

Is contrastive *-(n)un* prosodically different from non-contrastive *-(n)un*?*

Ilkyu Kim
(Yale University)

Kim, Ilkyu. 2013. Is contrastive *-(n)un* prosodically different from non-contrastive *-(n)un*? *Linguistic Research* 30(3), 539–566. Contrastive *-(n)un* is often assumed (or claimed) to be distinguished from non-contrastive *-(n)un* in terms of its special prosody such as high pitch. This paper evaluates the validity of this assumption by comparing the prosodic properties of contrastive *-(n)un* and its non-contrastive counterpart. Particularly, the focus is on testing Lee's (2007) characterization of contrastive *-(n)un* as (L)H*(%) and his claim that it is longer than non-contrastive *-(n)un*. Based on a production experiment, it is claimed that contrastive and non-contrastive *-(n)un* are not different from each other in terms of their pitch and length. This study has important implications on the nature of *-(n)un* with respect to its meaning/function. Because the alleged prosodic difference between the two has been used as main evidence for positing two lexical items *-(n)un*, one for topic and one for contrast, the results of this study significantly weakens the motivation for the distinction, thus supporting a unified approach to *-(n)un* which posits only one *-(n)un* in the lexicon. (Yale University)

Keywords information structure, prosody, contrastive *-(n)un*, non-contrastive *-(n)un*, Korean

1. Introduction

A Korean particle *-(n)un*, together with Japanese *-wa*, is known as the representative morphological topic marker (Roberts 2011). It is also widely observed that *-(n)un* can express contrastiveness (e.g. Choi 1996, 1997; Lee 2003, 2007; Jun 2005, 2006). Regarding its function of topic- and contrast-marking, one of the most important issues is whether *-(n)un* has the two meanings/functions as its inherent properties (e.g. Yang 1994; Choe 1995; Choi 2004; Jun 2005, 2006; Lee 2007), or

* This paper is a significantly revised and further developed version of part of my dissertation. I am grateful to two anonymous reviewers for their invaluable comments on the earlier version of this paper.

it has a single independent meaning from which topicality and contrast are somehow derived (e.g. Choi 1996; Han 1998; Choi 2000; Hong 2005).

It is important to note that, for those who take the former view of *-(n)un*, the difference in prosodic properties between contrastive *-(n)un* and its non-contrastive counterpart is crucial evidence for their distinction between the two types of *-(n)un*. For example, Lee (2007) argues that the prosodic difference between the two is evidence for the conventional (but not conversational) nature of the contrastive implicature induced by contrastive (his contrastive topic (CT)-marking) *-(n)un*.¹

The purpose of this paper is to evaluate the validity of the claim that contrastive *-(n)un* is distinguished from non-contrastive *-(n)un* by its phonetic “accent”. To be more specific, this study examines Lee’s (2007) claim that contrastive *-(n)un*, unlike non-contrastive *-(n)un*, is characterized as (L)H*(%) and that it is longer than non-contrastive *-(n)un*. Based on a production experiment, it will be claimed that contrastive and non-contrastive *-(n)un* are not different from each other in terms of their pitch and length. Thus, the results of this study significantly weakens the motivation for making a distinction between contrastive and non-contrastive *-(n)un*, thus supporting a unified approach to *-(n)un* which posits only one *-(n)un* in the lexicon.

The structure of the paper is as follows. In section 2, I will introduce previous prosodic analyses of contrastive *-(n)un* and examine their problems and limitations. Then, in section 3, a production experiment on contrastive and non-contrastive *-(n)un* will be introduced and discussed. The experiment is specifically designed to test Lee’s (2007) claim on the prosody of contrastive *-(n)un*. I discuss the results of the experiment in section 4. Section 5 concludes the paper.

2. Previous studies

According to Kim (2011: 72) “systematic research on phonetic aspects of this topic [contrastive *-(n)un*] have never been conducted”. This claim seems a little too strong. As will be shown below, there have been several systematic studies on the phonetic property of contrastive *-(n)un*. In this section, I will introduce previous

¹ Although Hong (2005) and Kim (2010) does not take this view, they also attribute the contrastiveness conveyed by *-(n)un* to the phonetic accent.

studies on the prosodic characteristics of contrastive *-(n)un* and discuss their problems and limitations. To the best of my knowledge, the studies introduced in this section are the only previous studies on the topic.

2.1 Kim (2004)

As far as I know, Kim (2004) is the first to provide a phonetic analysis of different types of discourse functions marked by *-(n)un*.² The discourse functions he investigates are plain non-contrastive topic, contrastive topic (CT) (list contrastive topic in Lee's (2007) terms³), and contrastive focus (CF) (contrastive topic in Lee's terms⁴).

The participants are 23 college students who speak the Seoul dialect. The material consists of multiple question-answer pairs and their contexts. An example of a question-answer pair and its context is shown in (1), which was originally presented in Korean but is translated into English here for convenience.⁵

- (1) Situation: During a small meeting, A comes back from a break and notices that Yengswu and Mantwu are missing. So A asks the question.

A: Did both Yengswu and Mantwu leave?

B: Mantwu-nun went.

(Kim 2004: 46)

During the experiment, the experimenter read the questions and the participants read

² In fact, he also investigates how different types of discourse functions marked by *-i/ka* differ from one another in terms of their phonetic properties. To examine his analysis of *-i/ka*, however, is beyond the scope of this paper.

³ Lee (2007: 155) defines LCT as "the exhaustive list of all the contrastive topics that constitute a big Topic".

⁴ According to Lee (2007), if contrastive *-(n)un* does not mark LCT, it marks CT. That is, any contrastive use of *-(n)un* is considered as CT-marking unless it marks LCT.

⁵ The original Korean version is shown below:

상황: 소규모 모임을 갖던 중 잠깐 휴식하는 사이에 밖에 나갔던 A (회장격)가 회의장에 다시 돌아와 영수하고 만두(별명)가 없는 걸 보고 A가 질문한다.

A(실험수행자): 영수랑 만두랑 모두 떠났어? (만두가 간 상황에서)

피실험자: (떠나도 상관없는 영수는 안 가고, 핵심 인물인) 만두가 갔어 (원망스런 어조로)

the answers aloud. In the answers, *-(n)un* marks different discourse functions. For instance, the discourse function marked by *-(n)un* in (1) is CT, which is guaranteed by the given context.

In order to understand the prosodic property of each discourse function, Kim measured the pitch and the length of the syllables of the *-(n)un*-marked phrases. The results show that 1) the three discourse functions do not significantly differ from one another in terms of the pitch and the length of the first two syllables of the *-(n)un*-marked phrase (e.g. *Mantwu* in (1)), 2) the pitch of *-(n)un* for CT is the highest, followed by that for LCT, followed by that for non-contrastive topic, and 3) the length of *-(n)un* for non-contrastive topic is the longest, followed by that for CT, followed by that for LCT. Every difference in pitch and length of *-(n)un* between different discourse functions is statistically significant.

