Reduced NP comparatives in Korean and their implications

Duk-Ho An¹

Received: 14 October 2019 / Accepted: 1 July 2020 / Published online: 13 August 2020
© Springer Nature B.V. 2020

Abstract In this paper, I examine a novel type of comparative construction in Korean, namely, reduced NP comparatives (RNC), and consider its implications. On the surface, RNC may appear to be a case of the usual NP comparative construction in that two NPs are involved. But, unlike typical NP comparatives, the element bearing the marker of the standard of comparison in RNC does not directly participate in the comparison, i.e., there is a mismatch between the standard and pivot. I argue this is due to the fact that the standard is reduced to leave only the pivot on the surface, hence the name “reduced” NP comparatives. I also argue that one of the factors that determines the availability of RNC is the notion of comparability, which is based on whether or not the compared elements can be associated with the same scale, where the scale is part of the semantics of the gradable predicate (Cf. Kennedy 2009). The interesting twist is that RNC is possible only if the relevant elements are not comparable with each other, i.e., they should denote different types of objects that cannot be associated with the same scale. Adopting Merchant’s (The syntax of silence: sluicing, islands, and the theory of ellipsis. Oxford University Press, Oxford, 2001, *Linguist Philos* 27:661–738, 2004, *J Greek Linguist* 9:134–164, 2009, among others) move-and-delete approach to various ellipsis constructions, I propose a move-and-delete analysis of RNC, where the pivot undergoes movement, followed by deletion of the rest of the standard. The discussion also has implications for NP-ellipsis in Korean.

Keywords Comparative construction · Reduced NP comparative · NP comparative · Comparability · Scale · NP ellipsis · Ellipsis · Deletion

✉ Duk-Ho An
andukho@konkuk.ac.kr

¹ Department of English Language and Literature, Konkuk University, 120 Neungdong-ro, Gwangjin-gu, Seoul 05029, South Korea

1 Introduction

Typical examples of comparative constructions in Korean discussed in the literature are usually of the types illustrated by (1) and (2).

- (1) NP comparative (also called “phrasal comparative”)

Yenghi-nun	Mary-pota	khi-ka	khuta. ¹
Yenghi-TOP	Mary-than	height-NOM	tall

‘Yenghi is taller than Mary.’

- (2) Clausal comparative

Yenghi-nun	nay-ka	sayngkakhayss-ten	kes-pota	khuta.
Yenghi-TOP	I-NOM	thought-ADN	kes-than	tall

‘Yenghi is taller than I thought.’ (Park 2018:257)

Due to their inherent semantics, comparative constructions normally involve two elements for a comparison to be made. As shown above, in typical comparative sentences, one of the compared elements is an argument of the main predicate, while the other, with which the former is compared, denotes the standard of comparison as a kind of adverbial. In Korean, the latter is marked by the occurrence of the comparative particle *pota* on it, which corresponds to *than* in English. (1) and (2) illustrate the different ways in which these two elements are realized. Roughly speaking, two NPs are compared in (1), while an NP is compared with what looks like a clause in (2),² which is more or less a general pattern across languages. Existing literature on comparative constructions in Korean and other languages has mostly focused on these types of sentences.

Before we move on, let me introduce some terminology to be used throughout this paper. Especially, there are four important terms: (i) “the antecedent” refers to one of the compared elements that is an argument of the main predicate, e.g., in (1), *Yenghi* is the antecedent; (ii) “the standard” refers to the element that denotes the standard of comparison, e.g., in (1), *Mary* is the standard; (iii) “the pivot” refers to the element that bears the comparative marker *pota* on the surface, e.g., in (1), *Mary* is the pivot as well. Pivots and standards are often identical, but as I show below, that is not always the case; (iv) “the correlate” refers to the element contained in the antecedent that is contrasted with the pivot in RNC. In the labeled brackets below, I indicate these elements as ANT, STA, PIV, and COR, respectively.

Turning now to the main topic of this paper, I examine below a hitherto unnoticed type of comparative construction in Korean and consider its implications.

¹ List of abbreviations: ACC (accusative), ADN (adnominal), ANT (antecedent), COMP (complementizer), COP (copula), COR (correlate), DAT (dative), DEC (declarative), GEN (genitive), NOM (nominative), PIV (pivot), PRES (present), Q (question), REL (relative), STA (standard), TOP (topic).

² There is some controversy concerning the status of clausal comparatives in Korean. (Japanese is similar in this regard.) That is, some researchers assume it to involve a kind of relative clause or nominalized clause, which means that clausal comparatives like (2) are essentially NP comparatives as well, while there are also researchers who assume that the complement of *pota* in sentences like (2) is a genuine clause. This in part stems from the status of *kes*, which is ambiguous between a pronominal and a complementizer. In any case, this controversy does not concern us here. See Beck et al. (2004), Jhang (1994), Park (2018), Sudo (2015) for relevant discussion.

I refer to the construction in question as *Reduced NP Comparatives* (RNC) for reasons to be made clear below. Some examples of RNC are given in (3).^{3 4}

- (3) a. John-uy sengcek-un Mary-pota cohta.
 John-GEN grade-TOP Mary-than good
 ‘John’s grade is better than Mary(’s grade).’
 b. John-uy kho-nun Mary-pota khuta.
 John-GEN nose-TOP Mary-than big
 ‘John’s nose is bigger than Mary(’s nose).’
 c. Kim kyoswu-uy ceyca-nun Lee kyoswu-pota manhta.
 Kim prof.-GEN student-TOP Lee prof.-than many
 ‘Prof. Kim’s students are more than Prof. Lee(’s students).’
 (= ‘Prof. Kim has more students than Prof. Lee.’)

The examples in (4) illustrate more complex instances of RNC.

- (4) a. Robert Downey Jr.-ka yenghwa han phyen-eyse pat-nun ton-i
 R.D.J.-NOM movie one piece-from receives-ADN money-NOM
 Tom Holland-pota hwelssin mahnta.
 T.H.-than far much
 ‘The money that R.D.J. receives from a movie is far more than
 (the money that) T.H. (receives from a movie).’
 b. Sosel-ul ssu-n haksayng-i si-pota manhta.
 novel-ACC wrote-ADN student-NOM poem-than many
 ‘There are more students who wrote novels than (students who wrote)
 poems.’

One immediate difference between RNC and ordinary comparatives in (1) and (2) is that in the former, the antecedent is always structurally more complex than the pivot. As I argue below, this is because the latter is the reduced form of the standard, hence the name “reduced” NP comparatives.

On the surface, RNC may appear to be a usual NP comparative construction in that it involves two NPs. But, what is crucial is the fact that in RNC, the pivot does not denote the standard of comparison at all, although it bears the marker of the standard of comparison, i.e., *pota* ‘than’. For instance, in (3a), what the speaker intends to compare is John’s grade and Mary’s grade, not John’s grade and Mary herself. Similarly, in (4a), it is not that a comparison is made between the amount of money that Robert Downey Jr. makes from a movie and another actor, Tom Holland. Rather, the standard is understood to be the amount of money that Tom Holland makes from a movie.

³ In the English translation of Korean sentences, implicit elements are enclosed in parentheses.

⁴ On the surface, the examples in (3) may give the impression that they involve NP-ellipsis, as in (i). I show in Sect. 2 that this is not the case.

(i) John cleaned Chomsky’s house, but Mary cleaned Halle’s.

The crucial point is that in RNC, there is a mismatch between the pivot and standard unlike in ordinary comparatives, where they are normally identical. The pivot in RNC bears the comparative particle *pota* on the surface, while the real standard is implicit and understood to contain the pivot underlyingly. This is the reason why the pivot and standard should be distinguished. Of course, the important question is how the mismatch between the pivot and standard should be captured. Putting aside details for now, the gist of the current analysis is that the mismatch should be accounted for in terms of deletion. This is schematically represented in (5).

