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## What is the Last Resort Condition?

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I. Last Resort and Move  $\boldsymbol{\alpha}$ 

- (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) 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); 'Greed'.
- (10) \_\_\_\_\_seems to [a strange man] [that it is raining outside]
- (11) \*A strange man seems to  $\underline{t}$  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 <u>believe</u> (1) will never be checked, and <u>that</u> 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) [, to be [, someone here]
- (16) At stage (15), there is a choice: it is possible to fill the Spec of  $\gamma$  by selecting <u>there</u> from the numeration and inserting it, or by raising <u>someone</u>. 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) [, to seem to a man that S]
- (21) It is believed (t to seem to a man that S)
- (22) \*John; Infl [vp t; [v, HIT t;]
- (23) John has originated in complement position, picking up the object  $\theta$ -role of the verb, then moved to Spec of VP, picking up the subject role, on its way to Spec of IP.

- (24) The economy condition 'shortest move' might demand, hence license, the step of movement through Spec of VP, so even Greed wouldn't rule out (22).
- (25)a John washed (=John washed himself)
  - b John shaved (=John shaved himself)
  - c John dressed (=John dressed himself)
- (26)a There is/\*are a man here
  b There are/\*is men here
- (27) [a man [there]] Agr is [t here]
- (28) Is this a Spec-head relation?
- (29) If any version of last resort is correct, the movement must satisfy <u>some</u> formal requirement of some item. Two possibilities: a) <u>there</u> is an LF affix, and the stranded affix constraint provides the driving force; b) <u>there</u> lacks Φ-features, yet the Φ-features of AGR must be checked.
- (30)a Greed: Movement of  $\alpha$  to  $\beta$  must be for the satisfaction of formal requirements of  $\alpha$ .
  - b 'Enlightened Self Interest': Movement of  $\alpha$  to  $\beta$  must be for the satisfaction of formal requirements of  $\alpha$  or  $\beta$ .
- (31) Who bought what
- (32) \*What did who buy
- (33) I believe John to be clever
- (34) On standard asumptions about the structure of (33), there must be some strong feature of non-finite tense driving the overt movement of <u>John</u> 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 Agr<sub>o</sub>, in association with <u>believe</u>.
- (35) John is believed [ $\underline{t}$  to be likely [ $\underline{t}$  to be arrested  $\underline{t}$ ]]
- (36) Greed is 'global'. Presumably <u>John</u> must move through the intermediate <u>t</u> positions in order for it to successfully arrive at its ultimate goal: the nominative Case checking position in the highest clause.
- (37) In this respect Enlightened Self Interest is actually a <u>stronger</u> constraint than Greed. If an instance of movement of  $\alpha$  to  $\beta$  can be driven by the needs of  $\beta$  (the feature instantiating the EPP, in the instances under discussion), the computation can be strictly local.

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- (38) \*There seems to [a strange man] [that it is raining outside]
- (39) Perhaps the semantic difficulty that Chomsky attributes to (38) with <u>a strange man</u> in situ might arise even if <u>a</u> <u>strange man</u> were to move.
- (40) Possible alternative: <u>there</u> must be an affix on an NP with partitive Case (in the sense of Belletti (1988)).
- II. Last Resort and Attract F
- (41) If movement is feature driven, all else equal, movement should never be of an entire syntactic category, but only of its formal features.
- (42) PF requirements will normally force movement of a category containing the formal features (pied-piping) under the assumption that a bare feature (or set of features) is an ill-formed PF object.
- (43) For LF movement 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.]
- (44) In (45), the associate  $\underline{someone}$  does not actually move to  $\underline{there}$ .
- (45) There is someone here
- (46) The movement of features is driven by the unchecked  $\Phi$ -features of Agr, <u>there</u> lacking agreement features of its own, (29)b above.
- (47) 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). [This is in the spirit of Enlightened Self Interest rather than Greed.]
- (48) But in addition 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 A-movement is possible.
- (49) \*The belief [a man to seem [t' is [t here]]
- (50) \*John BELIEVEs [a man to seem [t' is [t here]]
- (51) There is a man here
- (52) If Belletti (1988) is correct, the specific Case borne by the associate of <u>there</u> is one with semantic import. It would then not be checked-off even if it participated in checking. Being not merely a formal feature, it would survive to the LF interface level, so would be visible throughout the syntactic derivation.
- (53) There aren't many linguistics students here
- (54) Pictures of many students aren't here
- (55) Pictures of few students are here
- (56) There are few linguistics students here

