

December 3, 2004

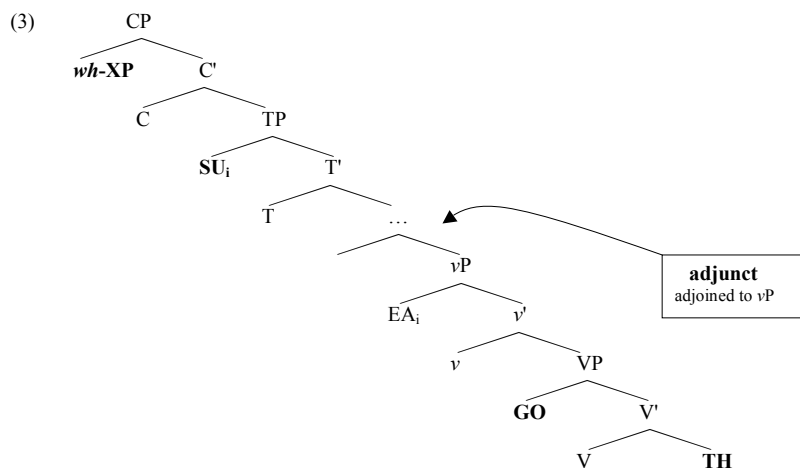
CLASS 23: WH-MOVEMENT

WH-QUESTIONS

Interrogatives (“questions” are not just of the Yes/No-type — another class involves so-called *wh*-question words (*wh*-phrases, *wh*-expressions, and so on). In English, these appear in **sentence- or clause-initial position**. But since their non-interrogative/declarative counterpart must be **base-generated in a lower position**, these expressions are **fronted by movement**.

- (1) a. **Who** ___ will ___ eat a hamburger? [SU; answer: s/he...]
 b. **What** will the students eat ___? [DO; answer: it/him...]
 c. **To whom** did the students complain ___? [IO-PP; answer: to...]
 d. **Who** did the students complain to ___? [IO-DP; answer: him ...]
- (2) a. **When** will the students eat a hamburger ___? [temporal adjunct]
 b. **Where** will the students eat a hamburger ___? [locative adjunct]
 c. **Why** will the students eat a hamburger ___? [purpose adjunct]
 d. **How** will the students eat a hamburger ___? [manner adjunct]

The position of the underscore indicates the **base-generated position for thematic reasons** (in the case of arguments) or other reasons stemming from **non-interrogative counterparts** (as with adjuncts, whatever their exact nature). We thus have ***wh*-movement to SpecCP**, where ***wh*-XP** is the moved interrogative element which can be any of the boldfaced phrases:



WH-MOVEMENT

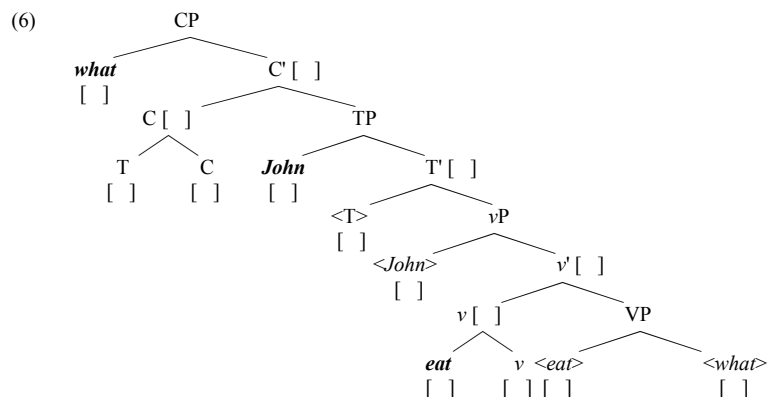
The term ***wh*-movement** then refers to the particular application of **Move** that targets SpecCP — this position we call an **operator position** where the Spec **scopes** over the entire clause. The interrogative operator can be taken as an **interrogative quantifier**, quantifying over the entity, property or proposition it denotes (this is **very rough** — see next semester for more!):

- (4) “for which *x*, *x* a [entity/property/proposition] is it the case that [...] *x*?”

This simplistic formula can be applied to all *wh*-elements/questions and they thus receive a **common semantic interpretation**. They also bear **common syntactic properties** (they move to SpecCP), so that we can **motivate a feature** unique to *wh*-expressions: [**wh**].

Next let’s see how we can implement *wh*-movement syntactically. If an interrogative operator must scope over the clause it makes interrogative and if this position is SpecCP, then **C** (or rather, **interrogative C**) must **bear a feature that forces its specifier be filled** — this is very reminiscent of the EPP (“fill SpecTP”), which we analyzed as [*uD**] because such a specifier must be a D-element (DP). In *wh*-questions the **specifier of CP must be a *wh*-expression**, so let’s call the uninterpretable feature that interrogative C bears [**uwh***]. Since English matrix *wh*-questions involve inversion as well, interrogative C looks like [**C, clause-type: Q, uwh***].

- (5) [_{CP} **what**_[wh] **will**_[present, clause-type: Q*]-C_[clause-type: Q, uwh*] [_{TP} **John** ... **eat** ...]]



WH-ISSUES

- echo questions/*wh*-in situ
 - subject *wh*-questions
- multiple *wh*-questions
 - Superiority Condition
 - *which*-questions
- embedded *wh*-questions
- long-distance *wh*-movement
- relative clauses

John ate what?
Who ate / **did eat a hamburger?*
Why did John eat **what** (*where*)?
 What* did **who eat?
Which hamburger did **which student** eat?
I wonder what John ate.
What did Bill say (that) Mary believed (that) John ate?
 the student **who** ate a hamburger