

L2 Syntax Lecture 11: A quick look at *wh*-movement

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The plan

- Summary of last lecture
- Questions (indirect and direct, yes/no and *wh*-)
- Types of movement not driven by the case filter
- Relative clauses and topicalization (*very* quickly)

Today's reading

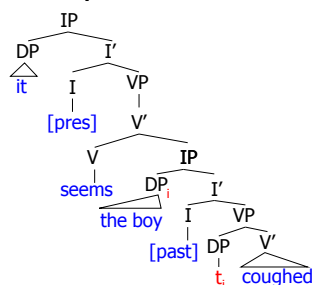
- Santorini & Kroch, chapter 11 (stop at "The Island Constraints", great though they are)
- <http://www.ling.upenn.edu/~beatrice/syntax-textbook/ch11.html>
- Links from WebCT and from the course website

Raising verbs with finite complements

[_{IP} it seems [_{IP} the boy [past] coughed]]

- If the lower IP is finite, the subject of the lower VP doesn't need to move as far
- Movement only happens when it has to, so the subject can't move to higher [_{Spec,IP}]
- The upper IP takes a **dummy subject** (pleonastic *it*)

Raising verbs with finite complements



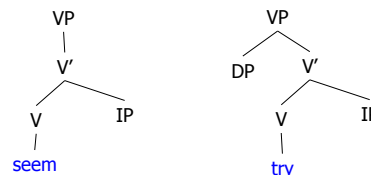
What is *it* doing there?

- Requirement that **every clause has its subject position filled**
 - *is raining
- **Expletives** like *it* appear when there is no other good option for filling this position.
 - It is raining

Control is different

- *Try* works differently
 - John tried [to win]
 - *It tried [(that) John wins]
- Also *want, hope, promise*
- One explanation: *John* is external argument of *try*, but not *seem*
 - John tried to win → John is trying
 - John seemed to win → John is seeming

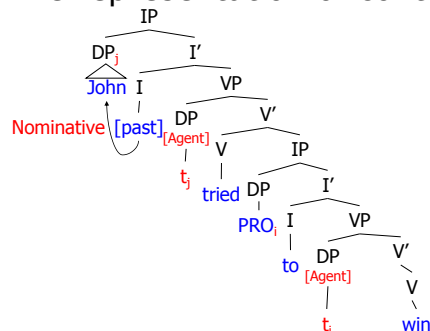
Control is different



Control and the Theta Criterion

- There are two theta roles in a control sentence (**Agent** of *try* and **Agent** of *win*), but only a single overt DP
- The theta criterion: Every semantically contentful DP must be assigned **exactly one thematic role**, and every thematic role must be assigned
- We must assume a second DP in a control construction, even though we can't hear it.

The representation of control



Control and idioms

- Control does not preserve idiomatic interpretation
 - #The cat_{t_i} tried PRO to t_j be out of the bag
 - #The shit_{t_i} wanted PRO to t_j hit the fan
- This makes sense because the embedded VP never includes the matrix subject
 - [PRO be out of the bag]
 - [PRO hit the fan]

Movement so far: a review

- movement from non-case-marked positions to case-marked positions
- only DPs move (only DPs bear case)
- allows two local requirements to be satisfied by the same DP
 - Theta criterion
 - Case filter

Wh-movement: a summary

- A different type of movement
- **Not** driven by the need for case
 - **Not just DPs** that move
 - Movement to a **new position**

Indirect questions

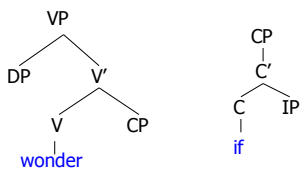
1) They wonder if the boy ate the cake

What's the structure for this?

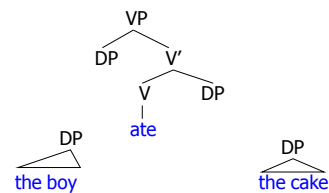
Indirect questions

1) They **wonder** if the boy ate the cake

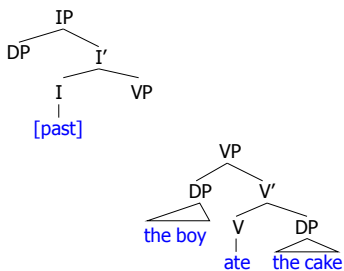
What's the structure for this?