The first result is no surprise because, as Kim also points out, Korean expresses various syntactic, semantic, and pragmatic information through particles such as *-(n)un*, *-i/ka*, and *-(l)ul*. That is, if any prosodic prominence is to be expressed for any syntactic/semantic/pragmatic effect, we would predict it to be conveyed by the particle that expresses that very effect.

The second result seems to support the claim that contrastive *-(n)un* is fundamentally different from non-contrastive *-(n)un*, thus supporting Lee's (2007) argument, because the fact that contrastive *-(n)un* gets significantly higher pitch than non-contrastive *-(n)un* is exactly what is predicted by those who claim that contrastive *-(n)un* and non-contrastive *-(n)un* are two different lexical items. However, a closer look at the results leads to a different story.

Note that the pitch of *-(n)un* for LCTs is also significantly different from that for CTs and that for non-CTs. What does this mean? If the logic that is used for positing two different items of *-(n)un* also applies, we should conclude that there are three different lexical items for *-(n)un* in the lexicon, that is, topic-marking *-(n)un*, contrast-marking *-(n)un*, and LCT-marking *-(n)un*.

Although this is in principle possible, it would be equally possible or even plausible to argue that the different pitches imposed on different types of *-(n)un* are just epiphenomena that reflect different strengths of contrastiveness conveyed by different discourse functions. That is, contrastiveness in CT is stronger than that in LCT in that oppositeness is shown in the former but not in the latter. Also, it is clear that contrastiveness in LCT is stronger than that in non-contrastive topic. It is

natural that different strengths of contrastiveness are usually (but not necessarily) expressed by different degrees of prosodic prominence.

Interestingly, the third result seems to be inconsistent with the second result. Kim predicts that contrastive *-(n)un* should be longer than non-contrastive *-(n)un* based on the assumption that what has a special pragmatic effect, contrast in this case, is marked not only by higher pitch but also by longer duration. Contrary to this prediction, the results show that non-contrastive *-(n)un* is longest, followed by contrastive *-(n)un*, followed by *-(n)un* for LCTs. Kim does not discuss what implication this result has on his analysis of *-(n)un*.

His study has several limitations regarding experimental design. First, while the sentences containing CT and LCT have an informal declarative ending *-e*, the sentence for non-contrastive topic ends with a formal declarative marker *-ta*, which could be an important confounding factor. Second, the number of experimental stimuli is too small. As experimental stimuli for *-(n)un*, Kim provides only three sentences, to which the three discourse functions match. In order to get more reliable results, we need more stimuli for each discourse function. Or, with that small number of stimuli, it would have been better if he had asked the participants to repeat the conversations several times.

2.2 Jo et al. (2006)

Jo et al. (2006) also provide a prosodic analysis of the information-structural notions marked by *-(n)un* and *-i/ka*. Again, for our purposes, we only need to look at the prosody of *-(n)un*. The discourse functions they posit to be marked by *-(n)un* are topic and topic/focus. What they call topic includes not only plain (non-contrastive) topic but also “contrastive predicate topic” (Lee 1999, 2000, 2002, 2007).⁶ Their focus/topic corresponds to Lee’s (2007) CT (excluding contrastive predicate topic).

Their hypothesis is that only focus but not topic is grammatically encoded with pitch accent, which predicts that, among discourse functions expressed by *-(n)un*, only their topic/focus gets high pitch due to their focus-hood.

Their study seems to partly support their hypothesis. That is, the results of their

⁶ Contrastive predicate topic is CT that is expressed by predicates (not by entity-denoting arguments).

experiment show that topic/focus gets pitch accent but only in non-sentence-initial position. In sentence-initial position, it does not get pitch accent. Jo et al. do not try to explain this unexpected result but just “assume that the sentence-initial context is masked by other factors such that pitch is usually higher in phrase- or sentence-initial position” (Jo et al. 2006: 193).

Unlike Kim (2004), Jo et al. provide enough experimental stimuli for their experiment. That is, four different sentences are provided for each discourse function, which are repeated five times in a quasi-random order. However, their experiment is problematic in other respects.

First, the number of participants is just one, which decreases the reliability of the results.⁷ Second, their claim that topic/focus in non-sentence-initial position is different from plain topic in its pitch range is not based on a statistical analysis. Without a proper statistical method of data analysis, it cannot be determined whether the prosodic difference between topic/focus and topic is significant or not.

In addition to the problems related to their experiment and its analysis, their hypothesis itself is also problematic. Their assumption that focus is grammatically encoded with pitch accent in Korean is not valid, because in Korean one can, for instance, felicitously answer a *wh*-question without accenting the focus argument. In fact, Jo et al. use the same logic in refuting Lee’s (2007) claim that Korean CT has its own prosodic prominence. That is, they argue that “the pitch accent is not obligatory or consistent in the contrastive topic, and contrastive topic interpretation never arises without the particle *-nun* in Korean. Hence the pitch accent, if any, in the contrastive topic is not grammatically significant in Korean” (Jo et al. 2006: 169).

2.3 Lee (2007)

As mentioned earlier, Lee (2007) characterizes the prosodic property of Korean CT as (L)H*(%), claiming that “[t]here occurs a direct rise from L on the final syllable of the nominal or other lexical constituent (CT target) to the CT marker *-nun*, a non-lexical function element” (Lee 2007: 157). Unlike other researchers who argue for the special prosodic status of contrastive *-(n)un* but stay vague on the exact

⁷ In fact, they also introduce their experiment as a pilot study.

property, his proposal is explicit enough to be testable.

However, Lee's analysis is not systematic. He bases his claim on intonation patterns of just a few occurrences of contrastive and non-contrastive *-(n)un* produced by a single speaker. No statistical analysis is found in his study either.

Also, Lee argues that contrastive *-(n)un* is the longest in duration among different phrase final elements. For this argument, however, he does not provide any supporting empirical evidence (or data). In fact, according to Kim's (2004) phonetic analysis discussed above, contrastive *-(n)un* is significantly shorter than non-contrastive topic.

2.4 Oh (2008)

Oh (2008) provides an elaborate phonetic study of *-(n)un* for different discourse functions it conveys. She compares the Seoul dialect with the Cennam dialect, spoken in the south-western area of Korea, with respect to the length and the pitch of different types of *-(n)un*. Since the main concern of this chapter is *-(n)un* used in the Seoul dialect, which is known as the standard Korean, I will not discuss the difference between the two dialects but concentrate on the phonetic properties of *-(n)un* uttered by the speakers of the Seoul dialect.

Following Lee (2007), Oh posits three types of discourse functions conveyed by *-(n)un*: topic, CT, and LCT. She provides three sets of four experimental sentences that contain these functions. The reason that the number of sentences for each set is not three but four is that topic is further divided into two subtypes depending on which discourse function it precedes. One type of topic is followed by focus and the other by contrast. The schemata of the experimental sentences are shown in (2).

