

Abstract
Korean *-(n)un*, Saliency, and Information Structure
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A Korean particle *-(n)un* is widely known as a topic and/or contrast marker. Despite this seemingly well-established view on the meaning/function of *-(n)un*, however, its exact nature is far from clearly understood. The main purpose of this dissertation is to shed light on the meaning of *-(n)un*, by looking at it from a different perspective, namely, the perspective of (discourse) saliency.

In unveiling the nature of *-(n)un*, it is necessary to clearly understand the notions of information structure such as topic and contrast that are assumed to be marked by *-(n)un*. It is also crucial to investigate the relation between these notions and *-(n)un*. Unlike the standard view that posits direct relation between them, the dissertation provides strong evidence for indirect relation between *-(n)un* and topic/contrast.

Based on a corpus study, I argue that what *-(n)un* really does is to IMPOSE SALIENCY on a discourse referent. Topicality and contrastiveness are only derived from the interaction of this meaning of *-(n)un* and various syntactic, semantic, and pragmatic factors. I support the proposed meaning of *-(n)un* by showing that 1) the main functions of *-(n)un* are introducing a new topic/frame, inducing contrast, and simply emphasizing a referent, 2) the use of *-(n)un* is constrained by the root restriction, and 3) different meanings expressed by *-(n)un* depending on its syntactic position are naturally explained by the proposed analysis of *-(n)un*.

Moreover, I further justify the meaning of *-(n)un* by comparing the pragmatic function of *-(n)un*-marked NPs with that of other types of NPs, that is, nominative-marked (or *-i/ka*-marked) NPs, bare NPs, and null NPs. Especially, I claim that the pragmatic meaning of *-i/ka* is UNIQUE SPECIFICATION of a referent, and the lack of this meaning in *-(n)un* is also crucial for understanding its nature.

The dissertation also proposes that the meaning of imposing salience conveyed by *-(n)un* is not a truth-conditional (or at-issue) meaning, but must be captured under the formal framework that posits multiple dimensions of meaning. In particular, *-(n)un* is argued to express a kind of performative and is characterized as instructional meaning.

The proposed analysis of *-(n)un* is further supported by the nature of contrastive implicatures it generates. Contrary to the standard view, which sees them as conventional implicatures, I argue that the contrastive implicature induced by *-(n)un* is conversational. Their conversational nature is backed up not only by semantic/pragmatic considerations but also by a prosodic experiment.

If what is claimed in this dissertation is on the right track, it is not only helpful to gain an insight into the nature of *-(n)un*, but it also has implications on information structure theory in general. Topic, focus, and contrast, although they are important notions for crosslinguistic studies, lose their status as UNIVERSAL categories (or primitives) of information structure. Instead, information structure of a particular language must be described in its own terms (e.g. imposing salience, unique specification).

Korean *-(n)un*, Salience, and Information Structure

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Abbreviations

ACC	accusative	ADN	adnominalizer
ADZ	adverbializer	AN	action nominal
CL	classifier	COMP	complementizer
COP	copular	DAT	dative
DEC	declarative	DES	desiderative
EM	epistemic marker	EXC	exclamative
FN	formal noun	FOC	focus
FP	final particle	FUT	future
HON	honorific	HYP	hypothetical
INT	interrogative	INTJ	interjection
INTR	intransitive	NMZ	nominalizer
NOM	nominative	OF	object focus
PAST	past	PF	perfective
PL	plural	SG	singular
TR	transitive		

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Chapter 1

Introduction

1.1. Information Structure

One of the most intriguing characteristics of human language is that one can express the same proposition (or thought) in various ways in order to communicate efficiently. This aspect of language use is called INFORMATION PACKAGING (Chafe 1976) or INFORMATION STRUCTURE (Halliday 1967; Lambrecht 1994).

One of the most important factors that the speaker has to consider for efficient communication is the HEARER'S MIND. That is, how the speaker structures or packages the information conveyed by a sentence at a given time-point crucially depends on her assumption about the hearer's beliefs or knowledge and attentional state.

Information structure theory deals with how this information packaging is done in natural language. Previous studies on information structure have shown that various kinds of linguistic devices are used to organize information structure of one's utterance, including intonational contours, morphological markers, and syntactic manipulations of clause structure.

Just like any linguistic structure (e.g. phonological structure, morphological structure, syntactic structure), information structure has basic categories. The basic categories of information structure are topic, focus, and contrast. These notions have been crucial for understanding how various types of linguistic phenomenon are used to package information.

1.1.1. Relation between Grammar and Information Structure

Despite the important role they play in the study of information structure, the notions of topic, focus, and contrast have been notorious for being hard to explicitly define. In fact, no consensus exists on what topic, focus, and contrast really are. Consequently, researchers in the field of information structure often use the same term with different definitions in their mind.

I believe that one of the main sources for this terminological confusion comes from an assumption shared by most linguists, which is that the categories of information structure have a one-to-one correspondence with some linguistic device in each and every language.¹ The assumption that posits a direct relation between a linguistic device and a category of information structure leads linguists who work on information structure to conduct their research in a particular way, which can be described as follows.

First, they pick some linguistic device and an information structure category that they think is a match for it. At this stage, they have some (vague) definition about this category. Next, they try to find a couple of examples in which the linguistic device seems to be used for marking the category. If it is successful, they take the linguistic device to be the marker for that category, thus (either explicitly or implicitly) proposing a direct relation between the category and its linguistic “marker”. Then, they either just delve into the semantics and pragmatics of the marker without further discussing its relation to the category², or redefine the category according to the detailed meaning of the marker they find out³.

¹ Linguists like Ellen Prince and Gregory Ward are notable exceptions as will be shown in Chapter 2.

² This is how linguistic devices like English topicalization, Korean *-(n)un*, and Japanese *-wa* are typically studied.

By conducting research on information structure this way, there is no room for seriously taking into account the nature of the categories of information structure and its relation to its markers. Consequently, these linguists are left with a still vague notion of topic, focus, or contrast, which matches to a linguistic device only superficially; or, they come to have an explicit definition of a category that is based only on a specific linguistic device in a single language, which thus can hardly be applicable to the grammar of other languages.

Again, what underlies this problematic practice of analyzing information structure is the assumption that the information-structural categories are directly related to some linguistic device in every language. It is crucial to note that this widely held assumption has never been firmly justified.⁴

Rather than adopting this assumption and following the methodological custom, this dissertation questions the validity of the assumption itself and tries to unveil the nature of the relation between the information-structural categories and their markers. Particularly, it focuses on the Korean particle *-(n)un* and the notions related to it, namely, topic and contrast.

1.1.2. Korean *-(n)un* and Information Structure

Korean *-(n)un* is widely known as a topic and/or contrast marker. Unlike particles that mark grammatical (and possibly also information-structural) function (e.g. *-i/ka* and *-(l)ul*) and those that convey truth-conditional meanings (e.g. *-to* ‘also’, *-kkaci* ‘until’),

³ This is how, for instance, É Kiss (1998) defines contrast (her identificational focus).

⁴ Interestingly, a workshop was recently held at Max Planck Institute for Psycholinguistics exactly on this issue, that is, whether the categories of information structure are directly related to a certain linguistic device in every language. The URL for this workshop is <http://tinyurl.com/oh37t7y>.

-(n)un is peculiar in that it is used solely for information packaging but not for grammatical or semantic (truth-conditional) purposes.

The two main questions asked in this dissertation are what the nature of *-(n)un* is and how it is related to information structure. In order to answer this question, the following subquestions are asked:

1. What is topic?
2. What is focus?⁵
3. What is contrast?
4. How is it possible that *-(n)un* can express both topicality and contrast?
5. What is the nature of the contrast expressed by *-(n)un*?
6. Does *-(n)un* convey any other meanings?

In solving these problems, the last three problems in particular, I use the corpus data that I collected from radio interviews. The motivation for conducting a corpus study is the belief that a deeper understanding of the nature of *-(n)un* is only possible when its everyday use is considered within various contexts.

Based on the corpus analysis, it will be argued that *-(n)un* marks neither topic nor contrast directly; rather, the nature of *-(n)un* will be claimed to IMPOSE SALIENCE on a discourse referent of a *-(n)un*-marked element. Topicality and contrastiveness are only derived properties arising from the interaction of the proposed function of *-(n)un* and other syntactic, semantic, and pragmatic factors.

⁵ The reason that this problem is also investigated is that 1) topic can better be understood when it is compared with focus and that 2) some researchers argue that *-(n)un* has a function of marking contrastive focus (e.g. H.-W. Choi 1996; C.-y. Han 1998; Y. Jun 2005, 2006).

