

WH-MOVEMENT: ISLANDS, BARRIERS AND SUCCESSIVE-CYCLICITY

Part II. CED, ECP

[The handout incorporates a lot of material included in David Pesetsky's previous handouts on the topic.]

1. HUANG'S (1982) CONDITION ON EXTRACTION DOMAINS

(1) **CED**

A phrase A may be extracted out of a domain B only if B is properly governed

properly governed: governed by a lexical head
extraction out of complements allowed / out of adjuncts and subjects not

Facts subsumed under CED (Huang 1982 drawing on Kayne 1981):

Subject-Object asymmetries in extraction
Adjunct – Object asymmetries in extraction

Generalizing: Non-complement (subject, adjunct) – complement (object) asymmetries in extraction.

Illustrating:

Subjects: Extraction from subjects illformed / extraction from objects wellformed:

case 1: subject DPs

- (2) a. *Who did [_{DP} pictures of _] please you?
b. Who did you see [_{DP} pictures of _]

case 2: subject CPs

- (3) *John, who [[that Sue spoke to __] surprises me]

case 3: subject PPs (in locative inversion)

- (4) *the room, which [[in the middle of __] sat a frog]

Adjuncts

case 1: adjuncts in CP/TP/VP

- (5) a. ??*The Minimalist Program*, which [Mary left [before she could finish ___]
b. ??*The Minimalist Program*, which [Mary bought [so that she could read ___ on the plane]
c. *What did John arrive yesterday [sad about ___]?
d. * Who did John come back [before I had a chance to talk to ___]?

case 2: adjuncts in DPs

- (6) a. **The Minimalist Program*, which I regret
[your departure [before you could finish ___]]
b. **The Minimalist Program*, which we witnessed
[a purchase [so that someone could read on the plane]]
c. *Which table do you like [the books on ___]?

vs.

- (7) Which city did you witness [the destruction of ___]?

case 3: relative clause modifiers of DPs.

- (8) a. ??*The Minimalist Program*, which I'd love to meet [the person [who wrote ___]]
b. **The Minimalist Program*, which I'd love to meet
[the person [who you talked to about ___]
c. *Who do you like [books [that criticize _]?]

Notes:

- This does not include the *wh*-island condition.
- This presumes that extraction from a complement CP does not require an intermediate landing site in Spec,CP.

2. SUBJACENCY ([CP OR TP] + DP) VS. CED:

1. The subjacency idea:

- Do not cross two among CP/TP or DP in a single move. Therefore, LD movement must stop in available landing sites. Landing site for A-bar movement is SPEC,CP.
- This does not get complement/non-complement asymmetry.

2. The CED idea:

- Do not cross a non-complement node in a move.

b. This does not get the *wh*-island condition.

3. Overlaps:

- a. Rel clauses: subjacency and CED
- b. subject DPs: subjacency and CED

4. Non-overlaps:

- a. subject sentences: only CED (unless it is stipulated that CP is dominated by DP)
- b. adjunct CPs: only CED
- c. *fact*-that islands: only subjacency
- d. *wh* islands: only subjacency

3. A COMMON VIEW IN THE EIGHTIES: SUBJACENCY AND CED AFFECT ONLY OVERT MOVEMENT

1. Evidence that wh-islands do not apply at LF (Baker 1970, discussed in Huang 1982: 495):

- (9) a. *What do you remember where I bought _?
- b. Who remembered where we bought what?

2. Evidence that the Sentential Subject Constraint does not apply at LF (Huang 1982: 495-496):

- (10) a. *Who did he say that [for Bill to marry _] was a surprise?
- b. ?Who said that [for Bill to marry who] was a surprise?

Note:

No significant contrast between the following:

- (11) a. *Who did [that Bill married _] surprise you?
- b. *Who said that [that Bill married who] surprised you?

The ungrammaticality of (11b) is linked to the ungrammaticality of (12), which does not display movement:

- (12) *He said that that Bill married Ann was a surprise

3. Evidence that the Subject Condition does not apply at LF (Huang 1982: 497):

- (13) a. *Who do you think that [pictures of _] would please John?
- b. Who thinks that [pictures of who] would please John?

