

## A Note on NP/DP Parameter: Left Branch Extraction in Korean\*

**Sun-Woong Kim**

(Kwangwoon University)

**Kim, Sun-Woong. 2011. A Note on NP/DP Parameter: Left Branch Extraction in Korean.** *Linguistic Research* 28(2), 257-269. According to Bošković's(2008, 2010a, 2010b) NP/DP parameter, DP languages obey the Left Branch Condition(LBC) whereas NP languages do not. English, for example obeys LBC but Serbo-Croatian(SC) and Russian, which are NP languages, allow left branch extraction(LBE). Korean, which is also allegedly an NP language, however, does not allow LBE. This is unexpected to Bošković(2008, 2010a, 2010b) since his theory predicts that Korean, as an NP language, would rule in LBE examples for Korean has no LBC in effect. Faced with this problem, this paper pursues the possibility that Korean would still belong to the NP language type but the seeming violation of LBC is due to a failure to satisfy the morphological requirement that Korean adnominals need a host for morphological completion. This analysis is confirmed by the repair by deletion facts of Korean and is further expanded to explain the apparent violations of the Korean morphological requirement, which are reported in Korean right dislocation and left node raising examples. (Kwangwoon University)

**Key Words** NP/DP parameter, NP language, DP language, left branch extraction, left branch condition, right dislocation, left node raising

### 1. Introduction

In a series of recent papers(2008, 2010a, 2010b), Bošković proposes the NP/DP parameter. Under his theory, DP languages obey the Left Branch Condition(LBC) whereas NP languages do not. A DP language, English for example, obeys the LBC but Serbo-Croatian(SC) and Russian, which are NP languages, allow left branch

---

\* I was greatly indebted to Željko Bošković for his original ideas on phasehood and parametric variation in terms of NP/DP distinction. This paper was presented in Seoul International Conference on Generative Grammar 13, August 2011, Sogang University in Seoul. I thank the audience for valuable comments. I also thank the anonymous reviewers of *Linguistic Research*, to whom I owe much for improvement. This paper was supported by 2011 Kwangwoon University Research Fund.

extraction(LBE) as shown below:<sup>1</sup>

- (1) \*Expensive/those<sub>i</sub> he saw t<sub>i</sub> cars.  
 (2) a. Skupa/Ta<sub>i</sub> je vidio [t<sub>i</sub> kola] (SC)  
       expensive/that is seen car  
       b. Doroguju/Tu<sub>i</sub> on videl [t<sub>i</sub> mašinu] (Russian)  
       expensive/that he saw car

Korean, which is allegedly an NP language, however, does not allow LBE.

- (3) a. Pissan/Enu chayk<sub>i</sub>-ul John-i t<sub>i</sub> ilk-ko-iss-ni?  
       expensive/which book-acc J-nom read-&-be-Q?  
       ‘Which book is John reading?’  
       b. \*Pissan/enu<sub>i</sub> John-i t<sub>i</sub> chayk-ul ilk-ko-iss-ni?  
       expensive/which J-nom book-acc read-&-be-Q?

This is unexpected to Bošković(2008, 2010a, 2010b) since his theory predicts that Korean, as an NP language, would rule in (3b), for Korean would have no LBC as far as it is an NP language. Faced with this problem, we could think of two possible tracks to pursue. One is to discard the parameter, which would be a big loss, since otherwise the parameter explains a huge amount of macro parametric differences across languages (Bošković 2008, 2010). The other is to pursue the possibility that Korean would still belong to the NP language type. The latter is the track the present study is on. If Korean is an NP language, then we will also have to find a solution to (3b) not in terms of LBC but in terms of something else.

To be concrete, the following claims will be made in this paper. First, English has a downright LBC but Korean has only a seeming “LBC effect,” which can be repaired by deletion. Second, Korean morphological requirement that induces the “LBC effect” is a representational condition while English LBC is a derivational constraint. Violations of representational but not derivational constraints can be repaired (Merchant 2001 and Lasnik 2005, among others).

