

Long-distance movement

1 Successive cyclic movement

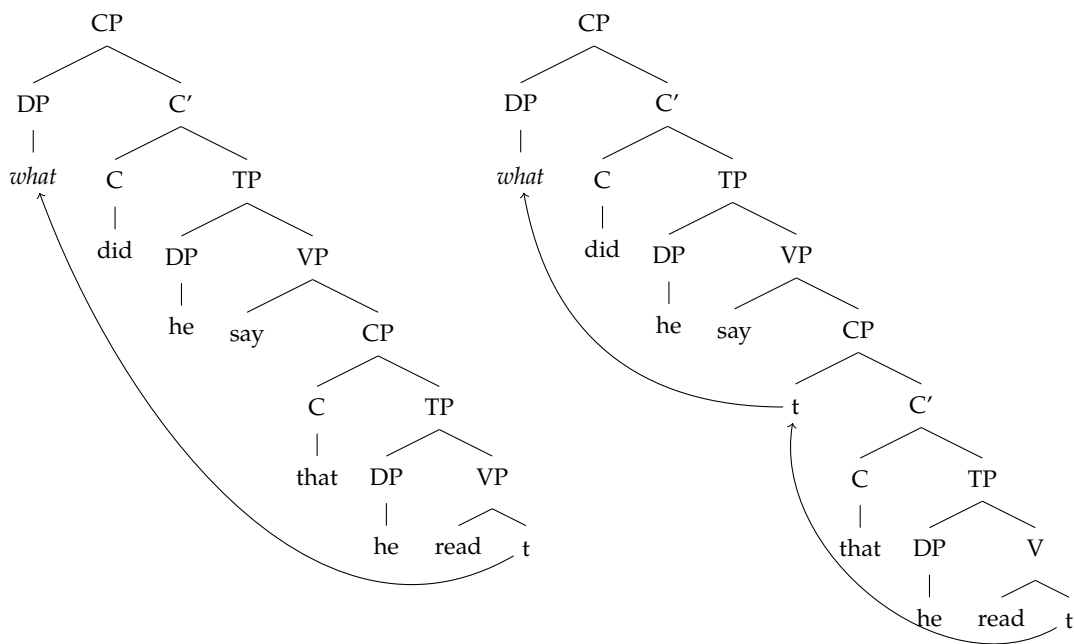
Recall that *wh*-movement is unbounded:

(1) [_{CP} *What* did he say [_{CP} that he read ___]]?

(2) Two possible (simplified) derivations for (1):

a. "One fell swoop"

b. "Successive cyclic movement"



2 6 arguments for successive cyclic movement through intermediate CP edges¹

1. Quantifier float/stranding in West Ulster English (McCloskey, 2000):

(3) **West Ulster English:**

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

¹Based on a handout by Jason Merchant.

2. Pronunciation of intermediate positions:

- (4) **Child English:** (exx Crain and Lillo-Martin, 1999: 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? (age 3;3)

3. Condition A reconstruction (Barss, 1986):

Recall the locality conditions on Condition A:

- (5) 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: (exx from Norvin Richards notes)

- (6) a. [Which picture of herself_j] did Mary_j buy ___?
b. [Which picture of herself_j] did John_i say that Mary_j bought ___?
c. [Which picture of himself_i] did John_i say that Mary_j bought ___?

4. Partial *wh*-movement: (aka *wh*-scope marking, *wh*-expletives)

- (7) **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?'

- (8) **Hungarian:** (Horvath, 1997)

Mit gondolsz, hogy *kit* látott János?
what.ACC you.think that who.ACC saw.3SG J.NOM
'Who do you think that Janos saw?'

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

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

5. Successive inversion:

(10) **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. Wh-agreement on C:

(11) **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.'

(12) **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?'

3 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.

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

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*, which seems to show its own V2-like requirement.