- (5) [_{ANT} [_{COR} ABC] XYZ] [_{STA} [_{PIV} DEF] ~~XYZ~~]-*pota* predicate

As mentioned above, RNC involves several essential elements—namely, the antecedent, correlate, pivot, and standard. Among these, the first three are overtly realized on the surface, while the last one is implicit. The standard is assumed to undergo deletion, and its remnant is what I call the pivot. The important intuition here is that the standard is a full complex NP that is structurally parallel to the antecedent and that it undergoes deletion, leaving only the pivot on the surface.

The discussion below is organized as follows: in Sect. 2, I briefly discuss NP-ellipsis in Korean, because RNC has some resemblance to it on the surface. I show that although certain elements in noun phrases may indeed be deleted in Korean, the deletion phenomenon has nothing to do with NP-ellipsis. Rather, I argue that it is tied to a new type of comparative construction that I call RNC. Although there exist no previous analyses of RNC in the literature on Korean, the discussion on NP-ellipsis in Sect. 2 provides a useful background for us to proceed further; in Sect. 3, I discuss some important factors that determine the availability of RNC and propose a novel generalization regarding the relation between the antecedent and pivot to the effect that they should be incomparable with each other for RNC to be possible. This is in fact the hallmark of RNC that distinguishes it from ordinary NP comparatives; in Sect. 4, I discuss how the pivot is determined in RNC and refine further the generalization proposed in Sect. 3; in Sect. 5, I discuss the role played by the gradable predicate in RNC, which further supports the idea that the notion of comparability and scale plays an important role in the construction; in Sect. 6, I discuss the status of the pivot in RNC from the point of view of deletion, which also has implications for the main generalization proposed above; in Sect. 7, I offer a deletion-based analysis of RNC, which can be seen as an extension of Merchant's (2001, 2004, 2009, among others) move-and-delete approach to various ellipsis phenomena; Sect. 8 concludes.

2 Background: NP-Ellipsis in Korean

Sentences like (6) are assumed to involve NP-ellipsis (NPE), the usual analysis of the construction being as in (7) (see Bošković 2014; Jackendoff 1971; Lobeck 1990; Saito, Lin, and Murasugi 2008; Saito and Murasugi 1990, Concerning this, Park among many others).

- (6) John cleaned Chomsky's house, but Mary cleaned Halle's.
 (7) ... Mary cleaned [_{DP} Halle's ~~the house~~]

In the case of Korean, as An (2009, 2013, 2014) points out, NPE does not seem to be available. For instance, the direct counterpart of (6) is totally ungrammatical in Korean.⁵

- (8) John-un Chomsky-uy cip-ul chengsohayssta.
 John-TOP Chomsky-GEN house-ACC cleaned
 * Kulentey Mary-nun [Halle-uy ~~ei~~]-ul chengsohayssta.
 But Mary-TOP Halle-GEN house-ACC cleaned
 'John cleaned Chomsky's house. But Mary cleaned Halle's.'

Concerning this, Park (2016) suggests that the deviance of a canonical NPE context like (8) should be attributed to an independent language-specific morphological constraint involving the genitive case-marker *uy*, to the effect that *uy* cannot be followed by other nominal suffixes such as the case-marker *ul*, as in (8), or the topic-marker *nun*, as in (ii) in note 5 (see also Lee 2013 for a similar view). Park argues further that NPE is actually possible in some limited contexts in Korean. In what follows, I discuss Park's proposal in some detail, as doing that reveals some properties that are also relevant to the current analysis, though I eventually conclude that Park's proposal itself cannot be maintained.

2.1 Canonical NPE contexts

As mentioned above, Park (2016) argues that the deviance of sentences like (8) stems from the fact that the genitive case-marker *uy* on the remnant is directly followed by another case-marker. Although it is plausible that a case-marker cannot be followed by another case-marker and that the constraint in question is language-specific, it is still noteworthy that precisely the same sequence of elements is allowed in NPE contexts in Japanese, as shown by example (i) in note 5. Note also

⁵ It is worth pointing out that Japanese, which often behaves very similarly to Korean, allows NPE (Saito and Murasugi 1990; Saito, Lin, and Murasugi 2008; Takahashi 2011, among many others). Consider the contrast between (i) and (ii).

- (i) Taroo-no taido-wa yo-i ga, [Hanako-no ~~taido~~-wa] yoku-na-i. (J)
 Taro-GEN attitude-TOP good-PRES though Hanako-GEN attitude-TOP good-not-PRES
 'Though Taro's attitude is good, Hanako's isn't.' (Saito, Lin, and Murasugi 2008:253)
 (ii) * John-uy thayto-nun coh-ciman, [Mary-uy ~~thayto~~]-nun cohci anhta. (K)
 John-GEN attitude-TOP good-though Mary-GEN attitude-TOP good not
 'Though John's attitude is good, Mary's isn't.' (An 2013:23)

that Korean allows all the usual case-markers, including the genitive case-marker *uy*, to be omitted (see An 2009 and references therein). If the genitive-accusative sequence in (8) were the source of the problem, it would be predicted that omitting either or both of these case-markers should improve the sentence. But, the prediction is not borne out. As (9) shows, NPE is disallowed even if we avoid the genitive-accusative sequence, regardless of which of the case-markers is omitted. Thus, omitting the genitive case-marker *uy*, the accusative case-marker *ul*, or both, has no effect at all on the ungrammaticality of the sentence. Note crucially that the case-markers in question can in principle be omitted in this environment, if there is no omission of the head noun, as (10) shows.

- (9) John-un Chomsky-uy cip-ul chengsohayssta.
 John-TOP Chomsky-GEN house-ACC cleaned
 *Kulentey Mary-nun [Halle-(uy) ~~ey~~]-ul chengsohayssta.
 But Mary-TOP Halle-GEN house-ACC cleaned
 'John cleaned Chomsky's house. But Mary cleaned Halle's.'
- (10) Mary-nun Halle-(uy) cip-ul chengsohayssta.
 Mary-TOP Halle-GEN house-ACC cleaned
 'Mary cleaned Halle's house.'

This indicates that the deviance of canonical NPE contexts in Korean cannot simply be attributed to some language-specific morphological constraint banning a sequence of nominal suffixes. Rather, the ungrammaticality does seem to stem from the omission of the head noun itself. In fact, I believe that there has not been any convincing evidence to date that NPE exists in the language.⁶ In any case, it suffices for present purposes that the RNC sentences in (3), where the head noun of the standard NP is omitted, do not involve NPE. (For reasons of space, I only repeat (3a) here as (11). But the same consideration applies to the other examples in (3).)

- (11) John-uy sengcek-un Mary-pota cohta.
 John-GEN grade-TOP Mary-than good
 'John's grade is better than Mary's (grade).'

Besides, there is no way that the sentences in (4) can be analyzed in terms of NPE, which also provides evidence that NPE is irrelevant to RNC. (I only repeat (4a) here for reasons of space.)

- (12) Robert Downey Jr.-ka yenghwa han phyen-eyse pat-nun ton-i
 R.D.J.-NOM movie one piece-from receives-ADN money-NOM
 Tom Holland-pota hwelssin mahnta.
 T.H.-than far much
 'The money that R.D.J. receives from a movie is far more than (the money that) (receives from a movie). T.H.'

⁶ See An (2013) for other cases in Korean that only apparently resemble NPE.

2.2 Alternative NPE contexts

Let us turn to Park's (2016) claim that NPE is possible in some limited contexts. In particular, Park argues that sentences like (13) and (14) are derived by NPE.

