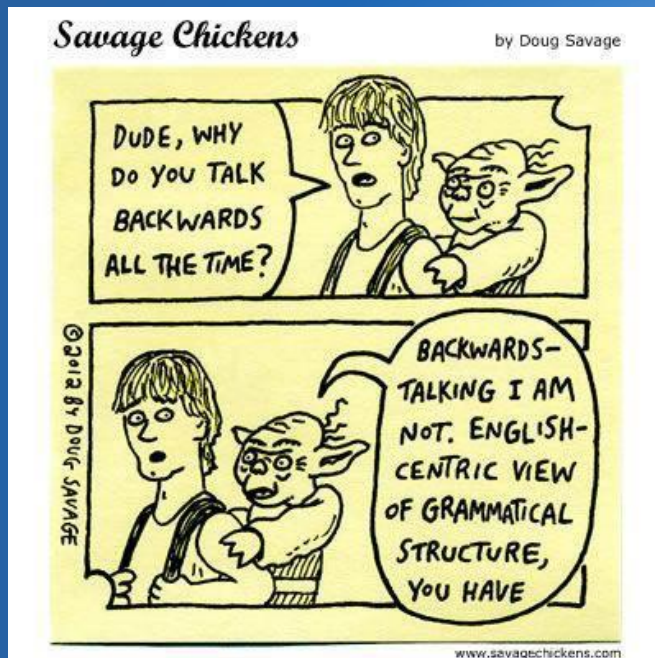


# CONSTITUENCY TESTS



# LAST CLASS...

- A **constituent** is a string of words that acts as a unit in the syntax.
- Constituency can be shown using a syntax tree.
- Trees have nodes & branches
- A particular node may have a mother, a sister, and/or a daughter.

# CONSTITUENTS

- Some words are more closely related than others.

[My [mangy dog]] [will [chase [her cat]]].

My mangy [dog will] chase her cat.

- Words that are closely related can be manipulated in the syntax.

It is my mangy dog that will chase her cat.

It is her cat that my mangy dog will chase.

\*It is dog will that my mangy chase her cat.

# CONSTITUENTS

How do we know a string of words is a constituent?

Why would we want to know if a string of words is a constituent?

# AMBIGUITY



John saw [the man] [with the telescope].

John saw [the man with the telescope].

# CONSTITUENTS

How do we know a string of words is a constituent?

1. Morphology
2. Constituency texts

# MORPHOLOGY

Morphosyntactic features (number, gender, case) are not exclusively properties of words, but of phrases

## English

- ▶ these books

## German (gender, number, case)

- ▶ diesen           Freuden  
det.pl.M.dat   N.det.pl.M.dat

# COORDINATION

*tests for:* any kind of constituent

*description:* If two strings are connected by a conjunction like *and* or *or* and the result is grammatical, then the strings are the same kind of constituent. When applying a test, use two strings that contain the same number and grammatical category of words.

Some examples of coordination:

Original sentence: [<sub>DP</sub> My blue podracer] is going to race.

Test sentence: [<sub>DP</sub> My blue podracer] and [<sub>DP</sub> your red podracer] are going to race.

Conclusion: The bracketed portion is a constituent.





# COORDINATION

Original sentence: The emperor sent [Vader to] Endor.

Test: \*The emperor sent [Vader to] and [Luke to] Endor.

Conclusion: It is not a constituent.

Original sentence: The rebels like to [ride speeder bikes in the forest.]

Test:

Conclusion:



# COORDINATION

Original sentence: The emperor [sent Vader to Endor].

Test: \*The emperor [sent Vader to Endor] and  
[Tuesday].

Conclusion: This test has been done incorrectly!

**CAUTION:** Because coordination is the most widely applicable constituency test, it also has the most things that can go wrong with it. Always do another test as well.

# SUBSTITUTION

*tests for:* different things, depending upon what you're using as a substitute.

*description:* If a string of words forms a unit it should behave like something that we have good reason to believe is a unit, such as a single word. If a string behaves like a single word, then it is reasonable to conclude it is a constituent.

Pronouns can substitute for DPs.

*Did so/do so* can substitute for VPs

# SUBSTITUTION - PRONOUNS

Use this test when you have a determiner and a noun (and possibly other words with it).

Original sentence: I ate [DP a jawa] earlier.

Test: I ate [DP it] earlier.

Conclusion: It is a constituent.



Original sentence: [My silver droid] will translate that language.

Test:

Conclusion:

# SUBSTITUTION - PRONOUNS

You get an ungrammatical sentence in English if you to replace part of the DP or more than the DP.

Original sentence: [My silver] droid will translate that language.

Test: \*It droid will translate that language.

Conclusion: not a constituent



Original sentence: [My silver droid will] translate that language.

Test: \*It translate that language.

