

MSc Introduction to Syntax

Lecture 2: Constituency

1. *Diagnostics for constituency*

In lecture 1 we saw that sentences have an internal structure: they consist of constituents, which in turn may consist of smaller constituents, and so on. In this lecture we will discuss how we can determine whether a string of words in a sentence is a constituent or not. That is, we are going to discuss a number of diagnostics of sentence structure, so that we can be more precise about what we mean when we say that some words in the sentence ‘belong together’.

The two most basic tests to determine whether a group of words is a constituent are:

- A. A constituent can be *replaced* by a single word
- B. A constituent can, in its entirety, be *placed in a different position* in the sentence

We will discuss a third test as well, after we have seen what these two amount to.

2. *Substitution*

2.1 Noun phrases

A constituent that is built around a noun is called a *noun phrase* or *NP*. That the noun is the most important element, called the *head*, of a noun phrase is shown by the fact that you cannot leave it out:

- (1) a. [Cats] are lovely
- b. [Intelligent cats] are lovely
- c. [Cats with long tails] are lovely
- d. [Intelligent cats with long tails] are lovely
- e. *[Intelligent] are lovely
- f. *[With long tails] are lovely
- g. *[Intelligent with long tails] are lovely

A noun phrase can be recognized as such because it can be replaced by a *pronoun*. Thus, we can determine that in (2a) the string *the boy who fed the cat* is one constituent (functioning as the direct object of the verb *saw*), because it can be replaced by the pronoun *him*, as in (2b). By the same means, we can determine that just the bit *the boy* is not a constituent of (2a), since it cannot be replaced in this way: see (2c). Of course, *the boy* can be a constituent in a different sentence, such as (2d), as we can infer from the fact that (2e) is well-formed.

- (2) a. Joan saw the boy who fed the cat.
- b. Joan saw him.
- c. *Joan saw him who fed the cat
- d. Joan saw the boy while he fed the cat
- e. Joan saw him while he fed the cat

Similarly, (3b) shows that the entire string *the elderly ... bus* is a constituent (namely the subject) of (3a). That this constituent in turn consists of smaller constituents is shown by (3c), where replacement with pronominal *it* indicates that *a sandwich* is one of the constituents within the subject constituent of (3a).

- (3) a. The elderly but still youthful looking lady who was eating a sandwich while waiting for the bus fell on the pavement.
- b. She fell on the pavement.
- c. The elderly but still youthful looking lady who was eating it while waiting for the bus fell on the pavement.

2.2 Preposition phrases

Preposition phrases or *PPs* are constituents that have a preposition as their head. That the preposition is the head is again shown by the fact that it cannot be left out:

- (4) a. The man [in the room]
- b. *The man [the room]

An indication that something is a constituent of the PP type is that it can be replaced by certain *adverbs*:

- (5) a. She went [to the port of Rotterdam]
- b. She went there
- c. I have never seen that [in a place like Edinburgh]
- d. I have never seen that here.

Thus, (6b)-(6c) show that *in the theatre with the old chairs*, but not just *in the theatre*, is a constituent of (6a), while (6e) shows that in (6d) *in the theatre* is a constituent. We can also determine that *in the theatre with a friend of mine* is *not* a constituent of (6e), because *there* in (6c) cannot stand in for this entire string.

- (6) a. He was in the theatre with the old chairs
- b. *He was there with the old chairs
- c. He was there
- d. He was in the theatre with a friend of mine
- e. He was there with a friend of mine

2.3 Adjective phrases

The phrases in (7a)-(7b) have an adjective as their head; this head cannot be left out, as shown by (7c)-(7d).

- (7) a. Marian seems [very ill]
- b. That music is [too loud to be bearable]
- c. *Marian seems [very]
- d. *That music is [too to be bearable]

An *adjective phrase*, or *AP*, can be replaced by the word *so* (although this is not felicitous in just any context; adding the word *too* to the sentence often helps):

- (8) Marian seems *ill* and Harriet seems *so*, too.

This test indicates that in (9a) *rather weird* is an AP, while just *weird* is not.

- (9) a. Harry is rather weird, and Bill is so, too.
- b. *Harry is rather weird, and Bill is very so, too.