---

<sup>1</sup> For a different view to Croatian, readers are referred to Caruso(2011).

## 2. Explaining Apparent LBC Violation

### 2.1 NP/DP Parameter

Bošković's(2008, 2010a, 2010b) recent papers cover quite an extended range of phenomena with respect to NP/DP distinction. He draws at least the following 16 generalizations across languages.

- (4) Generalizations with respect to NP/DP parameter
  - a. Only languages without articles (NP languages) may allow left-branch extraction.
  - b. Only NP languages may allow adjunct extraction from TNPs.
  - c. Only NP languages may allow scrambling.
  - d. MWF languages without articles (NP languages) do not show superiority effects.
  - e. Only DP languages may allow clitic doubling.
  - f. NP languages do not allow transitive nominal with two genitives.
  - g. Head-internal relatives display island sensitivity only in NP languages.
  - h. Polysynthetic languages are NP languages.
  - i. Only DP languages allow the majority reading of MOST.
  - j. NP languages disallow negative raising.
  - k. Negative constituents must be marked for focus in NP languages.
  - l. The negative concord reading may be absent with multiple complex negative constituents only in negative concord DP languages.
  - m. Radical pro-drop is possible only in NP languages.
  - n. Number morphology may not be obligatory only in TNPs of NP languages.
  - o. Elements undergoing focus movement are subject to a verb adjacency requirement only in DP languages.
  - p. The sequence of Tense phenomenon is found only in DP languages.

The present paper is particularly interested in the first generalization. According to him, languages can be divided into two types in terms of whether the language allows left branch extraction or not. Below is a list of languages which allegedly

belong to each group:

(5) NP/DP language distinction wrt. left branch extraction(LBE)

- a. DP languages: English, Bulgarian, Macedonian, Modern Romance, Colloquial Finnish
- b. NP languages: Serbo-Croatian, Polish, Czech, Ukrainian, Slovenian, Latin, Mohawk, Southern Tiwa and Gunwinjguan languages, Literary Finnish

In this regard, a very interesting example worth mentioning is Finnish. Literary Finnish is said to have had no article, while Colloquial Finnish has developed an article. In terms of the NP/DP parameter, this is recast as follows: An NP language has changed into a DP language. A natural prediction about these languages wrt LBE that Literary Finnish would allow LBE but Colloquial Finnish would not is really born out (Bošković's 2010a, 2010b):

- (6) a. Punaisen ostin auton. [Literary Finnish, poetic style]  
red-acc buy-pst-1sg car-acc
- b. ?\*Punaisen ostin(sen) auton. [Colloquial Finnish, spoken form]  
red-acc buy-pst-1sg car-acc

(6b) is illicit for a left branch element is extracted. This is due to the ban on LBE in DP languages like Colloquial Finnish.

## 2.2 Korean

Now let us discuss Korean, which is an NP language. There are two conflicting views on whether Korean allows LBE or not. Choe(2009) asks if Korean allows LBE. Her answer is positive while the present research is negative in tandem with the previous researches of Kim and Park(2010) and B.-S. Park(2005). Choe's claim(2009) is that Korean allows covert LBE but not overt LBE ("LBC effects"). Consider the following:

- (7) a. Phikaso-ga [t<sub>i</sub> chosanghwa-lul] kuli-n (ku) yeca<sub>i</sub>

- Picasso-nom portrait-acc painted-n the woman [n=nominalizer]  
 ‘the woman who Picasso painted a portrait of’
- b. [t<sub>i</sub> emeni-ka] hwullyulhasi-n(ku) yeca<sub>i</sub>  
 mother-nom great-n the woman  
 ‘the woman whose mother is great’

According to her, if the null operator movement is assumed in relative clauses in Korean, (7) shows that Korean appears to allow LBE in violation of LBC. Overt LBE is not allowed in tandem with the data in (8), which is also from Choe(2009):

