Introduction to syntax Constituents

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Sentence Structure

- Learning Goals
  - Establish that sentences have structure
  - Show that sentence structure is not linear
  - Introduce the notion of a string of words acting as unit= constituent
  - Discuss anaphors, coordination, ellipsis and other constituency tests

Modification

- I use the term modify to mean that when the word X is combined with Y the denotation of X or Y is altered.
- Salty + Fish = a subset of fish
- Note that the relationship between 'salty' and 'fish' is not symmetrical. The combined meaning of the two words cannot give us the meaning 'fishy salt'!

Linear order

The cat likes salty fish

1 2 3 4 5

- Hypothesis: word with number n modifies word with number n+1

a. n=2, n+1 = 3 Prediction 'cat' modifies 'likes' ✗

b. n=3, n+1= 4 Prediction 'likes' modifies 'salty' ✗

c. n=1, n+1= 2 Prediction 'the' modifies 'cat' ✔

d. n=4, n+1 =5 Prediction 'salty' modifies 'fish' ✔

Constituent

- Some strings of words behave like units
  - Units of meaning
  - Units of syntactic operations
- Hard to distinguish sometimes what is responsible for lumping of words: syntax or semantics. Why?
- Syntax creates on which semantics operates

Ellipsis and anaphors

A. I think [the cat] likes [salty fish], and I think [she] eats [them] often.

She = the cat; them=salty fish

B. I think the cat [likes salty fish], and the dog [does] too

does= likes salty fish

Reference

- 'she' refers to 'the cat'
- 'them' refers to 'salty fish'.
- 'does' refers to 'likes salty fish'.
- When x *refers* to y, I mean that x has the same *denotation* as y.
- In a given expression, x and y have the same *denotation* when they can be used interchangeably without impacting the truth or falseness of that expression. If y is more than one word, as is in both examples in (4), then the meaning of x is expressed by more than one word.

Coordination

Constituents can be coordinated:

a. I think the cat [likes salty fish], and the dog [does] too

b. I think the cat [likes salty fish] but [eats dried chicken]

*c.I think the [cat likes] salty fish, and dried chicken [does] too

(meaning the cat likes salty fish and the cat likes dried chicken too)

*d. Salty fish, I think [the cat likes] but [the dog eats]

(meaning: Salty fish, the cat likes but the dog eats them=salty fish)

Constituent embedding

[likes[salty fish]]

- [likes salty fish] is a constituent by virtue of our ellipsis tests consisting of [likes] and [salty fish].
- The expression [salty fish] is a constituent by virtue of our anaphor test,
- the question is what is the status of "likes"? We can say it is a one word but not a constituent, or it is also a constituent consisting of one word. Test coordination:

a. The cat [*likes*] and [*eats*] salty fish
b The cat [*often likes*] and [*sometimes eats*] salty fish
c. The cat [*likes*] and [*sometimes eats*] salty fish

Words are constituents

- Every word is a constituent, strings of words can be constituents too, but they do not have to be. To show that not every string of words is a constituent, take our two tests coordination and anaphora (an asterix means the sentence is judged ungrammatical) and apply them to other strings in the clause:

a. I think the cat [likes salty fish], and the dog [does] too
b. I think the cat [likes salty fish] but [eats dried chicken]
*c. I think the [cat likes] salty fish, and dried chicken [does] too
(meaning the cat likes salty fish and the cat likes dried chicken too)
*d. Salty fish, I think [the cat likes] but [the dog eats]
(meaning: Salty fish, the cat likes but the dog eats them=salty fish)

Clefts

- Cleft constructions
- Takes a sentence:
- A. He photographed the store on Fifth Avenue
- You can use a cleft construction
- It was X that did Y
- To make A into B
- B. It was the store on Fifth Avenue that He photographed

Ellipsis

- Take a sentence:
- John photographed the store on Fifth Avenue and Mary photographed the store on Fifth Avenue
- You can elide certain strings if they are similar enough to a preceding antecedent modulo something that has contrast. X=John and Y=Mary are that contrast, the similar part is photographed the store on Fifth Avenue
- X photographed the store on Fifth Avenue and so did Y [~~photograph the store on Fifth Avenue~~]
- John photographed the store on Fifth Avenue and Mary ~~photographed the store on Fifth Avenue~~ did so too

coordination

- Take a clause:
- John photographed the store on Fifth Avenue and a town in the Rocky Mountains
- If a string X can be coordinated with a string Y then X and Y are constituents. Coordination can be tricky, you need to know what the length of the string is before 'and'. How do we know the store on Fifth Avenue is that string in the above clause? We need to use other constituency tests. For example clefting:
- It was the store on Fifth Avenue that John photographed

Pro-forms

- Pronoun replacement
- John photographed the store on Fifth Avenue and I painted it
- The pronoun it refers to the store on Fifth Avenue. In general a string X is a constituent if it can be a referent to a pronominal,

Fragments

- Take our clause:
- John photographed the store on Fifth Avenue
- Turn it into a wh-question (ones using words like who, what, which, where, how)
- What did John photograph
- Answer it:
- - The store on Fifth Avenue

Meaning or form?

- Hard to say.
- Tests tap into both since meaning is computed based on form.
- Syntax feeds semantic composition