LF-copying and antecedent-contained deletion

Linguistics 315

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1 Introduction

LF-copying is an account of verb phrase ellipsis (VPE) that posits that elided VPs are null elements filled at LF using covert copying. That is, they are not fully syntactically defined at D-structure and thus rely on their antecedent for content (like pronouns). There is extensive debate in literature concerning LF-copying and its counterpart, PF-deletion, which holds that elided VPs possess intrinsic structure and are merely omitted phonologically.

The ability of LF-copying to explain phenomena like strict/sloppy identity makes it a compelling account of VPE. However, alone, it fails to explain the special case of antecedent-contained deletion (ACD), which occurs when the elided VP is contained within its antecedent. Consider the following example:

(1) *Jeff [$_{VP}$ attended every concert that Maggie did [$_{VP}$ ...]].*

Here, we denote the elided VP by *[$_{VP}$ ...]*. Its antecedent is then *attended every concert that Maggie did [$_{VP}$ ...]*, so blindly applying LF-copying gives:

(1) *Jeff [$_{VP}$ attended every concert that Maggie did [$_{VP}$ attended every concert that Maggie did [$_{VP}$ ...]]].*

But this produces another elided VP since the copied antecedent contains the ellipsis. Thus we never resolve the VPE, resulting in an infinite regress.

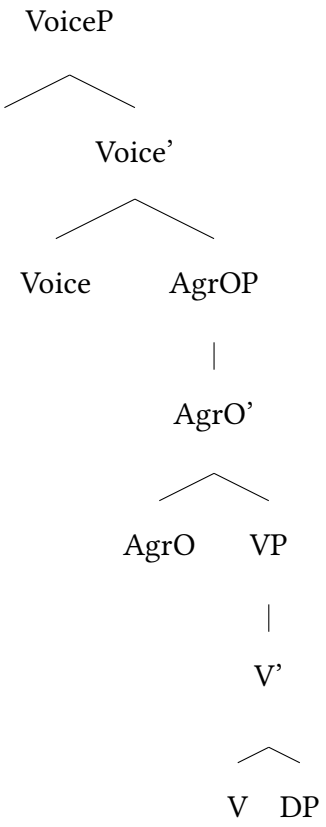
The natural strategy for preventing this is to move the elided VP out of its antecedent. In this paper, I will look at two such approaches—Hornstein's, which uses movement into AgrOP, and Sag's, which uses quantifier raising (QR)—and discuss their merits and drawbacks.

2 Hornstein's AgrOP account

In general, movement-based explanations of ACD rely on the property that elided VPs are found in DPs contained within the VP's antecedent. Recall sentence (1):

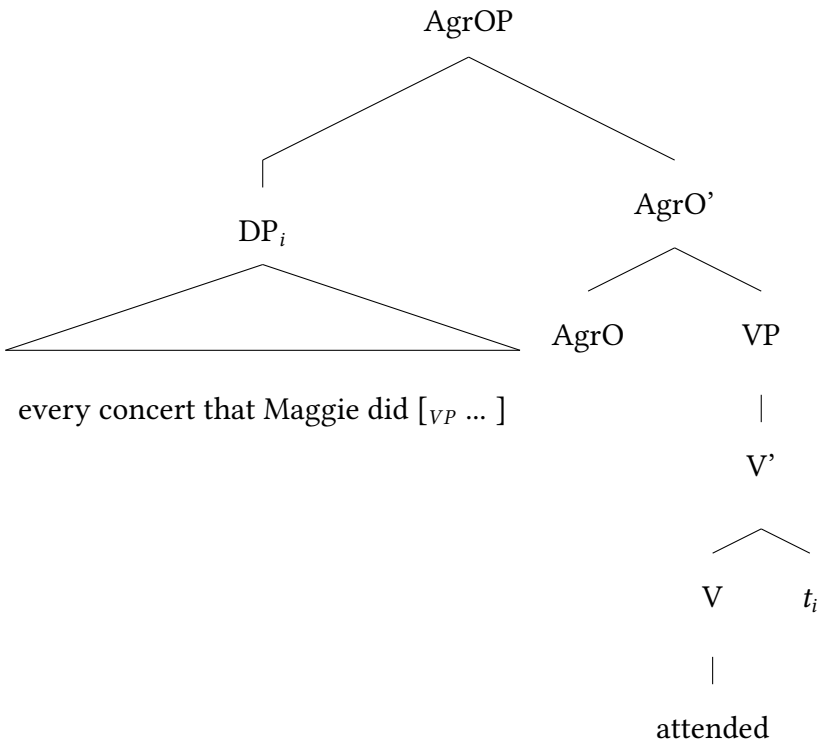
(1) *Jeff [$_{VP}$ attended [$_{DP}$ every concert that Maggie did [$_{VP}$ ...]]].*

