More movement

<u>Notes:</u>

- PS5 up soon, due November 8
- Reading for next week on IVLE

1 Japanese *wh*-questions

Japanese is a *wh*-in-situ language: *wh*-phrases do not need to move in *wh*-questions, unlike in English or German. Some data here from Huang and Ochi (2004); Richards (2008).

(1)   Kare-wa *nani*-o   katta   no?
         he-TOP   what-ACC bought Q

         'What did he buy ___?'

(2)   Taroo-wa [Hanako-ga *nani*-o   katta   to] omotta no?
         Taro-TOP   Hanako-NOM what-ACC bought that thought Q

         'What did Taro think that Hanako bought ___?'

Japanese *wh*-arguments are not sensitive to islands in Japanese, suggesting that there is no movement involved:

(3)   **Complex NP island (relative clause):**

         Kimi-wa [Hanako-ga *dare*-ni   ageta hon]-o   yonda no?
         you-TOP   Hanako-NOM who-DAT gave book-ACC read   Q

         'Who did you read [the book that Hanako gave to ___]?'

(4)   **Adjunct island:**

         John-wa [uchi-de *dono* *hon*-o   yonde kara] dekaketa no?
         John-TOP home-at which book-ACC read   after went.out Q

         'Which book did John go out [after he read ___ at home]?'

Now consider *wh-the-hell* questions, which reflect the speaker's impatience or annoyedness. The part of *the hell* is played by *ittai* in Japanese.

(5)   Kare-wa *ittai nani*-o   katta   no?
         he-TOP   ITTAI what-ACC bought Q

         'What the hell did he buy ___?'

(6)   Taro-wa [Hanako-ga kimi-ni *ittai nani*-o   okutta to] omotta no?
         Taro-TOP Hanako-NOM you-DAT ITTAI what-ACC sent   that thought Q

         'What the hell did Taro think that Hanako sent ___ to you?'

Ittai-wh is island-sensitive, in contrast to regular *wh*-arguments (Hoji, 1985; Pesetsky, 1987; Hagstrom, 1998; Huang and Ochi, 2004):

(7) **Complex NP island (relative clause):**

　　* Kimi-wa [Hanako-ga *ittai dare*-ni　ageta hon]-o　　yonda no?
　　　you-TOP　Hanako-NOM ITTAI who-DAT gave　book-ACC read　　Q
　　　Intended: 'Who the hell did you read [the book that Hanako gave to ___]?'

(8) **Adjunct island:**

　　* John-wa [uchi-de *ittai　nani*-o　　　yonde kara] dekaketa no?
　　　John-TOP home-at ITTAI what-ACC read　　after　went.out Q
　　　'What the hell did John go out [after he read ___ at home]?'

Fun fact: Mandarin Chinese has a similar pattern, with *daodi* making *wh*-arguments island-sensitive. See Huang and Ochi (2004).

2　Successive cyclic movement

Recall that *wh*-movement is unbounded:

(9)　What did he say that he read ___?

(10)　Two possible (simplified) derivations for (9):
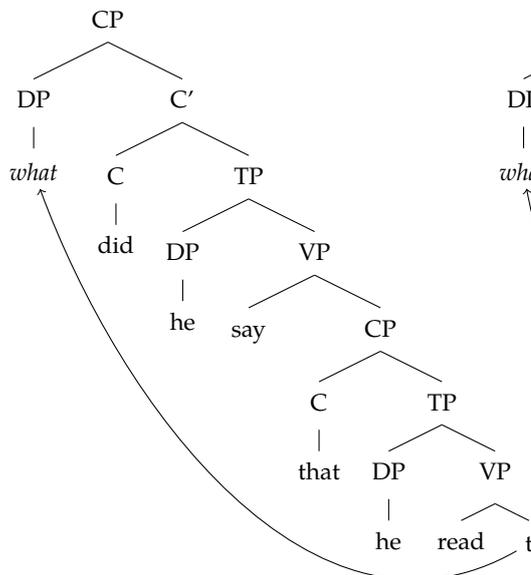
　　a. "One fell swoop"　　　　　　　b. "Successive cyclic movement"
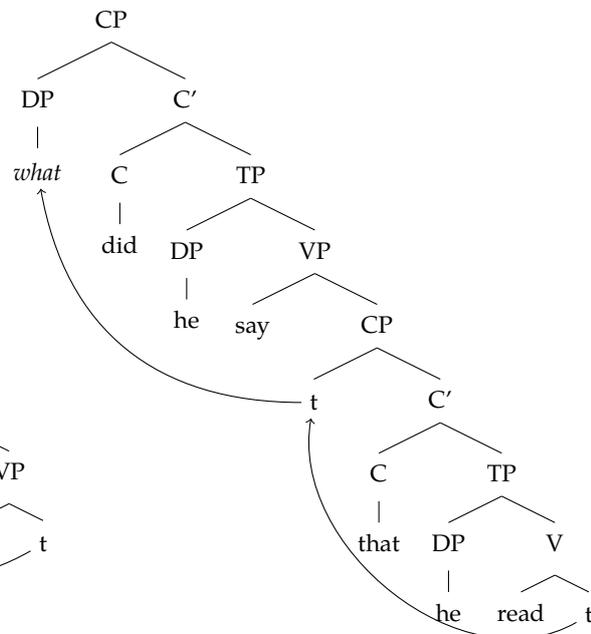
2.1 6 arguments for successive cyclic movement through intermediate CP edges[1]