(2) Schemata of four experimental sentences

- a. [NP-*-(n)un*]_{Topic} [NP-*i/ka*]_{Focus} VP
- b. [NP-*-(n)un*]_{Topic} [NP-*-(n)un*]_{CT} VP
- c. [NP-*-(n)un*]_{CT} [NP-*i/ka*]_{Neutral}⁸ VP
- d. [NP-*-(n)un*]_{LCT} [NP-*i/ka*]_{Focus} VP, and [NP-*-(n)un*]_{LCT} [NP-*i/ka*]_{Focus} VP

⁸ The term *neutral* means 'part of the ground' in the focus-ground partition (Vallduví 1990).

In the experimental material, contexts that guarantee each NP to have the intended discourse function are provided in parentheses. Four participants (two male and two female college students) were asked to read the experimental sentences aloud four times. Thus, the total number of recorded sentences is 192 (3 X 4 X 4 X 4).

The results show that, in sentence-initial position, *-(n)un* is longest in duration in (2b), followed by (2a) and (2c), between which no significant difference exists, followed by (2d). This result contradicts Lee's claim that contrastive *-(n)un* is longer than any other phrase-final elements.

As for pitch, Oh measured the difference between the pitch of *-(n)un* and that of the preceding syllable so that it could be seen how much pitch is increased at the end of the phrase for each discourse function. She reports that the degree of phrase-final rise for each discourse function is different between male and female participants, which is summarized in (3).

(3) Order of degree of phrase-final rising

a. Male

$$(2a) = (2b) = (2c) > (2d)$$

b. Female

$$(2b) > (2a) > (2c) > (2d)$$

It is important to note that regardless of gender, the degree of pitch difference for CT is not bigger than that for non-contrastive topic. That is, the phrase-final rise is not significantly sharper for CT than for plain topic.

To test the validity of Lee's claim that contrastive *-(n)un* is higher in pitch than the last element of an ordinary (accentual) phrase, Oh also compares the pitch of *-(n)un* for contrast and that for plain topic. The results show that no significant difference exists between the two. In fact, although it is not statistically significant, contrastive *-(n)un* is even lower than *-(n)un* for plain topic in both male and female data.

Interestingly, her results show that non-sentence-initial contrastive *-(n)un* is longer than sentence-initial contrastive *-(n)un* in duration. She relates this difference to the fact that a CT phrase in non-sentence-initial position (but not in sentence-initial position) always constitutes an Intonation Phrase (IP) on its own,

which is also one of her main findings.⁹

Despite the enough number of experimental stimuli and the elaborate statistical analysis, Oh's study is still problematic in several respects. First and most importantly, the number of participants is too small. A phonetic analysis with just four participants is, as she herself admits, must be supported by a study with more participants. Second, among the three sets of experimental sentences, two sets of sentences are provided in formal Korean, while the other set of sentences are presented in informal Korean, which could be a confounding factor.

2.5 Kim (2010, 2011)

Kim (2010, 2011) provides the most recent prosodic analysis of *-(n)un* in various contexts. However, I will not discuss her analysis in detail here, because the participants of her experiments are speakers of the Pusan dialect, which is spoken in the south-eastern area of Korea and has a different prosodic system from the Seoul dialect. Although Kim claims that "this difference does not make a big difference in its realization of pragmatic factors such as Focus at a sentence level" (Kim 2011: 77), it is not certain whether the difference is really not significant. Rather, Oh's (2008) study convincingly shows the possibility of dialectal difference in terms of topic/focus realization.

Nevertheless, I would like to point out that Kim's analysis, too, is inconsistent with the claim that contrastive *-(n)un* has its own prosodic property. The results of her three experiments show that "what has been thought to be B-accent in Korean for Contrastive Topic (Lee 2003) is not always observed" (Kim 2010: 44). Thus, she concludes that "in Korean, Contrastive Topic does not have a special prosodic property distinguished from a plain Focus construction" (Kim 2010: 59).

3. Experiment

As shown in the previous section, most previous prosodic studies on *-(n)un* seem to show either directly or indirectly that contrastive *-(n)un* and other types of *-(n)un* are not different from each other in terms of their prosodic properties. But they have

⁹ It is not clear why only non-sentence-initial CT phrases necessarily form an independent IP.

problems and limitations in one way or another, particularly with regard to the number of participants and experimental stimuli.

The prosodic study of *-(n)un* introduced in this section has more participants and experimental stimuli, thus providing a more reliable analysis of different types of *-(n)un*. Moreover, this study directly aims at testing the hypothesis that contrastive *-(n)un* is different from non-contrastive *-(n)un* with regard to pitch and length, and thus differs from other previous studies that only indirectly deals with this issue.

3.1 Participants

The participants were 29 students of Seoul National University who are native speakers of the Seoul dialect. They were all in their 20s. Fifteen of them were male and the other fourteen were female. They were paid \$5 for their participation in the experiment, which took about 30 minutes.

3.2 Material

The experimental stimuli consisted of six sets of six made-up conversations, all written in colloquial Korean. Among the six conversations in each set, three conversations were experimental stimuli and three were fillers. Thus, the total number of experimental observations is 522 (3 X 6 X 29). Examples of three experimental conversations in one set are shown in (4)-(6), which are translated into English for convenience. (When English translation alters word order significantly, sentences are encoded in Yale Romanization.)

(4) A: Do you like swuntay¹⁰? Shall we eat swuntay for lunch?

B: Yes. [Swuntay-nun]_{Topic} is always delicious. Let's go eat it.

A: You really like swuntay!

B: I can eat swuntay everyday for breakfast, lunch, and dinner.

¹⁰ Suintay is Korean food made by kneading together a seasoned mixture of glutinous rice, bean curd, scallions, and shiitake mushrooms.

- (5) A: Are Yengcay and Yengtay brothers? Their names are similar to each other.
 B: [Yengcay-nun]_{LCT1} is Micin's brother, and [Yengtay-nun]_{LCT2} is Changtay's brother.
 A: Really? I thought they were brothers.
 B: People often make that mistake. They even look alike.
- (6) A: I heard Cwuhyen applied to both Kentay and Hongtay. How did it go?
 B: [Kentay-nun]_{CT+Imp} ttelecye-ss-tay.
 Kenkwuk.Uni.-NUN get.rejected-PAST-EM
 'As for Kenkwuk University, I heard she got rejected from the school.'
 She seemed to be really disappointed.
 A: That's too bad. She wanted to go to Kentay more than Hongtay, right?
 B: [Hongtay-nun]_{CT+Imp} kwa swusek-ulo pwuthe-ss-tatentay?
 Hongik.Uni.-NUN department top-with get.accepted-PAST-EM
 'As for Hongik University, I heard she got accepted to the school with the top score in the department.'
 I guess she did a great job on the essay writing exam.