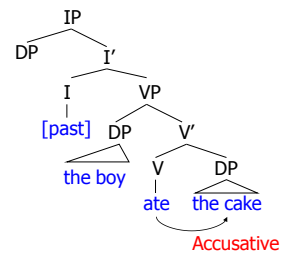
Building an indirect question



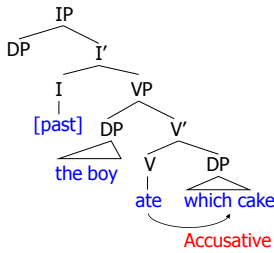
Building an indirect question



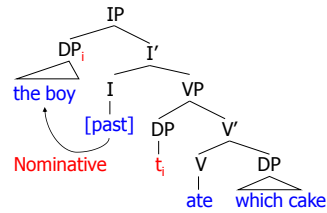
Building an indirect question



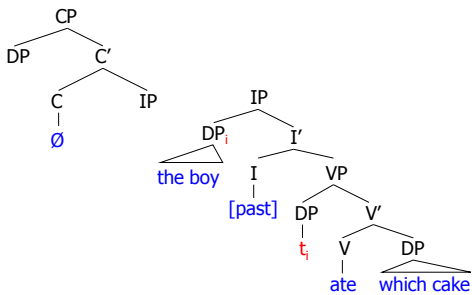
Wh-movement in an indirect question



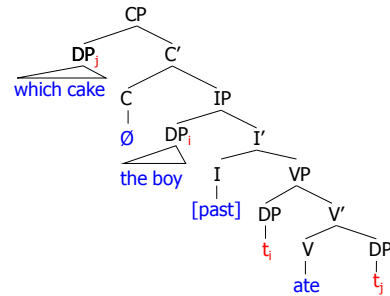
Wh-movement in an indirect question



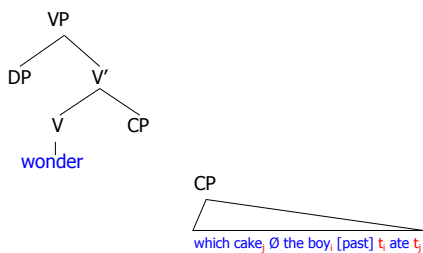
Wh-movement in an indirect question



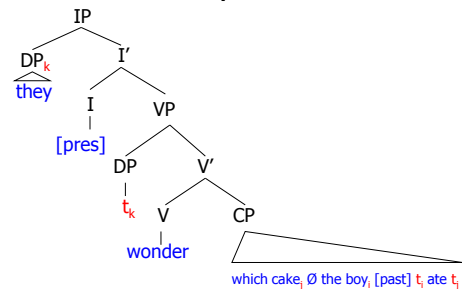
Wh-movement in an indirect question



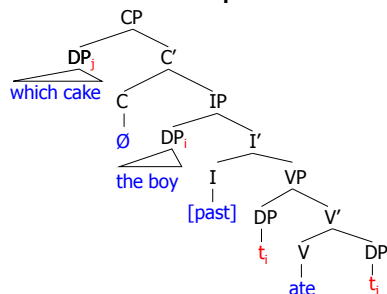
Wh-movement in an indirect question



Wh-movement in an indirect question



Wh-movement in an indirect question



Summary

They wonder [_{CP} which cake_j ∅ [_{IP} the boy_i t_i ate t_j]]

- *which cake* is object of *ate*
- thematic role and case from *ate*
- ∅ is a **null complementizer**, projecting CP
- *which cake* moves to [Spec, CP]
- **not** movement to get case

More wh-movement

They wonder if the boy ate the cake

- They wonder [_{CP} *which cake* [_{IP} the boy ate t]]
- They wonder [_{CP} *what* [_{IP} the boy ate t]]
- They wonder [_{CP} *which boy* [_{IP} t ate the cake]]
- They wonder [_{CP} *who* [_{IP} t ate the cake]]

So far, all instances of DP movement

More wh-movement

They wonder if the boy ate the cake
in the kitchen

- They wonder [_{CP} *where* [_{IP} the boy ate the cake t]]

They wonder if the boy ate the cake
really quickly

- They wonder [_{CP} *how quickly* [_{IP} the boy ate the cake t]]

Long-distance wh-movement

I wonder [_{CP} if he ate a cake]

I wonder [_{CP} *what* he ate t]

I wonder [_{CP} if she said [_{CP} he ate the cake]]

I wonder [_{CP} *what* she said [_{CP} he ate t]]

Long-distance wh-movement

I wonder [_{CP} if she said
[_{CP} I thought
[_{CP} he ate the cake]]]

I wonder [_{CP} *what* she said
[_{CP} I thought
[_{CP} he ate t]]]