1.2. Multiple Dimensions of Meaning

Another main concern of this dissertation is how the proposed nature of *-(n)un*, that is, to impose salience on a referent, can be formally understood. As pointed out above, the peculiarity of *-(n)un* is that it works only on the level of information structure, and thus its function (or meaning) cannot be represented on the same level on which ordinary truth-conditional meanings are dealt with.

1.2.1. Motivation for Multiple Dimensions of Meaning

Since Frege (1897), it has been pointed out that human language has a means of conveying CONVENTIONAL NON-TRUTH-CONDITIONAL meaning, namely, “meaning that does not contribute to the truth conditions of a sentence, but instead, ... affect[s] the conditions in which the sentence can felicitously be uttered” (Gutzmann 2013: 33). Typical examples of lexical items that convey this type of meaning are expressives like English *damn*, *fucking*, and *bastard*, all of which convey one’s emotional and evaluative attitude (Kaplan 1999; Potts 2003, 2007; Gutzmann 2013).

It will be shown that not only the expressives but *-(n)un* also conveys conventional non-truth-conditional meaning, further motivating the postulation of multiple dimensions of meaning. It is important to note that *-(n)un* is not an expressive, for it does not express one’s emotional or evaluative attitude. Thus, *-(n)un* makes it necessary to posit another type of non-truth-conditional meaning different from the expressive dimension.

1.2.2. Meaning of *-(n)un* as Instructional Meaning

In this thesis, following Portner (2007), I propose a new dimension of meaning, which is the INSTRUCTIONAL meaning. The meaning of *-(n)un* is instructional in that the

speaker guides the hearer's attentional state by imposing salience on a discourse referent that is not prominent as much as she wishes at the point of her utterance. In other words, the speaker gives the hearer an instruction as to which discourse referent to be the focus of attention by using *-(n)un*.

By positing multiple dimensions of meaning and capturing the meaning of *-(n)un* on the instructional dimension, not only its instructional nature but the fact that *-(n)un* is only relevant to information structure (but not to truth-conditional meaning) is well explained. The formal schema of the meaning of *-(n)un* is also provided in Chapter 3.

1.3. Conventional vs. Conversational Implicature

In many cases, it is hard to figure out whether a semantic/pragmatic effect is conventional or conversational. Especially, it seems often the case that some phenomena that have been taken to be conventional turn out to be conversational, but not vice versa. For instance, the exhaustivity induced by *it*-clefts still seems to be widely taken to be conventional, but Horn (1981) convincingly shows that it cannot be conventional but conversational.

Contrastive implicatures induced by *-(n)un* are also widely taken to be conventional (C. Lee 1999, 2002, 2006, 2007, Hara 2006a). In this dissertation, however, I argue that they are conversational. Particularly, I focus on the scalarity, the concessivity, and the uncertainty generated by the use of *-(n)un*, and claim that all of them are conversationally derived from the proposed meaning of *-(n)un*.

The conversational nature of the contrastive implicature induced by *-(n)un* is important counter-evidence to the approach that posits two lexical items of *-(n)un*,

one for topic and one for contrast, because it is crucially based on the idea that the uncertainty, the scalarity, and the concessivity are all conventionally expressed by “contrastive *-(n)un*”, which is independent from non-contrastive *-(n)un*. Consequently, the analysis of the contrastive implicatures generated by *-(n)un* also supports the proposed view of *-(n)un* which posits just one meaning of *-(n)un* (i.e. imposing salience) but not two (i.e. topicality and contrast).

1.4. Structure of Dissertation

The remainder of the dissertation is structured as follows. Chapter 2 discusses the three basic notions of information structure, topic, focus, and contrast, and presents their definitions that are to be used in this dissertation. Also, in this chapter, I argue that grammar and information structure are only indirectly related, based on different linguistic devices in different languages. In Chapter 3, which is the core of the dissertation, I first introduce previous studies on the nature of *-(n)un* and discuss their problems. Then, I investigate in detail the notion of discourse salience, which is a prerequisite for understanding the nature of *-(n)un*. After that, I provide the meaning of *-(n)un* based on the corpus study, which then is formalized based on the framework of multiple dimensions of meaning. Lastly, I further support and clarify the proposed meaning of *-(n)un* by comparing the pragmatic function of *-(n)un*-marked NPs with that of other types of NPs, namely, *-i/ka*-marked NPs, bare NPs, and null NPs. Chapter 4 and 5 further support the proposed account of *-(n)un* by refuting the approach that posits two lexical items of *-(n)un* in the lexicon, that is, topic-marking *-(n)un* and contrast-marking *-(n)un*. First, in chapter 4, I argue that contrastive implicatures induced by *-(n)un* are not conventional but conversational, which

discourages the view that posits contrastive *-(n)un* that is independent from non-contrastive *-(n)un* in the lexicon. In Chapter 5, based on a phonetic experiment, I claim that the purported *-(n)un* for contrast and *-(n)un* for non-contrast do not differ from each other prosodically, which is strong counter-evidence to the claim that contrastive *-(n)un* is distinguished from non-contrastive *-(n)un* by a special intonation contour (e.g. high pitch). Finally, Chapter 6 concludes the dissertation by discussing the the status of the categories of information structure, and introducing interesting topics for cross-linguistic studies on information structure.

Chapter 2

Topic, Focus, and Contrast

2.1. Introduction

Chapter 2 provides a theoretical basis and an empirical motivation for Chapter 3, the main part of the thesis. The theoretical basis is about the notion of topic, focus, and contrast. Although a number of previous studies exist on these notions, no consensus seems to exist on how they should be defined. In this chapter, I discuss different approaches to each notion and evaluate the validity of them. Based on this discussion, I pick up the most reasonable definition for each notion and use them as the working definitions for the thesis.

The empirical motivation comes from the discussion on the nature of the relation between the categories of information structure and so-called their linguistic markers. Especially, I will focus on topic and focus, and show that both of them are not directly but only indirectly related to their markers. The indirect relation between the information-structural notions and their markers motivate the analysis of the nature of *-(n)un*, which is the main concern of the dissertation. That is, what is discussed in this chapter refutes the standard assumption on the status of *-(n)un* as a topic/contrast marker, thus naturally raising a question of what *-(n)un* is then really for and how it is related to topicality and contrast.

2.2. Topic

2.2.1. What is topic?

The term *topic*⁶ was first introduced by Hockett (1958: 201), who states that "the most general characterization of predicative constructions is suggested by the terms 'topic' and 'comment' for their ICs [immediate constituents]: THE SPEAKER ANNOUNCES A TOPIC AND THEN SAYS SOMETHING ABOUT IT [emphasis added]".⁷ Since Hockett first used the term, his understanding of topic, which can be roughly defined as WHAT THE SENTENCE IS ABOUT, has been accepted and elaborated by many researchers (e.g. Strawson 1964; Gundel 1974, 1988; Reinhart 1981; Vallduv í1990; Lambrecht 1994; Portner & Yabushita 1998; Krifka 2007; Portner 2007). Also, this seems to be the standard way of understanding what topic is. For instance, according to New Oxford American Dictionary, topic (in linguistics) is "that part of a sentence about which something is said, typically the first major constituent".

However, if we want to be more explicit about the definition of topic, the matter is not so simple. The most difficult problem seems to be that, despite a number of attempts made by semanticists and pragmaticists, the notion of "aboutness" is not clearly understood and still remains vague. Various formal analyses of aboutness have been proposed (e.g. Reinhart 1981; Portner & Yabushita 1998; Portner 2007), but

⁶ In this thesis, topic is always understood as "sentence topic" but not "discourse topic". See Roberts (2011) for a comparison of the two.

⁷ In fact, similar concepts to topic and comment used by Hockett were already used by earlier studies with different terms. For instance, von der Gabelentz (1869) introduces 'psychological subject' and 'psychological predicate', each of which roughly corresponds to Hockett's topic and comment. Also, Jespersen's (1924) 'subject' is similar to the notion of topic, and Mathesius (1928), a Prague School linguist, uses 'theme' and 'enunciation' for what the sentence is about and what is said about it.

none of them provide a satisfactory account of what aboutness really is. According to Polinsky (1999: 572), “[l]inguists have essentially given up on a rigorous definition of topics - almost everyone [...] mentions the aboutness condition and then moves on to more mundane matters of topichood or topicalization”.

Given the difficulty of defining aboutness, several researchers have proposed various linguistic tests for topichood (or aboutness). First, Gundel (1974, 1985) proposes the *what about X?* test, the *speaking of X* test, and the *as for X* test. In addition, Reinhart (1981) introduces the *say about X that S* test, the *about/of X* test, and the left-dislocation test. (Examples of some of these tests will be shortly introduced below.)

