Handout 4:
MOVEMENT, continued
August 9, 2018

Review
1) 3 kinds of movement: i. "head-movement"   ii. Subject movement iii. WH-movement

I. Head movement

Head movement Type 1: Verb Movement (V°→T°)

English:

2)   a.   The President often sees Mary.   b. *The President sees often Mary.

French:

3)   a. Le président   voit   souvent Marie.   b.*Le   président   souvent voit   Marie.
        the president   sees   often   Mary   the president   often   sees   Mary

• Where are **adverbs** in the tree? (Are English and French adverbs attached in the same place?)
        English has affix hopping; French has **verb raising** (Pollock 1989)

4)   a.   Le président   voit   [$_{VP}$ souvent [$_{VP}$ <voit>$_V$ Marie].   (V^0→T°)
            the president   sees   [$_{VP}$ often   [$_{VP}$ __$_V$ Mary]

• all French main (finite) verbs raise to T^0 (Englishh main verbs don't)

Head movement Type 2.   T° raising to C°. (T° → C°)

5)   a.   [He will tell the truth]
      b.   **Will** [he ___ tell the truth   ] ?   (T° → C°)

• How do we know will statts in T° and raises to C°?:

6)   *Will [he can tell the truth] ?   (T° → C°)

7)   a.   Yeltsin can **go**.   (*going / *went / *gone / *goes)
      b.   **Can** [Yeltsin ___ **go**]?   (*going / *went / *gone / *goes)   (T° → C°)

• So we can see that modals raise out of TP (across the subject).

→ Some cool evidence that this movement leaves a GAP or TRACE:
8)   a.   **I have** called all the candidates.
      b.   **I've** called all the candidates.
9)   a.   **I** should **have** called all the candidates.
      b.   Should [**I** ___ **have** called all the candidates] ?   (T° → C°)
      c.   *Should [**I've** called all the candidates] ?
10) a.   **We** will **have** finished by 4:00.
      b.   Will [**we** ___ **have** finished by 4:00] ?   (T° → C°)
      c.   *Will [**we've** finished by 4:00] ?

• Remember, English main verbs do NOT move to T! So if we only allow elements in T° to raise to C°, then we *predict* that English main verbs *cannot*: (true!)

11) a. Obama **likes** politics
    b. The students **read** lots of political manifestos/.

12) a. *__Likes__ Obama __T [vP __ politics] ?   *(V⁰→T⁰ → C⁰)
    b. *__Read__ the students __T [vP __ lots of political manifestos]?   *(V⁰→T⁰ → C⁰)

12) a. *__Likes__ Obama $\_\_$T [vP $\_\_$ politics] ?   *($V^0 \to T^0 \to C^0$)
    b. *__Read__ the students $\_\_$T [vP $\_\_$ lots of political manifestos]?   *($V^0 \to T^0 \to C^0$)

• But to form a question we MUST have a T^0 element to move to C^0, right? So, we create one when needed! (*do*):

13) a. **Does** Obama <does>T [like politics] ?   ($T^o \to C^o$)
    b. **Do** the students <do>T [read lots of political manifestos].   ($T^o \to C^o$)

• And we predict that French verbs can raise to C^o:

14) a. Vous [**parlez** [_____ Anglais]]   ($V^0 \to T^o$)
        you   speak   English

    b. **Parlez**- [vous   _____   [_____ Anglais]] ?   ($V^0 \to T^o \to C^o$)
        speak   you   English

When does Engoish utilize "do-support" to fill T? In 3 instances:

i. to move $T^o \to C^o$ in questions (when necessary!)

15) a. John should [vP sing]   → a'. **Should** John <should>T [vP sing] ?
    b. Aliens can [vP understand syntax]   → b'. **Can** aliens <can>T [vP understand syntax] ?
    c. John has [vP gone]   → c'. **Has** John <has>T [vP gone] ?

16) a. John __T [vP sings]   → a'. **Does** John <does>T [vP sing] ?
    b. Aliens __T [vP understands syntax]   → b'. **Do** aliens <do>T [vP understand syntax] ?
    c. John __T [vP went]   → c'. **Did** John <did>T [vP go] ?

ii. in negation (when necessary!)

17) a. John should [vP sing]   → a'. John **should**T **not** [vP sing].
    b. Aliens can [vP understand syntax]   → b'. Aliens **can**T **not** [vP understand syntax].
    c. John has [vP gone]   → c'. John **has**T **not** [vP gone].

