Syntactic structure & trees
Syntactic knowledge

Native speakers have intuitions about grammaticality

1. The coconut fell on the windshield.
2. *Coconut the fell on the windshield.
3. #The banana danced at the party.
Syntactic knowledge

- It includes knowledge about structure and the relationship between words.

4. John saw himself in the mirror.
5. John saw him in the mirror.
6. John’s brother saw himself in the mirror.
It includes the ability to recognize and manipulate systematic relations

7. Bill pwned Fred. (active statement)
8. Did Bill pwn Fred? (active question)

9. Fred got pwned by Bill. (passive statement)
10. Did Bill get pwned by Fred? (passive question)
Syntactic knowledge

- Sentences are more than a string of words

11a. There were (old)(men and women)
11b. There were (old men)(and women)

12a. They (danced) and (sang the first number)
12b. They (danced and sang)(the first number)
Syntactic knowledge

- Sentences are more than a string of words

13a. John saw (the man)(with the telescope)
13b. John saw (the man with the telescope)
Syntactic knowledge

Some words are more closely related than others.

14. My new car can win this race.

[[My [new car]] [can [win [this race]]]].

*My new [car can] win this race.
Syntactic knowledge

Words that are closely related can be manipulated in the syntax

15. It is [my new car] that ___ can win this race.

16. It is [this race] that my new car can win ___.

17. *It is [car can] that my new ___ win this race.
Constituents

D: A **constituent** is a word or string of words that acts as a unit in the syntax.

14. [My [new car]] [can [win [this race]]]

How can we show constituency?

- [[The [new [car [that [is [parked [on [the street]]]]]]]] [can [[win [this race]] [without question]]]]
Syntactic trees

There were (old)(men and women)

Trees show constituency & modification

There were (old men) and (women)
Anatomy of a tree

- Carnie uses lots of terms we won't be using (domination, government). Focus on the terms we introduce in class lecture.
- We will also be drawing our trees differently than Carnie.
- A **branch** is a line connecting two parts of the tree.
- A **node** is the end of each branch. Everything contained within a node is a constituent.
- Other terms: **mother, sister, daughter**
Precedence

**Precedence**: Node 1 precedes node 2 if it is to the left of node 2
C-command

- Precedence/linear order is important in syntax.

John saw himself in the mirror.
*Himself saw John in the mirror.

- What about...

John’s brother saw himself in the mirror.

- John is before himself. Why these meaning restrictions?

- Height in the tree also matters.
C-command

C-command: Node 1 c-commands its sister and all her descendents.

- John
- saw
- himself
What is c-command?

- C-command refers to the domain of a particular node.

Mary loves herself.
*Herself loves unicorns and rainbows.
The father of Mary<sub>i</sub> loves herself<sub>i</sub>.

John does not have any tubas.
*John has any tubas.