

On Left-Branch Extraction (LBE) and Left-Branch Condition (LBC) effects
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In this paper, mostly based on Korean (and English) A-bar movement data, I suggest (A) that LBE is a case of regular overt A-bar movement (cf. Bošković (2005)); and (B) that LBC effects are derived by a PF condition, which interacts with a feature-copy/spreading process (that applies at the time of merger) which is triggered by lexical properties of the left-branches of particular category projections. Suggestion (B) will explain why unlike island effects, LBC effects exhibit language-internal/cross-linguistic variations (as discussed below) and a well-known category-sensitivity, and why they can be nullified by ellipsis, unlike island effects (cf. Grebenyova (2005)).

Suggestion (A) is supported by Korean relative clauses. In Korean, the null operator of a relative clause allows (long-distance) LBE, as shown in (1-2), but LBE exhibits island effects (cf. (3)), which suggests that a null operator alone undergoes overt A-bar movement.¹⁾

- (1) a. Phikaso-ka [t_i chosangwha-lul] kuli-n (ku) yeca_i b. [t_i emeni-ka] hwullwunghasi-n (ku) yeca_i
Picasso-Nom portrait-Acc painted-C the woman mother-Nom is.great-C the woman
- (i) '{the/a} woman_i who Picasso painted [t_i portrait]' (lit.) (ii) '{the/a} woman_i who [t_i mother] is great' (lit.)
- (2) {the/a} woman_i who we believe Picasso painted [t_i portrait] (Korean)
- (3) *{the/a} woman_i who John met [β a painter who painted [t_i portrait]] (K) (β = complex NP)
- In fact, relevant SCO effects show up (4) and the across-the-board (ATB) application is possible (5). Furthermore, deeply-embedded left-branches may be extracted (6), which suggests that like a clause, there is an "escape hatch" within a noun phrase (7a) so that LBE may be local, as shown in (7b) (cf. Szabolcsi (1984,1994)).
- (4) *a painter_i who he_i said that we like [t_i portrait] (K) (SCO effects)
- (5) a. the student_i who I met [t_i parent] and you met [t_i friends]
b. {the/a} woman who [t_i mother] is a painter and [t_i father] is a writer (K) (ATB LBE)
- (6) a. (the) student who [[[t_i mother's] friend's] son] got the best grade
b. (the) woman who [[[t_i friend's] father's occupation] is President (K)
- (7) a. (i) [Op_i X] ==> (ii) [Op_i [t_i X]]
b. [[[Op_i mother's] friend's] son] ==> [Op_i [[t_i [[t_i [t_i mother's]] friend's]] son]]

Topicalization data pattern like relative clause data in Korean, and as argued in Choe (2008), Korean clausal comparatives, which are all subcomparatives, involve the overt movement of a null degree operator (LBE), which suggests that all the null operators in Korean allow LBE.

However, in Korean, when a left-branch is an overt operator, LBE is not possible, unless the whole phrase containing it moves (cf. (8a-b)). Furthermore, the whole DP, but not a left-branch (DP-gen), can undergo long-distance A-bar scrambling, as shown in (9a-b).

- (8) a. *whose_i do you think that Picasso painted [t_i portrait]?
b. whose portrait_i do you think that Picasso painted [t_i]? (K)
- (9) a. *The woman's_i I think that Picasso painted [t_i portrait]? (A-bar scrambling/focus movement)
b. The woman's portrait_i I think that Picasso painted [t_i]? (K)

As for the contrasts between (8-9a) and (8-9b), I suggest a process in (10), by which the operatorhood/focushood (specified as π) of the left-branch is "spread" to the target (X2) at the time of merger so that either OP/Focπ or the whole Xπ (X1π) may formally function as an operator/focus. Given the overt vs. covert distinction in relation to LBC effects in Korean, I also suggest that whether or not (10) applies is determined by (lexical properties of) a left-branched operator/focus (and also by some property of X): In Korean, overt operators, not null operators, undergo (10) for lexical reasons (when they merge particular categories). Given that the splitting of overt Op/Focπ out of X1π is prohibited (LBC effects; cf. (8-9a)), I further suggest that overt Op/Focπ and X2π together form a PF unit so that (lexically-restricted) LBC effects are derived by a PF condition in (11), which can be considered a sort of "π-over-π" (A-over-A) condition.