As shown above, each conversation has one discourse function in it, namely, topic, LCT, and CT.¹¹ Note that LCT and CT (but not topic) are divided into two subtypes. First, LCT is divided into LCT1, which starts listing, and LCT2, which finishes (or exhausts) listing. Also, CT is divided into "CT+Imp", which induces contrastive implicature, and "CT-imp", which does not induce contrastive implicature because the CT leaves no unanswered "subquestion" (Büring 2003). These divisions have not been made by any previous studies, but I posited these subtypes of LCT and CT as separate factors and checked whether they show any difference in terms of their prosody.

Unlike most previous studies, the *-(n)un*-marked phrases in the experimental data are not the same for each discourse function. For instance, the noun for topic is

¹¹ The definitions of LCT and CT are adopted from Lee (2007).

swuntay in (4) while the *-(n)un*-marked phrase for LCT1 is *Yengcay* in (5). Although this difference could be a confounding factor, I used different nouns in each experimental conversation so that repeating the same noun over and over again would not affect the results of the experiment (e.g. due to boredom) and so that the participants were presented with various situations that they might face in real life.

In order to minimize the damage caused by using different *-(n)un*-marked phrases, I controlled the CV structure and the last vowel of the nouns in each set. For example, all the nouns in (4)-(6) have the CVCCV structure and the last vowel is the mid-front vowel. The CV structures used in the experiment are of two types: CVC(C)V and CVCCVC(C)V.^{12,13} Thus, each structure is used three times (for the six sets of experimental conversations). And three types of vowels are used: mid-front, high-front, and low-central vowels.¹⁴ Each of them is used twice.

With the *-(n)un*-marked phrases controlled in this way, differences between them can be ignored in analyzing the results. In addition, the number of words in each conversation is controlled to be between thirty and thirty-six. Also, all the *-(n)un*-marked phrases are controlled to be located at clause-initial position regardless of their grammatical function.¹⁵

¹² Glides are treated as a consonant in the experiment.

¹³ The reason why the consonant of the last syllable is optional is to provide as natural stimuli as possible with the participants. One might argue that this variation could be a confounding factor. However, note that the hypothesis tested in this experiment predicts that contrastive *-(n)un* gets high pitch regardless of the CV structure of the previous syllable. Thus, I assume that this variation does not crucially affect the conclusion gained from the experiment. Also, in order to minimize the possible confounding, the CV structure of the experimental stimuli is controlled within each set.

¹⁴ The full experimental material is provided in Appendix.

¹⁵ One anonymous reviewer claimed that the experiment needs to be designed more carefully. For instance, (s)he pointed out that the consonants following *-(n)un* must be controlled to be sonorants because non-sonorants tend to lower the pitch of the last syllable of the preceding phonological phrase. However, note that the hypothesis being tested is that contrastive *-(n)un* is fundamentally different from non-contrastive *-(n)un* in its pitch and length *regardless of its phonological environment*. That is, the testing hypothesis is that contrastive *-(n)un* is just like English B-accent (or rise-fall-rise) in that it has its own prosodic characteristic that is not affected by consonants and/or vowels around it. Indeed, Lee (2007) also does not control the property of consonants that follow *-(n)un* in his experiment. For instance, in a sentence he uses to show that *-(n)un* for LCT does not have high pitch, *-(n)un* is followed by /s/. For this reason, I think that the experimental stimuli are controlled enough for our purposes.

3.3 Procedure

The experiment was conducted in a recording room at Seoul National University. Before recording began, participants were asked to read the whole script carefully so that they could get used to the contents of the conversations. After that, they were asked to read the conversations aloud as if they were participating in a real conversation with their friend.

In reading the script, two participants made one team. One of them read the lines of A and the other read the lines of B. After that, they switched their roles and read the script once more. In this way, both participants could read the lines of B, where all the *-(n)un*-marked phrases are located. When only one participant was available, the experimenter took the role of A, and the participant was asked to read only the lines of B. If participants made any mistake while reading, they were asked to read the sentence again, and only the second reading was used for the analysis.

The phonetic analysis of the experimental data was done using Praat. Particularly, the pitch of a syllable was calculated by getting the average of the maximum and the minimum pitch of the syllable (i.e. $\text{pitch} = (\text{maximum pitch} + \text{minimum pitch}) / 2$). Also, difference in pitch between two syllables was measured by the difference in average pitch of the syllables.

3.4 Results

In order to test the hypothesis that contrastive *-(n)un* is longer (in duration) and higher (in pitch) than other types of *-(n)un*, I measured the length of *-(n)un*, the pitch range between *-(n)un* and its preceding syllable, and the pitch of *-(n)un*. A one-way ANOVA was used to test for differences in these variables among five discourse functions.

3.4.1 Length of *-(n)un*

First, for the male participants, the length of *-(n)un* differed significantly across the five discourse functions, $F(4, 389) = 21.70$, $p = .000$. Tukey post-hoc comparisons of the five groups are summarized in Table 1. Means that do not share a letter are significantly different.

Table 1. Grouping Information Using Tukey Method for Male

	N	Mean (ms)	Grouping
LCT1	79	190.62	A
LCT2	77	155.41	B
Topic	81	143.79	B
CT-Imp	77	131.80	B C
CT+Imp	80	115.53	C

The post-hoc analysis indicates that the length of *-(n)un* for LCT1 is significantly longer than that for the rest of the functions. Comparisons between LCT2, Topic, and CT-Imp are not statistically significant, and *-(n)un* for CT+Imp is significantly shorter than that for LCT2 and Topic but not that for CT-Imp.

As for the female participants, the length of *-(n)un* also differs significantly across the discourse functions, $F(4, 384) = 7.25$, $p = .000$. The results of Tukey post-hoc comparisons, which are summarized in Table 2, are similar to those of the male participants. Particularly, here too, *-(n)un* for LCT1 is longest, while that for CT+Imp is shortest.

Table 2. Grouping Information Using Tukey Method for Female

	N	Mean (ms)	Grouping
LCT1	79	189.15	A
Topic	76	169.34	A B
LCT2	76	159.71	B C
CT-Imp	78	155.53	B C
CT+Imp	80	137.66	C

Also, the difference in length of *-(n)un* between Topic, LCT2, and CT-Imp is not significant. Unlike the male participants, however, the length of *-(n)un* for LCT1 is not significantly longer than that for Topic. Note that the results reported here is inconsistent with Oh's (2008) result, according to which *-(n)un* for LCT is the shortest.

3.4.2 Phrase-final rise

In order to check whether the degree of phrase-final rise is significantly different

between contrastive *-(n)un* and other types of *-(n)un*, I measured the pitch difference between *-(n)un* and its preceding syllable. The results show that both male and female participants show a significant difference among the five discourse functions in terms of their behavior regarding phrase-final rise, $F(4, 390) = 4.42$, $p = .002$ for the male participants, and $F(4, 385) = 4.81$, $p = .001$ for the female participants.