The elided VP is contained within the DP *every concert that Maggie did*, which is in turn nested in the antecedent VP *attended every concert that Maggie did*. Hornstein further notes that the DP in question is always an object, which allows him to assign it accusative case using object agreement. Recall that object shift occurs via the functional category AgrO, which is positioned as such:



We assign accusative case to the DP by shifting it into the specifier of AgrOP. This has the secondary effect of moving it out of its parent VP, which Hornstein uses to explain ACD. By a direct application of object shift to (1), we obtain (for simplicity, I have omitted the parts

of the tree unrelated to VPE):



The elided VP is now outside of its antecedent. Applying LF-copying thus does not introduce a new VPE since the antecedent no longer contains the original [$_{VP}$ ...]. Therefore, we have mitigated the issue of infinite regress using object agreement.

3 Sag's QR account

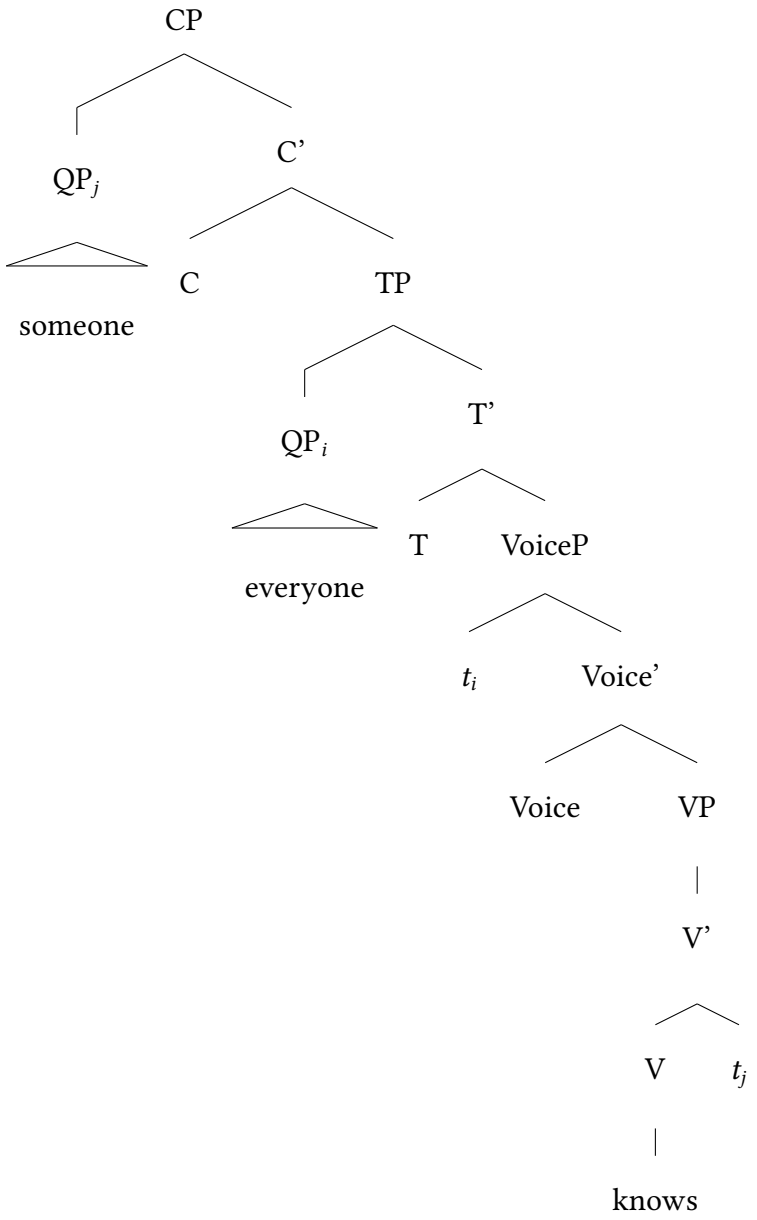
In his 1976 dissertation, Sag proposes a different way to explain ACD. Rather than overt movement into the specifier of AgrOP, he suggests covert movement into the specifier of CP using quantifier raising.