As pointed out by many (e.g. Lambrecht 1994; Roberts 2011), these tests must be used cautiously, for each test has its own pragmatic felicity conditions. For instance, Roberts (2011) points out that the *what about X?* test and the *as for X* test implicate contrast whereas the *speaking of X* test does not. Also, she claims that in the *about X* test, unlike the other three tests just mentioned above, the referent of *X* is presupposed to be mentioned before without conveying any contrast. These different felicity conditions for each test cause different acceptability when they are used in the same context, as shown in (1).

(1) A: I was at the mall yesterday and I ran into Louise Clark, who was here visiting Sue Topping.

B: Interesting. [Interlude of talk about Clark, followed by:]

(i) #About Sue, Louise said that ...

(ii) What about Sue? {What's she up to?/I heard she was moving.}

(iii) #(But) as for Sue, did you know ...⁸

(iv) But speaking of Sue, did you know she's engaged?

(Roberts 2011: 1918)

The phrase *About Sue* in (1i) is infelicitous since it does not implicate contrast (whereas the context requires contrast between Louise and Sue in B's utterance about Sue). The felicity of *speaking of Sue* in (1iv), which also does not implicate contrast, can be explained by the use of *but*, which conventionally conveys contrastiveness.⁹

The tests introduced above all do seem to insure aboutness at least intuitively if they are used in a felicitous context. However, the problem is that these aboutness tests are useful only when they are applicable. That is, these tests form only a sufficient but not necessary condition for aboutness, and it is in principle possible that some topics cannot be captured by any of the existing tests. Thus, it has to be

⁸ With respect to the unacceptability of (iii), Roberts (2011: 1918) claims:

The example also shows that felicity conditions on use of *what about X* differ from those for *as for X*. *What about Sue?* is felicitous in this context without prior indication that Sue and Louise were to be contrasted in this connection, even if Sue is the Contrastive Topic in the subsequent utterance. But *as for Sue* seems to presuppose that the speaker is working her way through a salient contrast set, indicating a turn of attention to someone already understood to be a member of that set; the contrast in this example might be facilitated by the use of *but*. Since there is no such salient set in the context given, (iii) is infelicitous.

⁹ Laurence Horn (p. c.) points out that (1iv) is acceptable even without *but*. This could be explained by the topic-shifting function of *speaking of*. That is, (1iv) without *but* could be still felicitous if the speaker is assumed to simply change (or shift) a topic without inducing any contrast (from I (Speaker A) to Sue Topping), which is totally felicitous in the given discourse context.

admitted that the aboutness tests cannot solve the vagueness problem completely, even though they are useful in many cases.

Regarding what topic is, another problem is that in fact there exist definitions of topic which are not based on aboutness. For instance, based on Chinese data, Chafe (1976: 51) argues that “‘real’ topics (in topic prominent languages) are not so much ‘what the sentence is about’ as ‘the frame within which the sentence holds’”. Also, the formal semanticist von Stechow (1994) does not distinguish sentence topic from discourse topic, which he defines as a set of propositions in discourse context (or a question under discussion (QUD) (cf. Roberts 2012)), and proposes that a sentence topic is nothing but a *salient discourse topic*.^{10, 11}

¹⁰ The notion of theme proposed by the theory of the Functional Sentence Perspective (FSP), developed by Prague School linguists, is interesting in that it had been first used to mean what the sentence is about (Mathesius 1928) but later was redefined based on the notion of COMMUNICATIVE DYNAMISM (CD), “the extent to which a particular sentence element contributes to the development of the communication” (Firbas 1966: 270-275). According to Firbas, theme is the element that contains the lowest degree of CD and (in general but not always) is the first element of a sentence. Although this notion of theme might be useful to capture the general tendency of organizing a sentence, its definition based on CD seem to have little to do with the notion of topic. Rather, theme in this version of FSP should be thought of as an independent notion from topic, and I will not discuss it any further in this dissertation.

¹¹ One might think that the definition of topic proposed by Halliday (1967) is also deviant from the aboutness-based definition. Halliday defines topic (his “theme”) as what comes first in the clause. In distinguishing the notion of “given” from “theme”, however, Halliday also claims that “while given means what you were talking about or what I was talking about before, theme means what I am talking about now” (cited from Gundel (1974: 37)), which clearly shows that he also has the aboutness-based definition of topic in his mind. It is just that he (wrongly) takes the sentence-initial element to be what the sentence is about (cf. Gundel 1974).

Given multiple definitions for a single notion, a natural question that arises is which definition is correct (or better at least).¹² Unless we want to stay vague on the meaning of topic and just use the term without giving it a unique definition, which is undesirable at least for our purposes, we should choose one of them and use the term unambiguously.¹³

At least intuitively, the standard aboutness-based definition seems to be the best choice, for an “aboutness-topic”-comment structure is one of the most typical information structural patterns in our everyday conversation. Thus, if we want to choose one of the other “non-standard” definitions, there must be a strong independent motivation for doing so. In order to figure out whether such a motivation exists, let us understand the motivation for proposing each non-standard definition. First, what motivates von Stechow (1994) to propose the “QUD-based” definition of topic is captured in a short paragraph below:

Can we incorporate the notion of "topic" into our system? The natural way to do this would be to interpret sentence topics as being anaphoric to a salient discourse topic (von Stechow 1994: 75).

It is important to note that the motivation seems to be purely THEORY-INTERNAL. That is, his main concern is not about what topic really is, but how the notion can be

¹² Laurence Horn (p. c.) points out that this conclusion is not necessary, because it could be that different definitions are correct (or better, useful) for different purposes. However, I think that different terms should be used in these cases. That is, if we use a single term for different purposes, it only causes confusion. In fact, this is exactly what is happening with the term topic, and part of the purpose of this section is to resolve this confusion.

¹³ Another possibility is to provide a new definition of topic. But I will not discuss this possibility here, because it will be ultimately claimed that the aboutness-based definition is most desirable.

incorporated into the formal system he proposes. This theory-internal motivation leads him to the new definition of (sentence) topic which is not only counter-intuitive but also empirically falsified. As Roberts (2011) points out, von Stechow's definition of topic is problematic in that it cannot capture our intuition about the information structure of the sentences in (2).

(2) a. What about Mary? What did she give to Harry?

Mary gave [a shirt]_{Rheme} to Harry.

b. What about Harry? What did Mary give to him?

To Harry Mary gave [a shirt]_{Rheme}.

(Roberts 2011: 1911)

In both (2a) and (2b), the QUDs are the same, which is what Mary/she gave to Harry. However, the topics (which are determined by the *what about X?* test) are different; it is the denotation of *Mary* in (2a) but that of *Harry* in (2b).¹⁴

As for Chafe (1976), the reason why he claims that a “real” topic is a FRAME (rather than an aboutness-topic) comes from Chinese data as shown in (3). They are typical examples of the so-called multiple subject constructions (henceforth, MSCs).

(3) a. nei-xie shumu shu-shen da

those tree tree-trunk big

b. nei-ge ren yang ming George Zhang

that person foreign name George Zhang

(Chafe 1976: 50)

¹⁴ Further arguments against the conflation of topic and QUD are provided in Portner & Yabushita (1998) based on Japanese data.

Chafe notes that, unlike the left-most argument of topicalized sentences in English, the left-most arguments in (3) are not what the predicates of each sentence are about. Rather, what the predicates are about is the second argument¹⁵ of each sentence (i.e. *shu-shen* ‘tree-trunk’ in (3a) and *yang ming* ‘foreign name’ in (3b)).

Instead, according to him, what the left-most arguments do is “to limit the applicability of the main predication to a certain restricted domain” (Chafe 1976: 50). For instance, he claims that what bigness is predicated of in (3a) is not the trees but their trunks, and that the bigness of the trunks applies within the domain of those trees.

Based on this observation, he concludes that “the topic sets a spatial, temporal, or individual framework within which the main predication holds” (Chafe 1976: 50) in topic-prominent languages like Chinese. And he calls this kind of topic “Chinese-style” topic.

Chafe’s definition of topic based on the notion of frame is not theory-internally motivated; rather, it seems to have a strong empirical motivation as shown in (3). However, his claim has at least four problems. First, he just assumes that the sentence-initial arguments in (3) are topics, without first defining what topic is. Thus, the alleged topichood of those arguments is fundamentally based on *syntactic* but not pragmatic considerations, which is undesirable under the assumption that the notion of topic is pragmatic in nature.

