

The EPP and Repair by Ellipsis

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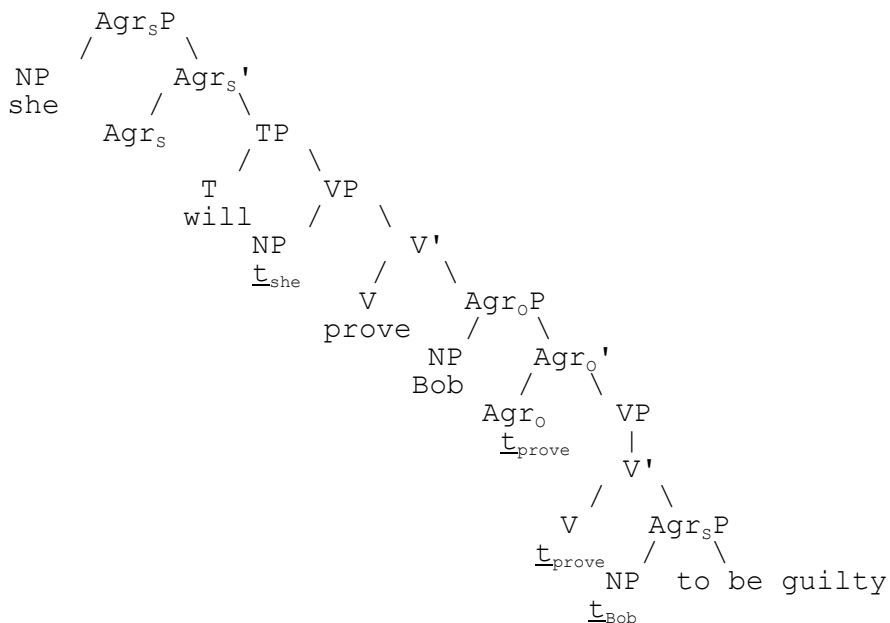
I. Background

- (1) The Extended Projection Principle (EPP) (here called by Chomsky 'principle P') "is the structural requirement that certain configurations ... must have subjects..." Chomsky (1981, p.27)
- (2)a. It seems that John is here
 b. *Seems that John is here
- (3) This does not entirely follow from θ -theory, since even when the predicate has no subject θ -role to assign, a subject must nonetheless be present, at least in one class of languages. "...the subject of a clause is obligatory in English and similar languages." [p.40]
- (4) Chomsky (1982) introduces the name 'Extended Projection Principle', since the requirement goes beyond anything demanded by the Projection Principle, "which states informally that the θ -marking properties of each lexical item must be represented categorially at each syntactic level...". [p.8]
- (5) Given that finite Infl is a Case 'assigner' (nominative Case), Fukui and Speas (1986) propose that the effects of the EPP actually follow from a more general requirement that a Case assigner must assign its Case. (2)b is out because Infl is unable to assign its Case.
- (6) But there are situations where neither θ -theory nor Case theory demand a subject, yet one is apparently still required (even if the result is ungrammatical; i.e., with or without a (pleonastic) subject, the sentences are bad).
- (7) *the belief [to seem [Peter is ill]]
- (8) *[To seem [Peter is ill]] is widely believed
- (9) *John has conjectured [to seem [Peter is ill]] Boskovic (1997)

II. ECM configurations and the EPP

- (10) Standard ECM constructions, on their standard analysis, initially look like powerful evidence for the EPP:
- (11) She will prove [Bob to be [t guilty]]
- (12) But Lasnik and Saito (1991), following Postal (1974), argue that the ECM subject has raised into the higher clause, suggesting that it is in Spec of Agr_o, arguably a canonical accusative Case position. The matrix verb then must have raised still higher, as in the analysis of Koizumi (1993), Koizumi (1995):

(13)



(14) The evidence for raising involves anaphor binding, bound variable anaphora, and negative polarity item licensing:

(15) The DA proved [two men to have been at the scene of the crime] during each other's trials

(16) The DA proved [no suspect_i to have been at the scene of the crime] during his_i trial

(17) The DA proved [noone to have been at the scene] during any of the trials

(18)?*The DA proved [that two men were at the scene of the crime] during each other's trials

(19)?*The DA proved [that no suspect_i was at the scene of the crime] during his_i trial

(20)?*The DA proved [that noone was guilty] during any of the trials

(21) The DA accused two men during each other's trials

(22) The DA discredited no suspect_i during his_i trial

(23) The DA cross-examined none of the witnesses during any of the trials

(24) But then, we no longer have an obvious argument for the EPP, as the ECM DPs are not in Spec of IP, and they might never have even passed through that position.

