Ling 610

The ECP
November, 2016

(1) ECP (Empty Category Principle) 1st version:
   A trace must be governed

(2) *John is illegal [_{CP}iptopark 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 [_{CP}t'[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 +γ; one that is not is marked -γ. The ECP says *[-γ]  Chomsky (1986) alternative notation: A trace that is not properly governed is marked *.

(14) ✔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 "that"-trace effect for subjects).

(17) *How do you wonder [when1 [John said t1 [t2' [Mary solved the problem t2]]]]
(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 gamma-marking (= *-marking) is not restricted to applying at levels.

(21) *Who left why
(22) Suppose all WH-phrases move eventually, creating an adjunction structure.

(23) \[
\text{LF:} \quad \text{CP}
\]
\[
\quad \begin{array}{c}
\text{who}_1 \\
\text{IP} \\
\text{why}_2 \\
\text{who}_1 \\
\end{array}
\quad \begin{array}{c}
t_1 \\
\text{left} \\
t_2 \\
\end{array}
\quad t_2 \text{ is not properly governed}
\]

(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 Barriers theory, there will actually not be any barriers, assuming that a head \(\text{N} \theta\)-governs its clausal complement. We put this problem aside here.)

(28) ✓\text{Ni xiangxin Lisi mai-le sheme de shuofa} Chinese \text{you believe Lisi buy-Asp what claim}

(29) *Why do you believe [the claim [that \[ Lisi left \(t\)]]]

(30) *\text{Ni xiangxin [[ Lisi weisheme likai] de shuofa} Chinese \text{you believe Lisi why leave claim}

(31) ??\text{What}_1 \text{do [you wonder [\text{why}_2 [Lisi bought \(t_1\) \(t_2\)]]]} 'WH-island constraint'
(32) *\text{Why}_2 \text{do [you wonder [\text{what}_1 [Lisi bought \(t_1\) \(t_2\)]]}]

(33) \text{ni xiang-xhidao [Lisi weisheme mai-le sheme]} Huang \text{you wonder Lisi why bought what}
(34) OK LF (33) can have the indicated interpretation.

\[
\begin{array}{l}
[S'[COMP sheme_1] [S ni xiang-zhidao [S' [COMP weisheme_2] [S Lisi \ t_2 \ mai-le \ t_1]]]]
\end{array}
\]

‘what is the thing x such that you wonder why Lisi bought x’

(35) * LF (33) cannot have the indicated interpretation.

\[
\begin{array}{l}
[S' [COMP weisheme_2] [S ni xiang-zhidao [S' [COMP sheme_1] [S Lisi \ t_2 \ mai-le \ t_1]]]]
\end{array}
\]

‘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.