Last Resort
Howard Lasnik

(1) *I believe John to be likely [t will win]

(2) *John is likely [t will win]

(3) Last resort relative to what?

(4)   I believe it to be likely John will win
(5)   It is likely John will win

(6) Chomsky (1994): derivations will be compared if and only if they involve all the same
     lexical choices (the same 'numeration').

(7) *I believe   to be likely John will win
(8) *   is likely John will win

(9) If the EPP follows from a feature of Infl that must be satisfied, then the ungrammaticality of
     (1) and (2) seems to lead to the conclusion that the movement of an item α is driven
     exclusively by requirements of α itself, even if failure to move results in a 'crashed'
     derivation, as in (7), (8). This is Chomsky's original 'Greed'.

(10)   seems to [α a strange man] [that it is raining outside]

(11) *A strange man seems to t that it is raining outside

(12) If the derived subjects in (1), (2) and (11) have already had their Case checked before they
     move to subject position, the nominative Case feature of Tense ((2), (11)) or the accusative
     Case feature of believe (1) will never be checked, and that will cause the derivation to crash.
     Greed is superfluous.

(13) *It is believed [a man to seem to t that S]

(14) *There is likely [someone to be [t here]]
(15) [γ to be [β someone here]

(16) At stage (15), there is a choice: it is possible to fill the Spec of γ by selecting *there* from the
     numeration and inserting it, or by raising *someone*. Chomsky argues that the latter move
     would violate Procrastinate.

(17) Procrastinate: LF movement is preferred to overt movement.
(18) There is likely to be someone here

(19) *It is believed [a man to seem to t that S]

(20) [γ to seem to a man that S]

(21) It is believed [t to seem to a man that S]

(22) There is a man here

(23)a There is/*are a man here
    b There are/*is men here

(24) A man is likely to be here

(25) There is likely to be a man here

(26) If the observed agreement implicates movement, then if any version of last resort is correct, the movement must satisfy some formal requirement of some item. One possibility: *there* lacks Φ-features, yet the Φ-features of AGR must be checked.

(27)a Greed: Movement of α to β must be for the satisfaction of formal requirements of α.
    b 'Enlightened Self Interest': Movement of α to β must be for the satisfaction of formal requirements of α or β.

(28) Who bought what

(29) *What did who buy

(30) I believe John to be clever

(31) There must be some strong feature of non-finite tense driving the overt movement of John to subject position. But the relevant feature is not a Case feature, since Case in ECM constructions is checked in the Spec of the higher AgrO, in association with believe.

(32) John is believed [t to be likely [t to be arrested t]]

(33) What features of John itself could possibly demand to be checked in every subject position it passes through? It is phenomena of this type that require a computationally complex global property of Greed. Given this, the possibility arises that Enlightened Self Interest is actually a stronger constraint than Greed in one regard. If an instance of movement of α to β can be driven by the needs of β (the feature instantiating the EPP, in the instances under discussion), the computation can be strictly local.

(34) "(20) a can target K only if
    a. a feature of a is checked by the operation
    b. a feature of either a or K is checked by the operation
    c. the operation is a necessary step toward some later operation in which a feature of a will
    be checked."   Ch. 4, p. 257

(35) All else equal, movement should never be of an entire syntactic category, but only of its
    formal features.
(36) PF requirements will normally force movement of a category containing the formal features,
    via a sort of pied-piping, under the assumption that a bare feature (or set of features) is an
    ill-formed PF object.
(37) For LF movement, on the other hand, pied-piping will normally not be necessary, hence, by
    economy, will not even be possible. Only the formal features will move, and they will
    move exactly to the heads that have matching features. [Procrastinate now becomes a true
    economy principle.]

(38) There is someone here

(39) The movement of features is driven by the unchecked Φ-features of Agr, *there* lacking
    agreement features of its own.

(40) Assume with Chomsky that any visible feature of a head can 'attract' a corresponding
    feature, resulting in the movement of a bundle of formal features (LF movement) or a
    syntactic constituent (overt movement). But in addition we must suppose that it is exactly a
    visible (i.e., unchecked) Case feature that makes the feature bundle or constituent available
    for 'A-movement'. Once Case is checked off, no further movement is possible.

(41) *The belief [a man to seem [t' is [t here]]

(42) *John BELIEVEs [a man to seem [t' is [t here]]

(43) There aren't many linguistics students here   "Davis's problem"

(44) Pictures of many students aren't here
(45) Pictures of few students are here

(46) There are few linguistics students here

(47) On May's and Chomsky's theory of adjunction, when α adjoins to β, β becomes a segmented
    category, and α c-commands anything β did prior to the adjunction. The scope problem that
    largely motivated the change from expletive substitution to expletive adjunction is not
    resolved by that change.

