Wh-movement

movement of question phrases

Another Terminological Point

- A Movement is the same thing as DP movement
  - Subtypes: Passive, SSR, SOR, movement of subject from VP internal subject to spec, TP
- A' (A-bar) Movement is the same thing as Wh-movement
  - Subtypes: Wh-movement, topicalization, relative clause formation

Two kinds of Questions

- Yes/No questions:
  - Did you see the octopus? yes/no /*dog
  - Have you eaten yet? yes/no /*apple
- Wh-questions
  - Who was here last week? Howard/*no
  - What do you have there? Nail clippers/*yes

Wh words

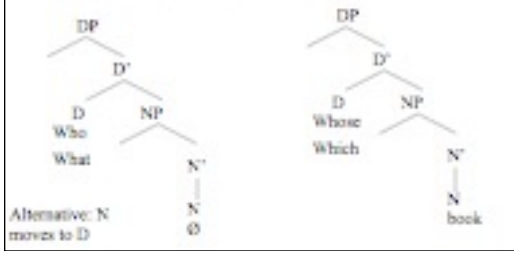
who
what
which X — Usually arguments

whose X — Can be either adjunct or argument

where
when
why
how — Usually adjuncts

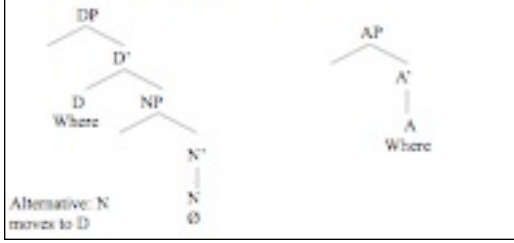
Wh-phrases are what move

- We move wh-***phrases***.
- *Who, What, Which, Whose* are determiners:



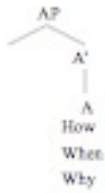
Wh-phrases are what move

- *Where* is sometimes a determiner
  - Where did John go to (cf. John went to school)
- And sometimes an Adverb
  - Where did John go (cf. John went home)



Wh-phrases are what move

- *How, When, Why* are usually adverbs



REMEMBER:
The **whole** phrase moves, not just the head

Wh-questions involve movement

- I bought a book
- What did you buy _____

Where from?

What did you say [_____ was hit _____]

gets theta role here

cf. John hit the ball

gets case here

cf. the ball was hit

Ends up here

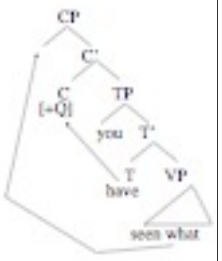
Where to?

What have you seen _____

subject aux inversion:

means Aux is in C

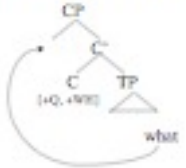
Wh-word precedes C --
specifier of CP



Why?

Movement of T to C is motivated by [+Q]

Proposal: there is a [+WH] feature in C, the *wh*-word must get close to it.



[+WH] Complementizers

Cé **a**[L] bhí sa seomra?

Who that-wh was in-the room

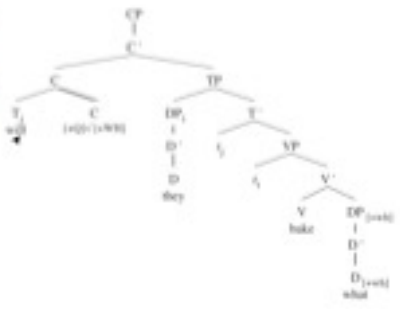
"Who was in the room"

Motivations for movements

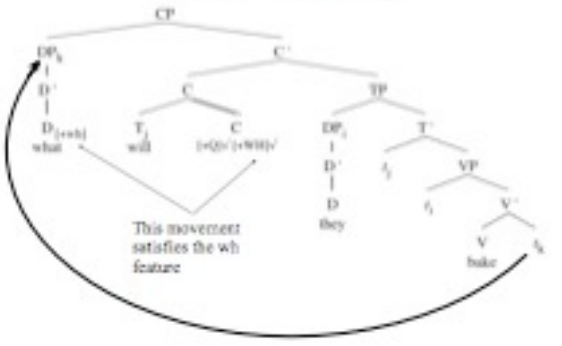
- *Head Movement*:
  - V to T (T to V) motivated by need of suffix
  - T to C motivated by null [+Q] C
- *NP movement*
  - Raising motivated by need for case
  - Passive motivated by need for case
- *Wh movement*
  - wh-questions motivated by need for wh-word to appear near [+wh] complementizer.