- (13) [Haksayngtul-uy [NP cengpwu-uy piphan]]-un
 students-GEN government-GEN criticism-TOP
 [kyoswutul [NP]]-pota-to hemhayssta.
 professors -than-even was.severe
 'The students' criticism of the government was more severe than the
 professors' criticism of the government.' (Park 2016:301)
- (14) [San-uy konggi]-nun [cip [NP]]-pota te kkaykushayssta.
 mountain-GEN air-TOP house -than more was.clean
 'The mountain's air was cleaner than the house's air.' (Park 2016:303)

In a nutshell, Park's claim is that NPE in Korean is only possible with event nouns, as in (13), and mass nouns, as in (14). With count nouns, NPE is assumed to be impossible. In such contexts, the pronominal element *kes* 'one' must be inserted, if the noun is not overtly realized, as in (15).

- (15) [John-uy kabang]-un [Mary-uy *(kes)]-pota pissata.
 John-GEN bag-TOP Mary-GEN kes-than expensive
 'John's bag is more expensive than Mary's.' (Park 2016:304)

Park does not provide an account of the observation in (13)–(15). More importantly, Park does not pay attention to the fact that these sentences are comparative constructions—note the occurrence of the comparative particle *pota*. What is more, these sentences are actually instances of RNC.⁷ That is, between the

⁷ It is noteworthy that a slightly modified version of (15) is acceptable with an RNC reading, as in (i).

(i) ? [John-uy kabang]-i [Mary]-pota pissata.
 John-GEN bag-NOM Mary-than expensive
 'John's bag is more expensive than Mary's bag.'

(i) may sound a bit awkward at first, but in a proper context, as in (ii), it sounds better.

(ii) Context for (i): People are trying to determine who has the most expensive bag: John's bag is from Gucci; Mary's is from Nike.

Also, with a different predicate, (i) allows an RNC reading more easily.

(iii) John-uy kabang-i Mary-pota sinhyeng/kwuhyang-i-ta.
 John-GEN bag-NOM Mary-than new.model/old.model-COP-DEC
 'John's bag is a newer/older model than Mary's bag.'
 (Context: People are trying to determine who has a newer/older model of a bag.)

These examples illustrate the role played by the predicate and context in determining the availability of RNC, to which I turn below in Sects. 3 and 5.

two compared NPs, the first one is a full complex NP argument, while the one bearing *pota* involves a mismatch between the pivot and standard. I have already shown in the previous section that the kind of omission phenomenon observed in RNC cannot be equated with NPE. Furthermore, even the configurations in (13) and (14) are disallowed if they occur in canonical NPE configurations, as (16) and (17) show. This provides strong evidence that, rather than NPE, being a comparative construction is a crucial factor in allowing the omission phenomenon in (13) and (14).

- (16) John-un [haksayngtul-uy [_{NP} cengpwu-uy piphan]]-ul swuyonghayssta.
 John-TOP students-GEN government-GEN criticism-TOP accepted
 * Mary-nun [kyoswutul [_{NP}]]-ul swuyonghayssta.
 Mary-TOP professors -ACC accepted
 ‘John accepted the students’ criticism of the government. Mary accepted the professors’ (criticism of the government).’
- (17) John-un [san-uy konggi]-lul coahanta.
 John-TOP mountain-GEN air-ACC likes
 * Mary-nun [cip [_{NP}]]-ul coahanta.
 Mary-TOP house -ACC likes
 ‘John likes the mountain’s air. Mary likes the house’s (air).’

Also, the alleged sensitivity to the distinction between event/mass nouns and count nouns is not supported empirically. For instance, in (3b) and (3c), repeated below, the omitted nouns, i.e., *kho* ‘nose’ and *ceyca* ‘student’, are count nouns, while the sentences are perfect.

- (18) a. John-uy kho-nun Mary-pota khuta.
 John-GEN nose-TOP Mary-than big
 ‘John’s nose is bigger than Mary(’s nose).’
 b. Kim kyoswu-uy ceyca-nun Lee kyoswu-pota mahnta.
 Kim Prof.-GEN student-TOP Lee Prof.-than many
 ‘Prof. Kim’s students are more than Prof. Lee(’s students).’
 (= ‘Prof. Kim has more students than Prof. Lee.’)

Furthermore, in more complex cases of RNC like those in (4), repeated below, what is omitted is not just the head noun—parts of the relative clause as well as the head noun are omitted together. Obviously, the distinction between event/mass nouns and count nouns is not applicable to the omitted elements here. It is also clear that NPE is not relevant either.

- (19) a. Robert Downey Jr.-ka yenghwa han phyen-eyse pat-nun ton-i
 R.D.J.-NOM movie one piece-from receives-ADN money-NOM
 Tom Holland-pota hwelssin mahnta.
 T.H.-than far much
 ‘The money that R.D.J. receives from a movie is far more than
 (the money that) T.H. (receives from a movie).’

- b. Soseul-ul ssu-n haksayng-i si-pota mahnta.
 novel-ACC wrote-ADN student-NOM poem-than many
 ‘There are more students who wrote novels than (students who wrote) poems.’

To summarize, it is true that in some contexts, omission of certain elements in an NP is possible in Korean. However, the omission phenomenon has nothing to do with NPE. In fact, the existence of NPE is questionable on independent grounds. Crucially, the omission phenomenon in question is tied to the fact that the sentence involves a comparative construction—in particular, RNC, an important property that has gone unnoticed in the previous literature.

3 Factors that determine the availability of RNC

I have argued above that the omission phenomenon in RNC does not involve NPE. I have also shown that the distinction between event/mass nouns and count nouns is not relevant to the omission phenomenon in RNC. In what follows, I examine a number of factors that determine the availability of RNC.

3.1 Comparability

First, note that for two NPs to be used legitimately in a comparative sentence, they should in some way be compatible with each other for the comparison to be possible, i.e., they should be similar enough to each other, while differing only with respect to certain relevant properties, so that the comparison makes sense. One would normally not compare things that belong to totally unrelated categories, e.g., apples and friendship, unless the comparison is figurative. Therefore, the compared elements should share some relevant properties with respect to which they can be compared. I refer to this general requirement simply as “comparability”.

To help understand the notion of comparability, it is useful to consider briefly some relevant semantic properties of gradable predicates. Gradable predicates are essential elements in comparative constructions, because normally, comparative constructions are impossible without them. This is clearly illustrated by (20), where the gradable predicate in (20a) allows a comparison, while the non-gradable predicate in (20b) doesn’t.

- (20) a. John-un Tom-pota pwuca-ta.
 John-TOP Tom-than rich.person-DEC
 ‘John is richer than Tom.’
 b. * John-un Tom-pota kyoswu-ta.
 John-TOP Tom-than professor-DEC
 ‘John is a professor than Tom.’

Regarding the semantics of gradable predicates, Kennedy (1999) points out that while gradable predicates are the same as non-gradable predicates in that they are functions from objects to truth values, they are different from the latter in that their domains are partially ordered with respect to some property that permits gradation. That is to say, gradable predicates are associated with some kind of “scale” as part of their meaning. According to Kennedy, when evaluating the meaning of a sentence containing a gradable predicate in the form of *x is*, we are concerned with a subset of the domain of that contains only objects that are deemed to be “like *x*” in some relevant sense. Kennedy (1999, p. 6) refers to the contextually relevant subset of the domain of a gradable predicate as a *comparison class* and makes the following remark, which is of particular relevance to our discussion:

... a comparison class ... contains just those objects that are determined to be relevant in a particular context of utterance, in particular, those objects that are similar to *x* in some appropriate respect

Given this, we can say that when two things are “comparable”, they can be associated with the same scale. They are objects belonging to the same comparison class. One simple way to determine whether two things are comparable or not is to construct sentences where the elements in question are used with the same gradable predicate. If they can be used naturally with the predicate, it means that whatever scale the predicate denotes, they can be associated with it, which in turn means that they can be compared with each other.

