Ling 610

The ECP

November, 2016

- (1) ECP (Empty Category Principle) 1st 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 2nd 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 solve)
- (6) Who do you think [t' [t solved the problem]] (t is not lexically governed)
- (7) α properly governs β if
 - i. α governs β and α is lexical ('lexical government')
 - ii. α binds β and β is (zero) subjacent to α ('antecedent government')
- (8) *Who do you think $[C_P t']$ that $[C_P t']$ that $[C_P t']$ solved the problem]]]
- (9) Either that somehow blocks antecedent government or that 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 (1984) technology: A trace that is properly governed is marked $+\gamma$; one that is not is marked $-\gamma$. The ECP says *[$-\gamma$] Chomsky (1986) alternative notation: A trace that is not properly governed is marked *.
- (14) \checkmark How do you think [t [(that) [Mary fixed the car t]]] (Why no "that-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) that can be deleted.
- (16) Argument traces are gamma-marked in overt syntax (or we lose the <u>that</u>-trace effect for subjects).
- (17) *How₂ do you wonder [when₁ [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 that 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 Under this proposal gammamarking (= *-marking) is not restricted to applying at levels.
- (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 Chinese you believe Lisi buy-Asp what claim
- (29) *Why do you believe [the claim [that [Lisi left *t*]]]
- (30) *Ni xiangxin [[Lisi weisheme likai] de shuofa Chinese you believe Lisi why leave claim
- (31) ??What₁ do [you wonder [why₂ [Lisi bought $t_1 t_2$]]] 'WH-island constraint'
- (32) *Why₂ do [you wonder [what₁ [Lisi bought $t_1 t_2$]]]
- (33) ni xiang-xhidao [Lisi weisheme mai-le sheme] Huang you wonder Lisi why bought what

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

```
[s·[comp sheme<sub>1</sub>]<sub>1</sub> [s ni xiang-znidao [s·[comp weisneme<sub>2</sub>]<sub>2</sub>
[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:[_{COMP} \text{ weisheme}_2]_2 [s \text{ ni xiang-zhidao}]_{s:[_{COMP}} \text{ sheme}_1]_1 [s \text{ Lisi } t_2 \text{ mai-le } t_1]]]] '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.