Long-distance *wh*-movement

I wonder [_{CP} if she said
[_{CP} I thought
[_{CP} they knew
[_{CP} he ate the cake]]]]

I wonder [_{CP} **what** she said
[_{CP} I thought
[_{CP} they knew
[_{CP} he ate **t**]]]]

Moving on to direct questions

They wonder [_{CP} what [_{IP} the boy will eat **t**]]

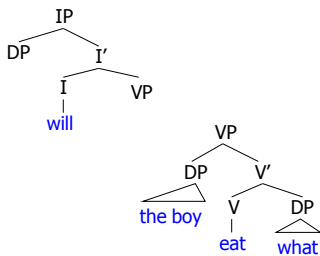
Theme Agent

- *what the boy will eat* is a CP.
- Object moves to [Spec, CP] in this case
- Subject is in [Spec, IP] in this case

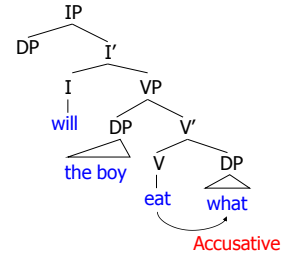
Direct question: What will the boy eat?

- almost same structure as indirect version

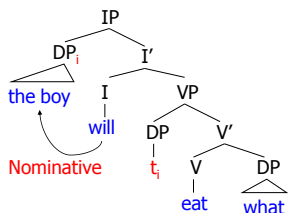
Wh-movement in a direct question



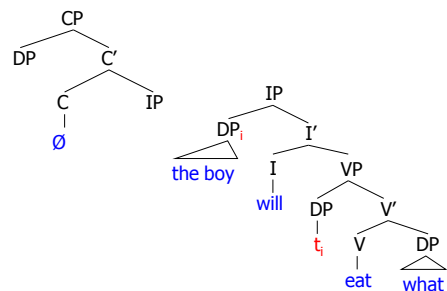
Wh-movement in a direct question



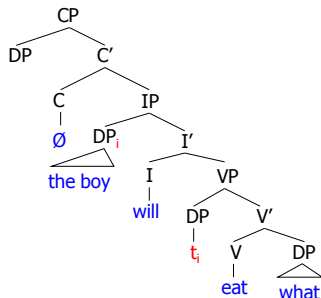
Wh-movement in a direct question



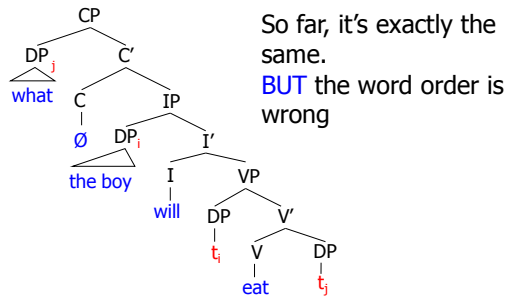
Wh-movement in a direct question



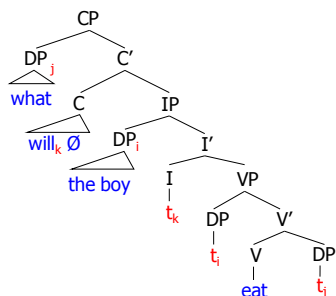
Wh-movement in a direct question



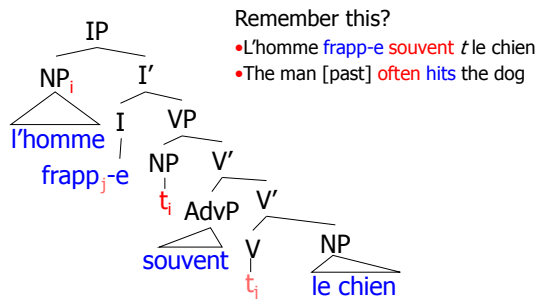
Wh-movement in a direct question



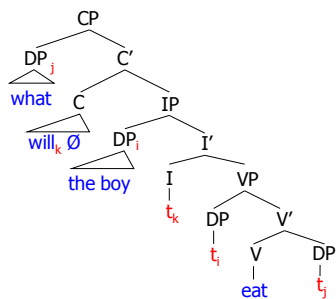
Head movement



Head movement



Head movement



Head movement

- Head movement is the **third type of movement**
- Driven by different requirements:
 - Raising, passive, subject movement: **Case filter**
 - Wh-movement: **interpretive properties** (question vs statement, etc.)
 - Head movement: **form complete words** from individual morphemes