- (21) John-i Tom-pota ttokttokhata.
 John-NOM Tom-than smart
 ‘John is smarter than Tom.’
 → a. John-i ttokttokhata.
 John-NOM smart
 b. Tom-i ttokttokhata.
 Tom-NOM smart

Similarly, the oddness of the comparative sentence in (22) is expected, because we are comparing two elements that are not comparable, i.e., they do not belong to the same comparison class, because they are not similar enough in the relevant sense.⁸

⁸ The caveat here is that this test might potentially give an apparently wrong result due to the flexibility of the meaning of the predicate. The problem is only apparent, because the interpretation of the predicate will be different depending on whether it is used with the antecedent or pivot. That is, we would be dealing with different kinds of scales in such situations. Such cases are tangential to the main point. See also the discussion in Sect. 5.

- (22) # John-i i kapang-pota ttokttokhata.
 John-NOM this bag-than smart
 ‘John is smarter than this bag.’
 → # I kabang-i ttokttokhata.
 this bag-NOM smart
 ‘This bag is smart.’

3.2 Comparability in RNC

With the notion of comparability in mind, I propose in this section an important generalization concerning the availability of RNC. Crucially, I propose that for RNC to be possible, the antecedent and pivot should “not” be comparable with each other. The general pattern we find in RNC is as in (23).

- (23) a. Incomparable antecedent and pivot → RNC possible
 b. Comparable antecedent and pivot → RNC impossible

This means that there is a reverse correlation between the comparability between the antecedent and pivot and the naturalness of RNC. The main intuition behind this is as follows: if the pivot is comparable with the antecedent, it is simultaneously interpreted as the standard as well, i.e., it is directly compared with the antecedent, which blocks the recovery of an implicit standard, a necessary step in RNC. In such cases, the sentence is analyzed as an ordinary NP comparative construction. However, if the pivot is incomparable with the antecedent, it facilitates the recovery of the standard, which is what happens in grammatical instances of RNC. It should also be emphasized that it is the pivot, not the standard, whose comparability with the antecedent matters for the purpose of RNC.⁹ The state of affairs can be summarized as below.

- (24) Antecedent-Pivot Incomparability (API) (*first version*)
 In grammatical instances of RNC, the pivot should not be comparable with the antecedent.

3.3 The distribution of RNC

Let us confirm that the generalization made in the previous section captures the distribution of RNC correctly. I repeat some of the grammatical examples of RNC in (3a) and (4) below. (The cases in (3b) and (3c) will be discussed separately.)

⁹ Of course, the standard should be comparable with the antecedent, but that is presupposed to be the case in all the relevant cases. Otherwise, the comparison will lead to gibberish.

- (25) a. John-uy **sengcek**-un **Mary**-pota cohta.
 John-GEN grade-TOP Mary-than good
 ‘John’s grade is better than Mary’s (grade).’
 b. Robert Downey Jr.-ka yenghwa han phyen-eyse pat-nun **ton-i**
 R.D.J.-NOM movie one piece-from receives-ADN money-NOM
Tom Holland-pota hwelssin manhta.
 T.H.-than far much
 ‘The money that R.D.J. receives from a movie is far more than
 (the money that) T.H. (receives from a movie).’
 c. Sosel-ul ssu-n **haksayng**-i **si**-pota manhta.
 novel-ACC wrote-ADN student-NOM poem-than many
 ‘There are more students who wrote novels than (students who wrote)
 poems.’

In these examples, it is clear that the pivots are not comparable with their antecedents, i.e., they are not of the same kind in the relevant sense, so that they cannot be associated with the same scale.

I provide additional examples of RNC below, whose grammaticality is correctly captured by the generalization in (24). In all these cases, the antecedent and pivot are not comparable.¹⁰

- (26) a. John-uy **nai**-nun **Mary**-pota manhta.
 John-GEN age-TOP Mary-than many
 ‘John’s age is more than Mary(’s age).’ (=John is older than Mary.)
 b. John-uy **sengkyek**-un **Mary**-pota cohta.
 John-GEN personality-TOP Mary-than good
 ‘John’s personality is better than Mary(’s personality).’
 c. Kim kyoswu-uy **kanguy**-nun **Park kyoswu**-pota caymiissta.
 Prof. Kim-GEN lecture-TOP Prof. Park-than interesting
 ‘Prof. Kim’s lecture is more interesting than Prof. Park(’s lecture).’
 d. Ceycakca-ka nay-nun **piyong**-i **yenghwasa**-pota mahnta.
 producer-NOM pay-ADN expense-NOM film.company-than many
 ‘The expenses that the producer pays are more than (the expenses that)
 the film company (pays).’

¹⁰ I am grateful to an anonymous reviewer for JEAL for providing the examples in (26e)–(26h).

- e. Ce san-uy **namwutul-i i** san-pota te phwuruuta.¹¹
 that mountain-GEN trees-NOM this mountain-than more green
 ‘The trees of that mountain are greener than those of this mountain.’
- f. I kakey-uy **kkochtul-i ce** kakey-pota te ssata.
 this shop-GEN flowers-NOM that shop-than more cheap
 ‘The flowers in this shop are cheaper than those in that shop.’
- g. John-i senmwul-lo pat-un **kabang-i** Mary-pota te manhta.
 John-NOM present-for receive-ADN bag-NOM Mary-than more many
 ‘John received more bags than Mary for a present.’
- h. Robert Downey Jr.-ka phayn-eykeyse pat-un **senmwul-i**
 RDJ-NOM fan-from receive-ADN present-NOM
Tom Holland-pota manhta.
 TH-than many
 ‘Robert Downey Jr. received more presents from his fans than Tom Holland did.’

¹¹ An anonymous reviewer for JEAL points out that for (26e) and (26f), it is possible to construct the sentences in (i) and (ii), respectively.

- (i) a. Ce san-uy namwutul-i phwururuta.
 that mountain-GEN trees-NOM green
 ‘That mountain’s trees are green.’
 b. I san-i phwururuta.
 this mountain-NOM green
 ‘This mountain is green.’
- (ii) a. I kakey-uy kkochtul-i ssata.
 this shop-GEN flowers-NOM cheap
 ‘The flowers in this shop are cheap.’
 b. Ce kakey-kassata.
 that shop-GEN cheap
 ‘That shop is cheap.’

At first, these examples seem to indicate that the antecedents and pivots in (26e) and (26f) are comparable, which if true, might be problematic for (24). However, there is reason to believe that that is not the case. Rather, these examples actually show the importance of the role played by the predicate in determining the comparability between the relevant elements. Regarding (26e) and (i), they are essentially the same as (37a)/(38) discussed in Sect. 5, where I argue that the scales associated with the relevant NPs are not identical, so that they are not comparable and, thus, do not pose a problem for API. (I refer the reader to Sect. 5 for details.) Regarding (iib), if the speaker is literally concerned with the price of that shop, e.g., if the speaker is a real estate agent, it is reasonable that the price range for real estate is not the same as that for flowers. Therefore, we are dealing with different scales in (iia) and (iib) in such contexts. Incidentally, (iib) allows an alternative reading that says something about prices of flowers. But, in that case, the sentence is based on a configuration like (iii), where *pro* can also be replaced by the overt NP *kkoch-i* ‘flowers-NOM’. Crucially, however, *kkoch* ‘flowers’ is not the pivot in (26f). Therefore, (iib) under the alternative interpretation does not pose a problem for API either.

- (iii) Ce kakey-ka *pro* ssata. (*pro*=*kkoch-i*)
 that shop-NOM cheap flower-NOM
 ‘Flowers are cheap at that store.’

This proposal also straightforwardly captures Park's (2016) putative NPE examples in (13) and (14), repeated here as (27a) and (27b). In both cases, the antecedent and pivot denote different types of things whose comparisons are intuitively implausible, which in turn makes RNC possible.

- (27) a. Haksayngtul-uy cengpwu-uy **piphan-un** **kyoswutul-pota**
 students-GEN government-GEN criticism-TOP professors-than
 hemhayssta.
 was.severe
 'The students' criticism of the government was more severe than the
 professors ('criticism of the government).'
 b. San-uy **konggi-nun** **cip-pota** te kkaykkushayssta.
 mountain-GEN air-TOP house-than more was.clean
 'The mountain's air was cleaner than the house('s air).'

