The ECP
November, 2013

(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" (not really an instance of government))

(8) *Who do you think [CP t [C that [IP 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: extraction 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 +γ; one that is not is marked −γ. The ECP says *[-γ]

(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 [when [John said t1 [ t2 [C Mary solved the problem t2]]]]
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.\)

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.

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.

*Who left why

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

\[
\text{LF: } \begin{array}{c}
\text{CP} \\
\text{who}_1 \\
\text{why}_2 \\
\text{who}_1 \\
\text{IP} \\
\text{left} \\
\text{t}_2 \\
\text{t}_2 \text{ is not properly governed}
\end{array}
\]

*Who \(t_1\) said [ [ John left why]]

Again, intermediate traces must be properly governed.

?*Which car did you leave [before Mary fixed \(t\)]

Who left before Mary fixed which car Subjacency doesn't constrain LF movement. (Huang)

?*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 N \(\theta\)-governs its clausal complement. We put this problem aside here.)

✓Ni xiangxin Lisi mai-le sheme de shuofa Chinese you believe Lisi buy-Asp what claim

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

*Ni xiangxin [[ Lisi weisheme likai] de shuofa Chinese you believe Lisi why leave claim

And similarly for all islands. This is the most powerful argument I know for covert movement.

Mali renwei [[Yuehan weisheme likai]] Mary thinks John why leave "Why does Mary think [John left \(t\)]"

Long distance interpretation (hence movement) of adjuncts is fine when there is no island.