The classical usage of QR is to disambiguate sentences with multiple quantifiers. For instance, consider the sentence:

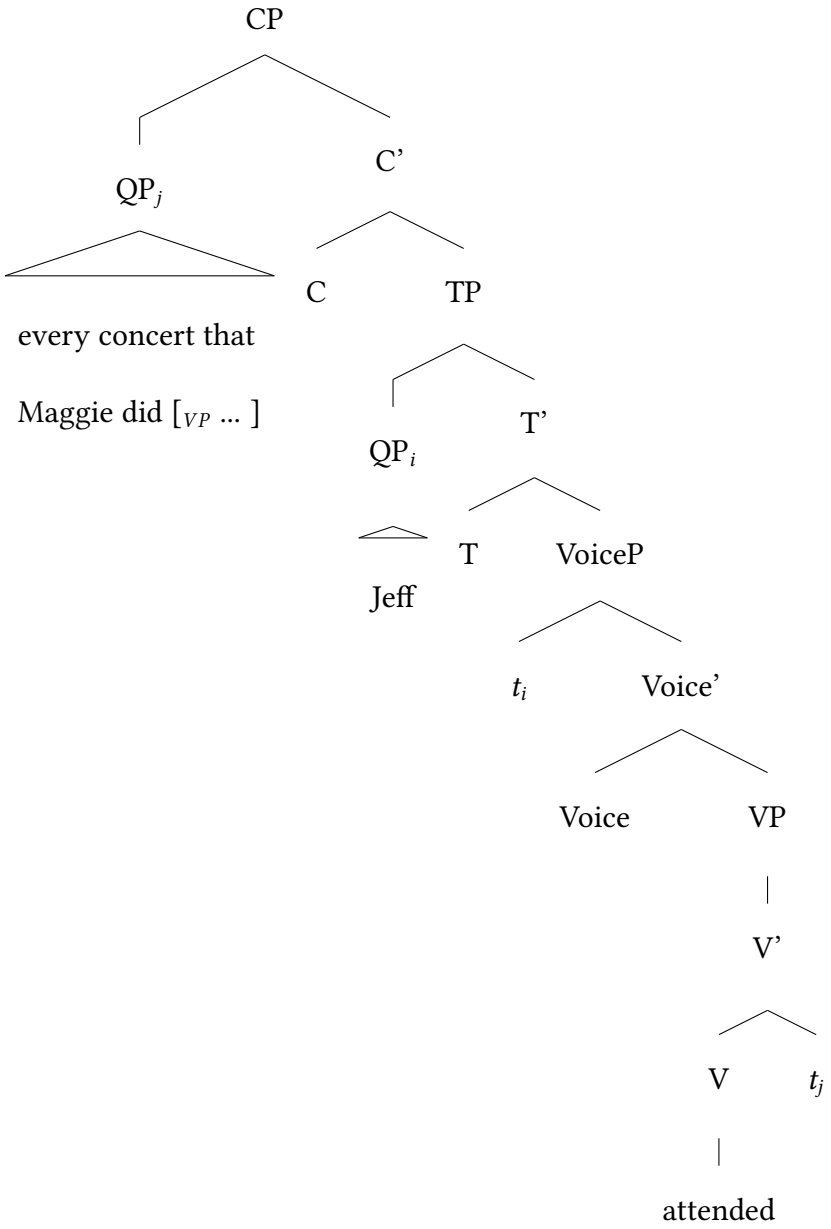
(1) *Everyone knows someone.*

If we want the universal quantifier to have narrow scope (so that the sentence is logically

equivalent to *There exists a person who knows everyone*), we need the existential quantifier to c-command it. The solution is covert movement of the quantifier phrase (QP) *someone* into the specifier of CP:



This is known as quantifier raising. Sag's account is then predicated on the assumption that every DP in ACD is also a QP, which lets us treat it as a quantifier to which we want to give wide scope. On sentence (1), QR yields the following:



As before, the elided VP has left its antecedent, and the desired LF interpretation follows after copying.

