

24.902 *wh*-movement

What is a *wh*-word?

A word containing the *wh*-morpheme /h^w/ (English).

How we know that *wh*-questions involve movement:

- It leaves a gap.
- (1) a. What did Sue put on the table?
b. How badly did the students treat the professor?
- The position before movement counts for Binding Theory. This phenomenon is often called *reconstruction*:
- (2) a. Which picture of himself did Sue say Bill liked __ best? [BT(A)]
b. [*]Whose photo of Sue_i did she_i especially praise __? [BT(C)]
- In West Ulster Irish English (McCloskey 1998), expressions like *what all*, *who all* etc. can undergo *wh*-movement and strand *all* in the trace position. This is very much like the Japanese numeral quantifier stranding discussed earlier:
- (3) a. What all did you give __ to the kids?
b. What did you give __ all to the kids?
- (4) a. Who all did you send __ to the shops?
b. Who did you send __ all to the shops?
- (5) a. Tell me what all you got __ for Christmas.
b. Tell me what you got __ all for Christmas.

As with Japanese numeral quantifier stranding, it is important to make sure that the *all* is not simply free to occur anywhere. It really does seem to stand next to the trace of the *wh*-word. It cannot occur in random places:

- (6) *Who did he tell __ he was going to resign all.
- (7) a. What did you do __ all after school the day?
b. *What did you do __ after school the day all?
c. *What did you do __ after school all the day.
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Where does the *wh*-phrase move to? Where does the auxiliary verb move to in main-clause questions?

- Probably the auxiliary verb moves to C in questions like *What will Mary buy?*.
 - We next observe that the *wh*-phrase is moving to what appears to be a unique position to the left of C, at the clause periphery.
 - Been there, done that. This looks like German V2 (Verb-second), where we saw Topic moving to the specifier of CP and the finite verb moving to C.
 - In fact, *wh*-movement in German appears to target Spec,CP just like topicalization:
- (8) Welches Buch hat Marie dem Manne __ gegeben?
which book has Mary the-DAT man-DAT given
- Remember:
Specifier: a non-modifier, non-complement position at the periphery of a maximal projection. A language may restrict the number of specifiers in a particular phrase to 1.
 - **So *wh*-phrase moves to specifier of CP. In English, each CP has only one specifier.**
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What's the mechanism by which *wh*-phrases move to specifier of CP?

- An EPP-type property of interrogative C! A feature of C (call it C's *+wh* feature) requires interrogative C to take a *wh*-specifier.
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What's the mechanism by which I moves to C in matrix questions?

- The C of main-clause questions has another property (we might call it a [+I] feature) which requires I to move to it as well.
 - C of embedded questions does not have this feature in standard English, but does in many dialects.
- (9) (*) Mary wanted to know [what did Bill say about her]?
[ok in Belfast English, African American Vernacular English, and other dialects]

In (9), the presence of *her* in the embedded clause, if coreferent with *Mary*, indicates that we are dealing with a true embedded clause — not with a quote, which would have to look like (10):

(10) Mary wanted to know, "What did Bill say about me?"

- Also in Indian English, matrix interrogative C does not necessarily have the I feature.

(11) **Indian English main-clause questions**

- a. What this is made from?
- b. Who you have come to see?

[Trudgill and Hannah (1994) *International English*. London: Arnold. p.132]

Why does *wh*-movement take place in the complements of certain verbs like *wonder* and *ask*?

- A verb like *wonder* subcategorizes for an interrogative C with a +wh feature.
- C with this feature attracts a *wh*-phrase to it. (see above)
- If you tried to merge *wonder* with a CP in which *wh*-movement had not occurred, it would be violating either the subcategorization property of *wonder* or the requirements of this +wh feature.

Why is C null with embedded *wh*-movement? Why can't it be pronounced?

- This seems to be a language-specific phenomenon. In modern Standard English, C must be null when its specifier is non-null. But in other languages and some dialects of English, including older stages of the language, this restriction does not hold:

- (12) a. Ik weet niet *wie* of Jan gezien heeft.
I know not who if John seen has [Dutch]
- b. men shal wel knowe *who that* I am [Middle English]
- c. Je me demande quand *que* Pierre est parti.
I wonder when that Pierre has left [colloquial French]

- The language-specific restriction is called the *Doubly-Filled COMP Filter*.

(13) **Doubly-Filled COMP Filter** [language-specific]
The null variant of C is obligatory when SPEC,CP is non-null.

- □ Note that an auxiliary verb in C is not a "variant of C"

What's a "*wh*-phrase"?

- That is, what besides the *wh*-morpheme undergoes movement to an interrogative C?

- (14) a. Which book did Mary buy?
b. *Which did Mary buy __ book?

There is cross-language variation. For example, Russian does not require pied-piping of NP:

- (15) a. Kakuju knigu Marija kupila?
which book Mary bought
- b. Kakuju Marija kupila __ knigu?

Russian is *more permissive* than English in allowing *wh*-movement of *which*. English requires *pied piping* of the entire DP in which *which* occurs.

He advanced to the council-table:
And, "Please your honours," said he, "I'm able,
"By means of a secret charm, to draw
"All creatures living beneath the sun,
"That creep or swim or fly or run,
"After me so as you never saw!
"And I chiefly use my charm
"On creatures that do people harm,
"The mole and toad and newt and viper;
"And people call me the Pied Piper."
from "The Pied Piper of Hamelin" by Robert Browning
<http://www.indiana.edu/~libresd/etext/piper/text.html>

In other cases, English is the more permissive language. For example, English allows *stranding* of a preposition when its object undergoes *wh*-movement — but Russian does not:

- (16) a. To whom did Mary speak?
b. Who did Mary speak to?
- (17) a. S kem Marija razgovarivala?
with whom Mary spoke
- b. *Kem Marija razgovarivala s?

The phenomenon seen in (16b) is called *preposition stranding*.