UConn Syntax: Some Lasting Insights and Their Interactions Howard Lasnik UConn 1972-2002, UMD 2002lasnik@umd.edu

I. Anderson (1979) on NP movement in nominals

- (1) Sentences and nominals were long known to be similar in some respects.
- (2) Rome was destroyed Rome's destruction <-- (the) destruction of Rome
- (3) Anderson (1979) explored the question of why they are not always the same. For instance, there are no 'pseudo-passive' nominals:
- (4) 62)a. The strike was referred to briefly in the communique b.* The strike's brief reference to in the communique (was not noticed) p.46
- (5) Pseudo-passive requires adjacency between V and P:
- (6) 63) a. *The strike was referred briefly to.
- (7) Proposal: Ban on P-stranding; P can incorporate into V but not into N:

 "This fact suggests that the verb-preposition string has been lexicalized, if as claimed above there is a general prohibition against stranded prepositions. This prohibition can now be considered to hold in S as well as in NP, because adjunction of the preposition to the verb exempts sentences like (6la) [sic]."

 p.47

Not all verb-preposition combinations can be adjoined.

- (8) 63)a. He went to the store.
 - b. * The- store was gone to.
- (9) 64)a. He walked up the road frequently.
 - b.* The road was walked up frequently.
- (10) 65)a. He stepped toward Mary.
 - b. * Mary was stepped toward.
- (11) "It appears that the inability to adjoin to the verb has something to do with the adverbial nature of the prepositional phrase. Preposing produces a good sentence in (66a) but not in (66b)" p.47
- (12) 66) a. The conclusion was-arrived at independently by several people.
 - b. * The station was arrived at by seven o'clock.

More evidence for the proposal:

- (13) 67) a. I refer to very few authors with any enthusiasm.
 - b.* My reference to very few authors with any enthusiasm is typical.
 - c. My reference to very few authors with 1's in their names is typical.
 - 68) a. He spoke to very few people about anything important.
 - b.* His speeches to very few people about anything important were typical.
 - c. His speeches to very few people about politics were typical.

(14) In the (a) sentences and NPs above, the negative is inside a prepositional phrase and thus does not c-command the following PP or NP. However, given the above analysis which includes adjunction of a preposition to a verb, the grammaticality of the (a) sentences can be explained. The preposition is adjoined to the preceding verb, leaving the NP containing the negative element in a c-command position. If we assume, as we did above, that prepositions adjoin to verbs but not to nouns, we can explain why the NPs in (b) are not grammatical.

p.49

A further constraint on passive in nominals (p.43):

- (15) 51) a. John's avoidance of Bill
 b.* Bill's avoidance by John
 c. Bill was avoided by everyone.
 - 52) a. John's discussion of Mary
 b.* Mary's discussion by John
 c. Mary was discussed by John.
- (16)

 54) a. Bob's evasion of the police

 b.* The police's evasion by Bob

 c. The police were evaded by Bob.
- (17) Proposal: When the NP complement is directly affected by the action named by the noun, the NP is the direct complement of the noun, so NP preposing will in general be possible. Otherwise, the NP is part of a PP, sometimes one headed by 'of'. Then NP preposing would run afoul of the ban on P-stranding. [This proposal has occasionally been misreported in the literature as affectedness being part of the transformation in nominals (in flagrant violation of autonomy of syntax) or as affectedness being a constraint on the operation of the transformation (likely a violation). Anderson's actual proposal is completely in accord with autonomy semantics determines subcategorization, a lexical property.]

II. Davis (1984) on Exceptional Case Marking:

- (18) Davis rejected the classic LGB analysis. That analysis was based on the idea that S, unlike S', is not a maximal projection, so does not block government of the embedded subject by the matrix verb, allowing the latter to Case-mark the former. Thus, following "S'-deletion", 'believe' Case-marks 'John' in
- (19) We believe [John to be intelligent]
- (20) But, Davis noted, once clauses are fully incorporated into X' theory, this becomes untenable: S is actually the maximal projection of Infl, so the needed Case marking

would not be available. As an alternative, Davis proposed that the Case feature of 'believe' percolates down to the head of its complement, non-finite Infl, thus providing the latter with accusative Case-marking ability.