4. Evidence that the bridge vs. non-bridge distinction does not apply at LF (p.497):

- (14) a. ??Who did John whisper that he saw _?
b. Who whispered that he saw who?

5. Evidence that the Adjunct Condition does not apply at LF (p. 497, 499, 503):

- (15) a. *Who did John come back [before I had a chance to talk to_]?
b. Who came back [before I had a chance to talk to whom]?
- (16) a. *Which class did you fall asleep [during _]?
b. Who fell asleep [during which class]?
- (17) a. *Which table do you like [the books on_]?
b. Who likes [the books on which table _]?
- (18) a. *Who did Mary cry [after John hit _]?
b. Who cried [after John hit who]?

6. Evidence that the Complex NP Constraint does not apply at LF (p. 492):

- (19) a. *In order to foil this plot, we must find out which senator the agent has [DP but_s [CP that are trained to kill _]
b. In order to foil this plot, we must find out which agent has [DP but_s [CP that are trained to kill which senator]
- (20) a. *Who do you like [DP books [CP that criticize _] ?
b. Who likes [DP books [CP that criticize who] ?

4. The ECP:

ECP phenomena

1. *That-t effects*

Original motivation for the ECP (empty category principle): “that-trace” effects:

- (21) a. *Who do you think [that [_ saw John] ?
b. Who do you think [that [John saw _] ?
- (22) a. *Who do you wonder [how [_ bought the book] ?
b. ??What did you wonder [how [he bought t]

Subjacency had nothing to say about this asymmetry (the number of nodes crossed in subject movement and object movement are exactly the same).

- (23) **ECP**
A (non-pronominal) empty category must be properly governed

Working definition of the ECP (in Hornstein and Weinberg 1995: 246)

- (24) An empty category must be:
(a) Lexically/head governed: governed by a lexical X^0 , or
(b) Antecedent governed: bound by (coindexed with and c-commanded by) a category that governs it

Definition of government (Aoun and Sportiche 1981):

- (25) A governs B iff for all X, X a maximal projection, X dominates A iff X dominates B

The that-t effect explained:

- Object trace is governed by V, a lexical governor
- Subject trace is not lexically governed, hence it must be antecedent governed.

The intermediate trace does not c-command the subject trace (no generalized X-bar for COMP); the trace is properly contained in COMP:

*[who_i [do you think [S' [COMP t_i that] [t_i saw John]]]]

c-command is satisfied when the complementizer is empty because the entire COMP is identified with t_i which it exclusively dominates.

Cases that have been brought under the ECP

2. *Personne* in French

Kayne (1981): Subject-object asymmetries also hold at LF:

- (26) a. *Je n'ai exigé que personne soit arrêté
I didn't require that anybody arrested
b. Je n'ai exigé que la police arrête personne
I didn't require that the police arrest anybody

Kayne: at LF *personne* raises to the clause where *ne* indicates scope leaving a trace. Subject trace is not properly governed. Object trace is:

- (27) a. * [TP personne [TP je n'ai exigé [CP _ que [TP t soit arrêté]]]]
b. [TP personne [TP je n'ai exigé [CP _ que [TP la police arrête t]]]]

3. *Superiority* (Aoun, Hornstein and Sportiche (1981), Chomsky (1981) Kayne (1983):

- (28) a. *Who remembers why who bought the book?
b. Who remembers why we bought what?

Note: the data are controversial (see fn 6 in Hornstein and Weinberg. Lasnik and Saito claim that (34b) is good with *who* instead of *what*. For alternative judgments see Aoun, Hornstein and Sportiche (1981), Kayne (1983), Aoun, Hornstein, Lightfoot and Weinberg (1987).

6. *Wh-in-situ* in French.

Discussed in Hornstein and Weinberg (1995: 249). But data are controversial:

- (35) a. Jean a dit que Pierre a vu qui
Jean said that Pierre saw who
b. *Jean a dit que qui est venu
Jean said that who came

7. Subjacency, CED, ECP

Conceptually, CED and ECP are close, as they require reference to proper government.

CED and ECP differ in that CED does not apply at LF, unlike ECP. In this respect, CED patterns with Subjacency.