An Early Minimalist Approach to Certain ECP Effects

(1) \[ ??\text{Who do you wonder [.CP whether [.IP John said [.CP t' e [.IP t solved the problem]]]} \]

(2) We take Subjacency for granted here. [For Chomsky (1986), the relevant ‘barrier’ for movement here is the CP in red, but that doesn’t matter for the issue under discussion here. All that matters is that there is a step of movement that is too long.] The question is why certain violations, such as (1), are not as bad as others, such as (3).

(3) \[ *\text{How do you wonder [.CP whether [.IP John said [.CP t' e [.IP Mary solved the problem t]]]} \]

(4) When a step of movement crosses a barrier, the resulting trace is marked *. [For Chomsky, *-marking (Lasnik and Saito's 1984/1992 $\gamma$-marking) happens on-line, in the course of the derivation.]

(5) What follows is Chomsky's attempt to deduce his slightly earlier approach to the “argument-adjunct asymmetry” which relied on the stipulation that intermediate traces of adjuncts can’t be deleted (“Adjuncts must be fully represented.”).

(6) Deletion is an operation, just as Move is. All operations are constrained by economy: Only perform an operation if you have to.

(7) Deletion is possible only to turn an illegitimate LF object into a legitimate one, where the legitimate LF objects are:

(8) a Uniform chains (all of whose members are in A-positions; A'-positions; or X0-positions)
   b Operator-variable pairs.

(9) Deletion of t' in the chain (Who, t', t) is permissible since the chain is neither uniform (Who and t' are in A'-positions, t in an A-position) nor is it an operator-variable pair.

(10) More generally, in the case of successive-cyclic A'-movement of an argument, intermediate traces (starred or otherwise) can (in fact must) be deleted in LF; this has the beneficial side effect of voiding an ECP violation when the trace to be deleted is starred.

(11) ECP effects arise when the final syntactic representation, the LF, contains a *.

(12) So, contrary to the situation in (1), barrier crossing movement of an adjunct as in (3) will be an ECP violation, since the movement chain in this instance is uniformly A', so economy prevents the deletion of t'.

(13) Similarly, ultra-long A-movement will also be properly excluded, even when the first step is 'short', as in (14):

(14) \[ *\text{John seems [that [it is likely [. t' to be arrested t]]]} \]

(15) The chain (John, t', t) is a uniform A-chain, hence already a legitimate LF object, so economy prevents deletion of any members of the chain. Thus, we are stuck with a *-marked trace, resulting in an ECP violation.