1. Quantifier float/stranding in West Ulster English:

   (11) **West Ulster English (McCloskey, 2000):**

       a. *What* **all** do you think (that) he'll say (that) we should buy ___?

       b. *What* do you think **all** (that) he'll say (that) we should buy ___?

       c. *What* do you think (that) he'll say **all** (that) we should buy ___?

       d. *What* do you think (that) he'll say (that) we should buy **all**?

2. Condition A reconstruction: (data from Norvin Richards notes)

   Recall the locality conditions on Condition A:

   (12)   a.   Mary$_j$ bought a picture of herself$_j$.

         b.   * John$_i$ said [$_{CP}$ that Mary$_j$ bought a picture of himself$_i$].

   Consider a reflexive pied-piped in the *wh*-phrase:

   (13)   [Which picture of herself$_j$] did Mary$_j$ buy?

   (14)   [Which picture of herself$_j$] did John$_i$ say that Mary$_j$ bought?

   (15)   [Which picture of himself$_i$] did John$_i$ say that Mary$_j$ bought?

   What do we learn?

3. Pronunciation of intermediate positions:

   (16) **Child English (exx Crain and Lillo-Martin, 1999, p. 238):**

       a. *What* do you think *what* Cookie Monster eats? (age 5;0)

       b. *Who* do you think *who* Grover wants to hug? (age 4;9)

       c. *What* do you think *what*'s in that box? (3;3)

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[1]Based on a handout by Jason Merchant.

4. <u>Partial *wh*-movement</u>: (aka *wh*-scope marking, *wh*-expletives)

(17) **German:** (see McDaniel, 1988)

Was glaubst du, mit *wem* er gesprochen hat?
what think you with whom he spoken has

'With whom do you think that he spoke?'

(18) **Hungarian (Horvath, 1997):**

Mit gondolsz, hogy *kit* látott János?
what.ᴀᴄᴄ you.think that who.ᴀᴄᴄ saw.3 sɢ J.ɴᴏᴍ

'Who do you think that Janos saw?'

(19) **Child English:** (from Jason Merchant: age 4;3)

What your [t]hink *who* made [t]his? (with genitive matrix subject)

5. <u>Successive inversion</u>:

(20) **Belfast English:**

a. Who did John hope [would he see ___]?

b. What did Mary claim [did they steal ___]?

c. I wonder what [did John think [would he get ___]]?

d. Who did John say [did Mary claim [had John feared [would Bill attack ___]]]?

6. <u>*Wh*-agreement on C</u>:

(21) **Irish declaratives:** (all Irish data from McCloskey 1979)

a. Deir sé [go dtuigeann sé an scéal].
says he C understands he the story

'He says that he understands the story.'

b. Dúirt sé [gur bhuail tú é].
said he C struck you him

'He said that you struck him.'

(22) **Irish *wh*-questions:**

a. Cén fear a^L thiteann go talamh
which man C falls to earth

'Which man falls to earth?'

b. Cé a^L bhuail tú?
who C struck you

'Who did you hit?'

c. Cé a^L mheas tú a^L chonaic tú?
who C thought you C saw you

'Who did you think that you saw?'

