

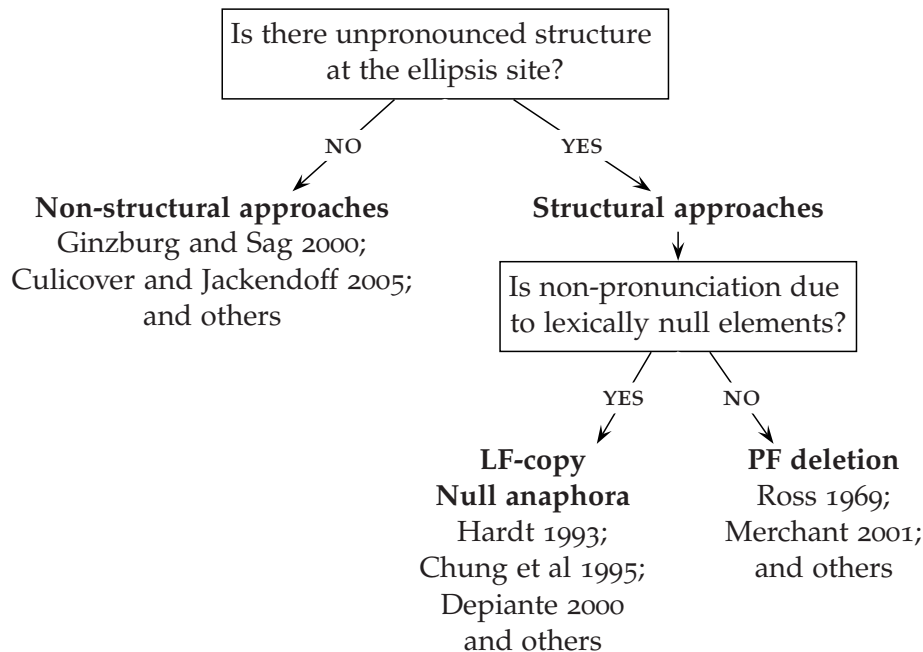
## Week 2

# Types of analysis and the identity condition on ellipsis

October 29, 2009

## 1 Review

Last week, we briefly discussed the following diagram of possible types of ellipsis:



### 1.1 Structural vs. non-structural analyses

As Merchant explains ("Three kinds of ellipsis"), we have a diagram like this because different researchers disagree on what it takes to produce a sentence. For the PF deletion proponents, you can have sentential semantics and pragmatics only if you also have a sentential syntactic structure on which to build. The question is not which kind of approach is correct, because very plausibly both of them are. The question is how we are going to divide the work between them. Here is what Merchant says when considering the possibility that all ellipsis might be structural (whether due to PF deletion, LF-copy, or null anaphora).

“... for almost any kind of ellipsis, a more or less plausible syntactic story can be told. But at the end of the day I feel like the boy with his thumb on the dike: the dike is going to keep on springing leaks, and while I may not run out of theoretical thumbs, one can't help but feel tired trying to plug all the leaks [...] I am willing to concede that syntactic ellipsis is required only when connectivity effects are observed, and this happens in only two subcases: first, when there is a linguistic antecedent as in short answers, and second, when there is a syntactic slot to be filled.”

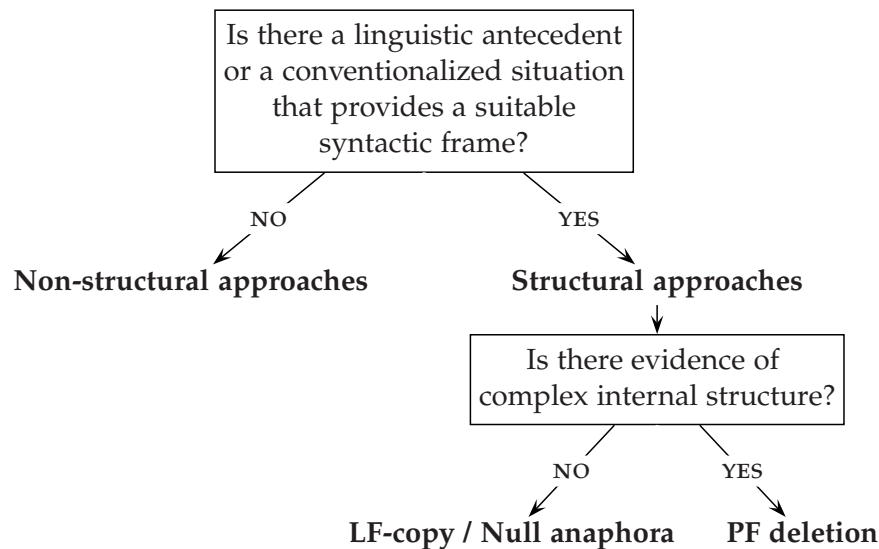
## 1.2 Structural analyses: PF-deletion vs. null anaphora

The main difference between the two kinds of structural approaches is that the PF deletion analysis posits a complex internal structure for the ellipsis site, whereas the null anaphora analysis does not. Consequently, the former will be supported if we find evidence of complex structure in the ellipsis site, and the latter if we don't find such evidence. A nice comparison of the two appears in chapter 10 of van Craenenbroeck (2004), with reference to short *do* replies in southern Dutch dialects.

