LNGT0101
Introduction to Linguistics

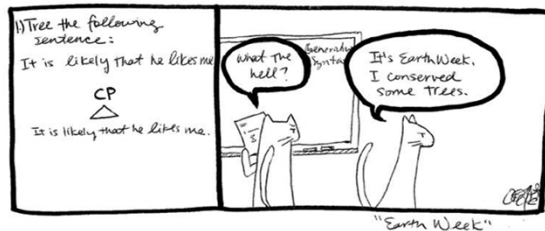Lingu-ist-ic-s
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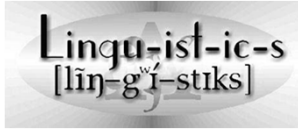
Lecture #12
Oct 20th, 2014

Announcements

- I will return HW2 to you this week.

- Any questions on Homework 3, or otherwise?

- Presentation on Wednesday on Myth 5
  "English spelling is kattastroffik."

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What you must not do on your HW

3

Today's agenda

- An example of a principle of UG. Last issue in syntax, I promise.
- Introduce phonetics.
- Describe consonants and vowels, and introduce their IPA symbols.
- Phonetic transcription.

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Transition from last class

- Last time we talked about **parameters**, the component of UG responsible for cross-linguistic variation (e.g., head directionality, wh-parameter, and the null subject parameter).
- The second component of UG is **principles**, which are argued to be shared by all languages (e.g., structure-dependence of rules).
- We talk about one example of these universal principles today.

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A puzzle from earlier in the semester

Anne hit the man with an umbrella.
Two meanings

What did Anne hit the man with?
One meaning

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Constraints on Wh-movement

- We have already seen examples of wh-movement in English (remember "*t*" is the trace of the moved wh-phrase):

    Who did John meet *t* ?

- Notice that the distance between the wh-phrase and its original position in the D-structure could be, in principle, unbounded:

    Who did you say that John met *t* ?

    Who does Mary believe that you said that John met *t* ?

    etc.

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Constraints on Wh-movement

- But now consider these cases of wh-movement:

    *Who did you meet Mary and *t* ?

    *Who do you believe the claim that Mary met *t* ?

    *Which book did Mary talk to the author who wrote *t* ?

    *Who do you wonder whether Mary met *t* ?

    *Who did Mary talk to John without meeting *t* ?

- Obviously, wh-movement is not unconstrained. There are cases where the movement is, for some reason, *blocked*.
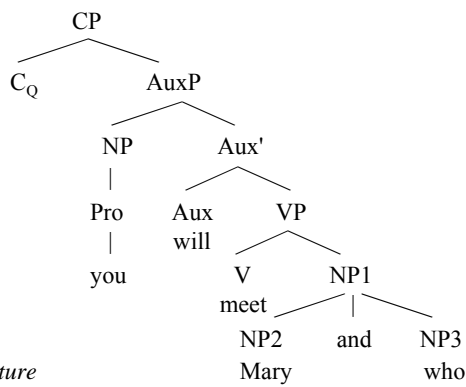
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Islands

- The substructures out of which wh-movement is blocked are called syntactic *islands*.
- Complex NPs are islands:

    *Who do you believe [**NP** **the claim** [**CP** **that Mary met *t*]]**?

    *Which book did Mary talk to [**NP** **the author** [**CP** **who wrote *t*]]**?
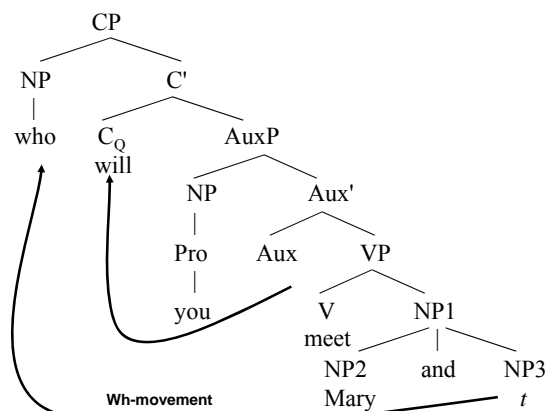
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Islands

- Also, embedded CPs introduced by a wh-word act as islands for wh-movement:

    *Who do you wonder [**CP** **whether Mary met *t*]**?