- (21) Three notes on this:
 - a. Modern Minimalist feature inheritance is remarkably reminiscent of Davis's approach b. Davis didn't comment on this, but a special configuration of Case-marking is eliminated head to specifier of complement. In the new account, subjects are always assigned Case in the Spec-head configuration of a functional head. This became a core idea of early Minimalism.
 - c. In the 'Accusative-Infinitive' construction of Latin and Classical Greek, non-finite Infl was evidently directly responsible for the accusative Case on its specifier. Under Davis's proposal, these languages are actually quite similar to English, the only difference being that in English, non-finite Infl needs to inherit the Case-assigning feature while in Latin and Classical Greek infinitival Infl has that feature intrinsically.
- (22) Overwhelmingly, the English 'Accusative-Infinitive' construction occurs only as the complement of an otherwise transitive verb which is independently capable of licensing Case on its complement.
- (23) When an English transitive verb is made passive, it loses that capability:
- (24) I believe him
- (25) *It is believed him cf. He is believed
- (26) It is believed that she convinced Bill
- (27) The English Accusative-Infinitive construction patterns with (24) rather than with (25):
- (28) *It is believed her to have convinced Bill
- (29) Similarly, adjectives do not license accusative Case, nor do they support the Accusative-Infinitive construction:
- (30) *It is likely her to convince John
- (31) In Latin, an accusative nominal is possible as subject of an infinitive even when the matrix predicate is one that cannot take an accusative complement, for examples an adjective or a passivized verb:
- (32) Certum est Petrum uenisse
 certain is Peter-Acc. come Past infinitive
 'It is certain that Peter came' Rouveret and Vergnaud (1980)
- (33) Dicitur Petrum uenisse it-is-said Peter-Acc come Past infinitive 'It is said that Peter came'

III. Ormazabal (1995) on absence of nominalizations of ECM configurations

- (34) Ormazabal (1995) examined the absence of nominalizations of ECM configurations, with or without passive/raising.
- (35) The former are fairly straightforward in the LGB system, as the subject of the infinitive will be Caseless:
 - a. They believe [Jane to be intelligent]
 - b. *Their belief [Jane to be intelligent]

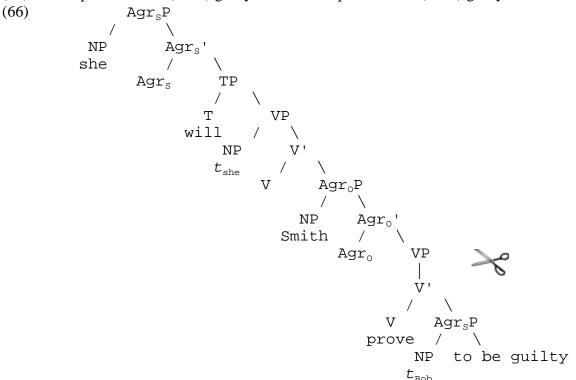
p.111

- (36) a. Mary is believed [t to have left]
 b. *Mary's belief [t to have left] p.114
- (37) The latter are more problematic, since the movement of the subject is to a Case position, and since passive movement is possible in nominals in other circumstances.
- (38) Similarly, simple raising isn't possible in nominals:
- (39) a. Mary appears [_ to have left] b. *Mary's appearance [_ to have left]
- (40) Developing ideas of Pesetsky (1991), Ormazabal proposed an account: These complements are not bare IPs (the bare Ss of LGB). Rather, they are full CPs headed by null C. This null C is an affix, specifically a verbal affix, so it must incorporate into a verb. When such a CP is not the complement of a verb, the null C will run afoul of the stranded affix filter of Lasnik (1981). The essence of this account is interestingly reminiscent of Anderson's analysis of the constraint she discovered.

IV. Case in ECM constructions, and a raising account

- (41) There were obvious conceptual virtues in Davis's account of ECM: Specifically, there is a common configuration for Case-assignment of subjects Spec of a functional head.
- (42) Chomsky (1991) proposed capturing that parallelism in another way, and, in fact, extending it to direct objects as well.
 - a. Nominatives move to Spec of a high functional head, called Agr_s in that work.
 - b. Accusatives, both direct objects and ECM subjects, move to Spec of a functional head just above VP, Agr_o.
 - c. For ECM subjects, this partly resurrected the classic analysis, first rejected in Chomsky (1973), that had those subjects raising into the higher clause.
- (43) For Chomsky, raising to Spec of Agr_o takes place in the LF component. This was, of course, a departure from the classic analysis, but seemed necessary to get the word order right, at least for English. Overt raising would incorrectly place the object or ECM subject to the left of the verb.
- (44) Lasnik and Saito (1991) presented some arguments (bearing a family resemblance to the arguments of Postal (1974)) for an analysis like that of Chomsky (1991).
- (45) The DA proved [the defendants to be guilty] during each other's trials
- (46) ?The DA accused the defendants during each other's trials
- (47) ?*The DA proved [that the defendants were guilty] during each other's trials
- (48) No one saw anything
- (49) *Anyone saw nothing
- (50) The DA accused none of the defendants during any of the trials
- (51) ?The DA proved [none of the defendants to be guilty] during any of the trials
- (52) ?*The DA proved [that none of the defendants were guilty] during any of the trials
- (53) The students solved three problems each
- *Three students each solved the problems (i.e., on the reading 'The problems were solved by three students each')
- *The students proved that three formulas each were theorems (i.e., on the reading 'Each of the students proved that three formulas were theorems')
- (56) ?The students proved three formulas each to be theorems

