The ECP  
November, 2012  

(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 [IP 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 [IP 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 [CP 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) *How2 do you wonder [when1 [John said t1 [t2' [Mary solved the problem t2]]]  

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(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.

(23) LF: \[
\begin{array}{c}
\text{who}_1 \\
\text{why}_2 \\
\text{IP} \\
\text{CP}
\end{array}
\]

\(t_1\) left \(t_2\)

(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 N \(\theta\)-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) And similarly for all islands. This is the most powerful argument I know for covert movement.

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

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