It is also significant that even if the sentences in (27) are modified in such a way that the antecedents involve relative clauses rather than genitive phrases, as in (28), the grammaticality remains the same. Note that (27) and (28) roughly mean the same thing. Therefore, in both (27) and (28), the antecedents and pivots are incomparable, rendering RNC possible.¹²

- (28) a. [_{ANT} [Haksayngtul-i cengpwu-eytayhay phepwu-un] **piphan-un**]
 students-NOM government-about poured.out-ADN criticism-TOP
 [_{PIV} **kyoswutul**]-pota hemhayssta.
 professors-than was.severe
 'The criticism that the students poured out about the government was
 more severe than (the criticism that) the professors (poured out about the
 government).'
 b. [_{ANT} [San-eyse nay-ka math-un] **konggi-nun** [_{PIV} **cip**]-pota]
 mountain-at I-NOM inhaled-ADN air-TOP house-than
 kkaykkushayssta.
 was.clean
 'The air that I breathed at the mountain was cleaner than (the air
 that I breathed at) the house.'

¹² Significantly, the parallelism between (27) and (28) provides further evidence that NPE is irrelevant to the cases under consideration.

As expected, when the antecedent containing a relative clause denotes the same kind of object as the pivot, i.e., when they are comparable, RNC is not acceptable, as shown in (29). Here, the sentences only allow the literal interpretation in (i), where the pivot is simultaneously interpreted as the standard. The sentences do not allow the RNC reading in (ii).

- (29) a. [_{ANT} [John-i ceycakha-n] **tongsang**]-un [_{PIV} **Mary**]-pota khessta.
 John-NOM produced-ADN bronze.statue-TOP Mary-than was.big
 i. ‘The bronze statue that John produced was bigger than Mary.’
 → non-RNC, NP comparative reading
 ii. * ‘The bronze statue that John produced was bigger than (the bronze statue that) Mary (produced).’
 → RNC reading
- b. [_{ANT} [San-eyse cap-un] **holangi**]-nun [_{PIV} **cip**]-pota khessta.
 mountain-at caught-ADN tiger-TOP house-than was.big
 i. ‘The tiger that was caught at the mountain was bigger than the house.’
 → non-RNC, NP comparative reading
 ii. * ‘The tiger that was caught at the mountain was bigger than (the tiger that was caught at) the house.’
 → RNC reading

4 Identifying the Pivot

In the previous section, I proposed a novel generalization about RNC, repeated below, and showed that it correctly captures a wide range of data that have not drawn any attention in the literature.

(30) Antecedent-Pivot Incomparability (API) (*first version*)

In grammatical instances of RNC, the pivot should not be comparable with the antecedent.

In this section, I propose a further refinement of API to capture more sophisticated patterns of RNC. Crucially, this helps us understand how the pivot should be identified in RNC.

First, (31) is an ordinary NP comparative construction. Here, of course, the antecedent and standard are comparable with each other, i.e., they can be associated with the scale of the predicate, so that the comparison is legitimate.

- (31) [_{ant} John-uy tongsayng-uy nai]-nun
 John-GEN brother-GEN age-TOP
 [_{sta} [_{NP1} [_{NP2} Mary]-uy tongsayng]-uy nai]-pota cekta.
 Mary-GEN brother-GEN age-than less
 ‘John’s brother’s age is less than Mary’s brother’s age.’
 (=John’s brother is younger than Mary’s brother.)

Note that the standard in (31) contains additional NPs inside, labeled NP1 and NP2 for convenience. Both these NPs are incomparable with the antecedent. Given API, they are potential candidates to be pivots in the RNC counterpart of (31). Assuming that, consider the sentence in (32), where what looks like NP2 surfaces as the pivot.

- (32) [ant John-uy tongsayng-uy nai]-nun [piv Mary]-pota cekta.
 John-GEN brother-GEN age-TOP Mary-than less
 a. 'John's brother's age is less than Mary.'
 (=John's brother is younger than Mary.)
 b. * 'John's brother's age is less than Mary's brother's age.'
 (=John's brother is younger than Mary's brother.)

Crucially, however, (32) is not ambiguous and allows only the reading in (32a), indicating that its underlying structure should be as in (33a), not (33b).

- (33) a. [ANT [COR John-uy tongsayng]-uy nai]-nun
 John-GEN brother-GEN age-TOP
 [STA [PIV Mary]-uy ~~nai~~]-pota cekta.
 Mary-GEN age-than less
 b. * [ANT [COR John]-uy tongsayng-uy nai]-nun
 John-GEN brother-GEN age-TOP
 [STA [PIV Mary]-uy ~~tongsayng-uy nai~~]-pota cekta.
 Mary-GEN brother-GEN age-than less

This means that (32) actually has nothing to do with (31). Nor does its pivot *Mary* correspond to NP2 in (31). In fact, for the reading in (32b) to be possible, the surface form of the sentence should be as in (34), its underlying structure being as in (35). Note that (35) is identical to (31).

- (34) [ant John-uy tongsayng-uy nai]-nun [piv Mary-uy tongsayng]-pota cekta.
 John-GEN brother-GEN age-TOP Mary-GEN brother-than less
 'John's brother's age is less than Mary's brother's age.'
 (=John's brother is younger than Mary's brother.).
 (35) [ant John-uy tongsayng-uy nai]-nun
 John-GEN brother-GEN age-TOP
 [sta [piv Mary-uy tongsayng]-uy nai]-pota cekta.
 Mary-GEN brother-GEN age-than less

Given this, I suggest that in constructing an RNC sentence, the element that surfaces as the pivot should be the largest NP within the standard that is incomparable with the antecedent. That is why a sentence that starts out with an underlying structure like (31) only allows an RNC counterpart like (34), not (32).

This means that being incomparable with the antecedent is not sufficient for an NP to be the pivot in RNC. Below, I revise API to incorporate this.

(36) Antecedent-Pivot Incomparability (API) (*revised version*)

In grammatical instances of RNC, the pivot should be the largest NP within the standard that is incomparable with the antecedent.

5 The role of the predicate

In the grammatical examples of RNC discussed so far, the antecedent and pivot denote different types of elements and are thus incomparable with each other as per API. However, there are cases where the antecedent and pivot seem to belong to the same category, while RNC is possible. For instance, in Sect. 2.2, I discussed the sentences in (37) as counterexamples to Park's (2016) claim that count nouns are disallowed in putative NPE contexts. Given their interpretation, it is clear that these sentences are instances of RNC. On closer inspection, these sentences also raise an interesting question for our discussion of RNC, to which I turn in this section.

- (37) a. John-uy kho-ka Mary-pota khuta.
 John-GEN nose-NOM Mary-than big
 'John's nose is bigger than Mary('s nose).'
 b. Kim kyoswu-uy ceyca-ka Lee kyoswu-pota manhtha.
 Kim prof.-GEN student-NOM Lee prof.-than many
 'Prof. Kim's students are more than Prof. Lee('s students).'
 (= 'Prof. Kim has more students than Prof. Lee.')

First, in (37a), it may seem that the antecedent and pivot are of the same type, given the availability of the pair in (38).¹³ If this is correct, then the antecedent and pivot are comparable in (37a), which in turn means that API is not satisfied. This should normally preclude an RNC reading.

¹³ In response to a question raised by an anonymous reviewer for JEAL, I should point out that the test proposed in Sect. 3.1 for determining the comparability of elements, which is also employed here and below, is simply a convenient tool and is not supposed to have any independent status in grammar. Nor is this supposed to work in all cases. (See the comments in note 8.) I assume that it is ultimately the semantic features of the relevant NPs and their predicates that determine their legitimacy in a comparative construction, though further research is necessary to fully understand how these factors interact with each other.

