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Weakness and Greed:  
A Consideration of Some Minimalist Concepts

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A. Verb System Parameters

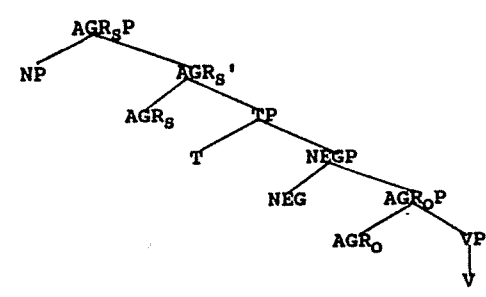
I. English vs. English; English vs. French

- (1) A traditional description of the verb system in terms of head movement':
  - a S is the maximal projection of the inflectional morpheme Infl (= C of *Syntactic Structures*).
  - b Infl takes VP as its complement.
  - c When the head of VP is *have* or *be* it raises to Infl, the next head up. (*not* is a modifier of VP?)
  - d Otherwise Infl lowers to V (under a condition of adjacency?).
  - e Otherwise *do* adjoins to Infl.
- (2) The 'stranded affix' filter: A morphologically realized affix must be a syntactic dependent of a morphologically realized category, at surface structure. (Lasnik (1981))
- (3) (2) eliminates much of the strict rule ordering and arbitrary obligatory marking of *Syntactic Structures*, but does not guarantee that *do*-support is a 'last resort', operating only when there is no other way to avoid a stranded affix.
- (4) A syntactic version of the 'Elsewhere Condition' of Kiparsky (1973): If transformations T and T' are both applicable to a P-marker P, and if the set of structures meeting the structural description of T is a proper subset of the set of structures meeting the structural description of T', then T' may not apply. (Lasnik (1981))
- (5) The SDs of verb raising and affix hopping mention Infl and (aux) V, while that of *do*-support mentions only Infl.
- (6) Alternative: UG principles are applied wherever possible, with language-particular rules used only to "save" a D-structure representation yielding no output. Verb raising and affix hopping are universal; *do*-support is language-particular. (Chomsky (1991))
- (7)a \*John likes not Mary  
b Jean (n')aime pas Marie

1

- (8) In French, *all* verbs are capable of raising, not just *have* and *be*. Unlike the situation in English, affix hopping and *do*-support are never needed. (Emonds (1978))
- (9) 'Infl' is not one head; it consists of (at least) Tense and Agr, each heading its own projection.
- (10)a English Agr, because not morphologically rich, is 'opaque' to  $\theta$ -role transmission. Thus, if a verb with  $\theta$ -roles to assign were to raise, it would be unable to assign them, resulting in a violation of the  $\theta$ -criterion.  
b French Agr, because morphologically rich, is 'transparent' to  $\theta$ -role transmission. (Pollock (1989))

II. Economy of Derivation

- (11) Raising is preferred to lowering, because lowering will leave an unbound trace that will have to be remedied by re-raising in LF. (Chomsky (1991))
- (12)a \*John not writes books  
b John does not write books
- (13) Why isn't (12)a, with overt affix lowering followed by LF re-raising, preferred over (12)b, with language particular last resort *do*-support?
- (14)
- (15) The Head Movement Constraint (reduced to an ECP antecedent government requirement) prevents the LF re-raising needed in the derivation of (12)a. The intervening head NEG cannot be crossed.
- (16) But then why is *overt* raising possible in French, and, in the case of *have* and *be*, in English as well?
- (17)a If Agr moves, its trace can be deleted, since it plays no role in LF.  
b If V moves, its trace cannot be deleted.  
c Deletion of an element leaves a category lacking features, [e].  
d Adjunction to [e] is not permitted. (Chomsky (1991))

2



11.

- (38) At the core of 'economy' approaches, of which the 'minimalist' approach is one, is the concept of choosing the best among competing derivations. It has never been clear in general, however, what determines the relevant comparison set. Chomsky (1994) has suggested a highly principled answer: To begin a derivation, you choose from the lexicon all the items you will use, annotating each with a counter indicating how many times it will be used. Call this collection a 'numeration'. The comparison set includes all and only derivations from the same numeration. This has the positive effect that (39)a does not block (39)b (or vice versa), since the numerations differ with respect to there.
- (39)a There is someone here  
b Someone is here
- (40) In line with strong lexicalism, forms of do, just as much as there, are in the lexicon. Do, when it occurs, will then be part of a numeration. Derivations with and without do are not comparable. The 'last resort' nature of do-support cannot be directly captured. I note this problem here, but put it aside.

