

van Gelderen, Elly (2002). *An Introduction to the Grammar of English. Chapter 3: Phrases*. Amsterdam: John Benjamins, 31–55.

Phrase structure

a. *The structure of sentences*

Remember the **dual patterning** of language? If not: Sentences can be decomposed into types of structural units of *decreasing complexity* (or, *vice versa*, composed into types of units of *increasing complexity*).

(1) phonemes → morphemes → sentences

However, in between morphemes (or, more simply, words) and full-fledged sentences, there's another type of structural unit comprising a *group of words*: the **phrase**.

(2) phonemes → morphemes → *phrases* → sentences

Consider the following sentence:

(3) a. The nice unicorn ate [a delicious meal].

b. The nice unicorn ate *it*.

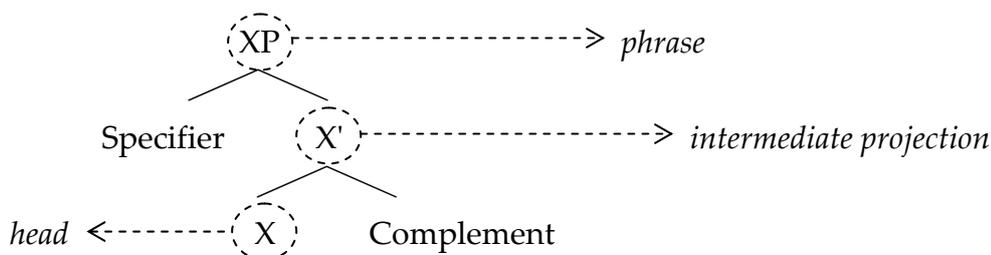
The string of words corresponding to the direct object seems to be replaceable by a pronoun, *it* (so-called *pronominalisation*). As this cannot be done with just any string in the sentence (you couldn't replace, say, *unicorn ate a*), it suggests that *a delicious meal* must constitute a particular kind of unit – a **phrase** (more precisely, a *noun phrase*, or, *NP*).

Syntax is the study of how phrases (and the elements contained within them) interact with other phrases (and the elements contained within them) in their environment.

b. *The structure of phrases*

Lexical categories: N, Adj/Adv, V, P *project to phrases*: NP, AdjP/AdvP, VP, PP

(4) *The X'-structure of phrases (read: 'x bar')*



These diagrammatic representations of phrase structure are also called *trees*, where the labels (X, X', XP,...) are called *nodes*, and the lines *branches*. Trees are actually upside-down: the topmost node is called *root*. If we want to talk about relations within a tree, we make use of a

feminist analogy to genealogy (family trees): *mothers* (e.g. XP is the mother of Spec and X'), *sisters* (e.g. X is the sister of Complement), and *daughters* (e.g. X and Complement are the daughters of X').

c. *Heads*

Intuitively, the head of a phrase is its central element, semantically speaking. It provides the central information of the phrase, while other elements only provide additional (mostly, optional) information (they **modify** the head).

(5) A student of linguistics \Rightarrow A type of student, not a type of linguistics

Semantic centrality as a diagnostic gets fuzzy in the light of examples like the following:

- (6) a. [one of those pages]
b. [piece of paper]

Here, *page* and *paper* are the semantically central words; the syntactic heads, however, are *one* and *piece*.

d. *Tests*

If semantics doesn't help us, we can resort to more formal, syntactic test.

(7) *Substitution*

[The unpleasant unicorn from Malacandra] loves dogfood.

a. **Who** loves dogfood?

b. **It** loves dogfood. (*pronominalisation*)

\Rightarrow [The unpleasant unicorn from Malacandra] is a phrase (NP)

(8) *Omissibility*

c. [The ~~unpleasant unicorn from Malacandra~~] loves dogfood. \Rightarrow *unicorn* is the head N

e. *Kinds of phrases*

(9) *NP*

[_{NP} the terrible **destruction** of the brewery]

(10) *AdjP*

[_{AdjP} very **afraid** of the dark]

(11) *AdvP*

[_{AdvP} Very **quickly**]

(12) *PP*

[_{PP} right **into** my bed]