Conclusion:

Be careful of meaning changes in the test sentence.

Original sentence: The ewoks lowered [the net with a rope]. (meaning they used a rope to lower the net)

**Test:**

Conclusion:



# SUBSTITUTION –NP

*one or ones*

- use this test when you have a noun+other words but not a determiner.

Original sentence: Luke saw [<sub>DP</sub> that [<sub>NP</sub> rabid rancor]] in the pit.

Test: Luke saw [<sub>DP</sub> that [<sub>NP</sub> one]] in the pit.

Conclusion:



**Make sure you leave D behind.**

# SUBSTITUTION – *DID SO*/ *DO SO*



You can replace VP with *did so* and *do so*.

Original sentence: Han [<sub>VP</sub> fixed the millennium falcon].

Test: Han [<sub>VP</sub> fixed the millennium falcon] and Chewbacca [<sub>VP</sub> did] too.

Conclusion:

Original sentence: My silver droid will [translate that language] after he fixes my speeder.

Test:

Conclusion:

Original sentence: My silver droid will [translate that language after he] fixes my speeder.

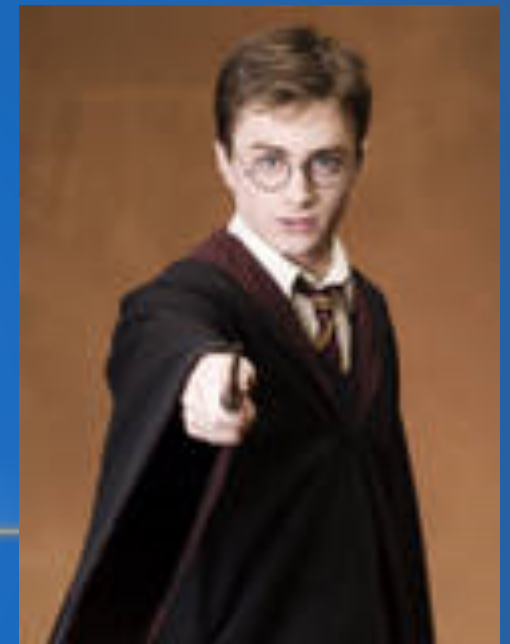
Test:

Conclusion:

# “DO” SUBSTITUTION

in *Harry Potter and the Half-Blood Prince*

“Ever heard of Sirius Black? You *must have done*—been in the papers for the last couple of years—died a few weeks ago—(70).”





# SUBSTITUTION – PP

Substitute a PP with *there, then*, etc. (it depends on the PP)

Original sentence: Vader met Luke [PP on Cloud City] on Tuesday.

Test: Vader met Luke [there] on Tuesday.

Conclusion:



# DELETION – VP ELLIPSIS

*tests for: VPs*

*description:* If a phrase with a verb gets deleted in a context where the information can be assumed, then the deleted constituent is a VP. This context is often the answer to questions or a coordinate construction.

The best way to do this test is to start with your original sentence, add *and*, and then include a parallel sentence.

Original sentence: Obi-Wan will [give Luke a lightsaber before they leave Tatooine].

Test: Obi-Wan will [give Luke a lightsaber before they leave Tatooine] and Yoda will [<sub>VP</sub> e ] too.

Conclusion: The bracketed portion is a constituent.

- It is acceptable to add *too* or to change words in the parallel sentence as long as you have the same number of words and words of the same grammatical category.

# FRONTING

*tests for: PP, VP, DP*

- Fronting doesn't work for constituents already at the beginning of the sentence.
- These works best when the fronted constituent is emphasized.
- You can't front an NP and leave a DP behind. The results tell you nothing.

[To hide their numbers], Sandpeople travel single file.

[<sub>PP</sub> On Degobah], Luke meets Yoda.

Original sentence: The jawas captured the [small droid].

Incorrect application of fronting: \*Small droid, the jawas captured the.

# VP FRONTING

- This test really only works when you have a VP.
- When you front a VP, you must leave an auxiliary behind.

“It was 19 years ago almost to the day that Boro had to beat Newcastle on the last day of the season to avoid dropping into the old third division. And beat them we did...”

“We had gotten there quite early to beat the crowds.. and beat them we did! :) One by one we had to get past the beefy guards who checked our bags, plus of course, the beefy Beef Eaters!”

# CLEFTS

*tests for:* any kind of constituent

- To use this test, add *it was* or *it is*, followed by the bracketed portion, then *that*, then the rest of the sentence.
- You can't cleft an NP and leave behind the D.
- Cleft only the bracketed portion.

Original sentence: [The death star] will blow up many planets.

Test: *It is* the death star *that* will blow up many planets.

Conclusion: The bracketed portion is a constituent.

Original sentence: The death star will blow up [many planets].

**Test:**

**Conclusion:**