Wh-questions

- 1 thing to solve:
  - [+Q] C needs T
  - [+WH] C needs a [+wh] spec.
- *Head-movement* of will to C will check the Q feature



Wh-questions



Two weird English-specific constraints

- *Who that John left?
- *John asked who if Susan loved?

- English doesn't allow you to have both an overt complementizer (other than Aux) and a wh-word
- *The Doubly filled CP filter* (English only)
  - * [$_{CP}$ wh that]

Two weird English-specific constraints

- Who did John think that Susan loved ____?
- *Who did John think that ____ loved Susan?
- Who did John think Ø ____ loved Susan?

- can't wh-move from a position next to the word "that".
- *That-trace filter* (English only)
  - * that *t*

A Derivation

What did John say was baked?

Step 1. UNDO all the transformations to figure out the D-structure

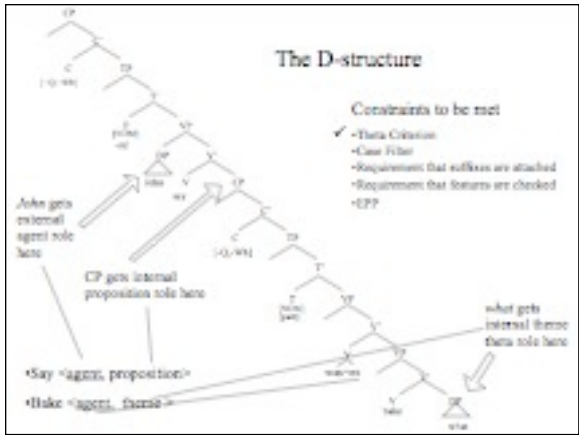
1) T→C movement: What John did say was baked
2) Do insertion: What John -ed say was baked

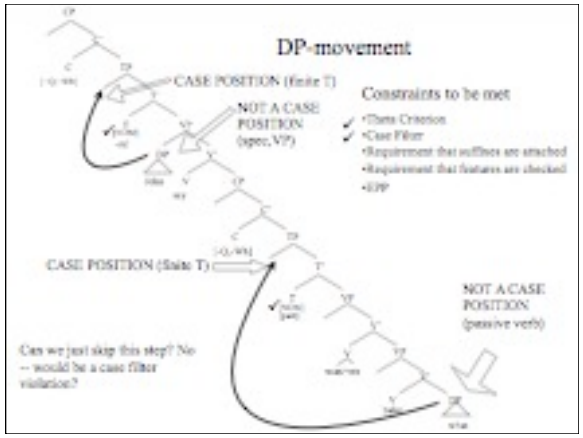
Question: where did "What" start?

Notice: John said the cake was baked [pattern is embedded clause]

3) Wh-movement: John -ed say what was baked
4) DP-movement: John -ed say was baked what

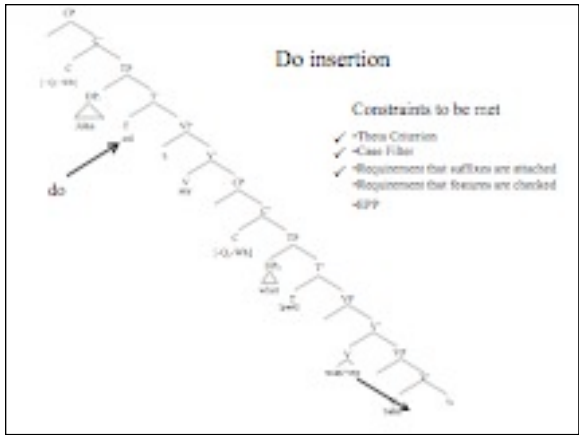
We are going to tree this string (4): *the D-structure*

