Linguistics 610 Fall 2017

Shortest Move

Superiority

Chomsky 1973 pp.245-246

- (1) John knows [who [t saw what]
- (2) *John knows [what [who saw *t*]
- (3) *What books does [John know [to whom [(PRO) to give t t]]
- (4) *To whom does [John know [what books [(PRO) to give t t]]
- (5) "... wh-Movement cannot move a wh-phrase across a wh-subject (just as it cannot move a wh-phrase across a wh-COMP)."
- (6) No rule can involve X, Y in the structure ... X ... [α ... Z ... -WYZ ...] ... where the rule applies ambiguously to Z and Y and Z is superior to Y
- (7) Superior (informal): "closer to the root of the tree"
- (8) <u>Superior</u> (more formal): *A* is superior to *B* if every major category dominating *A* dominates *B* as well but not conversely.
- (9) John knows [what books [(PRO) to give *t* to whom]]
- (10) John knows [to whom [(PRO) to give what books t]]
- (11) John knows [what [(PRO) to give t to whom]]
- (12) John knows [to whom [(PRO) to give what t]]

Possibly cf.

(13) *John knows [who(m) [(PRO) to give what to t]]

Oka (1993) MITWPL 19, Vol. II

- (14) Shallowness: An operation must be the shallowest p. 258
- (15) α is shallower than β if and only if the depth of α is properly included in the depth of β . p. 260
- (16) Depth: The depth of a Move- α operation affecting α is the union of the depth of α in the input of the operation and the depth of α in the output, where the depth of α is the set of maximal projections which dominate α . p. 258
- <<This led to the 'Attract' view of movement, by which the movement of α is to satisfy the needs of the head β to which it moves.>>

Chomsky Ch. 3, p. 181

- (17) Whom₁ did John persuade t_1 [(PRO) to visit whom₂]
- (18) *Whom₂ did John persuade whom₁ [(PRO to visit t_2]
- (19) Whom₂ "has failed to make the shortest move". [Not quite accurate]
- (20) "... Movement of $whom_2$ to [Spec, CP] is longer in a natural sense (definable in terms of command) than movement of $whom_1$ to this position."

Similarly for *wh*-islands:

- (21) *What did you wonder where John put
- (22) $[_{CP}What_1 \text{ did } [_{IP} \text{ you wonder } [_{CP} \text{ where}_2 [_{IP} \text{ John put } t_1 t_2]]]]$
- (23) Where is closer to the matrix C than what is, so where is an intervener preventing what from moving. [And where is for some reason frozen in place.]

and 'Superraising':

- (24) *John seems that [it is likely [t to be arrested t]]
- (25) <u>It</u> intervenes between matrix subject position and <u>John</u> preventing the latter from moving. [Even though <u>it</u> is frozen in place.]

Relativized Minimality Rizzi (2001), simplifying and updating Rizzi (1990

- (26) Y is in a Minimal Configuration (MC) with X iff
 - there is no Z such that
 - (i) Z is of the same structural type as X, and
 - (ii) Z intervenes between X and Y
 - << Intervention is standardly defined in terms of c-command.>>

In the following, the intervener is in **bold**:

RM and head movement:

- (27)a. They have left.
 - b. Have they <have> left?
- (28)a. They could have left.
 - b. *Have they **could** <have> left?
 - c. Could they <could> have left?

RM and A-movement:

- (29)a. It seems that it is likely that John will win.
 - b. It seems that John is likely t to win.
 - c. John seems t to be likely t to win.
 - d. *John seems that it is likely t to win.

RM and Ā-movement:

- (30)a. How many people do you consider __ intelligent?
 - b. How intelligent do you consider John __?
- (31)a. ??How many people do you wonder whether I consider intelligent?
 - b. *How intelligent do you wonder **whether** I consider John __ ?