- (8) a. \*Nwukwu-uy<sub>i</sub> ne-nun phikaso-ka [t<sub>i</sub> chosanghwa-lul] kulyesstako  
 Who-gen you-top Picasso-nom portrait-acc painted-C  
 sayngkakhanayo.  
 think-Q  
 ‘Who do you think that Picasso painted the portrait of?’ [Intended]
- b. \*ku yeca-uy<sub>i</sub> ne-nun phikaso-ka [t<sub>i</sub> chosanghwa-lul]  
 the woman-gen you-top Picasso-nom portrait-acc  
 kulyesstako sayngkakhanayo  
 painted-C think-Q  
 ‘The woman I think that Picasso painted the portrait of.’ [Intended]

The ungrammaticality of (8a and b) is due to what she calls the apparent “LBC effects.” Choe(2009) says that in Korean, overt operators trigger a feature-copy process, while null operators do not. This is claimed to explain why overt operators, but not null operators, allow pied-piping triggering “LBC effects”.

Her claims are, however, not without problems: Firstly, her feature-copy proposal is unmotivated. Why is the feature-copy process, whatever it might be, set in motion with overt operators but not with covert operators? Without answers to this question, her claim will be weakened a lot. Secondly, her examples in (7) can be alternatively analyzed. Consider the following simple phrase:

- (9) a. The physics student  
 b. The student of physics

The relationship between *student* and *physics* in (9a) is that of head-complement in the same way as in (9b) (Aarts 2001). In the same vein, we see the head-complement relationship between *yeca* ‘woman’ and *chosanghwa* ‘portrait.’<sup>2</sup>

- (10) ku yeca chosanghwa  
       the woman portrait  
       ‘a portrait of the woman’

If this alternative is right, what is involved in (8) is no LBE but extraction of the object out of NP. Let us conclude that Korean does not allow LBE, which brings about LBC violation and that there is no such thing as “LBC effects”. LBC is real in Korean.

Now, the question is why the examples (8b and 3b as well) are ungrammatical. Evidently, their ungrammatical status can be ascribed to a more general morphological requirement in Korean that adnominal expressions (“kwanhyenge” in Korean) must have an overt nominal to host them as shown below:

- (11) a. yeppun yeca ‘pretty woman’                    \*yeppun Ø  
       b. enu cip/cha/hakkyo ‘which house/car/school’ \*enu Ø

In this regard, ungrammaticality of (3b) is due to a failure to satisfy morphological requirements in Korean but not due to a violation of LBC.

### 2.3 Repair by ellipsis

Let us proceed a little further about the LBC in Korean. Most of all, let us consider repair by deletion possibilities wrt. LBC. First, it is well known that extraction of an island is generally repaired.

---

<sup>2</sup> There might be an objection to the view that (10) involves the head-complement relation. It may be the head-adjunct relation. For this objection, I would like to suggest that (10) is two-way ambiguous. It can mean either the portrait in which the woman is drawn or the portrait that is possessed by the woman. The former involves the head-complement, and the latter the head-adjunct. The present study is concerned with the former meaning. I thank an anonymous reviewer for this point.

- (12) a. \*That he'll hire someone is possible, but I won't divulge who that he'll hire t is possible.  
 b. That he'll hire someone is possible, but I won't divulge who <<sub>TP</sub> that he'll hire t is possible.>

In addition, LBC violations can be repaired by deletion.

- (13) a. \*No one has a student who owns a certain car but I can't remember what car [no one has student who owns t car].  
 b. No one has a student who owns a certain car but I can't remember what car <<sub>TP</sub> no one has student who owns t car>.

If LBC violations are combined with additional island violations, however, they are not repaired even by deletion (Grebenyova 2005). Compare (14a) with (14b and c).

- (14) a. He said he needed a detailed report, but wait till you hear detailed <he said he needed a t 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 a t car>.  
 c. \*They want to hire someone who writes thorough reports, and wait till you see how thorough <they want to hire someone who writes t reports>!

A noteworthy similarity between Korean and English wrt. "LBC effect" is that they can both be repaired by deletion.