The reason why he treats them to be topics is unclear. This position is also taken by Li & Thompson (1976), who make a typological distinction between languages based on topic- and subject-prominence and take the first constituent of

¹⁵ Strictly speaking, what the predicate is about is not the argument but its denotation. That is, the argument is the “topic expression” (Lambrecht 1994) and its denotation is the topic. But I will not distinguish between topic and topic expression throughout the dissertation unless it is necessary.

MSCs like (3) to be topics in topic-prominent languages. However, Li & Thompson also remain vague on the definition of topic and at some point just adopt Chafe’s definition of topic when they discuss the functional role of topic.¹⁶ Therefore, Chafe’s assumption that the left-most arguments in (3) are topics is ungrounded.

The second problem of Chafe’s definition of topic is that the sentence-initial elements in (3) can be interpreted as aboutness-topics in certain contexts. For instance, if (3a), which is repeated below within (4), is uttered in a context in which two groups of trees are compared in terms of the size of their trunk, the left-most element *nei-xie* ‘those trees’ can be a perfect aboutness-topic.

- (4) A: These trees have small trunks.
 B: What about those trees?
 A: (3a) *nei-xie shumu shu-shen da*
 those tree tree-trunk big

That is, B’s question guarantees that the denotation of *nei-xie shumu* ‘those trees’ in A’s response is an aboutness-topic. Note that in this case the sentence-initial NP acts as a subject and the following clause (i.e., *shu-shen da* ‘tree-trunk is big’) as a (*clausal*) *predicate* of the whole sentence (cf. Chae & Kim 2008). Consequently, Chafe’s claim that the left-most element in MSCs like (3) is a “frame-topic” rather than an aboutness-topic in topic-prominent languages is simply misguided, the reason for which is the lack of enough consideration of discourse context.

¹⁶ Li & Thompson do discuss syntactic and semantic differences between the sentence-initial element of MSCs, that is, what they call topic, and the canonical subject. However, the differences do not guarantee that the former is a topic, because they are mostly syntactic and semantic in nature. In order to figure out the information-structural status of the left-most element of MSCs, we need to pay attention to its pragmatic function in discourse but not its syntactic and/or semantic characteristics.

The third problem is that, contra Chafe, the second arguments in (3a) and (3b) (*shu-shen* ‘tree-trunk’ and *yang ming* ‘foreign name’) are not always what the predication is about. For instance, if (3a) is uttered as an answer to the question of (5A), *shu-shen* ‘tree-trunk’ becomes focus rather than (aboutness-)topic.

(5) A: What part of those trees is big (compared to these trees)?

B: (3a) *nei-xie shumu shu-shen da*
those tree tree-trunk big

That is, *shu-shen* is the (relationally) new information required by the speaker A in that context, and thus cannot be what the predication is about.¹⁷ Again, if there is an (aboutness-)topic in (5B), it is definitely the sentence-initial phrase *nei-xie* ‘those tree’.

The last problem of Chafe’s definition of topic (as a frame) is that the notion of frame is, just like aboutness, not clear enough. Krifka (2007: 46) points out this problem, stating that “[i]t is still unclear how this [Chafe’s definition of frame] should be understood more precisely”. In particular, when Chafe defines frame as “a spatial, temporal, or individual framework within which the main predication holds”, it is unclear how “individual framework” is different from aboutness-topic. At least intuitively, it seems hard to clearly make a distinction between an individual within which the predication holds and an individual which the predication is about.

Jacobs (2001), who also distinguishes aboutness-topic (his “addressation”) from frame-topic (his “frame-setting”), argues that the crucial difference between the two is that the former has no direct effect on the truth of the comment while the latter does. However, if this criterion is applied to the MSC in (4), the initial constituent

¹⁷ Note that by the definition of aboutness, a sentence (or predicate) can only be about a relationally old element.

must be a frame-topic but not an aboutness-topic, since it is crucial for the truth condition of the whole sentence. Thus, the distinction between frame-topic and aboutness-topic based on whether it directly affects the truth-condition of a sentence is not convincing.¹⁸

Moreover, a short made-up conversation in (6) shows an example of a referent's being a topic and frame at the same time. First, the aboutness of *his health* in (6B) is guaranteed by the *as for X* test.¹⁹

(6) A: How is John?

B: {Healthwise / As for his health}, he is [FINE]_{Focus}.

(Krifka 2007: 45)

But at the same time, the same phrase also acts as a frame within which the main predication (i.e. *he is fine*) holds. That is, what the sentence-initial phrase in (6B) does is “to limit the applicability of the main predication to a certain restricted domain”. This again shows that a nominal, which denotes a (physical or abstract) entity, can be a topic and frame at the same time depending on context.

The unclear nature of the notion of frame is furthered by different definitions given to it by different researchers. For instance, Jacobs (2001) defines frame as in (7).

¹⁸ Interestingly, Jacobs's examples of frame-topic only contain adverbials denoting temporal, spatial, or conditional frames but not nominals denoting an individual.

¹⁹ One might argue that the denotation of *his health* cannot be a sentence topic of (6B), because there is a clear sentence topic in (6B), that is, the denotation of *he*, or John, due to the question in (6A). But this argument is valid only under the assumption that there can be only one sentence topic for each sentence. Following Lambrecht (1994), I assume that there can be multiple sentence topics within a single sentence.

(7) Frame-setting (Jacobs 2001: 656)

In (X Y), X is the *frame* for Y iff X specifies a domain of (possible) reality to which the proposition expressed by Y is restricted.

Note that Jacobs's definition is different from Chafe's in that the domain (within which the predication holds) is not limited to temporal, spatial, and individual types. Indeed, according to Jacobs, conditionals can also be frame setters, which would be impossible under Chafe's definition.²⁰

(8) sungli hal kyengwu-ey-nun thim-i taythonglyeng-eykeyse
victory do case-DAT-NUN team-NOM president-from
phychang-ul pat-ul kes-i-ta
award-ACC receive-FUT COMP-COP-DEC

'If the team wins, they will get an award from the president.' (Jacobs 2001: 655)

In (8), Jacobs argues that the fact that the topic marker *-(n)un* is attached to the first phrase supports that it is a frame(-setter). Still, this understanding of frame seems to

²⁰ Haiman (1978) also claims that conditionals are topics, which is mainly motivated by the fact that conditional clauses and topics are marked identically in a number of unrelated languages. His definition of topic, however, is not based on aboutness. Rather, he defines topic as "an entity whose existence is agreed upon by the speaker and his audience" (Haiman 1978: 587). This "topic-as-given" approach is problematic in many respects. Most importantly, it is uncontroversial that a given entity can be a focus. One of the most famous examples comes from Reinhart (1981: 72):

- (i) A: Who did Felix praise?
B: He praised HIMSELF.

In (i), the referent of *himself*, namely, Felix, is definitely given (or old), and according to Haiman's definition of topic, Felix must be a topic. But Felix is not only topic (i.e. *He*) but focus (i.e. *HIMSELF*) in (iB), which cannot be captured by the topic-as-given approach. In fact, Haiman's claim would make more sense if he uses Chafe's notion of topic (as frame). That is, in "if p then q", p gives the frame in which q holds.

be somewhat inconsistent with Krifka's (2007), who defines it as "the general type of information that can be given about an individual" (Krifka 2007: 46). By adding *general* in the definition, Krifka seems to exclude "specific" information like conditionals²¹ and only consider prototypical frame-setting adverbials like *financially*, *healthwise*, *in Germany*, etc.²²

So, what is topic? Based on the discussion above, the best answer to this question seems that topic is what the sentence is about. To put it more clearly, "[a] referent is interpreted as the topic of a proposition if in a given situation the proposition is construed as being about this referent, i.e. as expressing information which is relevant to and which increases the addressee's knowledge of this referent" (Lambrecht 1994: 131). No convincing evidence exists for refuting this widely accepted and intuitively satisfying idea. That is, to define topic as QUD or frame is either only theory-internally motivated and counter-intuitive, or (pragmatically) ungrounded and unclear.

Two crucial problems arising from this conclusion is that 1) the notion of aboutness is still vague and that 2) so-called morphological topic markers (e.g. *-(n)un* in Korean and *-wa* in Japanese) and syntactic topicalization constructions (e.g. English topicalization and German topic-comment constructions) mark not only aboutness-topics but also non-(aboutness-)topics (as shown in (8)). The two problems will be the main focus of the next subsection, where the relation between topic and

²¹ Conditionals are specific in that 1) they contain a proposition denoting a specific action or state and that 2) they themselves can contain a "general" frame.

²² Ultimately, Krifka (2007) combines frame and contrastive topic, and proposes a new notion called *delimitator*, which is defined as below (where CG = Common Ground):

A Delimitator α in an expression [... α ... β_{Focus} ...] always comes with a focus *within* α that generates alternatives α' . It indicates that the current informational needs of the CG are not wholly satisfied by [... α ... β_{Focus} ...], but would be satisfied by additional expressions of the general form [... α' ... β'_{Focus} ...] (Krifka 2001: 48).

grammar is discussed.

