Ling 610

The ECP

November, 2018

(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')
or ii. α binds β and β is (zero) subjacent to α ('antecedent government')

(8) *Who do you think [$_{CP}$ *t*' [$_{C'}$ that [$_{IP}$ *t* solved the problem]]]
(9) Either that somehow blocks antecedent government
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; and maybe ECP causes extreme badness.)
(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 (which applies at LF) 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)a *How$_2$ do you wonder [when$_1$ [John said t_1 [t_2' [Mary solved the problem t_2]]]]
vs.
b ??What problem$_2$ do you wonder [when$_1$ [John said t_1 [t_2' [Mary solved t_2]]]]

(18) Intermediate traces must be properly governed. (t_2 in (17a) is antecedent governed by t_2'; so it must be the latter the is not properly governed in violation of the ECP.)

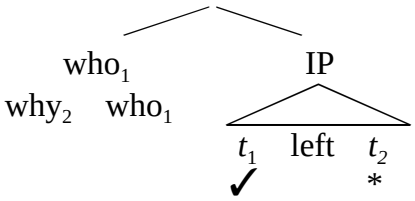
(19) Further, gamma-marking must be specifically at **levels**. If t_2' could properly govern t_2 and then delete, (17a) would be a 'mere' Subjacency violation like (17b).

(20) **Chomsky's version** of this, from the mid-1980's: Gamma-marking happens in the course of the derivation, and "adjuncts must be fully represented". That is, all the traces in the chain of the moved adjunct must remain, while intermediate traces of the moved argument can delete.

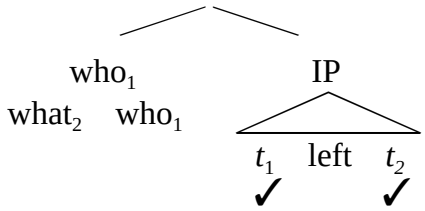
(21) *Who left why vs. ✓Who bought what

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

(23) LF: CP



LF: CP



(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 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) ??What$_1$ do [you wonder [why$_2$ [Lisi bought t_1 t_2]]] 'WH-island constraint'

(32) *Why$_2$ do [you wonder [what$_1$ [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$_1$ $]_1$ $[_S$ ni xiang-zhidao $[_{S'}[_{COMP}$ 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.

$[_{S'}[_{COMP}$ weisheme$_2$ $]_2$ $[_S$ ni xiang-zhidao $[_{S'}[_{COMP}$ sheme$_1$ $]_1$
$[_S$ Lisi t_2 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 covert movement) of adjuncts is fine when there is no island.