The results of Tukey post-hoc comparisons for the male and the female participants are summarized in Table 3 and 4 respectively.

Table 3. Grouping Information Using Tukey Method for Male

	N	Mean (Hz)	Grouping
LCT2	79	-8.74	A
CT+Imp	80	-13.65	A B
Topic	81	-14.15	A B
CT-Imp	77	-17.26	B
LCT1	80	-18.12	B

Table 4. Grouping Information Using Tukey Method for Female

	N	Mean (Hz)	Grouping
LCT2	76	-11.59	A
Topic	76	-22.73	A B
CT+Imp	80	-23.50	A B
CT-Imp	79	-27.87	B
LCT1	79	-31.94	B

Note that, on the average, there is no phrase-final rise in any of the discourse functions. (The minus values mean that the pitch of *-(n)un* is lower than that of the preceding syllable.) According to Oh (2008), this dephrasing (or phrase-final lowering) is a characteristic of focus and never found in CTs in non-sentence-initial position. However, the results of this experiment are not inconsistent with Oh's findings, for all the *-(n)un*-marked phrases in the experimental stimuli are sentence-initial.

Another interesting point is that except for the different rankings between Topic and CT+Imp, the patterns shown in the two groups of participants are exactly the same. Particularly, for both gender, the degree of phrase-final lowering for LCT2 is significantly smaller than that for CT-Imp and LCT1 but not significantly different

from that for Topic and CT+Imp.

3.4.3 Pitch of $-(n)un$

For the male participants, the pitch of contrastive $-(n)un$ differs significantly across the discourse functions, $F(4, 390) = 9.18$, $p = .000$. The Tukey post-hoc test shows that only LCT2, which is the lowest, is significantly different from the rest of the functions, among which no significant difference exists as shown in Table 5.

Table 5. Grouping Information Using Tukey Method for Male

	N	Mean (Hz)	Grouping
CT+Imp	80	168.50	A
Topic	81	165.40	A
CT-Imp	77	163.31	A
LCT1	80	154.78	A
LCT2	77	133.58	B

As for the female participants, there is also a significant difference among the five discourse functions with respect to pitch of $-(n)un$, $F(4, 386) = 19.77$, $p = .000$. They show exactly the same pattern with their male counterparts except that the ranking between CT-Imp and CT+Imp is reversed, as shown in Table 6.

Table 6. Grouping Information Using Tukey Method for Female

	N	Mean (Hz)	Grouping
CT-Imp	80	283.28	A
Topic	76	279.86	A
CT+Imp	80	278.60	A
LCT1	79	272.42	A
LCT2	76	238.92	B

What is important here is that contrastive $-(n)un$, whether it is used for CT+Imp or CT-Imp, is not higher in pitch than non-contrastive $-(n)un$, which is in direct contradiction to Lee's (2007) claim.

4. Discussion

The results of the experiment go against the hypothesis that contrastive *-(n)un* is fundamentally different from other types of *-(n)un*, thus (at least indirectly) supporting the approach to *-(n)un* that posits only one *-(n)un* in the lexicon.

4.1 Length of *-(n)un*

Contra Lee (2007), the length of contrastive *-(n)un* is not longer than the other types of *-(n)un*. Rather, the length of *-(n)un* for CT+Imp and CT-Imp is shorter than that for the other discourse functions, sometimes significantly, sometimes not significantly.

It is also worth noting that *-(n)un* for LCT1 is the longest both for male and female participants, and it is even significantly longer than LCT2. This result contradicts with Kim's (2004) and Oh's (2008) results, in which *-(n)un* for LCT is the shortest. It is not clear why the results of this study are not consistent with the studies of the other authors, but to resolve this issue is beyond the scope of this paper. What is important is that in all three experimental studies, contrastive *-(n)un* is not the longest.

4.2 Phrase-final rise

According to Lee (2007), the pitch of contrastive *-(n)un* sharply rises from the preceding syllable, thus showing a relatively sharp phrase-final rise. This phrase-final rise is shown neither in CT+Imp nor in CT-Imp with either gender. Rather, together with the other types of *-(n)un*, they show phrase-final lowering, or dephrasing, which seriously weakens the validity of Lee's claim.

It is surprising that phrase-final rise is not shown in any discourse function marked by *-(n)un*, for it is widely known that dephrasing is a characteristic of focus (Oh 2008). Also, Oh reports that CTs in non-sentence-initial position never shows dephrasing. I have no answer for the question of why only CTs in sentence-initial position tend to show dephrasing. But what is certain is that a sharp phrase-final rise is not a necessary condition for the felicitous use of contrastive *-(n)un*. What the results show is that, in Korean, the mere existence of *-(n)un* itself, however it is

pronounced, is enough to convey contrast, which is different from English, in which the specific intonation contour, that is, “rise-fall-rise”, is necessary for the same effect.

4.3 Pitch of *-(n)un*

The conclusion that the morphological marker *-(n)un* itself is enough for the intended contrastive meaning is further supported by our result that the pitch of contrastive *-(n)un* is not significantly different from that of *-(n)un* for other types of discourse functions (except for LCT2), which is also consistent with Oh’s (2008) results.¹⁶

In fact, it is not really necessary to look at experimental data. The fact that contrastive *-(n)un* can also be freely contracted clearly shows that the prosodic prominence is not obligatory for its conveying contrast. Note that *-(n)un* can be contracted to *-n* when it is preceded by a vowel (e.g. *Mary-nun* vs. *Mary-n*). With this contraction, *-(n)un* loses its status as an independent syllable and cannot get its own pitch or length. Crucially, this contraction is not only possible for non-contrastive *-(n)un* but also for contrastive *-(n)un*.

Indeed, both in the experimental data and our everyday conversation, it is not hard to find contraction of contrastive *-(n)un*. Let us first look at an example of a radio interview between a male DJ and a guest actress, where they talk about the guest’s work and life in a casual manner.

- (7) Guest: ce-n mom-ulo ha-nun, ilehkey
 I(HON)-NUN body-with do-NMZ like this
 cheylyek-i yokwu toynu-n ke-n
 physical strength-NOM requirement get-ADN thing-NUN
 cal ha-nun kes katha-yo
 well do-ADN COMP seem-DEC(HON)
 ‘It seems that I am good at doing things that require physical
 strength.’

¹⁶ The result that the pitch of *-(n)un* for LCT2 is significantly lower than that for the other types of discourse function is itself an interesting phenomenon, but I leave it as a future research topic since it is not directly relevant to the subject matter of this paper.

In the guest's utterance in (7), *-(n)un* occurs twice, once with the subject, *ce* 'I', and once with the clausal object, *chelyekk-i yokwu toynu-n kes* 'things that require physical strength'. Importantly, in the given context, both occurrences of *-(n)un* are used for contrast; that is, the guest actress contrasts herself with others, and she contrasts things that require physical strength with things that do not.