- (57) Jones proved the prisoners guilty with one accusation each
- (58) Jones proved the defendants to be guilty with one accusation each
- (59) Jones prosecuted the defendants with one accusation each
- (60) ??Jones proved that the defendants were guilty with one accusation each
- (61) BUT there was a problem. Some of the phenomena discussed by Lasnik and Saito seemed to implicate **overt** structure rather than LF. For instance, covert operations never seem to affect anaphoric binding possibilities, yet the ECM subject can bind an item unequivocally in the matrix clause. Lasnik and Saito left this as a mystery.
- (62) Koizumi (1993), Koizumi (1995), extending ideas of Johnson (1991), provided an elegant solution: ECM subjects (and simple direct objects) do raise above the verb, but the verb raises still higher, to a higher V position in his 'split VP'.
- (63) An additional argument for overt raising of an object or an ECM subject; Pseudogapping as VP ellipsis (Jayaseelan (1990)), with the remnant having raised to Spec of Agr_o (Lasnik (1995)).
- (64) Mary hired John, and Susan will hire Bill
- (65) He proved Jones (to be) guilty and she will prove Smith (to be) guilty



- (67) BUT why does the verb have to raise if there is no ellipsis?
 - a. *Susan will Bill hire
 - b. *She will Smith prove to be guilty
- (68) Suppose the empty higher V has a 'strong' feature, demanding satisfaction in overt syntax; and suppose movement is at heart feature movement. When a whole word or phrase moves, it is a result of pied-piping.

- "For the most part perhaps completely it is properties of the phonological component that require pied-piping. Isolated features and other scattered parts of words may not be subject to its rules, in which case the derivation is canceled; or the derivation might proceed to PF with elements that are 'unpronounceable,' violating FI." Chomsky (1995, p.262)
- "Applied to the feature F, the operation Move thus creates at least one and perhaps two "derivative chains" alongside the chain $CH_F=(F,t_F)$ constructed by the operation itself. One is $CH_{FF}=(FF[F],t_{FF[F]})$, consisting of the set of formal features FF[F] and its trace; the other is $CH_{CAT}=(\alpha,t_{\alpha})$, α a category carried along by generalized pied-piping and including at least the lexical item containing F. CH_{FF} is always constructed, CH_{CAT} only when required for convergence...As noted, CH_{CAT} should be completely dispensable, were it not for the need to accommodate to the sensorimotor apparatus." [p.265]
- "Just how broadly considerations of PF convergence might extend is unclear, pending better understanding of morphology and the internal structure of phrases. Note that such considerations could permit raising without pied-piping even overtly, depending on morphological structure..." [p.264] [Emphasis mine HL]
- Usually, if only the attracted features raise, but the V does not raise, a PF crash will ensue, but only if the offending item exists at that level. Deletion provides another way to salvage the derivation. When the lower VP is deleted without the V having raised, a PF crash is avoided and the result is acceptable Pseudogapping.
- (73) Once the matching feature of the lower lexical V is attracted, the lower V becomes defective. A PF crash will be avoided if either pied-piping or deletion of a category containing the lower V (VP Deletion = Pseudogapping in the relevant instances) takes place. [Lasnik (1999), developing the Ochi (1999) implementation of the Chomsky (1995) proposal]

One more argument for overt raising: Sometimes it is audible.

- (74) I figured out [it was more than 300 miles from here to Tulsa]
- (75) I figured it out [t to be more than 300 miles from here to Tulsa] Postal (1974)
- (76) They're trying to make out [that John is a liar]
- (77) They're trying to make John out [t to be a liar] Kayne (1985) ((Though not exactly Kayne's analysis. Johnson (1991) and Koizumi (1993) did offer a raising account.))
- (78) Note that the kind of word order seen in (77) is completely impossible when the complement clause is finite (and where no raising analysis has any motivation):
- (79) *They're trying to make John out (that) is a liar

V. Raising is optional for some speakers

- (80) For many speakers (including Kayne and Johnson) the raising in (77) is apparently optional:
- (81) %They're trying to make out John to be a liar
- (82) For them, the accusative subject can apparently be in the higher clause or the lower clause.

- (83) a (it seems that) everyone isn't there yet b everyone seems [t not to be there yet]

 Zubizarreta (1982) citing Chomsky, personal communication
- (84) A universal quantifier in subject position can be understood in the scope of clausal negation; but not if that quantifier has undergone raising.
- (85) The mathematician made every even number out not to be the sum of two primes [Only has the crazy reading that the mathematician was pretending that no even number is the sum of two primes.]
- (86) The mathematician made out every even number not to be the sum of two primes [In addition to the crazy reading also has the sane reading that the mathematician was pretending that Goldbach's conjecture is false.]

cf.