- Adverbial clauses introduced by *without, after, before,* etc., are also islands:

    *Who did Mary talk to John [**CP** **without meeting *t*]**?

- Coordinate NPs are also islands;

    *Who will you meet [**NP** **Mary and *t*]**?

- Let's draw a tree for this last wh-question and see if we can make sense of what's going on.
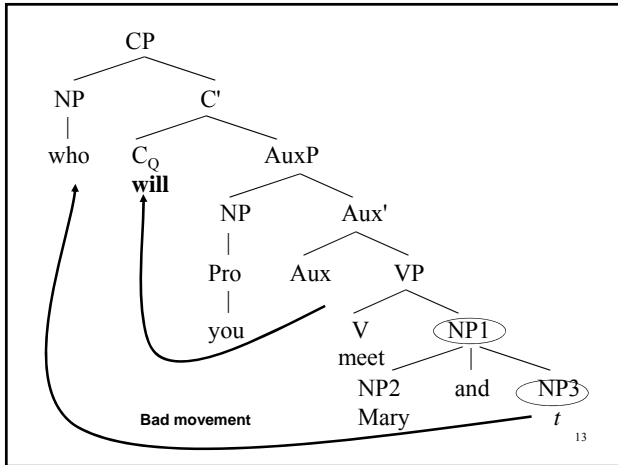
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D-structure

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Wh-movement

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2

Slide 13

CP
- NP — who
- C'
  - C_Q **will**
  - AuxP
    - NP — Pro — you
    - Aux'
      - Aux
      - VP
        - V — meet
        - NP1
          - NP2 — Mary
          - and
          - NP3 — *t*

Bad movement

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Slide 14

Islands

- Similar island effects are observed in other languages with wh-movement.
- Island constraints cannot possibly be learned on the basis of the primary linguistic data that the child hears around her.
- If so, then the inevitable conclusion is that they must be built-in.

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Slide 15

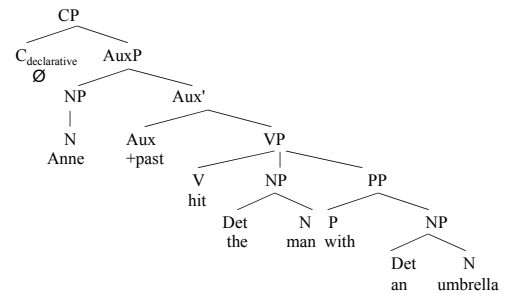## Revisiting the puzzle

Anne hit the man with an umbrella.
Two meanings

What did Anne hit the man with?
One meaning

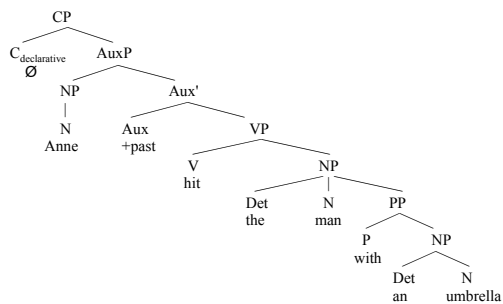- That's again where trees help.

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Slide 16

Anne hit the man with an umbrella.
"Meaning: Anne held an umbrella and hit the man with it."

CP
- C_declarative Ø
- AuxP
  - NP — N — Anne
  - Aux'
    - Aux +past
    - VP
      - V — hit
      - NP — Det the — N man
      - PP — P with — NP — Det an — N umbrella

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Slide 17

Anne hit the man with an umbrella.
"Meaning: Anne hit the man who was holding an umbrella."