One might suspect that the phrases with the contracted *-(n)un* might be phonetically accented due to the existence of contrastive *-(n)un*. But they do not show any prosodic peculiarity. That is, they are not significantly longer in duration or higher in pitch compared to other syllables around them.

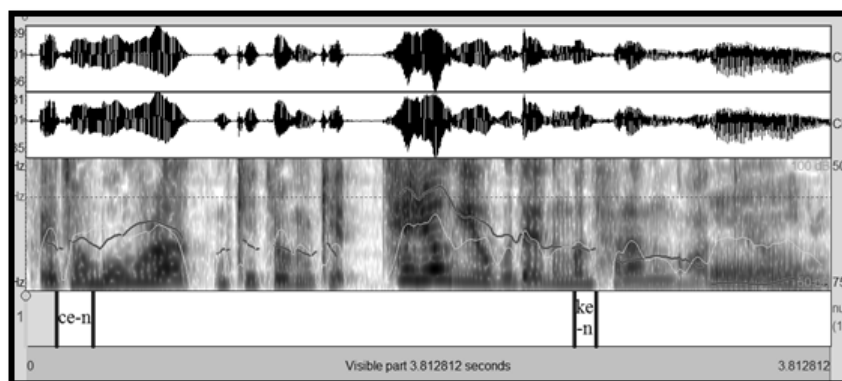


Figure 1. Spectrogram of sentence (7)

Figure 1 shows the spectrogram of the sentence in (7). Blue lines (or bold lines in the white and black version) illustrate the pitch and the two *-(n)un*-marked phrases are annotated in the lowest tier. From Figure 1, it is clear that the pitches of the *-(n)un*-marked phrases do not show a sharp rise at all.

In the experimental data, the total number of contracted *-(n)un* for CT+Imp and CT-Imp is 31, which means that about 22% of contrastive *-(n)un* occurrences are contracted. This ratio should be taken to be significant given that the script contains no contracted form of *-(n)un* at all. That is, the participants contracted nearly one fourth of the items of contrastive *-(n)un* in the script even though they were all provided in non-contracted forms. To sum up, as also claimed by Park (2003), *-(n)un* can mark contrast in a contrastive context however phonetically reduced it is.

5. Conclusion

In this paper, the prosodic properties of contrastive and non-contrastive *-(n)un* were investigated in order to find out whether contrastive *-(n)un* is fundamentally different from non-contrastive *-(n)un* in its prosody. The prosodic experiment conducted on 29 participants with 18 experimental conversations convincingly supports the view that the contrastive and non-contrastive *-(n)un* cannot be distinguished from each other in terms of length and pitch. That is, it is hard to characterize contrastive *-(n)un* in terms of some specific phonetic property (e.g. high pitch). Thus, the proposed phonetic analysis of contrastive and non-contrastive *-(n)un* refutes Lee's argument that contrastive *-(n)un* can be distinguished from non-contrastive *-(n)un* by its unique intonation contour, that is, (L)H*(%), but is totally consistent with the previous approach to *-(n)un* that does not posit independent entries for contrastive *-(n)un* and non-contrastive *-(n)un* in the lexicon.

References

- Büring, Daniel. 2003. On D-trees, beans and B-accents. *Linguistics & Philosophy* 26: 511-545.
- Choe, Hyon Sook. 1995. Focus and topic movement in Korean and licensing. In Katalin É Kiss (ed.), *Discourse configurational languages*, 269-334. Oxford: Oxford University Press.
- Choi, Hye-Won. 1996. *Optimizing structure in context: scrambling and information structure*. Ph.D. dissertation. Stanford University.
- Choi, Hye-Won. 1997. Topic and focus in Korean: the information partition by phrase structure and morphology. In Ho-min Sohn, and John Haig (eds.), *Japanese/Korean Linguistics* 6, 545-561. Stanford: CSLI.
- Choi, Kyu-Soo. 2004. Topic and contrastive focus: focusing on word order and phonetic accent (written in Korean). *Wulimalyenkwu* 15: 149-172.
- Choi, Seungja. 2000. *Topicality, genericity, and logophoricity: the postpositional markers nun in Korean and wa in Japanese from an argument perspective*. Ph.D. dissertation. Yale University.
- Han, Chung-hye. 1998. Asymmetry in the interpretation of *-(n)un* in Korean. In Noriko Akatsuka, Hajime Hoji, Shoichi Iwasaki, and Sung-Ock Sohn (eds.), *Japanese/Korean linguistics* 7, 1-15. Stanford: CSLI.

- Hong, Yong-Cheol. 2005. A unified analysis of a special particle *-(n)un* (written in Korean). *Studies in Generative Grammar* 15(3): 397-413.
- Jo, Jung-Min, Seok-Keun Kang, and Tae-Jin Yoon. 2006. Rendezvous of focus and topic in Korean: morpho-syntactic, semantic, and acoustic evidence. *The Linguistic Association of Korea Journal* 14(2): 167-196.
- Jun, Youngchul. 2005. Contrastive focus in Korean. *Eoneohag* 43: 215-237.
- Jun, Youngchul. 2006. Korean marker 'NUN' for contrastive topic and contrastive focus. *Hankul* 274: 171-200.
- Kim, Ji Eun. 2010. *The generation of implicit propositions in "alleged" Korean topics*. Ph.D. dissertation. UCLA.
- Kim, Ji Eun. 2011. The prosody of the alleged Korean topic marker *-nun*. *Language Research* 47(1): 71-99.
- Kim, Yong-Beom. 2004. Focus, topic and their phonetic relevance. *Language and Information* 8(1): 27-52.
- Lee, Chungmin. 1999. Contrastive topic: a locus of the interface - evidence from Korean and English. In K. Turner (ed.), *The semantics/pragmatics interface from different points of view: current research in the semantics/pragmatics interface*, volume 1. Elsevier Science Ltd, 317-142.
- Lee, Chungmin. 2000. Contrastive predicates and contrastive scales. In Arika Okrent, and John Boyle (eds.), *CLS* 36(1): 243-257.
- Lee, Chungmin. 2002. Contrastive topic and proposition structure. In Anne-Marie Di Sciullo (ed.), *Asymmetry in Grammar, volume 1: syntax and semantics*, 345-371. Amsterdam: John Benjamins Publishing Company.
- Lee, Chungmin. 2003. Contrastive topic and/or contrastive focus. In B. McClure (ed.), *Japanese/Korean linguistics* 12. CSLI.
- Lee, Chungmin. 2007. Contrastive (predicate) topic, intonation, and scalar meanings. In Chungmin Lee, and Matthew Gordon (eds.), *Topic and Focus: Cross-linguistic Perspectives on Meaning and Intonation*. Springer, 151-175.
- Oh, Mira. 2008. Prosody and Information Structure: Phonetic Realizations of Focus and Topic in Korean (written in Korean). *Umsengkwahak* 15(2): 7-19.
- Park, Chulwoo. 2003. *Topic and focus in Korean information structure* (written in Korean). Seoul: Yeklak.
- Vallduví, Enric. 1990. *The informational component*. Ph.D. dissertation. University of Pennsylvania.
- Yang, H.-K. 1994. Configurational Properties of CP and Relativization in Korean. In Young-un Kim, Byung-Choon Lee, Kyoung-Jae Lee, Hyun-Kwon Yang, and Jong-Yurl Yoon (eds.), *Explorations in Generative Grammar: A Festschrift for Dong-Whee Yang*, 633-652. Seoul: Hankuk Publishing Company.