- (41) I cha-uy yeph-ey iss-nun cha-ka ce cha-pota khuta.
 this car-GEN side-at be-ADN car-NOM that car-than big
 i. 'The car next to this car is bigger than that car.'
 → non-RNC, NP-comparative reading
 ii. *'The car next to this car is bigger than the car next to that car.'
 → RNC reading

Interestingly, a slightly modified version of (37a) allows an RNC reading even if a part-whole relation holds between the relevant elements in the antecedent. This is illustrated by (42), which is ambiguous in an interesting way.

- (42) Kein-uy kho-ka Mary-pota khuta.
 giant-GEN nose-NOM Mary-than big
 i. 'The giant's nose is bigger than Mary.'
 → non-RNC, NP-comparative reading
 ii. 'The giant's nose is bigger than Mary('s nose).'
 → RNC reading

Here, (42i) involves a literal comparison between the size of the giant's nose and the size of Mary herself. This is possible since we are dealing with a giant. (Assume that we are looking at a giant that is 50 meters tall.) On the other hand, (42ii) is basically the same as (37a), where we are comparing the size of the giant's nose with that of Mary's nose. (Assume in this case that we are looking at a small-sized giant that is only 3 meters tall.) Similarly, although the RNC reading is more natural, (39) may also allow a somewhat unusual non-RNC reading under a special circumstance. Imagine that one of the cars is a gigantic construction vehicle, while the other is a normal passenger car. Such a reading would correspond to (42i).

Next, turning to (37b), repeated below, note that the pivot is incompatible with the main predicate. Thus, (44b) is very odd, if *Lee kyoswu* 'Prof. Lee' is interpreted as the argument of the predicate.¹⁴ This means that unlike in (37a), there is no issue with respect to API in (43). Therefore, the availability of RNC in (37b) is correctly predicted under the current analysis.

¹⁴ (44b) can be grammatical under a different reading. Here, *pro* can be anything that is contextually salient, e.g., money, books, friends, etc. This reading is irrelevant to our discussion.

- (i) Lee kyoswu-ka pro manhta.
 Lee prof.-NOM many
 'As for Prof. Lee, (pro) is many. (=Prof. Lee has many (pro).)'

- (43) Kim kyoswu-uy ceyca-ka Lee kyoswu-pota manhta.
 Kim Prof.-GEN student-NOM Lee Prof.-than many
 ‘Prof. Kim’s students are more than Prof. Lee(’s students).’
 → RNC reading only
- (44) a. Kim kyoswu-uy ceyca-ka manhta.
 Kim Prof.-GEN student-NOM many
 ‘Prof. Kim’s students are many. (=Prof. Kim has many students.)’
 b. * Lee kyoswu-ka manhta.
 Lee Prof.-NOM many
 ‘Prof. Lee is many.’

If we modify (43) in a way that the antecedent and pivot are both compatible with the predicate, i.e., if a violation of API arises, an RNC reading becomes unavailable, as expected. This is because the pivot is simultaneously interpreted as the standard as well in such contexts. This is shown by (45).

- (45) Kim kyoswu-uy ceyca-ka Lee kyoswu-pota ywumeynghata/calsayngkiessta.
 Kim Prof.-GEN student-NOM Lee Prof.-than famous/handsome
 i. ‘Prof. Kim’s student is more famous/handsome than Prof. Lee.’
 → non-RNC, NP-comparative reading
 ii. * ‘Prof. Kim’s student is more famous/handsome than
 Prof. Lee(’s student).’
 → RNR reading

Note that (43) and (45) are a minimal pair differing only in the choice of the predicates. The contrast clearly indicates that it is important to consider the properties of the predicate in determining the availability of RNC. This is actually quite natural, considering that the comparability between elements is determined by the nature of the scale denoted by the gradable predicate.

6 The pivot as a remnant of deletion

Note that what underlies RNC is basically an NP comparative construction, as in (46).

- (46) [_{ant} John-uy nai]-ka [_{sta} Mary-uy nai]-pota manhta.
 John-GEN age-NOM Mary-GEN age-than many
 ‘John’s age is more than Mary’s age.’ (=‘John is older than Mary.’)

Here, the comparison is between the antecedent *John-uy nai* ‘John’s age’ and the standard *Mary-uy nai* ‘Mary’s age’. Note that these NPs contain identical elements, i.e., the noun head *nai* ‘age’, while they also contain distinct genitive NPs, i.e., *John* and *Mary*, corresponding to the correlate and pivot, respectively. Therefore, in a sense, the real contrast in (46) is between *John* and *Mary*, who are compared with respect to their age.

Given this, I assume that in RNC, the pivot is focused and that deletion applies to non-focused elements in the standard.¹⁵ This implies that assigning focus has the effect of determining which element is to be deleted and which is not. Now, recall that in Sect. 4, based on the contrast between sentences like (47) and (48), I suggested that API requires the pivot to be the largest element within the standard that is incomparable with the antecedent.

- (47) [John-uy tongsayng-uy nai]-nun [Mary]-pota manhtha.
 John-GEN brother-GEN age-TOP Mary-~~than~~ many
 a. 'John's brother's age is more than Mary's age.'
 b. * 'John's brother's age is more than Mary's brother's age.'
- (48) [John-uy tongsayng-uy nai]-nun [Mary-uy tongsayng]-pota manhtha.
 John-GEN brother-GEN age-TOP Mary-GEN brother-~~than~~ many
 a. * 'John's brother's age is more than Mary's age.'
 b. 'John's brother's age is more than Mary's brother's age.'

The question is why that should be the case. Regarding this, I suggest that elements in the standard that are not comparable with the antecedent are focused. If that is the case, the underlying structure of the standard in (48) will initially be like (49).¹⁶

In addition to that, I assume that something like (50) is also operative, to the effect that only the highest element among the F-marked elements in a dominance relation can retain its F-marking.

¹⁵ I assume that the relevant deletion operation in RNC only targets elements in the standard. This is supported by the contrast below.

- (i) a. [_{ant} John-uy nai]-nun [_{sta} Mary-~~uy~~ ~~nai~~]-pota manhtha.
 John-NOM age-TOP Mary-GEN age-~~than~~ many
 'John is older than Mary.'
 b. * [_{ant} John-~~uy~~ ~~nai~~]-nun [_{sta} Mary-uy nai]-pota manhtha.
 John-NOM age-TOP Mary-GEN age-~~than~~ many

¹⁶ For ease of exposition, I adopt a simplified structure of the noun phrase and label it as NP. I also ignore case-markers in the tree diagram. This does not affect our discussion.

- (50) A focus-marked node is an F-marked constituent not dominated by any other F-marked constituent (Selkirk 1995:555).

Then, the configuration in (49) will eventually be as in (51), which I assume is the source of the API effect.

- (51)
- ```

 NPSTA
 / \
 NPF N
 / \ age
 NP N
 | |
 N brother
 |
 N
 |
 Mary

```

## 7 Deletion in RNC

Let us turn to the deletion operation in RNC. Under the current analysis, the construction involves an implicit complex NP that undergoes deletion, which is what I call the standard. Assuming that the pivot is focused and that focused elements are exempt from deletion, an RNC sentence like (52) is derived as in (53).

- (52) Robert Downey Jr.-ka yenghwa hanphyen-eyse pat-nun ton-i  
 R.D.J.-NOM movie onepiece-from receives-ADN money-NOM  
 Tom Holland-pota hwelssin mahnta.  
 T.H.-than far much  
 ‘The money that R.D.J. receives from a movie is far more than  
 (the money that) T.H. (receives from a movie).’
- (53) ... [<sub>sta</sub> [<sub>piv</sub> T.H.]]<sub>F</sub>-ka yenghwa han phyen-eyse pat-nun ton]-pota ...  
 T.H.-NOM movie one piece-from receives-ADN money-than

Tentatively assuming this analysis, let us turn to the set of examples in (54) that makes an interesting point. That is, as an anonymous reviewer for JEAL points out, in most examples of RNC discussed so far, the pivot happens to be the initial element within the standard, which is also the case in (52). However, (54) shows

that this is not necessary, i.e., the pivot can also originate from non-initial positions within the standard.<sup>17</sup> (Here, the correlate and pivot are highlighted.)