- (15) a. John bought a car, but I don't know how expensive <John bought an t<sub>i</sub> car>.  
 b. John-i pissan cha-lul sassnuntay, na-nun elmana pissan;  
 J-nom expensive car-acc bought-but, I-top how expensive  
 <John-i t<sub>i</sub> cha-lul sassnun->ci mola.  
 whether not-know  
 'John bought a car but I don't know how expensive.'

This does not mean that Korean has LBC like English but only shows that if (15a) is rescued by deleting an illicit string and (15b) is also rescued by the deletion of illicit part.<sup>3</sup> The similarity is only apparent in that the former is a rescue of LBC violation but the latter is a rescue of morphological failure.<sup>4</sup> The morphological requirement can be repaired in Korean even in environments where LBC is not repaired in English. For example, LBE out of islands cannot be repaired in English (Grebenyova 2005) but it can in Korean.

- (16) a. \*Mary will be angry if John buys an expensive car, but I don't know how expensive<sub>i</sub> <Mary will be angry if John buys an t<sub>i</sub> car>.  
 b. ?Mary-ka mwuce-lul phuki-cen-ey cam-i tulesnuntay,  
 M-nom problem-acc solving-before-at sleep-nom fall-and  
 na-nun elmana elyewun<sub>i</sub> <Mary-ka t<sub>i</sub> mwuce-lul  
 I-nom how difficult M-nom problem-acc  
 phulki-cen-ey cam-i tulesnun>-ci mola.  
 solving-before-at sleep-nom fall-whether not-know  
 'Mary fell asleep before she solves a difficult problem, I don't know how difficult.

This shows that English has a downright LBC but Korean has only a seeming

<sup>3</sup> For the derivation of Korean "sluicing" constructions, the present paper assumes that the same derivation with English is valid in Korean examples, too. In other words, Korean sluicing is derived by the movement of the relevant part followed by the deletion of the remnant, as has been standardly assumed in Merchant(2001), etc. This paper does not assume the alternative pseudo-sluicing or pseudo-cleft analysis of Korean "sluicing."

<sup>4</sup> According to an anonymous reviewer, the thing is that what is actually responsible for the ungrammaticality of the undeleted version of (15b) is not the host itself but the adnominal which is separated from its host. This means that the deletion of the remaining string < > after the movement does not actually delete the problematic part. For this matter, the present study assumes that a boundary is marked \* in the sense of Bošković(2011) if something illegally crosses over it. If this is true, then the deletion of < > part would delete the \*mark along with other elements. To be concrete, schematically the following steps are assumed to be taken in (15b):

- (i) a. [<sub>NP</sub> pissan cha] 'expensive car'  
 b. pissan [ ... [<sub>NP</sub>\* t cha] ... ]-ci mola.  
 c. pissan < ... [<sub>NP</sub>\* t cha] ...>-ci mola.

The bound morpheme *-pissan* is salvaged by a supporting morpheme *-ci* for they become adjacent to each other by deleting the intervening strings.



“LBC effect” which can be repaired by deletion. How come this is repaired in Korean? The present study proposes that Korean morphological requirement is a representational condition while in English an LBC violation if it is coupled with island violations behaves as a derivational constraint.<sup>5</sup> According to Merchant(2001) and Lasnik(2005), a violation of representational but not derivational constraints can be repaired.

Repair of violations of representational constraints is evidenced by the irreparability of preposition stranding violations in German, for example (Merchant 2001). It is reported that P-stranding violations cannot be repaired (Merchant 2001). Look at the following German examples:

- (17) a. Anna hat mit jemanden gesprochen, aber ich weiß nicht [mit wem]<sub>i</sub> <Anna hit *t<sub>i</sub>* has with someone spoken but I know not with who gesprochen>.  
           ‘Anna has spoken with someone, but I don’t know with who.’  
       b. \*Anna hat mit jemanden gesprochen, aber ich weiß nicht [wem]<sub>i</sub> <Anna hit mit *t<sub>i</sub>* gesprochen>.  
           ‘Anna has spoken with someone, but I don’t know who.’