	Short <i>do</i> replies	English VP ellipsis
Distribution	very limited	very free
expletive subjects	no	yes
agreement with elided arguments	no	yes
modals and auxiliaries	no	yes
past tenses	no	yes
co-occurrence with 'yes' and 'no'	no	yes
co-occurrence with adverbs	only very high adverbs	no restrictions
subject restrictions	only weak pronouns	no restrictions
co-occurrence with wh- movement	no	yes
pseudogapping	no	yes

## 1.3 Going case by case

With what we have said so far, we can redraw the original diagram to make it read as a procedure.



## 2 Identity conditions on ellipsis

We know that elided constituents must be similar enough to a linguistic antecedent, or else ellipsis fails. The question is what “similar enough” means. For a long time, we’ve known that we cannot talk about strict morphosyntactic identity, because ellipsis allows a number of form mismatches between the antecedent and the ellipsis site, ranging from purely morphological mismatches, to reference of pronouns, to more radical argument structure alternations.

- (1)
  - a. These men are smarter than Jane [is smart]. [from Chomsky 1965]
  - b. Alicia is about to eat lunch, but Beatrix already has [eaten lunch].
  - c. Every<sub>i</sub> boy kissed his<sub>i</sub> mother, and every<sub>k</sub> girl did [kiss her<sub>k</sub> mother too].
  - d. The janitor should take the trash out whenever it is obvious it should be [taken out].
  - e. This material can be presented in an informal manner, and I often do [present it in an informal manner].

We can avoid this problem by saying that the identity conditions are semantic –roughly, ellipsis is grammatical if the antecedent and the elided constituent are truth-conditionally equivalent. This is what Sag (1976) did, defining the notion of *alphabetic variant*. More recently, the most widely used definition of semantic identity is the one provided in Merchant (2001) in terms of *eGIVENness*.

- (2) *Parallelism condition on ellipsis*  
Only *eGIVEN* expressions can be elided.
- (3) *eGIVENness*  
An expression *E* counts as *eGIVEN* iff *E* has a salient antecedent *A* and, modulo  $\exists$ -type shifting:
  - a. *A* entails the F-closure of *E*, and
  - b. *E* entails the F-closure of *A*.

- (4) *F-closure*  
The F-closure of  $\alpha$ , written  $F\text{-clo}(\alpha)$ , is the result of replacing F-marked parts of  $\alpha$  with  $\exists$ -type variables of the appropriate type.
- (5)  *$\exists$ -type shifting*  
 $\exists$ -type shifting is a type-shifting operation that raises expressions to type  $\langle t \rangle$  and existentially binds unfilled arguments.

This can be easily applied to unproblematic examples.

- (6) I don't drink wine and Alicia doesn't [drink wine] either.

### Is the ellipsis site $e_{\text{GIVEN}}$ ?

- Does it have a salient antecedent? Yes, the VP in the main clause.
- Does the antecedent VP entail the F-closure of the elided VP?
  - The initial syntax of the antecedent VP is  $[_{VP} \text{ drink wine}]$ .
  - This VP has an unfilled subject argument, which must be existentially bound.
  - Therefore, after  $\exists$ -type shifting, the antecedent VP is  $\exists[_{VP} x \text{ drink wine}]$ , which is equivalent to “someone drink wine”. This is our  $A$
  - The initial syntax of the elided VP is  $[_{VP} \text{ drink wine}]$ .
  - Since it has no F-marked subconstituents, F-closure returns the same constituent.
  - As with the antecedent VP, we apply  $\exists$ -type closure to take care of the unfilled subject argument.
  - The result is  $\exists[_{VP} \text{ drink wine}]$ , which is equivalent to “someone drink wine”. This is our  $F\text{-clo}(E)$ .
  - **Therefore**  $A$  trivially entails  $F\text{-clo}(E)$  (i.e., if someone drinks wine, then it is true that someone drinks wine), and we satisfy clause (3a).
- Does the elided VP entail the F-closure of the antecedent VP? Yes, it does.
  - **Exercise:** show that it does.
- Therefore, the elided VP is  $e_{\text{GIVEN}}$  and can be elided.

**Exercise** do the same thing for either one of the following two sentences (whichever one you feel the most comfortable with). Assume that both *a book* and *a magazine* are F-marked (or *einem Buch* and *einer Zeitschrift*, if you do the German sentence). If you are curious about why they should be F-marked, go read Umbach 2003: “Contrast and information structure”, *Linguistics* 43:207-232.

- (7) a. Alicia hasn't read the book, but rather [she has read] the magazine.  
b. Alicia hat das Buch nicht gelesen, sondern die Zeitung.