(13) *VP* \Rightarrow **Our topic!**

[_{VP} often **visit** my parents]

A (relative) test to identify the category of a phrase is *coordination* – linguists have found out that *only phrases of the same category* can be coordinated:

- (14) a. I love [_{NP} all the delicious beer from the Czech Republic] and [_{NP} my wife who works in a fancy software enterprise].
 b. *I love [_{NP} all the delicious beer from the Czech Republic] and [_{VP} going to fancy restaurants].
- (15) a. [_{NP} The destruction of Rome] and [_{NP} the invention of lying] were major events in history.
 b. * [_{NP} The destruction of Rome] and [_S that man invented shorts] were major events in human cultural evolution.

f. *Complement*

Phrases that are (semantically) obligatory; selected by heads

(16) *Transitive V selects NP (function: direct object)*

I [_{VP} hate [_{NP} **my neighbours**]] → *I hate.

(17) *P selects NP*

I go [_{PP} to [_{NP} **the zoo**]] → *I go to.

(18) *Some Adj's select PP*

I'm [_{AdjP} fond [_{PP} **of my students**]] → *I'm fond.

g. *Specifiers*

Optional phrases; appear to the left of the head (in English).

(19) *NP can be specified by articles and other determiners, by adjectives, or combinations thereof*

[_{NP} **the** hooker] ⇔ Articles are exceptional Specifiers; cannot be omitted (cf. *[hooker])

[_{NP} **some** cigarettes]

[_{NP} **beautiful** people]

[_{NP} **many beautiful** people]

(20) *AdjP and AdvP can be specified by degree Adv's*

[_{AP} **very** afraid]

[_{AdvP} **too** quickly]

(21) *PP can be specified by some Adv's*

[_{PP} **right** to [my bed]]

(22) *VP can be specified by some Adv's*

[_{PP} **never** visit [my grandma]]

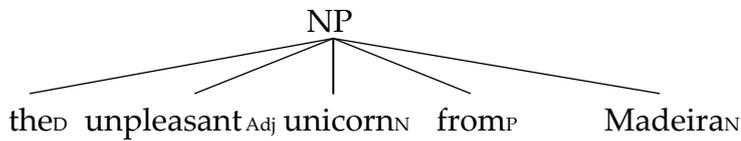
h. *Sentence*

S = NP + VP

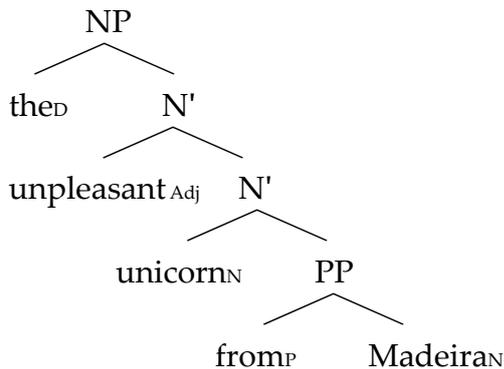
VP = V (+ NP)

i. *Flat vs. hierarchical structure*

(23) *Flat structure (linear)*



(24) *Hierarchical structure*



From (23) you cannot predict phrasehood, apart from the whole structure being an NP (cf. pronominalisation). Unlike (24), it does not tell you that, e.g., [*from Madeira*] is a phrase itself; nor does it exclude identifying, e.g. [*unicorn from Madeira*] as a phrase.

Another famous example *for* hierarchical structure comes from the ambiguous sentence

(25) I saw the man with the binoculars.

where [_{PP} *with the binoculars*] can be interpreted as modifying [_{NP} *the man*] (\Rightarrow 'the man has binoculars') or the verb *saw* (\Rightarrow 'I used binoculars in order to see the man'). Accordingly, it is assumed that the PP is attached at two different nodes in a tree, thus *disambiguating* the sentence structurally (cf. p. 38).

j. *Verbal complexes*

Simple mono-verbal predicates are relatively easy to analyse. But what about verbal complexes? What do we make of sentences containing verbal complexes like *Pavel has been drinking schnaps all afternoon*? What's with the mysterious *do*-support cropping up occasionally in these things? How do verbal complexes behave under ellipsis and question formation? Be excited...