#### IV. Notes Towards a Hybrid Minimalist Account

- (41) Chomsky's lexicalist-minimalist account demands that AGR and T are just abstract features that check against features of fully inflected verbs which raise to them. The earlier accounts treated such Infl items as bound morphemes that had to become affixes on otherwise bare verbs. Can both possibilities coexist? (42) sketches such a possibility.
- (42)a French verbs are fully inflected in the lexicon (possibly correlating with the fact that there are no bare forms; even the infinitive has an ending).  
b Have and be are fully inflected in the lexicon (possibly correlating with the fact that they are highly suppletive, but see below).  
c All other English verbs are bare in the lexicon.
- (43) Infl is freely an affix or a set of abstract features.
- (44)a Finite featural Infl is strong in both French and English.  
b Affixal Infl must merge with a V, a PF process (distinct from head movement) demanding adjacency. Halle and Marantz (1993); Bobaljik (1993))

- (45)a ... Infl ... V ... OK. V will overtly raise.  
+F +F  
b ... Infl ... V ... OK. PF merger.  
Af bare  
c ... Infl ... V ... \* at LF. +F of I won't be checked.  
+F bare  
d ... Infl ... V ... \* at LF. +F of V won't be checked.  
Af +F (Maybe \* at PF also, if merger fails.)
- (46)a French Infl will thus always have to be featural.  
b English Infl will always have to be featural, when the verb is have or be.  
c English Infl will always have to be affixal with any other verb.
- (47)a \*John not left {Merger couldn't have taken place.}  
b \*John left not {Left isn't in the lexicon, so no feature could drive raising.}
- (48) Jean (n')aime pas Marie  
(49) John has not left
- (50) Why is raising allowed in (48), (49)? Here are 3 possibilities:
- (51)a NEG and V are heads of different sorts, rendering an even more relativized version of RM irrelevant.  
b NEG is not a head, but a modifier. Note that its major role as a head had been to block (47)a, which is now irrelevant to the issue.  
c {The most radical} There is no Head Movement Constraint. In any theory where movement is driven solely by the need for features to be satisfied, the standard HMC example is irrelevant: \*Read John will ↑ the book won't be generated simply because no feature will drive the movement of read to Comp. It is only finite verbs that raise to Comp, clearly indicating that the crucial feature is Tense.
- (52) John slept, and Mary will too  
(53)a \*John slept, and Mary will slept too  
b John slept, and Mary will sleep too
- (54) ?John was sleeping, and Mary will too  
(55)a \*John was sleeping, and Mary will sleeping too  
b John was sleeping, and Mary will sleep too
- (56) John has slept, and Mary will too  
(57)a \*John has slept, and Mary will slept too  
b John has slept, and Mary will sleep too
- (58) Hypothesis 1: Any form of a verb V can be 'deleted under identity' with any form of V (reminiscent of Flengo and May's 'vehicle change').