CP
- C_declarative Ø
- AuxP
  - NP — N — Anne
  - Aux'
    - Aux +past
    - VP
      - V — hit
      - NP
        - Det the — N man
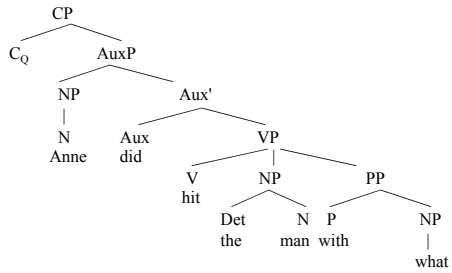   - PP — P with — NP — Det an — N umbrella
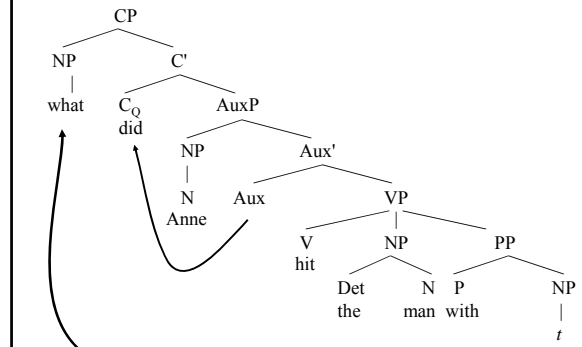
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Slide 18

- Now, let's draw trees for a wh-question out of each structure. (Assume 'did' under Aux for the time being, which is not quite accurate, but should do for our purposes here.)
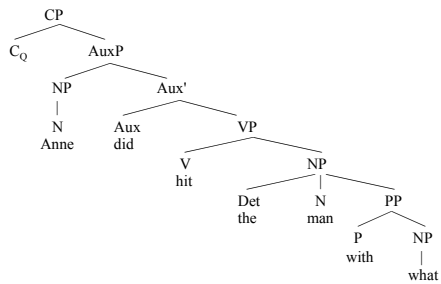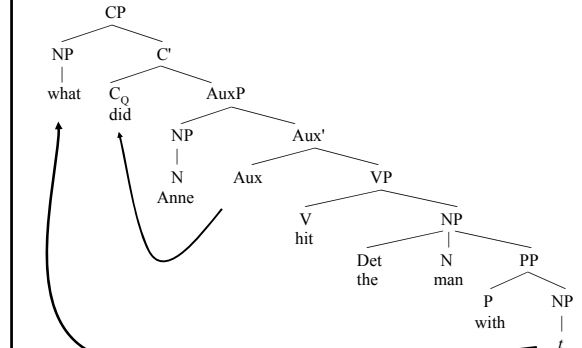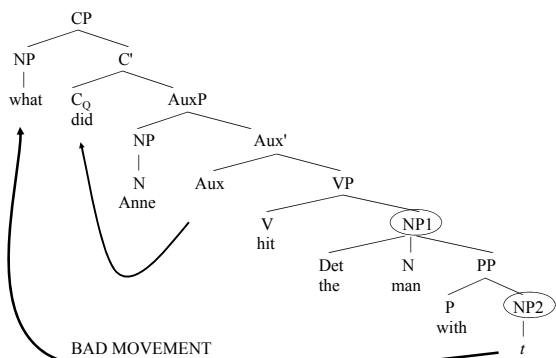
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D-structure: Anne hit the man with what

CP
C_Q AuxP
NP Aux'
N Anne
Aux did VP
V hit NP PP
Det the N man P with NP what

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CP
NP C'
what C_Q did AuxP
NP Aux'
N Anne Aux VP
V hit NP PP
Det the N man P with NP t

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D-structure: Anne hit the man with what

CP
C_Q AuxP
NP Aux'
N Anne
Aux did VP
V hit NP
Det the N man PP
P with NP what

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CP
NP C'
what C_Q did AuxP
NP Aux'
N Anne Aux VP
V hit NP
Det the N man PP
P with NP t

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CP
NP C'
what C_Q did AuxP
NP Aux'
N Anne Aux VP
V hit NP1
Det the N man PP
P with NP2 t

BAD MOVEMENT

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Another puzzle: *wanna*-contraction

- Who do you want to kiss?
  Who do you *wanna* kiss?

- Who do you want to kiss Mary?
  *Who do you *wanna* kiss Mary?

- Compare: I want to kiss Mary.
          I *wanna* kiss Mary.