2.2.2. Relation between Topic and Grammar

Topic is a linguistic notion that is useful in describing how human language and cognition work from the perspective of information structure (or information packaging). Thus, as to what kind of linguistic notion it is, there is no question about its being an information-structural (or pragmatic) notion. But when it comes to the question of how it is linguistically (or grammatically) realized, basically two different views exist.

First, it has been widely assumed that in many languages, there is a linguistic device, whether phonological, morphological, or syntactic, that uniquely marks topic. For instance, the syntactic structure in (9a), a non-canonical non-subject-initial construction containing a gap in its canonical position, is called preposing (or fronting) in English. In particular, if the sentence-initial element receives no tonic stress, the construction is called topicalization (or ‘Topic Topicalization’ in Gundel’s (1974) terms). An example sentence is provided in (9b).

- (9) a. [CP [NP X_i] [IP ... [e_i] ...]]
b. Bagels, I like. Hot dogs, I can’t stand.

The construction has been so called since Ross (1967), and its discourse function has “been taken for granted by the overwhelming majority of both syntacticians and discourse analysts for nearly [four] decades and that presumed function—to ‘mark a topic’—seems as ‘natural’ a function for [this form] as one could imagine” (Prince 1998: 281).

However, it is important to note that this assumption has no compelling evidence backing it up (cf. Ward 1985; Prince 1981a, b, 1984, 1998, 1999). That is, rather than making a serious attempt to evaluate the validity of the assumption, researchers have simply claimed or, worse, just repeated others' claim that English topicalization is used to mark topic.

Also, Gundel (1974) claims that “[a] number of non-Indo-European languages have overt morphological markers that are used to single out a particular element (generally a noun phrase) in the sentence to indicate that the purpose of the sentence is to communicate something about the object or concept designated by this noun phrase” (Gundel 1974: 24). Typical examples assumed to do this job (and thus called topic markers) are Korean *-(n)un* and Japanese *-wa*. Again, few researchers have questioned the validity of this assumption, and it is widely taken for granted that the markers are used to uniquely mark topic (unless they are used for contrast) (e.g. Kuno 1972; H.-W. Choi 1996; C. Lee 1999, 2007).²³

Another view on the relation between topic and grammar is that it is not always uniquely marked by a specific grammatical device in human language. Under this view, linguistic devices known to mark topic in many languages often (if not always) do not indicate (aboutness-)topic *per se* but have their own pragmatic functions. For instance, based on different German topic-comment constructions, Jacobs (2001: 643) claims that “[t]here is no unitary functional notion underlying all TC [topic-comment] constructions in natural languages”.

As will be shown below with English topicalization and Korean *-(n)un*, empirical data strongly support the latter view. That is, if we take a close look at what pragmatic role(s) the (so-called) topic marker and topicalization play, it becomes clear

²³ But see Kuroda (2005) for a different view on Japanese *-wa*.

that in fact they do not uniquely mark topic. The name “topic marker” given to these linguistic devices is just a misnomer.

2.2.2.1. English Topicalization

Regarding the issue of whether English topicalization always marks topic, one of the most important facts is that not only entity-denoting NPs but phrases of other parts of speech (e.g. prepositional phrases (PPs), verb phrases (VPs)) that denote non-entities can also be topicalized (Ward 1985). An example of PP topicalization is shown below.

(10) Topicalization of PP

Q: What about John? Where did John travel in July?

A: In July, he traveled China.

Notice that the topicalized phrase in (10), that is, *in July*, cannot be thought of as an aboutness-topic of the sentence. The sentence is clearly about John, and the fronted PP is (in Chafe’s, Jacobs’s and Krifka’s terms) a temporal frame. In fact, we cannot even apply the aboutness tests in this case, for putting the topicalized phrase in the *X* variable in any aboutness test construction would yield ungrammaticality (e.g. **as for in July*, **what about in July?* etc.).²⁴

It is important to note that the aboutness-based definition of topic basically applies only to the semantic type of *entity*, either concrete or abstract (e.g. Reinhart 1981; Lambrecht 1994; Portner & Yabushita 1998).²⁵ This is unsurprising given that it is implausible to talk about non-entities as shown in (8) and (10). Thus, the fact that

²⁴ But part of a preposed PP can be a topic. For example, *Harry* in (2b) is the topic of the sentence.

²⁵ I take a proposition can be an abstract entity, which is (at least indirectly) supported by the fact that a phrase denoting a proposition can be *nominalized* and syntactically behave just like a normal entity-denoting NP.

phrases that denote non-entities can be “topicalized” counter-argues the view that English topicalization always marks topic.²⁶

If English topicalization is not really for “topicalization”, what is it for? Although no satisfactory answer to this question has been proposed yet (Roberts 2012), several attempts have been made mainly by functional linguists (e.g. Gundel 1974; Chafe 1976; Prince 1981a, 1984, 1998, 1999; Ward 1985). To my knowledge, the most recent pragmatic analysis of English topicalization is provided by Prince (1999), who also reaches the same conclusion that “[t]opicalization is really not ‘about’ topichood [in the aboutness sense]”²⁷ (Prince 1999: 17). According to Prince, the pragmatic function of English topicalization is as follows:

²⁶ Ward (1985) and Prince (1999), contra Gundel (1974) and Reinhart (1981), claim that even topicalized NPs can be non-topics, based on the fact that many topicalized NPs fail aboutness tests such as *What about X?* test, the *as for X* test, and the *say about X that S* test. However, as discussed above, it is possible that a NP fails (some of) the aboutness tests and is still a good topic. Indeed, to my intuition, all the examples Ward and Prince provide as non-topicalized NPs seem to be perfectly good topics.

²⁷ In order to provide an objective way of identifying (aboutness-)topics, Prince (1999) adopts Centering theory and defines topic as either the Backward-looking Center (Cb) or the Preferred Center (Cp). In a nutshell, the Cb is the most pronominalizable entity in the current utterance, and the Cp is the most pronominalizable entity in the following utterance. (See Prince (1999) for a brief introduction to Centering theory, including the basic notions like Cb and Cp.) I do not agree with her on the claim that topic is either the Cb or the Cp, because both, by their definitions, can only capture CONTINUING topics but not newly introduced ones. That is, it is possible that a newly introduced topic (for instance, *via* topic shift) is neither the Cb nor the Cp, because it is usually infelicitous to be pronominalized in the utterance where it is first introduced and does not necessarily occur in the following utterance in a pronominalized form (if it occurs at all). This problem has also been noticed by those who work on Centering theory, but no satisfactory solution has been proposed (Masharov 2008). Moreover, I am not convinced by her assumption that using Centering theory is a more objective way of identifying topics than using the aboutness tests.

(11) Double discourse function of English topicalization²⁸ (Prince 1999: 7)

1. English Topicalization triggers an inference on the part of the hearer that the entity represented by the initial NP stands in a salient partially-ordered set ('poset') relation to some entity or entities already evoked in the discourse-model.
2. English Topicalization triggers an inference on the part of the hearer that the proposition is to be structured into a focus and a focus-frame as follows. First, if the entity evoked by the leftmost NP represents an element of some salient set, make that set-relation explicit. Then, in all cases, the open proposition resulting from the replacement of the tonically stressed constituent (in the clause!) with a variable is taken to represent information saliently and appropriately on the hearer's mind at that point in the discourse, the tonically stressed constituent representing the instantiation of the variable and the new information in the discourse.

As shown in (11), Prince claims that English topicalization has two functions. First, it triggers an inference that the referent of the preposed NP is in a salient partially ordered set (poset) relation²⁹ (Hirschberg 1985) with something in the prior context. At the same time, it also structures the proposition into focus and presupposition, that is, an open proposition and the instantiation of the variable in it, marking the open

²⁸ Note that Prince considers only NP topicalization. But I assume that her analysis can be easily modified so that it also applies to the topicalization of other syntactic categories.