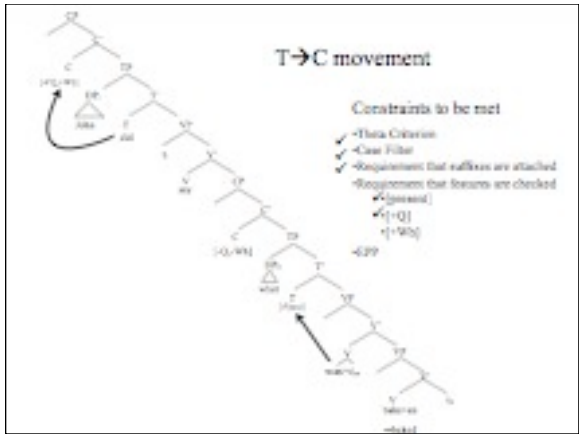


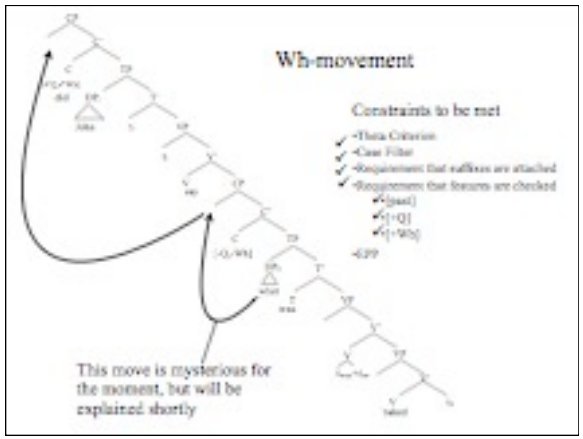


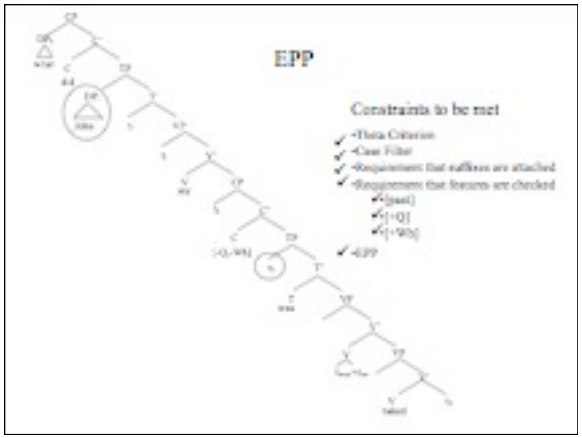
An aside: the order of things

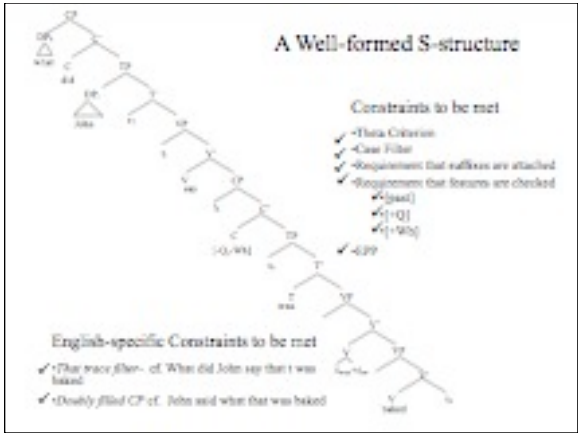
- START in your theta position
- If necessary, DP-move to get case. (*DP movement always ends in a case position*)
- Then if necessary, Wh-move to the specifier of CP to check [+wh]. (*Wh-movement always starts in a case position*)


Do insertion
Constraints to be met
•Theta Criterion
•Case Filter
•Requirement that suffixes are attached
•Requirement that features are checked
•EPP
do


T→C movement
Constraints to be met
•Theta Criterion
•Case Filter
•Requirement that suffixes are attached
•Requirement that features are checked
•EPP


Wh-movement
Constraints to be met
•Theta Criterion
•Case Filter
•Requirement that suffixes are attached
•Requirement that features are checked
•EPP
This move is mysterious for the moment, but will be explained shortly





Traces?

- want + to → wanna
  - Who$_i$ do you wanna kiss t_i?
  - *Who do you wanna kiss the puppy?
  - Who$_i$ do you want t_i to kiss the puppy?

intervenes, so blocks wanna contraction

Children and Traces

- This movie shows three things:
- -Children exhibiting overt traces (saying the word in both its D-structure and S-structure position)
- Children never pronounce a wh-word in a wanna contraction environment
- Children don't wanna contract across a wh-trace.

What summary?

- Wh-movement moves Wh-phrase to specifier of CP
- Motivated by need to get Wh-phrase near [+WH] complementizer
- Two English Specific constraints
  - Doubly filled Comp Filter
  - That-trace filter