(48) Feature movement and the scope problem: If in LF, only the formal features of *many*

linguistics students move to a functional head or heads above negation, it is reasonable to conclude that the quantificational properties remain below negation. Then, if it is this structure that determines scope (that is, if QR either cannot alter these hierarchical relations or does not exist) the desired results obtain.

(49)   The DA proved [two men to have been at the scene] during each other's trials
(50) *The DA proved [there to have been two men at the scene] during each other's trials

(51)   The DA proved [noone to be at the scene] during any of the trials
(52) *The DA proved [there to be noone at the scene] during any of the trials

(53)   Some linguists seem to each other [t to have been given good job offers]
(54) *There seem to each other [t to have been some linguists given good job offers]

(55)   No good linguistic theories seem to any philosophers [t to have been formulated]
(56) *There seem to any philosophers [t to have been no good linguistic theories formulated]

(57) Many linguistics students aren't [*t* here]
(58) There aren't many linguistics students here

(59) When movement is overt, the properties relevant to licensing an anaphor or negative polarity item or determining scope will be in the required structural position. On the other hand, when the movement is covert, only the formal features (Case, agreement) raise.

(60)a *The DA proved [there to have been two men at the scene] during each other's trials
     b *The DA proved [there to be noone at the scene] during any of the trials

(61)a The DA proved [two men to have been at the scene] during each other's trials
     b The DA proved [noone to be at the scene] during any of the trials

(62)a ?*The DA proved [that the defendants were guilty] during each other's trials
     b ?*The DA proved [that none of the defendants were guilty] during any of the trials

(63)a The FBI proved few students to be spies
     b The FBI proved that few students were spies

(64)a *Joan believes [him$_i$ to be a genius] even more fervently than Bob$_i$ does
     b Joan believes [he$_i$ is a genius] even more fervently than Bob$_i$ does

(65) A virtual contradiction: (49)-(58), (60) argue that when raising is in LF, only the formal features of an NP raise, leaving behind those properties involved in anaphora, scope, etc. But (61)-(64) argue that referential and scopal properties in ECM constructions do raise, along with the formal features.

(66) Two ways to resolve the paradox:

(67) (44) *there seem to each other [t to have been many linguists given good job offers]

(68) Under LF anaphor movement, "the head of the matrix clause of (44), at LF, would have the structure (45a) or (45b), depending on how covert operations are ordered, where An is the anaphor and α is the X_0 complex formed from I and the matrix V.

(69) (45) a. [$_1$ An [FF (*linguists*) α]]
          b. [$_1$ FF (*linguists*) [An α]]   P.275
 "On reasonable assumptions, neither of these structures qualifies as a legitimate binding-theoretic configuration, with AN taking FF (linguists) as its antecedent."

BUT the LFs of the L&S examples seem too similar:

(70) a [AGRo An [FF (two men [ ]]
       b [AGRo FF (two men [AN]]

(71) A second approach might rely, instead, on the already postulated distinction between overt and covert movement. The relevant movement in the there constructions considered above is covert, so only the features move. For all other purposes, it is as if no movement took place. For ECM constructions, also, the standard Minimalist assumption is that the movement is covert. This was the source of the paradox. But Koizumi (1993), revising and extending ideas of Johnson (1991), argues that accusative Case is checked overtly in English, just like nominative Case. The accusative NP overtly raises to Spec of AgrO (with V raising to a still higher head position). If this is correct, the seemingly paradoxical asymmetry is immediately reduced to the independent pied-piping asymmetry.

(72) Both of these approaches correctly entail that, among the NPs considered so far, only the associate of *there* shows lower behavior. All the others show higher behavior.

(73) John expected [[noone that I did [$_{VP}$e]] to be electable]
                                   Hornstein (1994)

(74) In the structure given in (73), the null VP seems to be contained within its antecedent, the larger VP headed by expected. But if [noone that I did [$_{VP}$e]] raises to Spec of AgrO above expected, the regress can be avoided (without QR).

(75) *John expected [there to be noone that I did electable]

(76) Hornstein concludes "there is no expletive replacement...If expletive replacement obtains, then at LF [(73)] and [(75)] should have analogous structures with *there* and *noone that I did* forming a complex and raising to the matrix Spec AgrO for Case checking."

(77) If Hornstein (1994) and Lasnik (1993) are correct that at least some instances of ACD involve raising to Spec of AgrO, and if Chomsky and Lasnik (1993) are correct that ellipsis

is a PF deletion process rather than an LF copying one, then, at least in those particular ACD constructions, movement for the checking of accusative Case must be overt. One might then suspect that it always is.

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