²⁹ The definition of poset relation is as follows (Prince 1999: 8):

Partially ordered sets, or 'posets', are defined by a partial ordering **R** on some set of entities, **e**, such that, for all **e-1**, **e-2**, and **e-3** that are elements of **e**, **R** is either reflexive, transitive, and antisymmetric or, alternatively, irreflexive, transitive, and asymmetric:

- a. REFLEXIVE: **e-1 R e-1**
TRANSITIVE: (**e-1 R e-2 and e-2 R e-3**) → (**e-1 R e-3**)
ANTISYMMETRIC: (**e-1 R e-2 and e-2 R e-1**) → (**e-1 = e-2**)
- b. IRREFLEXIVE: **e-1 R/ e-1**
TRANSITIVE: (**e-1 R e-2 and e-2 R e-3**) → (**e-1 R e-3**)
ASYMMETRIC: (**e-1 R e-2**) → (**e-1 ≠ e-2**)

proposition as being salient 'shared knowledge'³⁰ at that point in the discourse and marking the instantiation as new in the discourse.³¹ A similar approach is taken by Ward (1985), who also relies on the notion of the poset relation and the open proposition (or the focus-presupposition structure) in determining the function of English topicalization.

It is important to note that the function of topic-marking is not included in the double function of English topicalization proposed by Prince (1999) (and Ward 1985). In fact, her analysis is strongly supported by corpus data consisting of naturally occurring conversations. Under the assumption that Prince is on the right track, we now have a strong motivation for treating topichood (or aboutness) of topicalized NPs to be only a derived property rather than encoded by the syntactic construction.

One possibility of treating English topicalization as a “real” topicalization while admitting the fact that it does not necessarily mark aboutness-topic can be found in Jacobs’s (2001) proposal. Based on different types of so-called topic-comment (TC) constructions in German (e.g. left dislocation, I-topicalization), he claims that no unitary functional notion exists underlying all TC constructions in natural languages, and that the TC constructions share some salient semantic attributes with prototypical examples of TC constructions.

However, this “prototype” theory of topic is also problematic, because a single prototypical topic, or a set of salient semantic attributes of prototypical TC

³⁰ Strictly speaking, shared knowledge should be the existentially quantified proposition, e.g. ‘ $(\exists x)$ (x ate the pizza)’, and not the open proposition “x ate the pizza”. I am grateful to Laurence Horn for pointing out this to me.

³¹ Here, it is important to note that the focus is not the preposed element but the prosodically prominent constituent WITHIN THE CLAUSE, which crucially distinguishes topicalization from so-called focus-movement (or Gundel’s (1974) ‘focus topicalization’), “Y(iddish)-movement”, and clefts.

constructions, is still hard to define³². That is, how do we know that the four semantic attributes Jacobs proposes (i.e. information separation, predication, addressation, and frame-setting)³³ are the prototypical properties of TC constructions? In fact, the four constructions Jacobs discusses are named TC constructions based on their morpho-syntactic but not pragmatic properties; thus, there is no independent reason to believe that they are real “TC constructions”.

Instead, I claim, *pace* Jacobs, that there is a unitary functional notion underlying all TC constructions. It is aboutness. All the constructions that have been called TC constructions but are not based on aboutness are NOT actual TC constructions even if they have the same morphological marker or syntactic process. In other words, in determining the pragmatic status of a certain linguistic device, its pragmatic (not its morpho-syntactic) characteristic has to be considered.

2.2.2.2. Korean *-(n)un*

As briefly mentioned above, Korean *-(n)un* (together with Japanese *-wa*) is widely known as the representative morphological topic marker. This view is so widespread that the topic-marking function of *-(n)un* is taken for granted in discussing semantics and pragmatics of *-(n)un*. For instance, C. Lee (2007), who has done one of the most comprehensive studies on the meaning of *-(n)un*, provides the following examples as the evidence for his claim that *-(n)un* has an inherent property of marking topic:

³² Jacobs (2001) also acknowledges this point, stating that “[o]n closer inspection addressation ... on the one hand and frame-setting on the other might turn out to be attributes of two different but similar prototypes of TC. In this case, topicality would be a polysemous category” (Jacobs 2001: 658).

³³ See Jacobs (2001) for definitions of each notion.

(12) a. kumsokhwalca-nun hankwukin-i palmyeng hay-ss-ta
 metal.type-NUN Korean-NOM invention do-PAST-DEC

‘As for metallic type, Koreans invented it.’

b. Inswu-nun soselchayk-ul sa-ss-e-yo
 Inswu-NUN novel.book-ACC buy-PAST-DEC-HON

‘Inswu bought a novel. (to the questions “What did Inswu buy?”)

(C. Lee 2007: 152)

Note that *-(n)un* in both (12a) and (12b) is attached to an entity-denoting NP. Based on these data, C. Lee claims that topic is a basic category of information structure, and that “Roberts’ ([2012]) pessimism about the theoretical status of Topic in information structure, and B üring’s (2003) exclusion of non-contrastive Topic as a category in information structure, largely based on English, are not tenable” (C. Lee 2007: 153). The criticism of Roberts and B üring is based on the assumption that Korean, unlike English, has a grammatical device (i.e. *-(n)un*) to uniquely mark topic.

However, it is not hard to find counter-examples to this assumption. We have already seen one clear counter-example, that is, (8), which is repeated below.

(8) sungli ha-l kyengwu-ey-nun thim-i taythonglyeng-eykeyse
 victory do-FUT case-DAT-NUN team-NOM president-from
 phyochang-ul pat-ul kes-i-ta
 award-ACC receive-FUT COMP-COP-DEC

‘If the team wins, they will get an award from the president.’

The exact information-structural status of the *-(n)un*-marked constituent in (8) is not clear. Jacobs (2001) calls it a frame, but it seems not a frame according to the definitions of frame proposed by Chafe’s (1976) or Krifka’s (2007). What is important is the fact that it is definitely not an aboutness-topic of the sentence due to

the semantic type of the *-(n)un*-marked phrase. That is, the semantic type of an element to which *-(n)un* is attached is crucial for whether the element is a topic or not.

One might argue that examples like (8) are not counter-examples to the claim that *-(n)un* is a topic marker because it marks not topic but contrast. That is, since *-(n)un* has two functions, that is, topic- and contrast-marking, it might be claimed that every *-(n)un* that is not used to mark topic is used for contrast.

First of all, this would make sense only if there are two lexical items of *-(n)un* in the lexicon, that is, topic-marking *-(n)un* and contrast-marking *-(n)un*. From the point of view of the Modified Occam's Razor (Grice 1978), "Do not multiply senses beyond necessity", this view of *-(n)un* is less attractive than the view that assumes only one *-(n)un* in the lexicon. Also, I will show in Chapters 3, 4, and 5 that not only is it possible to posit just one *-(n)un*, but it is also desirable to do so for various reasons.

Second and more importantly, the *-(n)un*-marked constituent in (8) does not necessarily convey contrast. Whether it is contrastively used or not solely depends on discourse context. For example, if the prior utterance to (8) is "if the team loses the game, they get nothing", *-(n)un* certainly induces contrast. In contrast, if the utterance is preceded by "All the members of the team have done their best to win this game", no contrast is generated by the use of *-(n)un*.³⁴

If *-(n)un* does not uniquely mark topic or frame, what is *-(n)un* really for? Like English topicalization, few previous works on *-(n)un* asks this fundamental question. Even the studies that deal with this issue are problematic in one way or the other, which I will discuss in more detail in Chapter 3. In that chapter, together with a

³⁴ Of course, the use of the conditional itself implies contrast. In (8), for instance, the situation in which the team wins and the situation in which it loses are contrasted. But this kind of contrast is inherent in the use of a conditional itself regardless of whether *-(n)un* is used or not.

comprehensive review of previous studies on the nature of *-(n)un*, I will provide a new pragmatic analysis of *-(n)un* based on the notion of discourse salience.

2.2.3. The Source of Aboutness

According to the discussion above, aboutness (or topichood) is not grammatically encoded in English topicalization or Korean *-(n)un*. If it is not inherently marked by those linguistic devices, where does it come from?

As pointed out above, the semantic type of the preposed or *-(n)un*-marked element is crucial. That is, aboutness is possible only with entity-denoting elements. Together with this, the peculiarity of the construction and the morphological marker derives aboutness. The peculiarity of *-(n)un* will be discussed in detail in Chapter 3, where the nature of *-(n)un* is unveiled. Here, let us focus on what is special about English topicalization.

Syntactically, the construction is characterized by a non-subject element's being located at the clause-initial position. This noncanonical position of the element makes it possible for the fronted constituent to fit in the topic position of the canonical topic-comment structure, that is, the structure in which the speaker first introduces a topic and then makes a comment on it. Since the focus is necessarily within the clause in English topicalization, the clause-initial element, which is made salient (together with its alternatives) in the typical topic position, is naturally interpreted as the topic of the clause.

The source of framehood can be explained in the same manner. That is, framehood is also derived from the interaction of the semantic type of the preposed or *-(n)un*-marked phrase and the peculiarity of the grammatical devices. The proper semantic type of the element for framehood depends on how it is defined. For

instance, if Chafe's (1976) definition is adopted, only spatial, temporal, and individual types can be frames, while conditionals are also candidates for framehood under Jacobs's (2001) definition.