(25) ON THE OTHER HAND, there is considerable evidence that the ECM subject need not raise, i.e., that it can remain in Spec of IP. That is, ECM constructions do after all provide an argument for the EPP.

(26) Mary made John out to be a fool

(27) Mary made out that John is a fool

(28) Mary made out John to be a fool Kayne (1985), Johnson (1991)

(29) An observation about scope that Zubizarreta (1982) attributes to Chomsky, and that is discussed again by Chomsky (1995) provides further evidence for the optionality of object shift with ECM subjects:

(30)a. (it seems that) everyone isn't there yet

b. everyone seems [t not to be there yet]

(31) Chomsky (p.327) argues as follows: "Negation can have wide scope over the Q in [(30)a]... but not in [(30)b]", concluding that

"...reconstruction in the A-chain does not take place, so it appears."

- (32) When the word order makes it clear that a universal ECM subject has raised, that subject cannot be interpreted inside the scope of negation in the complement clause, as seen in (33).
- (33) The mathematician made every even number out not to be the sum of two primes
- (34) The alternative word order for (33), with every even number unraised, does allow narrow scope for the universal:
- (35) The mathematician made out every even number not to be the sum of two primes
- (36) I expected [everyone not to be there yet] Chomsky (1995)
- (37) I believe everyone not to have arrived yet
- (38) I proved every Mersenne number not to be prime
- (39) Note that if the ECM subject has to be 'high' in order to license some element in the higher clause, then the lower reading for that ECM subject becomes impossible:
- (40) The DA proved every defendant not to be credible during his_i trial

III. Binding theoretic evidence for the EPP

- (41) The 'Governing Category' for Condition A is based on 'clause-mate'. Lasnik (2002b)
- (42) a. Jack made himself out to be immoral
b.?*Jack made out himself to be immoral
- (43) a. They made each other out to be honest
b.?*They made out each other to be honest
- (44) ?Jack called up himself
- (45) ?They called up each other
- (46) John appears to Mary to seem to himself/*herself to be the best candidate [pointed out to me in this connection by Adolfo Ausín; also attributed to Danny Fox, via David Pesetsky, in Castillo et al. (1999)]
- (47) The 'Governing Category' for Condition B is based on 'clause-mate'. Lasnik (2002a) [But see Fiengo and May (1994) for an alternative take.]
- (48) *John_i injured him_i
- (49) *John_i believes him_i to be a genius
- (50) *Mary injured him_i and John_i did too
- (51) ?Mary believes him_i to be a genius and John_i does too
- (52) 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 (2002b))
- (53) Weak pronouns must cliticize onto the verb. Oehrle (1976)
- (54) The detective brought him in
- (55) *The detective brought in him Chomsky (1955)
- (56) Failure to cliticize in (51) is repaired by ellipsis.
- (57) In (50), on the other hand, the pronoun and its antecedents are clause-mates independent of cliticization.
- (58) *John_i is believed [to seem to him_i [to be a genius]]

IV. Repair of EPP violations? Merchant (2001, pp. 185-193)

- (59) *Which Marx brother did she say that [[a biography of _] is going to be published this year]