- (59) \*John was here, and Mary will too  
 (60) a \*John was here and Mary will ~~was~~ here too  
 b John was here and Mary will ~~be~~ here too
- (61) Could it be that a trace can't serve as (part of) an antecedent for deletion?  
 (62) Linguistics, I like, and you should to  
 (63) ?Someone will be in the office, won't there?  
 (64) That this approach will fail is likely. Yes it is.
- (65) John will be here, and Mary will too
- (66) ?\*John has been here, and Mary will too
- (67) \*John was being obnoxious, and Mary will too  
 (68) \*John was being obnoxious, and Mary has too
- (69) ?John should have left, but Mary shouldn't ~~have left~~  
 (70) \*John has left, but Mary shouldn't ~~have left~~
- (71) John has a driver's license, but Mary shouldn't  
 (72) ?\*John hasn't a driver's license, but Mary should
- (73) Hypothesis 2: Any form of a verb V other than be or 'auxiliary' have can be 'deleted under identity' with any form of V. A form of be or auxiliary have can only be deleted under identity with the very same form.
- (74) Is this difference related to (degree of) suppletion?
- (75) John went, and Mary will too  
 (76) \*John was being obnoxious, and Mary will too
- (77) The paradigm of go is highly suppletive, yet apparent deletion under incomplete identity is allowed. Progressive form of all verbs, including be, is completely regular, yet such deletion is disallowed.
- (78) \*John slept, and Mary was too  
 (79) John slept, and Mary was sleeping too
- (80) \*John will sleep. Mary is now.  
 (81) John will sleep. Mary is sleeping now.
- (82) Hypothesis 3: A form of a verb V can only be deleted under identity with the very same form. Forms of be and auxiliary have are introduced into syntactic structures already fully inflected. Forms of 'main' verbs are created out of lexically introduced bare forms and independent affixes.
- (83) John Infl sleep, and Mary will sleep too  
 (84) John was ing sleep, and Mary will sleep too  
 (85) John has en sleep, and Mary will sleep too

- (86) John Infl sleep, and Mary was ing sleep too
- (87) a John is not foolish  
 b \*Be not foolish  
 c Be foolish
- (88) a The Imperative morpheme (generated in the position of Tense) is strictly affixal, hence there will never be raising to it (just merger with it)  
 b OR Imp is freely affixal or featural, and be and auxiliary have lack imperative forms in the lexicon.
- (89) a \*Not leave {Lack of adjacency blocks merger}  
 b \*Not be foolish
- (90) Leave. I don't want to.  
 (91) Mary left. I don't want to.
- (92) Be quiet. I don't want to.  
 (93) Mary is quiet. \*I don't want to.

#### B. NP Movement Parameters

- (94) a \*    has been arrested John  
 b \*    [<sub>VP</sub> John owns a house]  
 c \*    [<sub>VP</sub> is [<sub>SC</sub> John available]]
- (95) a John has been arrested ‡  
 b John [<sub>VP</sub> ‡ owns a house]  
 c John is [<sub>VP</sub> ‡<sub>v</sub> [<sub>SC</sub> ‡<sub>NP</sub> available]]
- (96) The 'EPP feature' driving the movement must be 'strong'. Any formal feature must be checked by LF. A strong one must be checked in overt syntax; if it survives into PF, the derivation crashes. Objects in English, unlike subjects, need not raise overtly, hence, by Procrastinate, must not. For (94)-(95), the strong feature driving movement of the subject could conceivably be a Case feature.
- (97) a \*I believe [     to have been arrested John]  
 b \*I believe [     to John own a house]  
 c \*I believe [     to be [John available]]
- (98) a I believe [John to have been arrested ‡]  
 b I believe [John to ‡ own a house]  
 c I believe [John to be [‡ available]]
- (99) Why must there be (overt) movement to the embedded subject position? This time, the relevant strong feature is apparently not a Case feature, since the embedded subject is not a Case position. Is it an agreement feature?
- (100) I believe [John to be [<sub>AGRP</sub> ‡' AGR [‡ available]]