Appendix. Experimental stimuli for the Experiment

1. First set

Topic

A: 선생님, 성철이 학교생활 잘 하나요?

B: 네. [성철이는]_{Topic} 성격이 아주 좋아요. 그래서 친구들한테 인기도 아주 많아요.

A: 집에서는 항상 혼자만 있으려 해서 걱정 했는데 다행이네요.

B: 네. 걱정하지 마세요. 아주 잘 지내고 있어요.

LCT

A: 철민이랑 정현이 졸업했지? 졸업시험 어려웠다던데 둘 다 붙었나?

B: 어. 둘 다 합격하고 이번에 졸업 했어.

A: 지금은 뭐 해? 취업 했나?

B: [철민이는]_{LCT1} 대학원 갔고, [정현이는]_{LCT2} 취업 했어.

CT

A: 너 지난 주말에 MT 갔었다며? 민영이랑 민정이 왔니?

B: [민영이는]_{CT+Imp} 봤어. 같이 저녁도 먹었어.

A: 그래? 그 전날 밤 새서 시험공부 한다길래 피곤해서 안 갈 줄 알았는데.

B: [민정이는]_{CT-Imp} 안 왔더라. 개는 진짜 밤 새고 못 일어났대.

Filler 1

A: 이 식당은 피자랑 스파게티 중에 뭐가 더 잘 팔려?

B: 피자가 훨씬 많이 팔리지. 피자 전문점이잖아.

A: 그래? 여긴 원래 스파게티가 더 유명하지 않나?

B: 아니야. 피자가 원래부터 유명했어.

Filler 2

A: 넌 어떤 스타일의 여자가 좋니?

B: 난 눈이 파란 여자가 좋아.

A: 눈 색깔을 따지는 사람은 처음 본다. 그게 왜 중요해?

B: 모르겠어. 난 그냥 눈이 파란 여자한테 끌리더라고.

Filler 3

A: 친구 병원에 입원했다며?

B: 어. 디스크 걸렸대. 3년 전에도 걸려서 수술 했는데 이번에 또 걸렸어.

A: 그래? 이번에도 수술도 해야 한대?

B: 아니. 그만큼 심각하진 않고, 이번엔 시술만 하면 된대.

2. Second set

Topic

A: 내 동생이 충북대 가고싶어하는데, 충북대 어떨까?

B: [충북대는]_{Topic} 다 좋은데 너네 집에서 너무 멀어.

A: 그거야 기숙사에 살면 되니까 괜찮을 것 같애.

B: 그렇다면야 개한테 충북대만큼 좋은 학교는 없지.

LCT

A: 정훈이 이번에 수능 봤지?

B: 어. 요즘은 대학 지원 하느라 바쁜가봐.

A: 어디어디 지원했대? 계획대로 경찰대랑 강원대 지원했대?

B: 아니. [경찰대는]_{LCT1} 점수가 안 돼서 못 하고, [강원대는]_{LCT2} 부모님이 싫어해서 안 했대.

CT

A: 민철이 이번에 충북대랑 전남대 지원했지? 어떻게 됐는지 알아?

B: [충북대는]_{CT+Imp} 붙었어. 내가 전화로 확인해 봤어.

A: 그렇구나. 근데 충북대보다는 전남대 더 가고싶어하지 않았나?

B: [전남대는]_{CT+Imp} 발표 아직 안 났대. 전남대도 되면 거기로 가겠지.

Filler 1

A: 여기서서 강남역이 가까워 역삼역이 가까워?

B: 강남역이 가까울거야. 저 위로 20분만 걸어가면 돼.

A: 근데 버스 타면 역삼역이 더 가까운 것 같던데?

B: 아니야. 강남역이 버스로도 더 가 가까워.

Filler 2

A: 우리 오늘 영화 보기로 했지? 무슨 영화 볼까?

B: 로맨틱 코미디 어때? 난 오늘 로맨틱 코미디가 땡기는데.

A: 너 그런 장르 싫어하잖아.

B: 그러게. 원래 싫어하는데 오늘은 이상하게 로맨틱 코미디가 땡기네.

Filler 3

A: 밥 다 먹었으니 후식으로 뭘 먹을까?

B: 아이스크림 어때? 길 건너편에 아이스크림가게 있던데.

A: 나 감기 걸려서 아이스크림은 좀 그렇고, 차 마실까?

B: 그래. 여기서 5분만 걸어가면 맛있는 차집 있어. 그리로 가자.

3. Third Set

Topic

A: 너 길상사 어딴는지 아니? 이번에 법정스님 추모식이 거기서 열린대.

B: [길상사는]_{Topic} 북악산 근처에 있으니 여기서 멀지 않을거야.

A: 그래? 다행이다. 여기서 얼마나 걸릴까?

B: 아마 한 시간이면 충분히 갈 거야.

LCT

A: 김형사랑 최형사 어느 대학 출신이지? 이번에 누가 승진할까?

B: [김형사는]_{LCT1} 경찰대 출신이고, [최형사는]_{LCT2} 동국대 출신이야.

A: 그럼 김형사가 승진에 더 유리하겠네?

B: 아마 그렇겠지? 요즘은 아무래도 경찰대 출신들이 잘 나가니까.

CT

A: 김박사랑 전박사 이번에 교수 임용 됐나?

B: [전박사는]_{CT+Imp} 이번에 최종면접까지 통과 했어.

A: 그래? 잘 됐네. 참 열심히 준비 하더니 결국 됐구나.

B: [김박사는]_{CT-Imp} 최종면접에서 떨어졌대. 총장 질문에 제대로 대답을 못 했나봐.

Filler 1

A: 변호사랑 변리사 중에 어느 직업이 소득이 높지?

B: 개인차가 있겠지만 변리사가 평균소득은 더 높아.

A: 근데 변호사 되기가 더 어렵지 않나?

B: 아니야. 변리사가 더 힘들대. 우선 뽑는 인원이 훨씬 적대.

Filler 2

A: 영민이 이제 졸업할 때 됐지? 졸업 하고 뭐 하고싶대?

B: 농부가 될거래. 놀랐지?

A: 어. 왜 농부가 되려고 하지? 전공은 사회학이잖아?

B: 환경쪽에 관심이 많아서 유기농법으로 농사 지으며 살고싶대.

Filler 3

A: 세 시간동안 한 번도 안 쉬고 공부만 하니까 힘들다.