- (60) *Which Marx brother did she say that [[a biography of _] will appear this year]
- (61) A biography of one of the Marx brothers is going to be published this year - guess which!
- (62) A biography of one of the Marx brothers will appear this year - guess which!
- (63) *Which Marx brother did she say that [a biographer of _] worked for her
- (64) A biographer of one of the Marx brothers worked for her, but I don't remember which
- (65) Subject position is an island. But there is a potential source for the sluices where the extraction is not out of 'subject position', roughly as in:
- (66) *Which candidate were [posters of t] all over town
- (67) Which candidate were there [posters of t] all over town
- (68) *Which candidate did they say [to get t to agree to a debate] was hard
- (69) Which candidate did they say it was hard [to get t to agree to a debate]
- (70) Guess [which Marx brother]₂ [~~IP _ is [VP going to be published [a biography of t₂]]]~~]
- (71) *Guess [which Marx brother]₂ [IP _ is [VP going to be published [a biography of t₂]]]
- (72) (71) violates the EPP, so why is (70) good? Infl has a strong EPP feature, where 'strong' means uninterpretable at the PF interface. If, as a result of deletion, the strong feature does not reach the PF interface, then the absence of checking movement should not matter. According to Merchant, that's what happens in the Sluicing examples.
- (73) On the other hand, Merchant (based on Ross (1969)) also presents considerable evidence that certain island violations (his 'PF islands') can be repaired by ellipsis. One of his PF islands is actually the subject island. So are we dealing with EPP repair or with island repair?
- (74) [Every biography of one of the Marx brothers]₁ seemed to its₁ author to be definitive, but I don't remember which (Marx brother)
- (75) Here, there must have been raising in the sluice in order for the bound pronoun to be licensed.
- (76) Merchant suggests that phrasal A-movement takes place in covert syntax. Thus, EPP, an overt requirement, would have been violated, had deletion not removed the offending item (Infl on this account).

BUT

- (77)a. Some applicants_i seem to each other_i to be eligible for the job
 b. *There seem to each other_i to be some applicants_i eligible for the job
 den Dikken (1995)
- (78) Merchant acknowledges this sort of potential difficulty, but claims that the relation between there and its associate is not one of covert phrasal movement, but rather, possibly (formal) feature movement and thus irrelevant to binding and scope. This is, in fact, exactly the proposal of Lasnik (1995a), Lasnik (1995b) for such constructions.

BUT

- (79)a. The DA made every defendant₁ out to be guilty during his₁ trial

b.*The DA made out every defendant_i to be guilty during his_i trial
 Lasnik (2001b), Lasnik and Park (In press)

(80) John-ga subete-no gakusei-o_i soitu-no_i sensei-ni syookaisita
 -Nom all-gen student-acc he-gen teacher-dat introduced
 'John introduced every student_i to his_i teacher

(81) *John-ga soitu-no sensei-ni subete-no gakusei-o syookaisita
 -Nom he-gen teacher-dat all-gen student-acc introduced

(82) Short scrambling is (or can be) A-movement. If there were covert A-scrambling, then (81) should be as good as (80). Takano (1998)

(83) Thus, there is good reason to believe that subject island violations can be repaired by ellipsis (and, hence, no reason yet to assume that EPP violations can be).

V. Failure of repair of EPP violations? [Based on Lasnik (2001a)]

(84) Certain heads have a strong feature, demanding overt movement for checking. Chomsky (1995)

(85) Certain heads require Spec's. Chomsky (2000), Chomsky (1981)

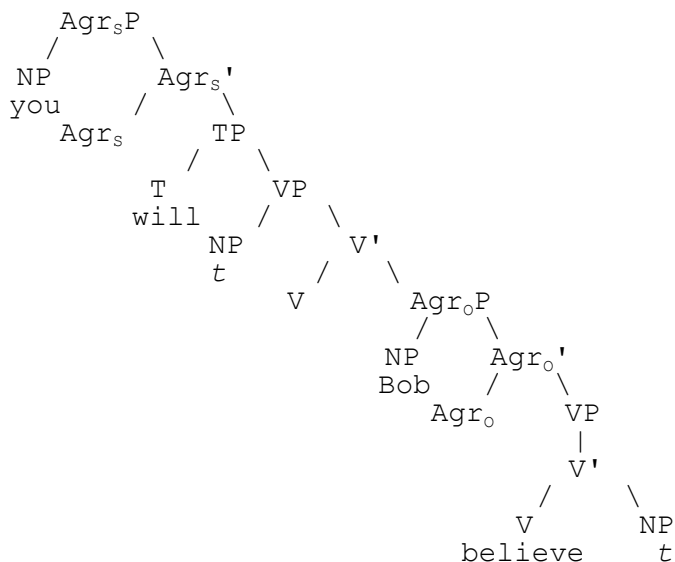
(86) Lasnik (2001a), Lasnik (2002c) shows that apparent failure to move in order to check a strong feature can be repaired by ellipsis. Pseudogapping provides one instance:

(87) You might not believe me but you will Bob

(88) NP-raising to Spec of Agr₀ ('Object Shift') is overt in English. [Koizumi (1993), Koizumi (1995), developing ideas of Johnson (1991)]

(89) Pseudogapping as overt raising to Spec of Agr₀ followed by deletion of VP. Lasnik (1995c)

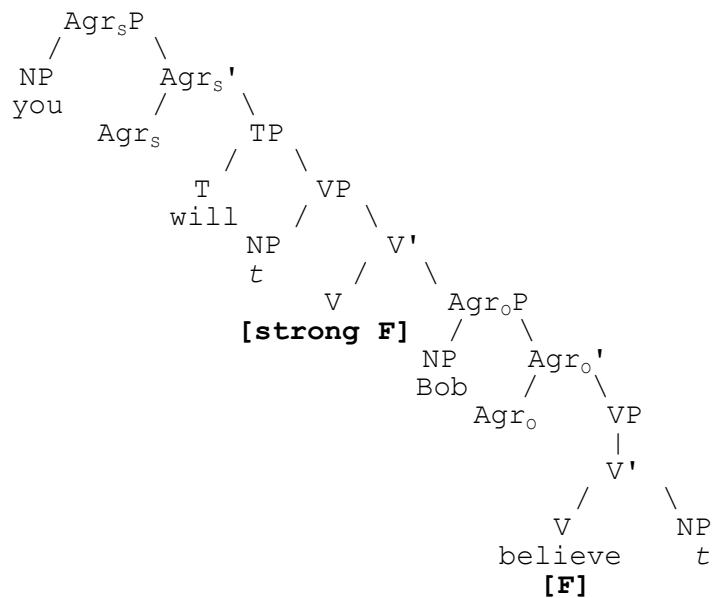
(90)



(91)*You will Bob believe

(92) In (93), if only the attracted features raise, but the V does not raise, a PF crash will ensue (Ochi (1999)), 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.

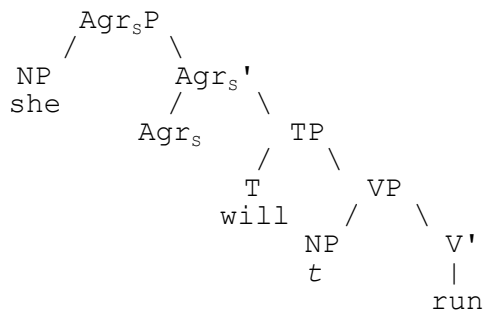
(93)



(94) Once the matching feature of the lower lexical V is attracted, the lower V becomes defective (marked *, if you like). 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)]

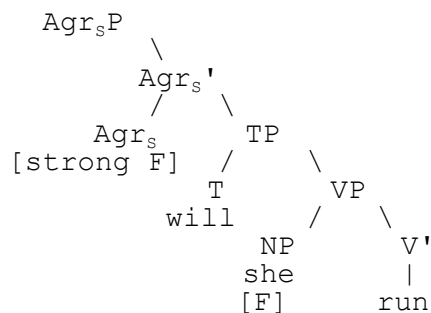
(95) Now suppose that EPP satisfaction were likewise a matter of strong feature checking.

(96)



(97) Mary said she won't run, although she will ~~run~~

(98)



(99) *Mary said she won't run, although will ~~she~~ run

(100) Agr (or T) requires a Spec. It does not suffice to check its 'EPP feature'.

(101) Further, this need for a Spec is presumably not a phonetic requirement, given that various phonetically null elements (pro, PRO) can satisfy it. I will immediately return to what kind of requirement the EPP actually is.