(13) **Dinka immediately preverbal position must be filled by some non-subject:**

- | | |
|---|---|
| <p>a. $\gamma\grave{e}n$ cí [Ayén $\gamma\grave{i}\grave{e}n$ kitàp.
 I PRF Ayen give book
 'I gave Ayen a book.'</p> | <p>b. $\gamma\grave{e}n$ cí [kitàp $\gamma\grave{i}\grave{e}n$ Ayén.
 I PRF book give Ayen
 'I gave Ayen a book.'</p> |
| <p>a'. *$\gamma\grave{e}n$ cí [___ $\gamma\grave{i}\grave{e}n$ Ayén kitàp.
 I PRF give Ayén book</p> | <p>b'. *$\gamma\grave{e}n$ cí [___ $\gamma\grave{i}\grave{e}n$ kitàp Ayén.
 I PRF give book Ayen</p> |
| <p>a''. *$\gamma\grave{e}n$ cí [Ayén kitàp $\gamma\grave{i}\grave{e}n$.
 I PRF Ayén book give</p> | <p>b''. *$\gamma\grave{e}n$ cí [kitàp Ayén $\gamma\grave{i}\grave{e}n$.
 I PRF book Ayen give</p> |

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

- | | |
|---|--|
| <p>a. $\text{Yè}\grave{n}\grave{a}$ cí mòc [___ $\gamma\grave{i}\grave{e}n$ kitàp?
 who PRF.NS man give book
 'Who did the man give the book to?'</p> | <p>b. $\text{Yè}\grave{n}\acute{o}$ cí mòc [___ $\gamma\grave{i}\grave{e}n$ Ayén?
 what PRF.NS man give Ayen
 'What did the man give to Ayen?'</p> |
| <p>a'. *$\text{Yè}\grave{n}\grave{a}$ cí mòc [kitàp $\gamma\grave{i}\grave{e}n$?
 who PRF.NS man book give</p> | <p>b'. *$\text{Yè}\grave{n}\acute{o}$ cí mòc [Ayén $\gamma\grave{i}\grave{e}n$?
 what PRF.NS man Ayen give</p> |

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

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

- $\text{Yè}\grave{n}\grave{a}$ cúkkú luéel, [_{CP} ___ cí [_{VP} kitàp $\gamma\grave{o}\acute{o}c$?
 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,vP.

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

- | | |
|---|--|
| a. <i>Yeyà cí Bòl</i> [_{vP} ___ <i>tíŋ?</i>
who PRF.NS BÒL.GEN see
‘Who did Bol see?’ | b. <i>Yèyíŋa cí Bòl</i> [_{vP} *(ké) <i>tíŋ?</i>
who.PL PRF.NS BÒL.GEN PL see
‘Who all did Bol see?’ |
|---|--|

(17) **Long-distance object *wh*-movement ⇒ *ke* in each intermediate vP edge:**

- | | |
|---|--|
| a. <i>Yeyà yé</i> [_{vP} ___ <i>tàak</i> [_{CP} <i>cí Bòl</i> [_{vP} ___ <i>tíŋ?</i>
who IMPF.2sg think PRF.NS BÒL.GEN see
‘Who do you think Bol saw?’ | b. <i>Yèyíŋa yé</i> [_{vP} *(ké) <i>tàak</i> [_{CP} <i>cí Bòl</i> [_{vP} *(ké) <i>tíŋ?</i>
who.PL IMPF.2sg PL think PRF.NS BÒL.GEN PL see
‘Who all do you think Bol saw?’ |
|---|--|

(18) **Long-distance subject *wh*-movement ⇒ *ke* at higher but not lower vP edge:**

- | | |
|--|-----------------------|
| [<i>Ye kòc-kó</i>] <i>yùkkù kè</i> <i>tàak</i> , [_{CP} <i>càm</i> [_{vP} ___ <i>cuín?</i>
[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 vP edge (cf West Ulster English *all*-stranding).

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