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Phonetics

- Phonetics is the study of speech sounds in human language.
- In this class we'll be mainly concerned with *articulatory phonetics*.

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Phonetics

- What are some phonetic puzzles you're familiar with from English or from other languages that you know?

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Spelling and speech

The one-l lama,
He's a priest.
The two-l llama,
He's a beast.

And I will bet
A silk pajama
There isn't any
Three-l lllama.

Ogeden Nash

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Spelling and speech

- Even though alphabetic spelling is meant to represent the pronunciation of words, it is not always reliable in figuring out how a word is pronounced. Why?

- Different letters may represent the same sound:
  to too two through threw clue shoe

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Spelling and speech

- A single letter may represent different sounds:
  dame dad father call village many.
- A combination of letters may represent a single sound:
  ship chrome phonetics
- Some letters have no sound at all in certain words:
  know numb sword

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Spelling and speech

- Spelling may also fail to represent sounds that are actually pronounced:
  futility university
- Also, one letter may represent two sounds:
  box Xerox
- Also, the majority of human languages do not have a writing system, which makes spelling completely irrelevant for pronunciation in these languages.

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Introducing the IPA

- If we cannot rely on spelling, then what do we do?
- Linguists rely on a special alphabet to represent speech sounds in human language: The *International Phonetic Alphabet* (IPA).
- The IPA represents speech in the form of symbols for individual sounds like [p], [s], [a], etc., as well as for other phonetic features that arise in human speech.

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Some IPA links

- Link to the IPA chart.

- Link to an interactive chart to insert symbols. This will be quite useful when we do phonetic transcription exercises.

- Interactive IPA from Peter Ladefoged's online Course in Phonetics: Click and listen to different sounds.

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Consonants vs. Vowels

- There are two major types of sounds in human language: **consonants** and **vowels**. How do they differ?
- In terms of articulation, consonants are produced when the airflow is obstructed in the vocal tract, while vowels are produced with relative free flow of the airstream in the vocal tract.
- Both consonants and vowels can be described in terms of a number of individual articulatory features.
- We start with consonants. But let's look at the human vocal tract first.

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The vocal tract
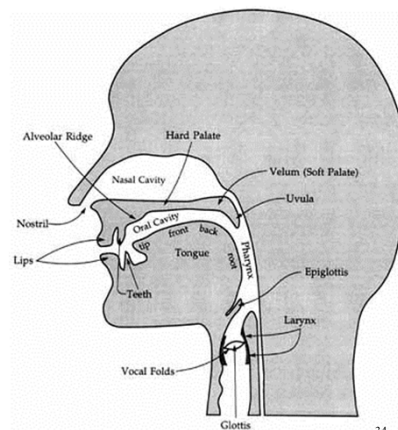
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Articulation of consonants

- Consonant sounds can be characterized according to three main phonetic properties:
  - a) **place of articulation**,
  - b) **manner of articulation**, and
  - c) **voicing**.

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Places of articulation

- **Labial**, e.g., *bilabial* [p] and *labiodental* [f].
- **Dental**, e.g., French [d] in *dire*. English has *interdental* [θ] as in *thorn* and [ð] as in *there*.
- **Alveolar**, e.g., [t], [s], [n], and [ɹ].
- **Alveopalatal**, e.g., [ʃ] as in *shoe*, [ʒ] as in *vision*, [tʃ] as in *choose*, and [dʒ] as in *jam*.
- **Palatal**, e.g., [j] in *yes*.

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Places of articulation

- **Velar**, e.g., [k], [g], and [ŋ], the last one is the final sound in *king*.
- **Uvular** consonants: These are produced by raising the back of the tongue to the uvula, e.g., French [ʀ] and Arabic [q].
- **Pharyngeal** consonants: These are produced at the pharynx, e.g., Arabic [ħ] and [ʕ].
- **Glottal** consonants: These are produced at the glottis, e.g., [h] in *hill* and [ʔ] in *uh-oh*.

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Next class agenda

- Finish our discussion of consonants.
- Vowels.
- Phonetic transcription.
- Syllable structure.

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