Importantly, if the current analysis of the source of aboutness (and framehood) is on the right track, it is no longer necessary (or even meaningful) to provide an explicit definition of aboutness or frame. The reason is that the fundamental pragmatic function of English topicalization or Korean *-(n)un* is not to mark topic or frame. Topicality and framehood are just derived properties. Instead, what really needs to be done is to provide explicit accounts of what pragmatic function(s) they have.

2.3. Focus

2.3.1. Two Standard Views on Focus

Just like topic, focus has been defined in various ways (sometimes with different names) by different researchers.³⁵ Unlike topic, however, there seem to be not one but two standard definitions of focus, based on ALTERNATIVE-INDICATION and RELATIONAL NEWNESS respectively. First, focus defined in terms of indicating alternatives can be informally characterized as in (13).

(13) Focus indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions (Krifka 2007: 18).

³⁵ See Vallduv í & Engdahl (1996) for a brief (but comprehensive) historical study on the notion of focus.

The above definition is the core of the Alternative Semantics, a formal semantic theory of focus first developed by Rooth (1985, 1992) and adopted by most formal semanticists thereafter (e.g. Büring 2003; Krifka 2007; Beaver & Clark 2008; Roberts 2012).³⁶

Under this view, the meaning of a sentence is two-dimensional, consisting of the ordinary meaning and the focus meaning. For instance, the ordinary semantic value of the sentence $[_S [_{John}_F \text{ likes Kim}]]$ is represented in (14a), and the focus semantic value in (14b).

- (14) a. $[_S [_{John}_F \text{ likes Kim}]]^o = \{\text{like}(j, k)\}$
 b. $[_S [_{John}_F \text{ likes Kim}]]^f = \{\text{like}(x, k) \mid x \in E\}$, where E is the domain of individuals

As shown in (14b), the focus meaning of the sentence is the set of propositions of the form ‘ x likes Kim’, each proposition of which fills the x variable with the alternatives to John.

The other standard definition of focus is the relationally (but not referentially) new information of a proposition (e.g. Halliday 1967; Jacobs 1984; Prince 1986; Lambrecht 1994; Vallduv í & Engdahl 1996; Gundel & Fretheim 2004). For instance, according to Vallduv í & Engdahl (1996: 462), a proposition can be divided into “a noninformative, known, or expected part - the ground - and an informative, newsy, dominant, or contrary-to-expectation part - the focus”. Let us see how a sentence is structured based on the ground-focus partition.

- (15) A: Among John, Kim and Mary, who went to the party?
 B: Mary went to the party.

³⁶ But see Wee (2010a) for other formal theories of focus and a comparison of them.

In the question in (15A), it is presupposed that one or more members of the indicated set went to the party. Thus, the phrase *went to the party* in (15B) conveys the “noninformative, known, or expected part”. In contrast, the subject *Mary* expresses the new information of the sentence in that the information cannot be taken for granted at the time of speech. That is, even though *Mary* is already familiar, or referentially given (or old), to both A and B before (15B) is uttered, it is relationally new in (15B), for it is unpredictable or pragmatically non-recoverable³⁷ element in that utterance.

Given the two different definitions of focus, a natural question that arises is, again, which is right (or at least better).³⁸ As pointed out earlier, it is undesirable to use the same term for different purposes or concepts, for it would only give rise to confusion among linguists.

In order to determine which definition we should choose, let us first consult our intuition. As pointed out by Umbach (2004) and Matić (2009), the definition

³⁷ “What is focal is “new” information; not in the sense that it cannot have been previously mentioned, although it is often the case that it has not been, but in the sense that the speaker presents it as NOT BEING RECOVERABLE FROM THE PRECEDING DISCOURSE [emphasis added] (Halliday 1967: 204).

³⁸ One might argue that the two definitions are not contradictory but compatible with each other. That is, it could be argued that focus is descriptively what is relationally new in a sentence and it can be formally represented as indicating alternatives. Indeed, this seems how focus is understood by Rooth (1985), where he introduces both the definitions. A crucial problem of this view is that it is not clear why the characteristic of being relationally new has to be formally captured by the feature of indicating alternatives. In principle, the two has nothing to do with each other, as will be discussed in more detail below. Rooth (1985) also introduces the two definitions without explaining how they are related to each other.

based on relational newness seems more intuitively appealing.³⁹ The reason is that a typical example of focus, an answer to a *wh*-question, can best be captured by the pragmatic notion of relational givenness-newness (cf. footnote 37). The notion of indicating alternatives is intuitively less attractive, because, by answering a typical *wh*-question, what the speaker tries to do is to propose one of the alternatives as the correct answer but not to indicate (possibly) wrong “alternative answers”.

Then, why do Alternative Semanticists pursue this intuitively less direct notion of focus? The motivation seems to be theory-internal. Notice that the meaning of focus proposed by them is very closely related to the meaning of a question proposed by Hamblin (1973) according to whom, the meaning of a question is a set of alternative answers. Adopting this view of questions and also assuming that every focus-containing utterance is an answer to an (implicit or explicit) question, Rooth (1985: 14) claims that “the function of the focus ... is to signal that alternatives [the meaning of a question to which the focus-containing sentence is an answer] are indeed under consideration”. To put it simply, the meaning of focus is understood as TO INDICATE A COUNTERPART QUESTION. For instance, the focus in (16a) indicates that the utterance serves as an answer to the question in (16b).

(16) a. [John]_F likes Kim.

b. Who likes Kim?

This understanding of focus is motivated only when Hamblin’s theory of the meaning of questions is adopted. However, as noted by Beaver & Clark (2008: 27), “questions

³⁹ For instance, Umbach (2004) claims that “[i]nterpreting focus as evoking a set of alternatives raises the question of how to account for the intuitive idea that a focus in most cases presents new information” (Umbach 2004: 160).

do not have to be analyzed using alternatives at all”. In fact, another standard way of dealing with questions in formal semantics and pragmatics is to treat them as properties, which is, according to Beaver & Clark, intuitively more direct (e.g. Scha 1983; Hausser 1983; Krifka 2001, 2004; Ginzburg 1995a, 1995b; Ginzburg & Sag 2000).

Moreover, despite the fact that the theory-internally motivated definition of focus can be useful in accounting for various linguistic phenomena such as question-answer congruence, reconstruction of elided VPs, focus on contrastive pairs, focus-triggered implicature, and the focus sensitivity of expressions like *only* and *even*, it is not without theoretical problems (Krifka 2001; Beaver & Clark 2008; Wee 2010a). Rather than re-introducing the problems, I will introduce a problem that has been ignored by most researchers. The problem is that, in principle, not only focus but topic can also be understood to indicate alternatives.

Under the assumption that an assertion is an answer to an implicit or explicit question (Beaver & Clark 2008; Roberts 2012), the “topical meaning” (as opposed to the ordinary meaning) of a topic-containing sentence can be taken to indicate a set of propositions each of which contains an alternative topic. Logically, this makes perfect sense, because it is totally plausible to assume that a set of potential topics exists in discourse and the speaker selects one of them in her topic-containing utterance. In fact, this kind of approach has been pursued by Büring (2003) for what he calls CT.⁴⁰ From this point of view, no distinction can be made between focus and topic at least in their inherent nature of indicating alternatives.

⁴⁰ The only difference is that he deals only with topics that have a contextually salient set of alternatives. But nothing in principle prevents us from extending his analysis to “plain” non-contrastive topics.

Lastly, the Alternative Semantics approach to focus causes serious confusion in distinguishing focus from contrast, another basic notion in information structure. Basically, contrast is established between one element and its alternative(s). Thus, no matter what the exact definition of contrast is, it necessarily involves alternative-indication as the central part of its definition. Hence, the problem is that it is hard, if not impossible, to make a clear distinction between focus and contrast. Indeed, it is generally believed among Alternative Semanticists that every focus is inherently contrastive (Umbach 2004).

