. R.: 1970, 'On Declarative Sentences', in R. Jacobs and P. Rosenbaum (eds.), *Readings in English Transformational Grammar*, Ginn and Co., Waltham, Mass.