- (57) When  $\alpha$  adjoins to  $\beta$ ,  $\beta$  becomes a segmented category, and  $\alpha$  ccommands anything  $\beta$  did prior to the adjunction. May (1985); Chomsky (1986) Thus, the scope problem that largely motivated the change from expletive substitution to expletive adjunction was actually not resolved by that change.
- (58) If in LF, only the formal features of <u>many linguistics</u> <u>students</u> 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 are obtained.
- (59) Many linguistics students aren't [ t here]
- (60) There aren't many linguistics students here
- (61)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
- (62) Some linguists seem to each other [<u>t</u> to have been given good job offers]
- (63) \*There seem to each other [t to have been some linguists given good job offers]
- (64) No good linguistic theories seem to any philosophers [<u>t</u> to have been formulated]
- (65) \*There seem to any philosophers [t to have been no good linguistic theories formulated]
- (66) When movement is overt, the properties (referential, quantificational, etc.) relevant to licensing an anaphor or negative polarity item or determining scope will be in the required structural position. When the movement is covert, only the formal features (Case, agreement) raise.
- (67)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
- (68)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
- (69)a The FBI proved few students to be spies
  - b The FBI proved that few students were spies
- (70)a \*Joan believes [him, to be a genius] even more fervently than Bob, does
  - b Joan believes [he<sub>i</sub> is a genius] even more fervently than Bob<sub>i</sub> does
- (71) A virtual contradiction: The phenomena in (59)-(65) argue that when raising is in LF, only the formal features (Case, agreement) of an NP raise, leaving behind those properties

involved in anaphora, scope, etc. But (67), (69) and (70) argue that referential and scopal properties in ECM constructions do raise, along with the formal features.

- (72) The relevant movement in the <u>there</u> constructions 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. Thus the paradox. But Koizumi (1993,1995), revising and extending ideas of Johnson (1991), argues that accusative Case is checked <u>overtly</u> in English, just like nominative Case. The accusative NP overtly raises to Spec of Agr<sub>o</sub> (with V raising to a still higher head position). The paradoxical asymmetry is immediately reduced to the independent pied-piping asymmetry.
- (73) John will select me, and Bill will you
- (74) John could pull you out of a plane, like he did ø his brother.
- (75) Mary hasn't dated Bill, but she has ø Harry.
- (76) The DA proved Jones guilty and the Assistant DA will prove Smith guilty
- (77) Mary hasn't dated Bill, but she has Harry  $f_{vp} \frac{dated t}{dt}$
- (78) Raising to Spec of Agr<sub>o</sub> can be overt in English. Given the normal word order of English, raising of V to a higher head is also overt. However, even though the direct object did raise out of the deleted VP in the constructions just examined, the V did <u>not</u> raise out of that VP. Hence, it is not clear why (79) should not also be possible, with overtly raised object Harry, and V in situ.
- (79) \*She has Harry dated
- (80) Even worse, Procrastinate should then block (77), where, by hypothesis, raising of V is overt.
- (81) Suppose that the relevant strong feature driving raising of V is a feature of the V itself (perhaps a  $\theta$ -feature, plausible under Koizumi's split VP hypothesis). And suppose, following Chomsky (1993) but contra Chomsky (1994), that an unchecked strong feature is an ill-formed **PF** object (rather than an ill-formed LF object). Under the assumption that ellipsis phenomena truly do involve deletion, ellipsis of (a category containing) an item with an unchecked strong feature salvages a derivation that would otherwise crash at PF. In the present case, the strong feature of <u>dated</u> in (79) is not checked overtly, so the PF is ill-formed. In (77), repeated as (82), on the other hand, the unraised dated does not survive to the level of PF, as it is deleted.
- (82) Mary hasn't dated Bill, but she has Harry {vp dated t}



(84) The LF will also be well-formed, since in the LF component, the V can raise, checking its own checkable features and those of the functional heads it raises to.

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