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- (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 '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 [_α 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) *John_i Infl [_{VP} t_i [_{V'} HIT t_i]
 (23) John has originated in complement position, picking up the object θ -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) There is a man here
 (27)a There is/*are a man here
 b There are/*is men here
 (28) A man is likely to be here
 (29) There is likely to be a man here
 (30) [a man [there]] is likely [t to be t here]
 (31) Is this a Spec-head relation?
 (32) If any version of last resort is correct, the movement must satisfy some formal requirement of some item. Two possibilities: a) there is an LF affix, and the stranded affix constraint provides the driving force; b) there lacks Φ -features, yet the Φ -features of AGR must be checked.
 (33)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 .
 (34) Who bought what
 (35) *What did who buy
 (36) I believe John to be clever
 (37) 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 Agr_o, in association with believe.
 (38) John is believed [t to be likely [t to be arrested t]]
 (39) 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.

- (40) Someone laughed
(41) [_{VP} someone [_V laughed]]
- (42) Someone arrived
(43) There arrived someone [with someone in its initial position as complement of V]
- (44) *There someone laughed [with someone in its initial position as Spec of VP]
- (45) *There seems to [_α a strange man] [that it is raining outside]
- (46) Perhaps the semantic difficulty that Chomsky attributes to (45) with a strange man in situ might arise even if a strange man were to move.
- (47) Possible alternative: there must be an affix on an NP with *partitive Case*.
- (48) All else equal, movement should never be of an entire syntactic category, but only of its formal features.
- (49) 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.
- (50) 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.] In a standard existential sentence like (51), then, the associate someone does not actually move to there.
- (51) There is someone here
- (52) The movement of features is driven by the unchecked Φ -features of Agr, there lacking agreement features of its own, (32)b above.
- (53) 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 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.
- (54) *The belief [a man to seem [_t' is [_t here]]
- (55) *John BELIEVEs [a man to seem [_t' is [_t here]]
- (56) There is a man here
- (57) The Case borne by the associate of there, having semantic import, would not be checked-off even if it participated in checking. It would survive to the LF interface level, so would be visible throughout the syntactic derivation.
- (58) There aren't many linguistics students here
- (59) Pictures of many students aren't here
(60) Pictures of few students are here
- (61) There are few linguistics students here
- (62) 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.
- (63) 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.
- (64) The DA proved [two men to have been at the scene] during each other's trials
- (65) *The DA proved [there to have been two men at the scene] during each other's trials
- (66) The DA proved [noone to be at the scene] during any of the trials
- (67) *The DA proved [there to be noone at the scene] during any of the trials
- (68) Some linguists seem to each other [_t to have been given good job offers]
- (69) *There seem to each other [_t to have been some linguists given good job offers]
- (70) No good linguistic theories seem to any philosophers [_t to have been formulated]
- (71) *There seem to any philosophers [_t to have been no good linguistic theories formulated]
- (72) Many linguistics students aren't [_t here]
(73) There aren't many linguistics students here
- (74) 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.
- (75)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
- (76)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

- (77) 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
- (78) a The FBI proved few students to be spies
 b The FBI proved that few students were spies
- (79) 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
- (80) A virtual contradiction: (64)-(73) 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 (76), (78) and (79) argue that referential and scopal properties in ECM constructions do raise, along with the formal features.
- (81) Two ways to resolve the paradox:
- (82) There might be a crucial distinction between Case and other formal features. Agreement features could be checked via adjunction of those features to an agreement head. [In existential and unaccusative constructions, if it is only agreement features that need to be checked by movement (under a 'partitive' type approach to Case), referential and quantificational properties would be left behind, with only the formal features raising.] Case features, on the other hand, might be checkable only in a Spec-head configuration. ECM constructions would involve Case driven covert raising, under the assumption that Spec of an ECM infinitive is not a Case position. On the suggested hypothesis, the raising would be of the entire NP (exactly as with overt subject raising to subject position), yielding all of the observed parallelisms with raising to subject position.
- (83) A second approach would 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 Agr_o (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.
- (84) 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.
- (85) John expected [[noone that I did [_{VP}e]] to be electable]
 Hornstein (1994)
- (86) In the structure given in (85), 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 Agr_o above expected, the regress can be avoided (without QR).
- (87) *John expected [there to be noone that I did electable]
- (88) Hornstein concludes "there is no expletive replacement...If expletive replacement obtains, then at LF [(85)] and [(87)] should have analogous structures with there and noone that I did forming a complex and raising to the matrix Spec Agr_o for Case checking."
- (89) On both of the approaches to Case and agreement sketched above, only the formal features of the associate of there move. Consequently, noone that I did in (87) remains in situ, leaving the null VP internal to its antecedent. Further, on both of the approaches, in (85) that NP necessarily raises out of the VP, freeing the null VP from its antecedent.
- (90) If Hornstein (1994) and Lasnik (1993) are correct that at least some instances of ACD involve raising to Spec of Agr_o, 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 expect that it always is.
- (91) a John wants to catch a fish
 b John wants to catch a fish and Mary does too
- (92) John wants to catch a fish and Mary wants to catch a fish too
- (93) ?Dulles suspected Philby, who Angleton did not
- (94) ?Dulles suspected Philby, who Angleton did as well
- (95) Lasnik (1993;1995) shows that the possibility of this type of ACD construction correlates with the possibility of structural accusative Case. For example, objects of prepositions typically allow restrictive ACD but not appositive ACD:
- (96) a Mary stood near everyone Emily did
 b *Mary stood near Susan, who Emily did as well
- (97) Two remaining problems: By hypothesis, in (93), the direct object Philby, who Angleton did not has raised overtly to Spec of Agr_o. The main verb suspected must have also raised overtly to a still higher position. Further, internal to the relative clause, we can then assume that the variable bound by the relative operator also has raised to Spec of Agr_o in its clause. The verb in the relative clause, however, must not have raised to a higher position, since then VP deletion would not result in the elimination of that verb. How can the main VP, out of which V has raised, antecede the deletion of the VP in the relative clause, which still has its V in situ (in order that it is deleted along with the VP)? The trace of the raised V counts as equivalent to the V itself. This is immediate under the 'copy theory' of movement.

(98) A harder problem: Raising to Spec of Agr_o 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 not raise out of that VP. Hence, it is not clear why (99) should not also be possible, with overtly raised object Philby and V in situ.

(99) *Dulles Philby suspected

(100) Even worse, Procrastinate should then block (101), where, by hypothesis, raising of V is overt

(101) Dulles suspected Philby

(102) Suppose that the relevant strong feature driving raising of V is a feature of the **V** itself (perhaps a θ -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 suspected in (99) is not checked overtly, so the PF is ill-formed. In (93), repeated as (103), on the other hand, the unraised suspected does not survive to the level of PF, as it is deleted.

(103) ?Dulles suspected Philby, who Angleton did not

(104) 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.

(105) ?Dulles suspected Philby, and Angleton did Burgess

(106) AGR_sP

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NP      AGRs'
      AGRs  TP
        T    VP
          NP  V'
            V  AGRoP
              NP  AGRo'
                AGRo  VP
                  V'
                    V  NP
  
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(107) AGR_sP

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NP      AGRs'
      AGRs  TP
        T    VP
          NP  V'
            V  AGRoP
              NP  AGRo'
                AGRo  VP
                  V'
                    V  NP
  
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(108) AGR_sP

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NP      AGRs'
      AGRs  TP
        T    VP
          NP  V'
            V  AGRoP
              NP  AGRo'
                AGRo  VP
                  V'
                    V  AGRsP
                      NP .....
  
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