(17b) is bad since the *wh* has moved leaving the preposition behind. Why is this bad? Lasnik’s (2005, 2006) conjecture is that, assuming derivational constraints are not repaired (Merchant 2001), P-stranding constraint is derivational. He assumes that the A over A condition may be in effect. For this he assumes that the *wh*-feature can or must percolate from DP to PP depending on languages. If it must, P-stranding violates the A over A, which cannot be repaired.<sup>6</sup> This is because the A over A is

<sup>5</sup> This actually means that the LBC may be, in fact, a representational constraint in English. This somehow turns out to be a derivational constraint if it comes with additional island violations. It is not yet clear how a non-representational constraint becomes a derivational one. This awaits further elaboration. I thank an anonymous reviewer for this problem.

<sup>6</sup> His conjecture, however, encounters at least three empirical problems. First, some English sluicing data imposes the problem (Lasnik 2005):

- (i) a. \*What circumstances<sub>i</sub> will the moon implode [under *t<sub>i</sub>*]?  
       b. The moon will implode under certain circumstances, but I’m not sure exactly what circumstances<sub>i</sub> <the moon implode [under *t<sub>i</sub>*]>.  
       c. \*The moon will implode under certain circumstances, but I’m not sure exactly under what circumstances<sub>i</sub> <the moon implode *t<sub>i</sub>*>.

a derivational constraint, while representational violations can be repaired.

### 3. More Apparent LBC Violations in Korean: RD and LNR

In fact, there are a couple of examples which seem to show that Korean does also allow LBE. One is right dislocation(RD) and the other is left node raising(LNR) examples.

- (18) a. John-i kkoch-ul sass-e, acwu yeppun.  
           J-nom flower-acc bought-dec very pretty  
           ‘John bought very beautiful flowers.’  
       b. ?Acwu pissan, John-i cha-lul sass-ko, Mary-ka cip-ul  
           very expensive J-nom car-acc bought-and M-nom house-acc  
           sass-ta.  
           bought-dec  
           ‘John bought a very expensive car and Mary bought a very  
           expensive house.’

These Korean examples have stray adnominals. That is, *acwu yeppun* ‘very pretty’, which is an adnominal that must be combined with its host. This is, however, being used alone in (18a and b), separated with its host in contrast to (19) below:

- (19) ?\*John-i kkoch-ul sass-e, yeppun.  
           J-nom flower-acc bought-dec pretty  
           ‘John bought very beautiful flowers.’

These examples raise a problem either to the claim that Korean obeys LBC or to the claim that Korean adnominals must be combined with its host. How can these examples be explained without altering the thesis that Korean is an NP language,

---

(ia) is bad since under *what circumstances* function is an adjunct. (ib), on the other hand, turns out good even if the preposition is stranded and repaired. In fact, as (ic) shows, P-stranding is forced in this particular example.

which has no LBC?

The present study assumes the analysis proposed by Kim and Park(2010) that RD is actually an afterthought that is derived not by movement-cum-deletion but by conjunction reduction.

- (20) John-i acwu yeppun kkoch-ul sass-ta kuliko John-i acwu yeppun  
kkoch-ul sass-ta.  
'John bought very pretty flowers and John bought very pretty  
flowers.'  
→ John-i kkoch-ul sass-ta, acwu yeppun.

A clue comes from a special property of Korean RD that it is allowed only with a relatively heavy remnant.

- (21) a. John-i kkoch-ul sass-e, acwu yeppun.  
J-nom flower-acc bought-dec very pretty  
'John bought very beautiful flowers.'  
b. ?John-ikkoch-ul sass-e, YEPPUN.  
J-nom flower-acc bought-dec pretty  
c. ?\*John-i kkoch-ul sass-e, yeppun. (=19)  
J-nom flower-acc bought-dec pretty

This means that the stranded adnominals are somehow remedied by the addition of focus in terms of intensification (21a) or heavy stress (21b), etc. If it is not accompanied by focus, the string becomes illicit (21b).