18) a. John __T [vP sings]   → a'. John **does**T **not** [vP sing].
    b. Aliens __T [vP understands syntax]   → b'. Aliens **do**T **not** [vP understand syntax].
    c. John __T [vP went]   → c'. John **did**T **not** [vP go].

iii. in emphatic statements (when necessary!)

19) a. John should [vP sing]   → a'. John **SHOULD**T [vP sing] !
    b. Aliens can [vP understand syntax]   → b'. Aliens **CAN**T [vP understand syntax] !
    c. John has [vP gone]   → c'. John **HAS**T [vP gone] !

20) a. John __T [vP sings]   → a'. John **DOES**T [vP sing].
    b. Aliens __T [vP understands syntax]   → b'. Aliens **DO**T [vP understand syntax].
    c. John __T [vP went]   → c'. John **DID**T [vP go].

Some guiding questions about movement:
• how do we know there is movement?
• what moves?   • how much of it is universal?
• where does it move to?   • why does it happen?
• where does it move from?

Movement Type 2. "Subject movement"

• When is a subject moved to SpecTP? (trick question…) _____

• Where does a subject move to SpecT from? Give examples or construction types:

  i. from Spec*v*P _____

  ii. from object position (complement of V^0) _____ , _____

  iii. from a subordinate clause (or a small clause) _____

21) a. [SpecTP____] will [vP **John** sing the blues]. → a'. **John** will [vP < ____John > sing the blues].

   b. [SpecTP____] __T [vP **John** sings the blues]. → b. **John** __T [vP < ____John > sings the blues].

22) a. [SpecTP____] was_T [vP filmed **John** in class].   "passive:"

    → a'. **John** was [vP filmed < ____John > in class].
                    (agent unstated)

    b. [SpecTP____] was_T [vP destroyed **John** by the new theory].   "passive"

      → b'. **John** was_T [vP destroyed < ____John > by the new theory].
                        (agent in *by*-phrase)

23) a. [SpecTP____] __T [vP seems [vP **John** to be late].   "raising to subject"

      → a'. **John** __T [seems [vP < ____John > to be late]].

    b. [SpecTP____] __T [vP seems [vP **John** sad].   "raising to subject"

      → b'. **John** __T [seems [vP < ____John > sad]].

24) a. [SpecTP____] __T [vP appeared **a man**].   "unaccuastive"

      → a'. **A man** __T [vP appeared < ____a man >].

    b. [SpecTP____] __T [vP appeared **a man**].

      → b'. **John** was_T [vP destroyed < ____John > by the new theory]. (agent in *by*-phrase)

Movement Type 3. WH-movement

25) WH-words: *where, why, when, which, what, who, how ...*

      • What do WH-phrases replace? (constituents!)

Provide the *categories* replaced by the following WH phrases: (there can be more than 1!)

what _____   *when* _____   *where* _____   *why* _____

who(m) _____   *how* _____   *how many* _____   *which* _____

   • Where do they originate?
   • How do we know where they originate?
   • **Where does the WH phrase move to?**
   • **Is WH-movement obligatory?**

26) a. What did John say __ ?
    b. *John said what? (cf. "John said WHAT?" = 'echo question')

27) a.   Putin is chasing Yeltsin.   b. Who is Putin chasing?

28) Putin is chasing…   --Yeltsin
                             --the alien invaders
                             --who(m)
                             --*Ø

29) *Putin is chasing.

30) a.   Putin is chasing grgrhgnfyhbb.   B. Lebed is chasing **WHO**? ("echo question")

• In WH-questions, the WH-phrase *must* move to the beginning of the sentence.

31)   a. **What** are you reading ____ ?
        b **Where** do you live ___ ?
        c **Why** are you laughing ___ ?
        d **Who** did you know ___ at the party ?
        e **When** does the play begin ___ ?

• The answer to the question tells us where it moves from. Answers to (31):

32)   a. I am reading <u>a book</u>.   (direct object)
        b I live <u>in Moscow</u>.   (PP modifier adjoined to V')
        c I am laughing <u>for no reason</u> / <u>because John is funny</u> .   (PP or CP adjuncts)
        d I knew <u>Mary and Bob</u> at the party .   (direct object)
        e The play begins <u>at 7:00 pm</u> ?   (PP modifier adjoined to V')

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33) Boris Yeltsin is going to the new hospital tomorrow for an operation.