2.2 Phases

Chomsky (2000, 2001): Syntactic structure is built in "chunks," called *phases*.

- For something to move long-distance, it must move to the edge of each phase.

- CPs are phases, forcing successive cyclic movement through CP edges, as we saw above.

- *v*P are phases.[2] We therefore might expect successive-cyclic movement to occur through *v*P edges too.

Dinka is a Nilotic language of South Sudan (Van Urk and Richards, 2015). It is V2: a constituent is in initial position, followed by the auxiliary, with the main verb lower down.

There's a lot to say about *wh*-movement in Dinka, but today we will focus on *the immediately preverbal position*.

(23) **Dinka immediately preverbal position must be filled:**

a. ɣèn cí **Ayén** yiɛ̠́n kitàp.
    I   PRF Ayen give book
    'I gave Ayen a book.'

b. ɣèn cí **kitàp** yiɛ̠́n Ayén.
    I   PRF book give Ayen
    'I gave Ayen a book.'

c. * ɣèn cí ___ yiɛ̠́n Ayén kitàp.
    I   PRF   give Ayén book

d. * ɣèn cí ___ yiɛ̠́n kitàp Ayén.
    I   PRF   give book Ayen

(24) **Direct and indirect object extraction requires empty preverbal position:**

a. *Yeŋà* cíi   mòc ___ yiɛ̠́n kitàp?
    who PRF.NS man   give book
    'Who did the man give the book to?'

b. *Yeŋɔ̠́* cíi   mòc ___ yiɛ̠́n Ayén?
    what PRF.NS man   give Ayen
    'What did the man give to Ayen?'

c. * *Yeŋà* cíi   mòc **kitàp** yiɛ̠́n?
    who PRF.NS man book give

d. * *Yeŋɔ̠́* cíi   mòc **Ayén** yiɛ̠́n?
    what PRF.NS man Ayen give

Similarly, long-distance extraction requires intermediate Spec,CP (clause-initial positions) to be empty. (Embedded clauses are also V2.)

(25) **Subject extraction requires Spec,CP but not preverbal position to be empty:**

Yeŋà cúkkú luéel, [CP ___ cíi   [*v*P **kitàp** ɣòoc?
who PRF.1pl say   PRF.NS   book buy
'Who did we say bought a book?'

The immediately preverbal position is Spec,*v*P. The subject is generated above this position. Extraction of non-subject arguments must move through Spec,*v*P.

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[2]Originally, it was claimed that unaccusative and passive *v*P are not phases, but I assume here that all *v*P are phases.

(26) **Extraction of plurals triggers obligatory *ke*-stranding:**

    a. *Yeŋà* cíi   Bôl   [$_{vP}$ ___ tíŋ?
       who PRF.NS Bol.GEN   see

       'Who did Bol see?'

    b. *Yèyĵŋa* cíi   Bôl   [$_{vP}$ ***(ké)** tíŋ?
       who.PL PRF.NS Bol.GEN   PL see

       'Who all did Bol see?'

(27) **Long-distance object *wh*-movement ⇒ *ke* in each intermediate *v*P edge:**

    a. *Yeŋà* yé   [$_{vP}$ ___ tàak [$_{CP}$ cíi   Bôl   [$_{vP}$ ___ tíŋ?
       who IMPF.2sg   think   PRF.NS Bol.GEN   see

       'Who do you think Bol saw?'

    b. *Yèyĵŋa* yé   [$_{vP}$ ***(ké)** tàak [$_{CP}$ cíi   Bôl   [$_{vP}$ ***(ké)** tíŋ?
       who.PL IMPF.2sg   PL think   PRF.NS Bol.GEN   PL see

       'Who all do you think Bol saw?'

(28) **Long-distance subject *wh*-movement ⇒ *ke* at higher but not lower *v*P edge:**

    [*Ye kɔ̂ɔc-kó*]   yùkkù kê tàak, [$_{CP}$ càm [$_{vP}$ ___ cuı́n?
    [Q people-which] IMPF.1pl PL think   eat   food

    'Which people do we think are eating food?'   (Coppe van Urk, p.c.)

Dinka *ké* shows the "footprint" of movement of plurals at the *v*P edge (cf West Ulster English *all*-stranding).

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