As for LNR constructions, the present study proposes that LNR in Korean is also derived by conjunction reduction in a dynamic model of derivation (Park and Lee 2009).

- (22) ? John-i acwu pissan cha-lul sass-ta, kuliko Mary-ka acwu pissan  
cip-ul sass-ta.  
'John bought a very expensive car and Mary bought a very  
expensive house.'  
→ ?Acwu pissan, John-i cha-lul sass-ko, Mary-ka cip-ul sass-ta.

In LNR, too, the stranded adnominals are somehow remedied by the addition of focus in terms of intensification (23a) or heavy stress (23b), etc. If it is not accompanied by focus, the string becomes illicit (23b).

- (23) a. ?Acwu pissan, John-i cha-lul sass-ko, Mary-ka cip-ul  
           very expensive J-nom car-acc bought-and M-nom house-acc  
           sass-ta.  
           bought-dec  
           ‘John bought a very expensive car and Mary bought a very  
           expensive house.’  
       b. ?PISSAN, John-i cha-lul sass-ko, Mary-ka cip-ul  
           expensive J-nom car-acc bought-and M-nom house-acc  
           sass-ta.  
           bought-dec  
       c. \*Pissan, John-i cha-lul sass-ko, Mary-ka cip-ul  
           expensive J-nom car-acc bought-and M-nom house-acc  
           sass-ta.  
           bought-dec

#### 4. Conclusion

The present study started with the observation that while English has the LBC, Korean has only the “LBC effect.” Under the assumption that Korean is an NP language, this would be a challenge to the NP/DP parameter (Bošković 2008, 2010a, 2010b). The seeming similarity, however, diverges in cases where the left branch extraction proceeds over an island. In English this violation is not repaired even by deletion, while in Korean it is still repaired. The present study demonstrated that this is because Korean “LBC effect” is in fact a violation of a morphological requirement. If morphological requirements are a representational condition, then it is rightly predicted to be remedied by deleting the relevant part of the string as was discussed by Merchant(2001) and Lasnik(2005).

## References

- Bošković, Željko. 2008. What will you have, DP or NP? *NELS* 37.
- Bošković, Željko. 2010a. On NPs and clauses. Ms. University of Connecticut, Storrs.
- Bošković, Željko. 2010b. Phases beyond clauses. Ms. University of Connecticut, Storrs.
- Bošković, Željko. 2011. Rescue by PF deletion, traces as (non)-interveners, and the *that*-trace effect. *Linguistic Inquiry* 42:1-44.
- Caruso, Durdica Zeljka. 2011. In support of a DP-analysis of nominal phrases in Croatian. *The Proceedings of SICOOG 13*: 81-100.
- Choe, Hyon Sook. 2009. On left-branch extraction(LBE) and left-branch condition(LBC) effects. *CLS* 45.
- Grebenyova, Lydia. 2005. Sluicing and left-branch extraction out of islands. *WCCFL* 24:164-172.
- Kim, Sun-Woong and Myung-Kwan Park. 2010. Parallel linearization: A thought on afterthoughts. *The Journal of Studies in Language* 26:459-480.
- Lasnik, Howard. 2005. How to evade moving violations. Handout given in LSA 2005.
- Merchant, Jason. 2001. The syntax of sluicing: Sluicing, islands, and the theory of ellipsis. New York: OUP.
- Park, Myung-Kwan and Wooseung Lee. 2009. A RNR analysis of left node raising constructions in Korean. *Studies in Generative Grammar* 19:505-528.

### **Sun-Woong Kim**

Department of English  
Kwangwoon University  
20 Kwangwoon-gil, Nowon-gu  
Seoul 139-701, Korea  
Tel: +82-2-940-5364  
E-mail: swkim@kw.ac.kr

Received: 2011. 07. 15

Revised: 2011. 08. 08

Accepted: 2011. 08. 10