- (87) The mathematician made out that every even number isn't the sum of two primes
- (88) I believe everyone not to be there yet [Based on Chomsky (1995)]
- (89) For some speakers, Chomsky among them, this can have 'everyone' with scope below 'not', just as in the situation of "I believe that everyone isn't there yet".
- (90) Thus, we have more evidence that at least for some speakers, the raising in ECM constructions is optional.
- (91) Yet another construction discussed by Postal is potentially relevant. Postal observed that quantificational nominal expressions beginning with <u>not</u> are fine in subject position but considerably degraded in object position:
- (92) Not many gorillas have learned to tap-dance
- (93) ?*Joe kissed not many models
- (94) The nature of this constraint is far from clear, but the fact is fairly robust, and it seems to be a non-subject effect, rather than a property of direct objects per se. For example, indirect objects and objects of prepositions are also degraded with <u>not</u>:
- (95) ?*They gave not many students books
- (96) ?*They talked about not many articles
- (97) Postal used this phenomenon to argue for raising in standard ECM constructions, claiming that examples like (98) have the same status as (93).
- (98) (?*)Harry proved not many of those formulas to be theorems cf. Harry proved that not many of those formulas were theorems
- (99) As discussed in Lasnik (2002), I find the judgment not as clear as Postal indicates. (98) seems considerably better than (93), as expected if raising is optional. The <u>make-out</u> construction should, again, provide a clearer test, and, indeed, the results seem clearer:
- (100) ?They made out not many articles to have been published (for those speakers who allow, e.g., "They're trying to make out John to be a liar")
- (101) *They made not many articles out to have been published
- (102) Where the word order indicates that raising has taken place, the effect is strong.

One final argument for optionality of raising:

- (103) *John, injured him,
- (104) *John, believes him, to be a genius

- (105) *Mary injured him, and John, did too
- (106) ?Mary believes him, to be a genius and John, does too
- (107) Bizarrely, a PF process, deletion, looks like it is repairing a Condition B violation in the ECM situation, at least for some speakers.
- (108) Suppose Postal (1966), Postal (1974) was right (contra Chomsky (1973)) that the relevant structural configuration for such obviation is based on the notion clause-mate. (For related discussion, see Lasnik (2002) and Ausin (2001).)
- (109) Weak pronouns must cliticize onto the verb, as proposed by Oehrle (1976)
- (110) The detective brought him in
- (111) *The detective brought in him Chomsky (1955)
- (112) I gave it to Mary
- (113) *I gave Mary it
- (114) Suppose cliticization demands structural locality. And suppose that in (106) <u>him</u> stays in the lower clause to evade a Condition B effect. The resulting failure to cliticize will cause a PF violation, but in (106) the failure is repaired by ellipsis, as the would be clitic is gone.
- (115) In (105), on the other hand, the pronoun and its antecedents are clause-mates all along, so deletion doesn't help. The cliticization requirement will invariably be satisfied but Condition B will invariably be violated.
- (116) So perhaps Davis was right, at least as one parametric option: When the ECM subject does not raise, its Case is licensed in the Spec of the lower clause, plausibly by the functional head of that clause, which inherits the Case-assigning feature from the matrix verb. [When it does raise to the Spec of a functional head in the higher clause, its Case is licensed by a functional head above the matrix V, which also obtains its Case-assigning feature from that V.]
- (117) What is the optionality of raising (for the relevant speakers)? In Lasnik (2001) I suggested that it is the optionality of the functional head, Agr_o, above the matrix V. I proposed that Agr heads have an EPP feature, so if that head is present, raising will be forced. If the head is absent, raising won't be possible. When raising doesn't take place, the ECM subject receives its Case directly from the matrix verb (under government in LGB, or via some kind of long distance agreement in more recent work).

BUT

- (118) Kayne pointed out that even for speakers like him who allow the make-out-DP order in (81), such an order is impossible when the complement is a small clause:
- (119) *They're trying to make out John a liar [cf. They're trying to make John out a liar]
- (120) This is mysterious under the view that if the ECM subject remains in the lower clause, it receives its Case from the verb. Why shouldn't that be possible into a small clause?
- (121) On the other hand, under the Davis approach, there is a pretty nice story to tell: Whatever heads a small clause is not capable of inheriting a Case-assigning feature, so unless the subject raises, its Case will not be licensed at all.
- (122) Footnote: For extensive illuminating discussion of infinitival complements, some of it at odds with what I proposed here (as the work of my students was often at odds with my own), see Boskovic (1995), Boskovic (1997), Martin (1996), and Martin (2001).

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