VI. An argument against the EPP?

- (102) Epstein and Seely (1999) offer a conceptual/technical argument against the EPP: The EPP demands successive cyclic A-movement, thus creating a chain. According to Chomsky (1995), a chain is a set of 'occurrences' where each occurrence is defined in terms of sisterhood. Since an EPP position is a Spec of some X, its sister is X', an intermediate projection of X. But it is widely assumed that syntactic operations can't target intermediate projections. Therefore the needed chain links can't exist, so the EPP must not be valid.
- (103) Epstein and Seely assume, completely reasonably, that chains are representational objects, existing at the ends of derivations. At that point, it is certainly true that most of the occurrences constituting a chain are intermediate projections. However, this has no consequences for the EPP per se.
- (104) There is no a priori reason to assume that the EPP requirement must be met at the end of the derivation. Rather, it is naturally viewed derivationally (particularly in light of the argument above that the EPP is not a PF requirement). But then, assuming standard bottom-up structure building, at the point where the EPP will be satisfied, the moving DP will be targeting a maximal projection - the entire existing structure. Lasnik (2003)

References

- Boskovic, Zeljko. 1997. *The syntax of nonfinite complementation: An economy approach*. Cambridge, Mass.: MIT Press.
- Castillo, Juan Carlos, John Drury, and Kleantes K. Grohmann. 1999. The status of the Merge over Move preference. In *University of Maryland Working Papers in Linguistics* 8, 66-104.
- Chomsky, Noam. 1955. The logical structure of linguistic theory. Ms. Harvard University, Cambridge, Mass. and MIT, Cambridge, Mass. [Revised 1956 version published in part by Plenum, New York, 1975; University of Chicago Press, Chicago, 1985].
- Chomsky, Noam. 1973. Conditions on transformations. In *A festschrift for Morris Halle*, ed. Stephen Anderson and Paul Kiparsky, 232-286. New York: Holt, Rinehart and Winston.
- Chomsky, Noam. 1981. *Lectures on government and binding*. Dordrecht: Foris.
- Chomsky, Noam. 1982. *Some concepts and consequences of the theory of government and binding*. Cambridge, Mass.: MIT Press.
- Chomsky, Noam. 1995. Categories and transformations. In *The minimalist program*, 219-394. Cambridge, Mass.: MIT Press.
- Chomsky, Noam. 2000. Minimalist inquiries: the framework. In *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, ed. Roger Martin, David Michaels, and Juan Uriagereka, 89-155. Cambridge, Mass.: MIT Press.
- den Dikken, Marcel. 1995. Binding, expletives, and levels. *Linguistic Inquiry* 26: 347-354.
- Epstein, Samuel D., and T. Daniel Seely. 1999. SPEC-ifying the GF "subject"; eliminating A-chains and the EPP within a derivational model. Ms. University of Michigan and Eastern Michigan State University.
- Fiengo, Robert, and Robert May. 1994. *Indices and identity*. Cambridge, Mass.: MIT Press.
- Fukui, Naoki, and Margaret Speas. 1986. Specifiers and projection. In *MIT working papers in linguistics* 8, 128-172.
- Johnson, Kyle. 1991. Object positions. *Natural Language and Linguistic Theory* 9: 577-636.
- Kayne, Richard. 1985. Principles of particle constructions. In *Grammatical representation*, ed. Jacqueline Guéron, Hans-Georg Obenauer, and Jean-Yves Pollock, 101-140. Dordrecht: Foris.
- Koizumi, Masatoshi. 1993. Object agreement phrases and the split VP hypothesis. In *Papers on Case and Agreement I: MIT working papers in linguistics* 18, 99-148.
- Koizumi, Masatoshi. 1995. *Phrase structure in minimalist syntax*. Doctoral