- (101) Even if  $\phi$ -features of DPs need to be 'checked', those of John already are, in the position of  $\bar{t}$ '. Thus, the problem of ECM is not how we can make the EPP feature strong. (That's always trivial.) It's how we can identify it at all. Put another way, the real issue is not why the movement happens 'early' but why it happens period. Note that, for Chomsky, it will not suffice to claim that the functional head of the infinitival clause needs to discharge a feature, since movement is claimed never to be altruistic in that way, but only 'Greedy'.
- (102) Chomsky (1994) suggests an answer: the movement of John to embedded subject position is so that later movement will result in the satisfaction of requirements (presumably Case requirements) of that DP that couldn't otherwise be satisfied. But I don't see how that is so.
- (103) Tentative conclusion: Greed tempered by altruism: enlightened self interest. A similar conclusion obtains for unaccusative constructions, if we assume with Belletti (1988), Lasnik (1992), and Chomsky (1994), that the associate of the expletive has its Case licensed by the verb.
- (104) There will be someone available
- (105) As in (100),  $\phi$ -features of someone can be checked via the SC agreement head. If, additionally, the Case of that DP is licensed by he, no Greedy feature drives the LF movement of someone to there. Rather, altruistically, the movement is to satisfy the LF affixal requirements of there, or, if there has no  $\phi$ -features, to satisfy the agreement requirements of  $AGR_s$ .
- (106) \*It is believed [a man to seem to  $\bar{t}$  that...]
- (107) According to Chomsky (1994), (106) argues for Greed: a man had all its own features satisfied, but moved to satisfy the EPP feature on Infl. But note how much like (108) this ex. is in that regard.
- (108) \*There seems [a man to be [ $\bar{t}$  in the room]]
- (109) [ to be [a man in the room]]
- (110) At point (5) of the derivation, either a man could raise, or there could be inserted. Procrastinate demands the latter. There then raises, yielding:
- (111) There seems [ $\bar{t}$  to be [a man in the room]]
- (112) Now note that exactly this same line of reasoning carries over to (2), rendering Greed irrelevant:
- (113) [ to seem to a man that...]
- (114) Insertion of it is favored by Procrastinate over raising of a man.
- (115) [it to seem to a man that...]
- (116) It is believed [ $\bar{t}$  to seem to a man that...]
- (117) \*John [<sub>VP</sub>  $\bar{t}$ ' [HIT  $\bar{t}$ ]]
- (118) John can't move from complement position of HIT (a verb like hit, but without a Case feature) merely to pick up the subject  $\theta$ -role has to assign. Note, though, that if  $\theta$ -roles

are not formal features, then even enlightened self interest would block the movement (with the result that the ex. would converge as gibberish). Note too that if  $\theta$ -roles are features, but symmetrical in the way Case and agreement features are assumed to be, then even Greed won't be strong enough to exclude (117).

- (119) \*There seem to a lot of us that...
- (120) This is a hard one. If there doesn't have agreement features, or if it is an LF affix, enlightened self interest should allow a lot of us to move to there. (Recall that the agreement features of DPs don't disappear via checking, so they should survive possible checking with to or an agreement projection above to.) The trick will be reconciling (16) with (121), or (122).
- (121) There were a lot of us in the room
- (122) There were some men in the room
- (123) It strikes John that S
- (124) \*John strikes  $\bar{t}$  that S
- (125) Last Resort? But did John move from a Case position? Even if it is forced to move through SPEC of  $AGR_0$ , is that a Case position?
- (126) Does  $AGR_0$  acquire a Case feature by the raising of V to it (the standard view), or does it have it all along, but with the need for it to be checked by the V (a more strictly 'lexicalist' view)? Note that certain 'last resort' claims might demand this. A normal direct object is assumed not to be in a Case position overtly, yet it still cannot move to an independent case position. Even 'shortest move' (to SPEC of  $AGR_0$ ) will not give the desired constraint unless  $AGR_0$  already has the Case feature.
- (127) \*It is a man available
- (128) Chomsky (1994) indicates that such an ex. is out because the features of the associate can't be checked, it not being an LF affix. But what features need to be checked? Alternative: Is it an LF affix that must be attached to a clause?
- (129) That John will win and that he will lose are??is equally likely
- (130) It is/\*are equally likely that John will win and that he will lose

References: Baker (1991) "The Syntax of English Not"; Bobaljik (1993) "What Does Adjacency Do?"; Chomsky (1957) Syntactic Structures; (1965) Aspects of the Theory of Syntax (1991) "Some Notes on Economy of Derivation and Representation"; (1993) "A Minimalist Program for Linguistic Theory"; (1994) "Bare Phrase Structure"; Emonds (1978) "The Verbal Complex V'-V in French"; Halle and Marantz (1993) "Distributed Morphology and the Pieces of Inflection"; Lasnik (1981) "Restricting the Theory of Transformations: A Case Study"; McCloskey (1991) "There, It, and Agreement"; Pollock (1989) "Verb Movement, Universal Grammar, and the Structure of IP"; Warner (1986) "Ellipsis Conditions and the Status of the English Copula"; Watanabe (1993) AGR-Based Case Theory and its Interaction with the A-bar System.