- (54) a. [John-i **hakkyo-eyse** ponay-nun sikan]-i **cip-(eyse)**-pota manhta.  
 John-NOM school-at spend-ADN time-NOM home-at-than many  
 'John spends more time in school than at home.'
- b. [Kengkang kemcin-lul pat-ule **kayin pyengwen-ey** ka-n salam]-i  
 medical checkup-ACC have-to private hospital-to go-ADN person-NOM  
**conghap pyengwen**-pota manhta  
 general hospital-than many  
 'More people went to private hospitals than general hospitals to have a medical checkup.'
- c. [John-i **kangaci-eykey** cwu-n cangnamkam]-i  
 John-NOM puppy-DAT give-ADN toy-NOM  
**koyangi-(eykey)**-pota manhta  
 cat(-DAT)-than many  
 'John gave more toys to his dog than to the cat'
- d. [John-i **onul** pata-eyse cap-un koki]-ka **ecey**-pota manhta.  
 John-NOM today sea-at catch-ADN fish-NOM yesterday-than many  
 'The fish that John caught today in the sea is more than yesterday.'

If we assume that deletion takes place in (54) in the same way as in (53), the relevant configuration will be as in (55). (Due to considerations of space, I only discuss the case in (54a). But the situation is the same for the other examples in (54).)

- (55) [John-i **hakkyo-eyse** ponay-nun sikan]-i  
 John-NOM school-at spend-ADN time-NOM  
 [John-i **cip-eyse** ponay-nun sikan]-pota te manhta.  
 John-NOM home-at spend-ADN time-than more many

Note here that the deleted elements do not form a constituent. Therefore, the question arises how deletion can target these elements, given the usual assumption

<sup>17</sup> I thank the anonymous reviewer for JEAL for raising this point and also for the data in (54a–c).

that deletion only targets constituents.<sup>18</sup> In this context, Merchant's (2009) analysis of NP comparatives in Greek seems helpful. According to his analysis, the pivot undergoes focus movement out of an underlying clause, followed by deletion of the clause, which is actually an extension of his earlier analysis of sluicing in English (Merchant 2001), as shown in (56). His analysis of Greek NP comparatives is given in (57).

(56) a. Jack bought something, but I don't know what.

- (57) a. I Maria pezi kithara kalitera apo ton Gianni.  
 the Maria.NOM plays guitar better than the Giannis.ACC  
 'Maria plays guitar better than Giannis.' (Merchant 2009:152)
- b. ... [apo [[ton Gianni]<sub>1</sub> [<sub>t</sub> pezi kithara]]]

Given this, suppose that *pota* 'than' heads a functional projection (say, *thanP*) and takes the standard as its complement. In this base structure, the pivot undergoes focus movement to the specifier of *thanP*, followed by deletion of the rest of the standard, similarly to what happens in (56b). Assuming this, the configurations of deletion in (53) and (55) can be reanalyzed as in (58).

<sup>18</sup> It has been proposed in the literature that there are instances where deletion can actually target non-constituents (Abe 2016; An 2007, 2016, 2018, 2019; Mukai 2003, Ott and Struckmeier 2016, 2018, Sato and Maeda 2018, among others). However, this does not mean that deletion is unconstrained. For instance, An (2019) argues that deleted elements have to form a consecutive string due to independent requirements on PF. Therefore, the configuration in (55) cannot be accepted as is under An's approach to deletion. On the other hand, Abe (2016) and Ott and Struckmeier (2016, 2018) allow scattered deletion of non-constituents. I will not go into further details of these different approaches to deletion, since discussing them will go beyond the scope of this paper.



(58) a.

b.

Furthermore, note that in all cases of RNC, the pivot originates from an island such as a relative clause or a left-branch. For instance, although (59a) should involve movement and deletion as in (59b) under the current analysis, such extraction is not possible in non-RNC contexts, due to the left-branch condition, as (60) shows.<sup>19</sup> This means that deleting the extraction site, i.e., the standard, in RNC remedies island violations.

- (59) a. John-uy sengcek-un Mary-pota cohta.  
 John-GEN grade-TOP Mary-than good  
 'John's grade is better than Mary('s grade).'

b. ... [<sub>thanP</sub> [<sub>NP</sub> Mary] [<sub>than'</sub> [<sub>NP</sub> t-uy sengcek] pota]

- (60) \* [Mary] na-nun [<sub>CP</sub> [<sub>NP</sub> t uy sengcek]-i cohta-ko] sayngkakhanta.  
 Mary I-TOP GEN grade-NOM good-COMP think  
 'I think that Mary's grade is good.'

<sup>19</sup> The deviance of (60) may also be due to the fact that the genitive case marker is stranded after the movement of the pivot. This does not affect the main point of the discussion, as such problems can also be remedied by deletion, as Park (2005a, b) argues. Besides, moving the case-marker with the pivot does not improve the grammaticality of the sentence anyway.

- (i) \* [Mary-uy] na-nun [<sub>CP</sub> [<sub>NP</sub> t sengcek]-i cohta-ko] sayngkakhanta.  
 Mary-GEN I-TOP grade-NOM good-COMP think  
 'I think that Mary's grade is good.'

This is not surprising, because it is well-known that deletion can remedy island violations (Fox and Lasnik 2003, Ince 2012, Merchant 2001, Park 2005a, 2005b, among many others; see also Griffiths and Lipták 2014 and references therein for contexts that disallow island repair). For instance, sluicing in English can remedy violations of relative clause islands and left branch islands.

(61) Relative clause island

- a. They want to hire someone who speaks a Balkan language, but I don't remember which.
- b. \* I don't remember which (Balkan language) they want to hire someone [who speaks \_\_\_\_]. (Merchant 2008: 136)

(62) Left-branch island

- a. She bought a big car, but I don't know how big.
- b. \* I don't know how big she bought [a \_\_\_\_ car]. (Merchant 2008: 136)

In Korean, too, deletion is known to remedy island violations as well.<sup>20</sup>

(63) Relative clause island

- a. Q: John-un [nwu-ka cakokha-n nolay]-lul pwulless-ni?  
John-TOP who-NOM wrote-ADN song-ACC sang-Q  
'Who did John sing a song that wrote?'  
A: Max-(ka).
- b. ?\* Max-ka [John-un [t cakokha-n nolay]-lul pwulless-e.  
Max-NOM John-TOP wrote-ADN song-ACC sang-DEC (Park 2005a: 88)

(64) Left-branch island

- a. Q: John-un [nwukwu-uy tongsayng]-ul mannass-ni?  
John-TOP who-GEN brother-ACC met-Q  
'Whose brother did John meet?'  
A: Mary-(uy). (Park and Oh 2015: 3)
- b. \* Mary-uy John-un [t tongsayng]-ul mannass-ta.  
Mary-GEN John-TOP brother-ACC met-DEC

## 8 Conclusion

In this paper, I examined the properties of a novel type of comparative construction in Korean, namely, RNC. I argued that the notion of comparability plays an important role in determining the availability of RNC, where comparability is based on the scale associated with gradable predicates in comparative constructions. The hallmark of RNC that makes it different from ordinary NP comparatives is the fact that the antecedent and pivot have to be incomparable with each other, despite the fact that the pivot bears the marker of the standard of comparison. This means that

<sup>20</sup> (63a) and (64a) are examples of fragment answers, not sluicing. This does not affect the main point of our discussion, because the analysis of fragment answers adopted by the authors cited in the main text is essentially the same as Merchant's (2001) analysis of sluicing in (56b). In fact, the same is true of Merchant's (2004) own analysis of fragment answers in English. See An (2016) and Saito and An (2014) for further discussion and references for sluicing and fragment answers in Korean.

there is a mismatch between the standard and pivot as well. Adopting Merchant's (2001, 2004, 2009, among others) move-and-delete approach to various ellipsis constructions, I proposed a move-and-delete analysis of RNC, where the pivot undergoes focus movement within *than*P, followed by deletion of the rest of the standard. In the course of the discussion, I also showed that some putative instances of NPE in Korean are not genuine cases of NPE. It remains to be seen to what extent the current analysis can be extended to other languages and other types of comparative constructions, a task that I put aside for future research.