Note that the test does not work when the AP is used *attributively*, that is, as a prenominal modifier:

- (10) a. A rather weird man
- b. *A so woman, too.

2.4 Verb phrases

Finally, there are phrases that have a verb as their head, *verb phrases* or *VPs* such as the bracketed phrases in (11).

- (11) a. to [work in the garden] is a nice thing to do
- b. Mary will [rent some dvd tonight]

A VP constituent can be recognised by its being replacable by the expression *do so*. This is, admittedly, not a single word of course, but since arguably neither the part *do* nor the part *so* on its own stands in for a constituent, we may assume that this is a fixed expression that stands in for something as a whole, namely for a VP:

- (11) a. Mary will [rent some dvds tonight] and Bill will *do so* as well.
- b. Shane has [given money to that charity] and Jane has *done so*, too.
- c. To [work in the garden] is a nice thing to do, and to *do so* in the morning is especially relaxing

3. Movement

The word order of a sentence can be altered in certain ways such that the result is still a possible sentence. You can recognize a constituent by its staying together as a unit in such a redistribution process. We will refer to such processes with the term *movement*. So, a constituent can be recognized as such because it can move to another position in the sentence – typically, to the first position. (Note that it is not the case that any constituent can move to any position in a sentence; this depends on the exact rules of syntax of a particular language). A string of words that do not form a constituent cannot move like this.

- (12) a. Mary will never read that novel by Robinson
 - b. That novel by Robinson Mary will never read (although she's a keen reader in general)
 - c. *By Robinson Mary will never read that novel
 - d. *That novel Mary will never read by Robinson
- (13) a. Shelly was reading a book in the garden
 - b. In the garden, Shelly was reading a book
 - c. *A book in the garden, Shelly was reading

- (14) a. John never will read a thousand novels.
 b. Read a thousand novels, John never will
 c. *Read, John will never a thousand novels

We can conclude from these examples that in (12a) *that novel by Robinson* is a constituent (an NP), in (13a) *in the garden* is a constituent (a PP), and in (14a) *read a thousand novels* is a constituent (a VP). But, for example, *a book in the garden* is not a constituent of (13a), as shown by the ungrammaticality of (13c)

A combination of the replacement test and the movement test involves trying to *question* the string of words for which you want to determine if it is a constituent. If you can replace the string by a question word like *who* or *what* and move this question word to the first position of the sentence, then you are dealing with a constituent:

- (15) a. John ate [a sandwich with cheddar]
 b. What did John eat? Answer: A sandwich with cheddar (NP)
 c. *What did John eat cheddar? Answer: A sandwich with
 (not a constituent)
- (16) a. Ruby was in the large garden
 b. Where was Ruby? Answer: In the large garden (PP)
 c. *Where was Ruby garden? Answer: In the large (not a constituent)

In the case of questioned VPs, a form of *do* must appear in addition to the moved question word:

- (17) a. Beatrice will [read that book]
 b. What will Beatrice *do*?

4. It-clefts

English has a construction known as the *cleft*-construction. Schematically, a cleft sentence looks as follows:

- (18) It – form of *to be* – X – that - Y

In this scheme, X is something of which we want to stress that it contrasts with something else, a so-called *focus*. Here are some examples of clefts:

- (19) a. It was Messi that scored the goal (not another player)
 b. It is the female that has yellow feathers (not the male)
 c. It is a strong tree that can carry such a heavy burden (not a weak tree)

Crucially, only constituents can be the focus of a cleft, i.e. the ‘X’ part in the scheme in (18). Hence, something is a constituent of a sentence if we can turn the sentence into a cleft that has the relevant string as its focus. Thus, from the examples in (20) it can be deduced that in (20a) *the old lady with the grey coat* and *on the steep stairs* are constituents, but *the old lady* and *on the steep* are not.

- (20)
- a. The old lady with the grey coat fell on the steep stairs
 - b. It was the old lady with the grey coat that fell on the steep stairs
 - c. It was on the steep stairs that the old lady with the grey coat fell
 - d. *It was the old lady that with the grey coat fell on the steep stairs
 - e. *It was on the steep that the old lady with the grey coat fell stairs

Exercises

From Santorini & Kroch Chapter 2: 2.1, 2.2, and Problem 2.2.