Long-distance movement

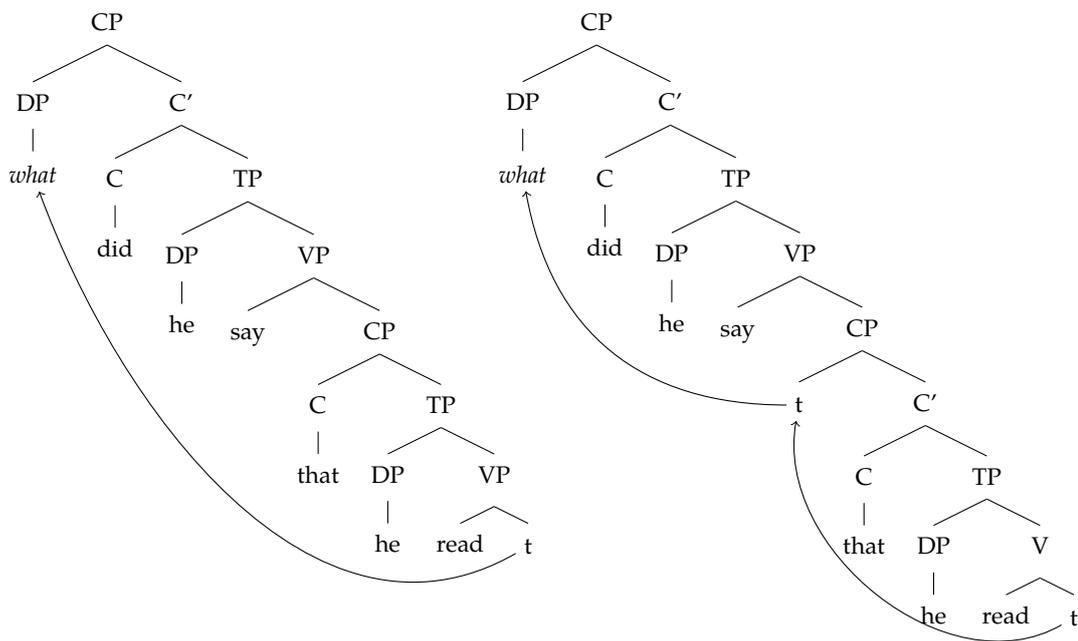## 1 Successive cyclic movement

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 edges[1]

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

    (3) **West Ulster English:**

        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 **<u>all</u>**?

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[1]Based on a handout by Jason Merchant.

2. <u>Pronunciation of intermediate positions:</u>

(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. <u>Condition A reconstruction (Barss, 1986):</u>

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. <u>Partial *wh*-movement:</u> (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. <u>Successive inversion:</u>

(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.

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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.

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:**

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

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

a'. * ɣèn cí [___ yiɛ̤́n Ayén kitàp.
I PRF give Ayén book

b'. * ɣèn cí [___ yiɛ̤́n kitàp Ayén.
I PRF give book Ayen

a''. * ɣén cí [**Ayén kitàp** yiɛ̤́n.
I PRF Ayén book give

b''. * ɣèn cí [**kitàp Ayén** yiɛ̤́n.
I PRF book Ayen give

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

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

b. *Yeŋɔ̤́* cíi mòc [___ yiɛ̤́n Ayén?
what PRF.NS man give Ayen
'What did the man give to Ayen?'

a'. * *Yeŋà* cíi mòc [**kitàp** yiɛ̤́n?
who PRF.NS man book give

b'. * *Yeŋɔ̤́* cíi mòc [**Ayén** yiɛ̤́n?
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.)

(15) **Subject extraction requires Spec,CP but not preverbal position to be empty:**
Yeŋà cúkkú luéel, [$_{CP}$ ___ cíi [$_{vP}$ **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.

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

a. *Yeŋà* cíi   Bôl   [*v*P ___ tíŋ?
   who prf.ns Bol.gen   see
   'Who did Bol see?'

b. *Yèyûŋa* cíi   Bôl   [*v*P ***(ké)** tíŋ?
   who.pl prf.ns Bol.gen   pl see
   'Who all did Bol see?'

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

a. *Yeŋà* yé̠   [*v*P ___ tàak [CP cíi   Bôl   [*v*P ___ tíŋ?
   who impf.2sg   think   prf.ns Bol.gen   see
   'Who do you think Bol saw?'

b. *Yèyûŋa* yé̠   [*v*P ***(ké)** tàak [CP cíi   Bôl   [*v*P ***(ké)** tíŋ?
   who.pl impf.2sg   pl think   prf.ns Bol.gen   pl see
   'Who all do you think Bol saw?'

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

[*Ye kɔ̀ɔc-kó*]   yù̠kkù̠   **kê** tàak, [CP càm [*v*P ___ cuí̠n?
[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).

References

Barss, Andrew. 1986. Chains and anaphoric dependence. Doctoral Dissertation, Massachusetts Institute of Technology.

Chomsky, Noam. 2000. Minimalist inquiries: the framework. In *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, ed. Roger Martin, David Michaels, and Juan Uriagereka, 89–156. MIT Press.

Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A life in language*, ed. Michael Kenstowicz, 1–52. MIT Press.

Crain, Stephen, and Diane Lillo-Martin. 1999. *An introduction to linguistic theory and language acquisition*. Blackwell.

Horvath, Julia. 1997. The status of "wh-expletives" and the partial wh-movement construction of Hungarian. *Natural Language & Linguistic Theory* 15:509–572.

McCloskey, James. 1979. *Transformational syntax and model theoretic semantics: A case study in Modern Irish*. Dordrecht: Reidel.

McCloskey, James. 2000. Quantifier float and *wh*-movement in an Irish English. *Linguistic Inquiry* 31:57–84.

McDaniel, Dana. 1988. Partial and multiple *wh*-movement. *Natural Language & Linguistic Theory* 7:565–604.

van Urk, Coppe, and Norvin Richards. 2015. Two components of long-distance extraction: Successive cyclicity in Dinka. *Linguistic Inquiry* 46:113–155.