Ling 610

## The ECP

## November, 2015

- ECP (Empty Category Principle) 1<sup>st</sup> version: A trace must be governed
- (2) \*John is illegal [ $_{CP}[_{IP} t$  to park here]] (CP is a barrier to government; non-finite Infl isn't a governor)
- (3) ECP 2<sup>nd</sup> version:

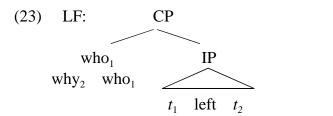
A trace must be properly governed (Proper government is government by a **lexical** head)

- (4) \*Who do you think [that [*t* solved the problem]] (*t* is not properly governed)
- (5) Which problem do you think [that [John solved *t*]] (*t* is properly governed by <u>solve</u>)
- (6) Who do you think [t' [t solved the problem]] (t is not lexically governed)
- (7)  $\alpha$  properly governs  $\beta$  if
  - i.  $\alpha$  governs  $\beta$  and  $\alpha$  is lexical ('lexical government')
  - ii.  $\alpha$  binds  $\beta$  and  $\beta$  is (zero) subjacent to  $\alpha$  ('antecedent government')
- (8) \*Who do you think  $[_{CP} t' [_{C'} that [_{IP} t solved the problem]]]$
- (9) Either <u>that</u> somehow blocks antecedent government or <u>that</u> somehow turns C' into a barrier for antecedent government
- (10) ?\*Which car did you leave [before Mary fixed *t*] Subjacency an 'adjunct island'
- (11) \*How did you leave [before Mary fixed the car *t*] (*t* is not properly governed, so the ex. violates both Subjacency and the ECP)
- (12) Similarly for all islands: extreaction of an adjunct in violation of Subjacency always yields crashingly bad results.
- (13) Lasnik and Saito technology: A trace that is properly governed is marked  $+\gamma$ ; one that is not is marked  $-\gamma$ . The ECP says \*[- $\gamma$ ]
- (14) ✓How do you think [ *t* [(that) [ Mary fixed the car *t*]]] (Why no "<u>that</u>-trace effect with adjuncts?)
- (15) Lasnik and Saito proposal: Adjunct traces are not gamma-marked in overt syntax (maybe because they aren't present yet). In LF (as in overt syntax) <u>that</u> can be deleted.
- (16) Argument traces are gamma-marked in overt syntax (or we lose the <u>that</u>-trace effect for subjects).
- (17) \*How<sub>2</sub> do you wonder [when<sub>1</sub> [John said  $t_1$  [ $t_2$ ' [Mary solved the problem  $t_2$ ]]]]

- (18) Intermediate traces must be properly governed. ( $t_2$  is antecedent governed by  $t_2$ '; so it must be the latter the is not properly governed in violation of the ECP.)
- (19) Further, gamma-marking must be specifically at **levels**. If  $t_2$ ' could properly govern  $t_2$  and then delete, (17) would be a 'mere' Subjacency violation.
- (20) Chomsky's version of this, from the mid-1980's: "Adjuncts must be fully represented". That is, all the traces in the chain of the moved adjunct must remain.

(21) \*Who left why

(22) Suppose all WH-phrases move eventually, creating an adjunction structure.



 $t_2$  is not properly governed

- (24) \*Who  $t_1$  said [ [ John left why]] Again, intermediate traces must be properly governed.
- (25) ?\*Which car did you leave [before Mary fixed *t*]
- (26) Who left before Mary fixed which car Subjacency doesn't constrain LF movement. (Huang)
- (27) ?\*What do you believe the claim that Lisi bought t (Subjacency: 'Complex NP constraint'. There is actually a difficult puzzle here, since by the core <u>Barriers</u> theory, there will actually not be any barriers, assuming that a head N θ-governs its clausal complement. We put this problem aside here.)

(28)	✓Ni xiangxin Lisi mai-le sheme de shuofa you believe Lisi buy-Asp what claim	Chinese
(29)	*Why do you believe [the claim [that [ Lisi left <i>t</i> ]]]	
(30)	*Ni xiangxin [[ Lisi weisheme likai] de shuofa you believe Lisi why leave claim	Chinese
(31) (32)	??What <sub>1</sub> do [you wonder [why <sub>2</sub> [Lisi bought $t_1 t_2$ ]]] *Why <sub>2</sub> do [you wonder [what <sub>1</sub> [Lisi bought $t_1 t_2$ ]]]	'WH-island constraint'
(33)	ni xiang-xhidao [Lisi weisheme mai-le sheme] you wonder Lisi why bought what	Huang

(34) OK LF (33) can have the indicated interpretation.

 $[s \cdot [comp sheme_1]_1 [s ni xiang-znidao [s \cdot [comp weisheme_2]_2] [s Lisi t_2 mai-le t_1]]]]$ 'what is the thing x such that you wonder why Lisi bought x'

- (35) \* LF (33) cannot have the indicated interpretation.
  [s<sup>-</sup>[comp weisheme<sub>2</sub>]<sub>2</sub> [s ni xiang-zhidao [s<sup>-</sup>]comp sheme<sub>1</sub>]<sub>1</sub>
  [s Lisi t<sub>2</sub> mai-le t<sub>1</sub>]]]
  'what is the reason x such that you wonder what Lisi bought for x,
- (36) And similarly for **all** islands. This is by far the most powerful argument I know for covert movement.
- (37) Mali renwei [[Yuehan weisheme likai]] Mary thinks John why leave "Why does Mary think [John left *t*]"
- (38) Long distance interpretation (hence movement) of adjuncts is fine when there is no island.