**Acknowledgments** I am very grateful to the anonymous reviewers and editors for JEAL for their insightful comments, which greatly helped improve this paper. Earlier versions of this paper were presented at the Nominals at the Interface workshop at Sogang University, Seoul in November, 2018 and at the 9th Comparative Syntax and Language Acquisition workshop at Nanzan University, Nagoya in March, 2019. I thank the audiences at these meetings—including, but not limited to, Michael Barrie, Marcel den Dikken, Jong-Bok Kim, Myung-Kwan Park, and Mamoru Saito for helpful discussion and comments. Many thanks are also due to Toshiko Oda for generously spending many hours discussing the details of my analysis. I would also like to mention that a more recent version of this paper was supposed to be presented in March, 2020 at a workshop on comparative constructions that I organized. Unfortunately, the event had to be canceled due to the pandemic of COVID-19. Although the workshop could not take place, I would still like to express my gratitude to those people who had agreed to participate in the workshop—in particular, the invited speakers Sigrid Beck, Vera Hohaus, Toshiko Oda, and Osamu Sawada. This work was supported by the Ministry of Education of the Republic of Korea and the National Research Foundation of Korea (NRF- S201907S00006).

## References

- Abe, Jun. 2016. Make short answers shorter: Support for the in situ approach. *Syntax* 19: 223–255.
- An, Duk-Ho. 2007. *Syntax at the PF interface: Prosodic mapping, linear order, and deletion*. Ph.D. dissertation. University of Connecticut, Storrs.
- An, Duk-Ho. 2009. A note on genitive drop in Korean. *Nanzan Linguistics* 5: 1–16.
- An, Duk-Ho. 2013. What is not NP-ellipsis in Korean. In *Deep insights, broad perspectives: Essays in honor of Mamoru Saito*, ed. Yoichi Miyamoto, Daiko Takahashi, Hideki Maki, Masao Ochi, Koji Sugisaki, and Asako Uchibori, 22–41. Tokyo: Kaitakusha.
- An, Duk-Ho. 2016. Extra deletion in fragment answers and its implications. *Journal of East Asian Linguistics* 25: 313–350.
- An, Duk-Ho. 2018. Another way to avoid islands. *Journal of East Asian Linguistics* 27: 173–209.
- An, Duk-Ho. 2019. On certain adjacency effects in ellipsis contexts. *Linguistic Inquiry* 50: 337–355.
- Beck, Sigrid, Toshiko Oda, and Koji Sugisaki. 2004. Parametric variation in the semantics of comparison: Japanese vs. English. *Journal of East Asian Linguistics* 13: 289–344.
- Bošković, Željko. 2014. Now I'm a phase, now I'm not a phase: On the variability of phases with extraction and ellipsis. *Linguistic Inquiry* 45: 27–89.
- Fox, Danny, and Howard Lasnik. 2003. Successive cyclic movement and island repair: The difference between sluicing and VP ellipsis. *Linguistic Inquiry* 34: 143–154.
- Griffiths, James, and Anikó Lipták. 2014. Contrast and island sensitivity in clausal ellipsis. *Syntax* 17: 189–234.
- Ince, Atakan. 2012. Fragment answers and islands. *Syntax* 15: 181–214.
- Jackendoff, Ray. 1971. Gapping and related rules. *Linguistic Inquiry* 2: 21–35.
- Jhang, Sea-Eun. 1994. "Headed nominalizations in Korean: Relative clauses, clefts, and comparatives." Ph.D. dissertation, Simon Fraser University.
- Kennedy, Christopher. 1999. *Projecting the adjective: The syntax and semantics of gradability and comparison*. New York: Routledge.
- Lee, Jeong-Shik. 2013. N'-ellipsis in Korean. *Studies in Modern Grammar* 72: 121–137.
- Lobeck, Anne. 1990. "Functional heads as proper governors." In *Proceedings of the North East Linguistic Society*, Vol. 20, 348–362. Amherst: GLSA, University of Massachusetts.

- Merchant, Jason. 2001. *The syntax of silence: Sluicing, islands, and the theory of ellipsis*. Oxford: Oxford University Press.
- Merchant, Jason. 2004. Fragments and ellipsis. *Linguistics and Philosophy* 27: 661–738.
- Merchant, Jason. 2008. Variable island repair under ellipsis. In *Topics in ellipsis*, ed. Kyle Johnson, 132–153. New York: Cambridge University Press.
- Merchant, Jason. 2009. Phrasal and clausal comparatives in Greek and the abstractness of syntax. *Journal of Greek Linguistics* 9: 134–164.
- Mukai, Emi. 2003. “On verbless conjunction in Japanese.” In *Proceedings of North East Linguistic Society 33*, ed. Makoto Kadowaki and Shigeto Kawahara, 205–224. Amherst, MA: GLSA.
- Ott, Dennis, and Volker Struckmeier. 2016. “Deletion in clausal ellipsis: Remnants in the Middle Field.” *U. Penn Working Papers in Linguistics* 22: 225–234.
- Ott, Dennis, and Volker Struckmeier. 2018. Particles and deletion. *Linguistic Inquiry* 49: 393–407.
- Park, Bum-Sik. 2005a. “*Identity and locality in ellipsis*.” Ph.D. dissertation. University of Connecticut, Storrs.
- Park, Bum-Sik. 2005b. “Island-insensitive fragment answers in Korean.” In *Proceedings of the 24th West Coast Conference on Formal Linguistics*, ed. John Alderete, Chung-hye Han, and Alexei Kochetov, 317–325. Somerville, MA: Cascadilla.
- Park, Bum-Sik, and Sei-Rang Oh. 2015. Left branch extraction in multiple fragments and its implications for island violations in Korean. *Korean Journal of Linguistics* 41: 1–19.
- Park, So-Young. 2016. Arguments for NP-ellipsis in Korean. *Korean Journal of Linguistics* 41: 289–311.
- Park, So-Young. 2018. Arguments against a relative clause analysis of Korean clausal comparatives. *Studies in Generative Grammar* 28: 253–272.
- Saito, Mamoru, and Duk-Ho An. 2014. A comparative syntax of ellipsis in Japanese and Korean. In *Japanese syntax in comparative perspective*, ed. Mamoru Saito, 117–138. New York: Oxford University Press.
- Saito, Mamoru, and Keiko Murasugi. 1990. N'-deletion in Japanese: A preliminary study. In *Japanese/Korean Linguistics*, Vol. 1, 258–301. Stanford: CSLI Publications.
- Saito, Mamoru, T.-H. Jonah Lin, and Keiko Murasugi. 2008. N'-ellipsis and the structure of noun phrases in Chinese and Japanese. *Journal of East Asian Linguistics* 17: 247–271.
- Sato, Yosuke, and Masako Maeda. 2018. Particle stranding ellipsis involves PF-deletion. *Natural Language & Linguistic Theory*. <https://doi.org/10.1007/s11049-018-9409-0>.
- Selkirk, Elisabeth. 1995. Sentence prosody: Intonation, stress and phrasing. In *Handbook of phonological theory*, ed. John Goldsmith, 550–569. Cambridge, MA: Blackwell.
- Sudo, Yasutada. 2015. Hidden nominal structures in Japanese clausal comparatives. *Journal of East Asian Linguistics* 24: 1–51.
- Takahashi, Masahiko. 2011. “*Some consequences of Case-marking in Japanese*.” Ph.D. dissertation, University of Connecticut, Storrs.