- dissertation, MIT, Cambridge, Mass.
- Lasnik, Howard. 1995a. Last resort. In *Minimalism and linguistic theory*, ed. Shosuke Haraguchi and Michio Funaki, 1-32. Tokyo: Hituzi Syobo. [Reprinted, with minor revisions, in Lasnik, H. 1999. *Minimalist Analysis*. Blackwell.]
- Lasnik, Howard. 1995b. Last resort and attract F. In *Proceedings of the Sixth Annual Meeting of the Formal Linguistics Society of Mid-America*, ed. Leslie Gabriele, Debra Hardison, and Robert Westmoreland, 62-81. Indiana University, Distributed by the Indiana University Linguistic Club, Bloomington, Indiana. [Reprinted, with minor revisions, in Lasnik, H. 2003. *Minimalist Investigations in Linguistic Theory*. Routledge Ltd.]
- Lasnik, Howard. 1995c. A note on pseudogapping. In *Papers on minimalist syntax, MIT working papers in linguistics 27*, 143-163. [Reprinted, with minor revisions, in Lasnik, H. 1999. *Minimalist Analysis*. Blackwell.]
- Lasnik, Howard. 1999. On feature strength: Three minimalist approaches to overt movement. *Linguistic Inquiry* 30: 197-217. [Reprinted, with minor revisions, in Lasnik, H. 2003. *Minimalist Investigations in Linguistic Theory*. Routledge Ltd.]
- Lasnik, Howard. 2001a. A note on the EPP. *Linguistic Inquiry* 32: 356-362.
- Lasnik, Howard. 2001b. Subjects, objects, and the EPP. In *Objects and other subjects: Grammatical functions, functional categories, and configurationality*, ed. William D. Davies and Stanley Dubinsky, 103-121. Dordrecht: Kluwer Academic Publishers.
- Lasnik, Howard. 2002a. Clause-mate conditions. In *Proceeding of the 2002 International Conference on Korean Linguistics*, 386-393. The Association for Korean Linguistics, Seoul
- Lasnik, Howard. 2002b. Clause-mate conditions revisited. *Glott International* 6: 94-96.
- Lasnik, Howard. 2002c. Feature movement or agreement at a distance? In *Dimensions of movement*, ed. Artemis Alexiadou, Elena Anagnostopoulou, Sjef Barbiers, and Hans-Martin Gärtner, 189-208. Amsterdam: John Benjamins.
- Lasnik, Howard, and Myung-Kwan Park. In press. The EPP and the Subject Condition under Sluicing. *Linguistic Inquiry* 34.
- Lasnik, Howard, and Mamoru Saito. 1991. On the subject of infinitives. In *Papers from the 27th Regional Meeting of the Chicago Linguistic Society, Part I: The general session*, ed. Lise M. Dobrin, Lynn Nichols, and Rosa M. Rodriguez, 324-343. Chicago Linguistic Society, University of Chicago, Chicago, Ill. [Reprinted, with minor revisions, in Lasnik, H. 1999. *Minimalist Analysis*. Blackwell.]
- Merchant, Jason. 2001. *The syntax of silence: Sluicing, islands, and the theory of ellipsis*. Oxford: Oxford University Press.
- Ochi, Masao. 1999. Some consequences of Attract F. *Lingua* 109: 81-107.
- Oehrle, Richard. 1976. *The grammatical status of the English dative alternation*. Doctoral dissertation, MIT, Cambridge, Mass.
- Postal, Paul M. 1966. A note on understood transitively. *International Journal of American Linguistics* 32: 90-93.
- Postal, Paul M. 1974. *On raising: One rule of English grammar and its theoretical implications*. Cambridge, Mass.: MIT Press.
- Ross, John Robert. 1969. Guess who? In *Papers from the Fifth Regional Meeting of the Chicago Linguistic Society*, ed. Robert I. Binnick, Alice Davison, Georgia M. Green, and Jerry L. Morgan, 252-286. Chicago Linguistic Society, University of Chicago, Chicago, Ill.
- Takano, Yuji. 1998. Object shift and scrambling. *Natural Language and Linguistic Theory* 16: 817-889.
- Zubizarreta, Maria Luisa. 1982. *On the relationship of the lexicon to syntax*. Doctoral dissertation, MIT, Cambridge, Mass.