3.1 Non-quantifier heads

One shortcoming of the QR approach is its inherent assumption that a quantifier is present; in practice, not every DP in ACD (nor in general) must be headed by a quantifier. Consider the following sentences:

(2) *Jeff attended the same concert that Maggie did.* (article)

(3) *Jeff attended five concerts that Maggie did.* (cardinal numeral)

(4) *Jeff attended that concert that Maggie did.* (demonstrative)

Although each sentence contains an elided VP nested within its antecedent, none of the determiners are quantifiers. Thus, we cannot perform QR, and Sag's hypothesis appears to fail in this simple case.

However, accounting for pragmatics, I claim that these sentences can each be transformed into a semantically equivalent form featuring a quantifier. Take (4), for instance. If Maggie only went to one concert, then Jeff's attendance at "that concert" implies that he attended every concert she did. So we can write the following variation:

(5) *Jeff attended every concert that Maggie did.*

Essentially, we broaden the determiner by replacing it with the universal quantifier *every* to reflect the quantity of Maggie's attended concerts. Alternatively, if she attended multiple, we might write:

(6) *Jeff attended some concerts that Maggie did.*

Here, we use the existential quantifier *some*, conveying the equivalent semantic notion that Jeff's attended concerts intersect with Maggie's. This reasoning extends analogously to the determiners in (2) and (3). The salient point is that, from a syntactic perspective, it is irrelevant whether a sentence like (4) corresponds to (5) or (6). Rather, given virtually any context and any DP, it seems to me that there always exists a quantifier-headed variation to which the DP is equivalent at LF.

With this in mind, we can generalize Sag's account by replacing the determiner in any

DP with a context-dependent placeholder Q_C that functions as a quantifier, transforming the DP into a QP and allowing us to perform QR on it.

4 Analysis

A major advantage of Hornstein's approach is that it relies on very minimal and safe assumptions. For instance, we can be relatively certain that the DP surrounding any elided VP will be an object:

(6) **Every concert that Maggie did was attended by Jeff.*

One reason a construction like this fails is that the content of the DP inherently depends on that of the antecedent VP. That is, even though the full version of the sentence (*Every concert that Maggie attended was attended by Jeff*) is grammatical, the DP derives its content from the elided VP, which in turn does not receive meaning until its antecedent "acts on" the DP. This seems to imply the syntactic restriction that the DP parent of an elided VP must be the object of the VP's antecedent.

However, even though Sag's approach is not by itself sufficient to account for every kind of DP, it seems to me that quantifier raising is still a more appropriate explanation of ACD. Importantly, QR is covert, while object shift is overt; I think that covert movement based on the determiner is a more accurate reflection of how ACD is intuitively processed.

It seems to me that, under the LF-copying hypothesis, the logical interpretation of a sentence containing VPE is not directly influenced by that sentence's surface structure. In fact, the principle behind the hypothesis is that empty categories are covertly copied from their antecedents but are not represented syntactically at D-structure. Sag's QR account appears to adhere to this principle better than the overt movement that Hornstein proposes; it separates

the logical disambiguation of a sentence from its surface structure, which in my view makes it more consistent with the basic motivation of LF-copying.

5 Conclusion

In this paper, I discussed two prominent accounts for reconciling antecedent-contained deletion within the LF-copying hypothesis: object shift, suggested by Hornstein, and quantifier raising, suggested by Sag. Both approaches rely on moving the parent DP of the elided VP upward to remove it from the antecedent VP. I concluded that, although the AgrOP technique appears more generally applicable, the covert movement of QR—and its separation of logical form and surface structure—makes it a more compelling account of ACD.

6 Works cited

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