- (10) (a) [X1 Op/Focπ - X2] ==> (b) [X1π Op/Focπ - X2π]
(where the operatorhood/focushood of Op/Foc (π) is "spread" to X2 at the time of merger)
- (11) a PF condition: In (10b), Opπ may not be split from X2π, as they together form a PF unit.

Suggestion (B) can nicely explain Grebenyova (2005)'s data in (12-3):

- (12) a. *She bought a rather expensive car but I can't remember how expensive [she bought [t a car]].
 b. She bought a rather expensive car but I can't remember how expensive [she bought [t a car]].
 ((5a-b) in Grebenyova (2005) with some modifications; cf. *how expensive a car*)
- (13) a. He said he needed a detailed report, but wait till you hear how detained [he said he needed [t a report]].
 b. *She'll be angry if he buys an expensive car, but I don't know how expensive [she'll be angry if he buys [t a car]]. ((7a-b) in Grebenyova (2005)) ((13a) = LBC violation; (13b) = LBC and island violation)

From the present perspective, in English, since all the left-branched operators obligatorily trigger pied-piping, all the operators, null or overt, should trigger the process in (10) for lexical reasons so that LBC effects may always appear, as shown in (12a) which can be considered a violation of (11). However, while (13b) shows that island effects are not nullified by ellipsis/slucing, (12b,13a) show that LBC effects are, which suggests that unlike island effects, LBC effects are PF effects.²⁾

Korean "right-dislocation" data also show the same point: In Korean, (as in Japanese; cf. Kato (2007)), a left-branch can be "right-dislocated," in contrast to A-bar scrambling data in (9a): LBE looks possible in (14a-b), where a left-branch (DP-gen) looks "right-dislocated" to the sentence-final position, but "right-dislocated" left-branches cannot cross an island, as shown in (15).

- (14) a. ku-ka [e_i sacin-ul] ccikessta, ku yeca-uy_i
 he-Nom picture-Acc took, the woman-Gen
 'He took [e_i picture], the woman's_i.' (lit.)
- b. na-nun ku-ka [e_i sacin-ul] ccikessta-ko mitnun_{ta}, ku yeca-uy_i
 I-Top he-Nom picture-Acc took-C believe the woman-Gen
 'I believe he took [e_i picture], the woman's_i.' (lit.) (K)
- (15) *I met [β the person who took [t_i picture]], the woman's_i (K) (β = complex NP)
- If a bi-sentential analysis is adapted where the "right-dislocated" one is derived from the second conjoined sentence via the A-bar scrambling of the "right-dislocated" phrase (16a) followed by a process of slucing (16b), then the LBC violations in (14a-b) can be explained in the following way: In (14a-b), LBC violations (as PF condition violations) are remedied by ellipsis/slucing (cf. the derivation in (16)), unlike island violations (cf. (15)).
- (16) a. [I believe he took pro's_i picture], [the woman's_i [β I believe he took [x₁ t_i picture] ...]] =>
 b. [I believe he took pro's_i picture], [the woman's_i [β I believe he took [x₁ t_i picture] ...]]
 (where the empty category e's in (14a-b) are considered pros (null pronouns))
 (cf. Kato (2007), cf. also Kuno (1978) Whitman (2000))

Given the data discussed so far, I conclude that LBC effects are a lexically-restricted special PF phenomenon, unlike island effects, and therefore should not be linked with a locality problem. If the present view is correct, then (as suggested in Grebenyova (2005)) LBC effects may also not be linked to the internal structure of "NP" (contrary to what is suggested in Boškovic (2005)).

Selected Bibliography:

- Boškovic, Ž. 2005. On the Locality of Left Branch Extraction and the Structure of NP. *Studia Linguistica* 59.
- Choe, H.S. 2008. Korean clausal comparatives as subcomparatives. paper read at TEAL-5, Germany.
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- Lasnik, H. 2000. When can you save the structure by destroying it. *NELS* 30.

1) When the null operator of a relative clause is not located in a left-branched position, island effects may not show up, as discussed in the literature. As for such data, I assume that in a pro-drop language like Korean, a resumptive pro strategy can nullify island effects (cf. Yoon (1989), Ishii (1991)). Island violations like (3), however, suggest that the distribution of resumptive pros (covert pronouns) is restricted in that resumptive pros may not be allowed in left-branched positions.

2) Since no resumptive AP-pronouns are available in English, a resumptive-binding strategy may not be able to "repair" island violations like (13b) (cf. Grebenyova (2005) who argues against Lasnik (2000)); cf. also Merchant (2001)).