Head movement

- Moves **small units** (lexical items, not phrases)
- Moves them **small distances** (from one head to the next highest)
- Don't worry too much about the details of head movement in direct questions

Direct and indirect questions

They wonder [_{CP} what_i [_{IP} the boy_j will t_j eat t_i]]

[_{CP} What_i [_C will_j [_{IP} the boy_k t_j t_k eat t_i]]]

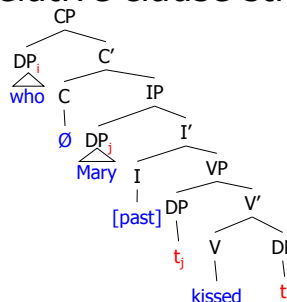
The **same structure** for both:

- *what the boy will eat* is a CP
- *what will the boy eat* is a CP
- Object is in [Spec, CP] in this case
- Subject is in [Spec, IP] in this case

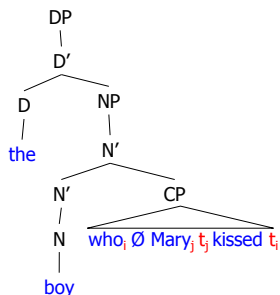
Wh-movement beyond questions

- The same sort of movement is also found in **relative clauses**
 - The boy [_{wh_i} t_i ate all the sweets]
 - The boy [_{wh_i} Mary kissed t_i]
 - The woman [_{from whom_i} I learnt French t_i]
- No head movement here

Relative clause structure



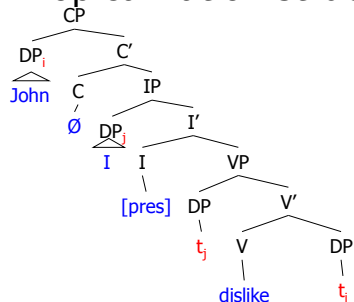
Relative clause structure



Wh-movement beyond questions

- The same sort of movement is also found in **topicalization**
 - [_{Idiots like him_i}]_i, I just can't stand t_i
 - _{To John_i}, I gave a card t_i, and _{to Mary_i}, I gave a present t_i
- Not even movement of a *wh*-phrase here
- Movement still driven by interpretation, not case

Topicalization structure



Wh-movement: summary

- Not movement for case
- Not just DPs that move
- Landing site: [Spec, CP]
- Many other constructions use similar movement
 - Relative clauses
 - Topicalization

The three types of movement: differences

- Subject movement, passive, raising:
 - Movement of XP
 - Driven by need for Case
- Wh-movement:
 - Movement of XP
 - Driven by interpretive properties?
- Head movement:
 - Movement of head
 - Driven by morphology

The three types of movement: similarities

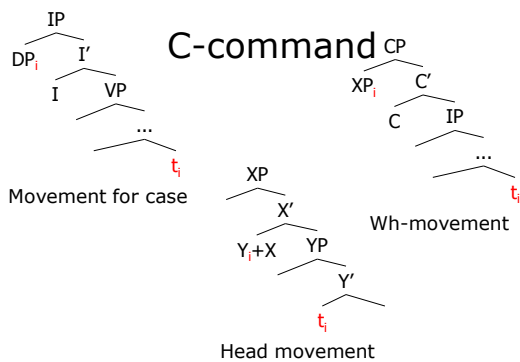
- Structure-preservation:
 - XP-movement targets XP-positions, head movement targets heads
 - *Sun_i, I like [the t_i]
 - *The_i, I like [t_i sun]
 - Nous mang-erons [t_i du fromage]
 - We eat-will.1pl some cheese
 - *Nous [mange du fromage]_i-erons t_i

The three types of movement: similarities

- Locality:
 - Movement for case only to the nearest case position
 - *John seems [that t_i likes Mary]
 - No Wh-movement out of wh-questions
 - *What_i do you wonder [who_j [t_j likes t_i]]
 - Head movement only to the nearest head
 - Could_i you t_i have won
 - *Have_i you could t_i won

The three types of movement: similarities

- Landing site:
 - The “shape” of every movement is very similar
 - The trace of movement...
 - ...is contained in the sister...
 - ...of the landing site of the movement
 - We call this configuration “c-command”. It is very important in many syntactic phenomena you may see in honours.



The three types of movement: similarities

- The moral: although we use movement as a powerful analytical tool, it is tightly constrained
 - Structure-preservation
 - Locality
 - C-command

Next class

- The big picture: Universal Grammar
- Principles and Parameters
- Argument from poverty of the stimulus