34) a.   **Where** is Boris Yeltsin going ___ tomorrow?
    b.   **Why** is Boris Yeltsin going to the new hospital ___?
    c.   **When** is Boris Yeltsin going to the new hospital ___?
    d.   [**Which** hospital] is Boris Yeltsin going to ___?
    e.   **Who** ___ is going to the new hospital tomorrow?
    f.   **How** is Boris Yeltsin going to the new hospital tomorrow ___?
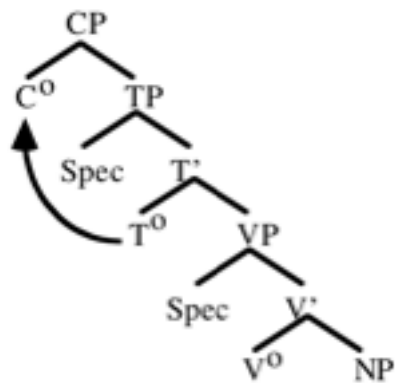
• Semantically, WH-phrases are understood as Quantifiers:

    "Who left?"   = For which X, X a human, did X leave
    "Where is the cake?" = For which X, X a place, is the cake in place X?   etc.
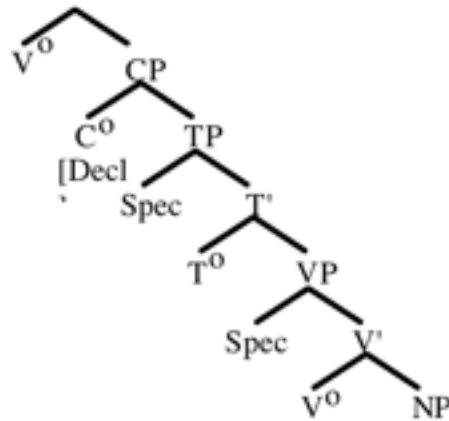

WH-questions move a WH phrase (XP) to SpecQP

WH-questions ALSO involve $T^0 \rightarrow Q^0$ (like Y/N questions)

35) Schematic form of QP (often called CP) in questions and non-questions
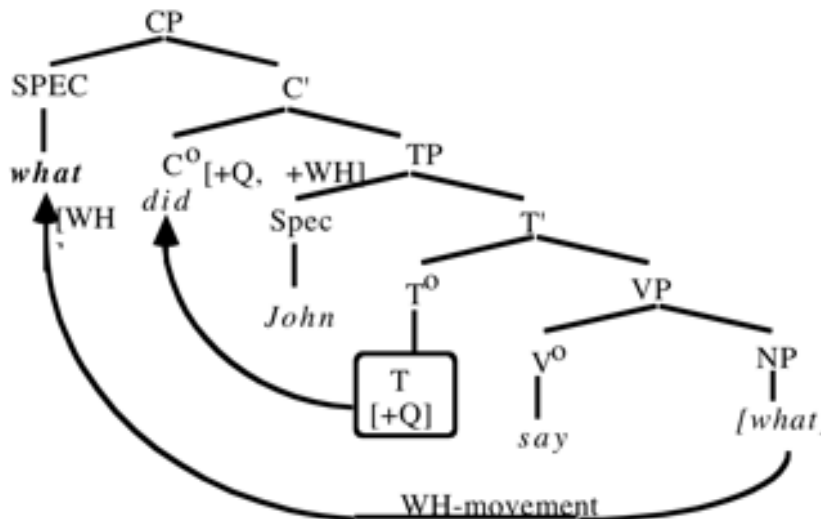
    a. YES/NO Question: b. Embedded (subordinate) clause:

36) Structure of a simple WH-question:

Indirect Questions (= "embedded" questions)

WH-movement in the subordinate/embedded clause: (= "indirect questions")

37) a. *John wonders [that he left].   (*wonder* selects a [+WH] CP)
     b. John wonders [**why** he left __]
     c. John knows [**where** Mary lives]
     d. John isn't sure [**when** the game begins]
     e. Yeltsin asked [**when** Gorby fell __]

(37) involves WH-movement into SpecCP (<u>Practice</u>: draw trees for (37)b-e)

       NB: there is no $T^0 \rightarrow C^0$ in embedded questions (so no dummies!)

38) b. *John wonders [**why** did he leave __]
     c. *John knows [**where** does Mary live]
     d. *John isn't sure [**when** does the game begin]