B: 그럼 좀 쉬었다 할까?

A: 어. 시원한 음료수 좀 마시고 할까?

B: 좋지. 저번에 너가 샀으니까 이번엔 내가 살게.

4. Fourth set

Topic

- A: 정미가 이번 신입생 환영회에서 사회 보기로 했대며?
B: 어. [정미는]_{Topic} 성격이 차분해서 실수 없이 잘 할거야.
A: 그렇구나. 철민이도 사회 보고싶어하는 것 같던데?
B: 어. 근데 정미가 됐으니 할 수 없지.

LCT

- A: 민기랑 선미 언어학 개론 잘 듣고 있나?
B: 아니. 둘 다 지난 주에 취소 했어.
A: 왜? 재밌어 하는 것 같던데.
B: [민기_{LCT1}] 교수님이 싫대고, [선미_{LCT2}] 숙제가 너무 많대.

CT

- A: 민지랑 선기 본 지 정말 오래 됐다. 개네 결혼은 했나?
B: [민지_{CT+Imp}] 작년에 했어. 선 본 남자랑 두 달만에 했대.
A: 그래? 빨리 했네? 암튼 잘 됐다.
B: [선기_{CT+Imp}] 아직도 안 했더라. 결혼생각이 전혀 없나봐.

Filler 1

- A: 경차는 모닝이랑 레이 중에 뭐가 더 좋아?
B: 모닝이 더 좋아. 레이₁는 너무 위험하고, 사고 나면 수리비도 더 많이 든대.
A: 근데 연비는 레이₂가 더 좋지 않나?
B: 아니야. 모닝이 연비도 더 좋아.

Filler 2

- A: 미국은 어느 도시가 제일 유명하지?
B: 뉴욕이 제일 유명하지.
A: 그래? 조만간 미국 여행할 생각인데 뉴욕은 꼭 가야겠다.
B: 어. 볼거리도 엄청 많대. 다른 덴 몰라도 뉴욕은 꼭 가봐.

Filler 3

- A: 주현이가 입고있는 옷 어디서 산거래? 아주 예쁘네?
B: 강남역 지하상가에서 샀대.
A: 엄청 비싸보이는데? 정말 지하상가에서 산 거 맞아?
B: 그렇게 말이야. 아주 잘 골랐어. 나도 내일 똑같은 거 사려고.

5. Fifth set

Topic

A: 정아가 친구 무지 좋아한다며? 정말이야?

B: 어. [정아는]_{Topic} 친구밖에 없어. 완전 일편단심이야. 소개팅도 미팅도 다 싫대.

A: 그래? 좋아한지 오래 됐어?

B: 어. 5년도 넘었을걸? 고등학교 1학년때부터 좋아했으니까 6년째네.

LCT

A: 민영이가 아기가 둘이나 있다며? 결혼한 지 얼마 안 된 것 같은데.

B: 어. 둘 다 딸이야. 신아랑 민아.

A: 이름 예쁘네. 몇 살이야?

B: [신아는]_{LCT1} 두 돌 막 지났고, [민아는]_{LCT2} 8개월 접어들었어.

CT

A: 경아랑 진아 올 해 졸업 하니?

B: [경아는]_{CT+Imp} 졸업 해. 그것도 수석졸업이래.

A: 그래? 대단하네. 근데 경아보다 진아가 공부 더 잘 하지 않았나?

B: [진아는]_{CT+Imp} 졸업시험을 떨어졌대. 성적은 제일 좋은데 시험을 떨어졌어.

Filler 1

A: 노트북은 어디 제품이 좋지? 삼성? 아니면 소니?

B: 소니가 훨씬 더 잘 팔려.

A: 가격은 삼성이 더 싸지 않나?

B: 아니야. 소니가 20%정도 더 싸대. 요즘 한창 세일 기간이거든.

Filler 2

A: 이 책 처음 보는 것 같은데 누가 산거야?

B: 민지가 샀어. 어제 서점에 들렀다가 재밌을 것 같아서 샀대.

A: 제목만 봐도 재밌을 것 같네.

B: 민지 읽은 다음 나도 읽어야지.

Filler 3

A: 성일이가 안 보이네? 웬일로 수업에 빠졌지? 이 수업 엄청 좋아하잖아.

B: 어. 감기몸살 걸려서 오늘 학교 안 나왔어.

A: 그래? 심하게 걸렸나보네?

B: 그렇게 말이야. 아까 통화 했는데 침대에서 일어나질 못하겠대.

6. Sixth set

Topic

- A: 너 순대 좋아해? 우리 점심으로 순대 먹을까?
B: 좋지. [순대는]_{Topic} 언제 먹어도 정말 맛있어. 빨리 먹으러 가자.
A: 순대 정말 좋아하는구나.
B: 난 하루 세끼 순대만 먹으라고 해도 먹을 수 있어.

LCT

- A: 영재랑 영대는 형제야? 이름이 비슷하네?
B: [영재는]_{LCT1} 미진이 동생이고, [영대는]_{LCT2} 창대 동생이야.
A: 그래? 난 또 영재랑 영대가 형제줄 알았네.
B: 사람들이 그렇게 착각 많이 하더라. 생긴 것도 비슷하잖아.

CT

- A: 주현이 이번에 건대하고 홍대 둘 다 지원 했다면? 어떻게 됐대?
B: [건대는]_{CT+Imp} 떨어졌대. 정말 아쉬워 하더라.
A: 아쉽네. 홍대보다는 건대를 가고싶어했던 것 같은데.
B: [홍대는]_{CT+Imp} 과수석으로 붙었다던데? 논술을 아주 잘 봤나봐.

Filler 1

- A: 상하이랑 북경 중에 어디가 더 크지?
B: 북경이 훨씬 더 커. 인터넷으로 검색해 보니까 나오더라.
A: 그래도 인구는 상하이가 더 많지 않나?
B: 아니야. 북경이 인구도 50만명이나 더 많던데?

Filler 2

- A: 선생님께 꽃을 선물해 드리고 싶은데 무슨 꽃이 좋을까?
B: 장미가 좋을거야. 저번에 장미 좋아하신다고 하셨어.
A: 근데 장미는 너무 비싸지 않나?
B: 아니야. 장미보다 비싼 꽃이 얼마나 많은데. 장미는 싼 편이야.

Filler 3

- A: 창규 올해 유학 간다며?
B: 어. 작년에는 지원한 학교 다 떨어졌는데 올 해는 지원한 학교에 모두 붙었대.
A: 그럼 갈 학교는 정한거야?
B: 아니. 어디로 갈 지 아직 고민 중이래.

Ilkyu Kim

Department of Linguistics

Yale University

370 Temple St, Room 204

New Haven, CT 06520-8366, USA

E-mail: 81ilkyu@gmail.com

Received: 2013. 10. 24

Revised: 2013. 11. 22

Accepted: 2013. 12. 18