If focus is always contrastive, how could contrastive focus (CF) be defined? One possibility is that there is no such thing as CF. In fact, this is the view taken by Bolinger (1961), whose view of contrast is as follows:

... in a broad sense every semantic peak is contrastive. Clearly in "*Let's have a PICNIC*", coming as a suggestion out of the blue, there is no specific contrast with *dinner party*, but there is a contrast between picnicking and anything else the group might do. As the alternatives are narrowed down, we get closer to what we think of as contrastive accent" (Bolinger 1961: 87)

Just like Alternative Semanticists, Bolinger assumes that every semantic peak, or focus, is in principle contrastive. CF, or contrastive accent in his terms, is exactly the same as ordinary (non-contrastive) focus except that the number of alternatives is limited enough to make the hearer "feel" contrastiveness among alternatives.⁴¹

However, even if we accept the claim that there is no CF, it leaves the fundamental issue of distinguishing between focus and contrast unresolved. As long as both focus and contrast are defined in terms of indicating alternatives, it is hard to

⁴¹ But it will be shown below that whether contrastiveness is felt or not does not depend on the number (or size) of alternatives.

understand why two terms (i.e. focus and contrast) exist for one concept (i.e. alternative-indication). Interestingly, as far as I know, those who adopt the definition of focus as indicating alternatives do not provide an explicit definition of contrast. Krifka (2007), for example, claims that CF is “focus used for truly contrastive purposes” and that corrective or additive purposes are truly contrastive. However, he does not explain why corrective and additive purposes are “truly contrastive”.

Given the weaknesses of the definition of focus as indicating alternatives, I propose that a better and more useful definition (at least for the purposes of this dissertation) is the one based on relational newness. Note that focus as what is relationally new does not have the problems mentioned above, for it is more intuitive, not theory-internally motivated, and does not overlap with the notion of contrast in meaning. It will be shown below that the notion of indicating alternatives is necessary for capturing the intuitive feeling of contrastiveness, thus being the crucial part for the definition of contrast (not of focus).⁴²

2.3.2. Relation between Focus and Grammar

As with topic, there are two views on the relation between focus and grammar. First, according to Wedgwood (2009: 101), “there is a popular perception among linguists ... that there is a single notion of focus that can be associated with a variety of grammatical phenomena in different languages” (e.g. Saeed 1984; Rizzi 1997; J. Han 1999; C. Oh 2007). Under this view, various grammatical devices (e.g. focal pitch accenting in English, Hungarian ‘focus movement’, so-called focus morphemes like *baa-* in Somali and *-i/ka* in Korean) are associated with a unitary notion of focus.

⁴² How to formally represent relational newness is still unresolved here. But Krifka’s (2001) STRUCTURED MEANING approach is surely one possibility. Also, see Wee’s (2010a) formal analysis of focus that is consistent with the informal view of focus as what is relationally new.

From this perspective, it is tempting to assume that these grammatical devices are driven by, or sensitive to, a particular grammatical feature (e.g. [+focus]), which has a cross-linguistically consistent semantic correlate. For instance, one version of this view is proposed by Rizzi (1997), who ties the feature [+focus] to a particular syntactic functional projection in the left periphery of underlying sentence structure.⁴³

Another view on how focus is related to grammar is that there is no universal semantic or pragmatic notion of focus that is expressed by different linguistic devices across languages (e.g. Matic 2009, 2011; Wedgwood 2009; Matic & Wedgwood 2013). Those who take this view provide two different kinds of evidence for their argument. First, they try to show that phenomena to which the term ‘focus’ has been applied are by no means homogeneous. For example, Wedgwood (2009) convincingly shows that the semantico-pragmatic meaning expressed by Hungarian ‘focus movement’ is not the same as that expressed by English *it*-clefts, which have been argued to be the English counterpart of Hungarian ‘focus movement’ (É. Kiss 1998).⁴⁴

The second type of evidence is that what have been known as focus markers are not really focus markers. That is, it has been claimed that linguistic devices that seem to encode the meaning of focus (i.e. relational newness) do not always convey the focal meaning but something else. In what follows, I will introduce two such cases. The first case is first introduced by Matic (2011), who discusses a morphological

⁴³ Rizzi’s (1997) analysis is mainly motivated by Hungarian ‘focus movement’. But as will be discussed below, Hungarian ‘focus movement’ is not really about marking focus, or the feature [+focus].

⁴⁴ According to É. Kiss (1998), both Hungarian ‘focus movement’ and English *it*-clefts are classified as “identificational focus”, which (conventionally) conveys exhaustiveness (or exhaustive identification).

marker *mər=* in Tundra Yukaghir. The second piece of evidence, which comes from Korean *-i/ka*, is newly introduced here.

2.3.2.1. Tundra Yukaghir *mə(r)=*

According to Matic (2011), there are three types of declarative sentences in Tundra Yukaghir, a language spoken in Russia. The three types and their examples are shown in (17) and (18).

- (17) a. Focus case on subjects/objects + focus agreement on the verb
 b. No focus case + neutral agreement on the verb
 c. No focus case + proclitic *mə(r)=* + neutral agreement on the verb

(Matic 2011: 4)

- (18) a. *neme-ləŋ iŋe:-məŋ?*
 what-FOC fear-OF.1/2SG
 ‘What do you fear?’
labunmə-ləŋ iŋe:-məŋ.
 ptarmigan-FOC fear-OF.1/2SG
 ‘I fear ptarmigans.’

- b. *qaduŋudəŋ kew-ej?*
 where go-PF(3SG)
 ‘Where did he go?’
Moskva-ŋiŋ kew-eč.
 Moscow-DAT go-PF.INTR(3SG)
 ‘He went to Moscow.’

- c. *nime mə=we:-ŋa?*
 house MƏR=do-TR.3PL
 ‘Have they built a house?’
mə=we:-ŋa.
 MƏR-do-TR.3PL
 ‘Yes, they have.’

(Matic 2011: 3-4)

What is important here is that the three types of clauses seem to represent different types of focus with respect to the syntactic status of the focused items. That is, the first type (17a) seems to be used for argument (subject and object) foci, the second type (17b) for oblique foci, and the third type (17c) for predicate foci. In particular, Matic concentrates on the third type in order to see if this classification is correct.

Matic provides three kinds of data that seem to support the view that the third type of clause is used for predicate foci. First, he shows that $m\partial(r)=$ is obligatory both in yes/no questions and their answers as shown in (19).

- (19) Nime ***(m ∂ =)**we:- η a?
house M Θ R=do-TR.3PL
‘Have they built a house?’
***(M ∂ =)**we:- η a.
M Θ R-do-TR.3PL
‘Yes, they have.’ (Matic 2011: 4)

Second, he points out that the morphological marker is necessary in verb-only sentences as shown in (20).

- (20) ***(M ∂ =)**keweč.
M Θ R-go.PF.INTR.3SG
‘He left/ He did leave.’ (Matic 2011: 4)

The examples in (19) and (20) show that predicates expressing the relationally new part must be marked by $m\partial(r)=$.

Further, Matic shows that sentences with focused subjects, objects, and peripheral constituents are ungrammatical with $m\partial(r)=$.

- (21) a. *Labunmə-ləŋ mə̀r=iŋe:-məŋ.
 ptarmigan-FOC MƏR=fear-OF.1/2SG
- b. *Qadunjudəŋ mə̀=kewej?
 where MƏR-go-PF
 Moskva-ŋiń mə̀=keweč.
 Moscow-DAT MƏR-go-PF.INTR.3SG

(Matić 2011: 4)

As shown in (21), in sentences with focus-marked arguments or *wh*-words, $mə̀(r)=$ cannot be attached to the predicates. This is understandable if $mə̀(r)=$ is a focus marker for predicates, because both predicates in (21) should belong to the “ground” in the ground-focus partition (Vallduv í& Engdahl 1996).

Despite the seemingly clear status of $mə̀(r)=$ as a predicate focus marker, Matić ultimately claims that it does not mark predicate foci as such. Instead, he argues that “ $mə̀(r)=$ functions as an existential quantifier over the event variable in the semantic representation” (Matić 2011: 5).

The most important evidence for this argument is the fact that various kinds of verb-only sentences that convey non-factual mood (i.e. potential actualization and non-actualization of events) cannot appear with $mə̀(r)=$.

- (22) a. (*Mə̀r=)u:-jə-li!
 MƏR=go-INTR-1PL
 ‘Let’s go!’ (Matić 2011: 4)
- b. (*Mə̀=)lewdə-l-buń-i.
 MƏR=eat-AN-DES-INTR.3SG
 ‘He might want to eat.’ (Matić 2011: 4)
- c. Qa:layaji:, mid’ek (*mə̀=)m őr-i-m!
 INTJ HYP MƏR=hear-TR(3SG)
 ‘Awful! What if he hears it! (Imagine he hears it!)’ (Matić 2011: 5)

(22a) is a hortative sentence that expresses a potential actualization of the event of going. (22b) is a sentence with an irrealis grammatical verb form. Lastly, the sentence in (22c) conveys a hypothetical situation, thus also conveying potential actualization of an event.

Matić claims that the ungrammaticality of the three sentences in (22) with $m\partial(r)=$ can best be explained if the meaning of $m\partial(r)=$ is assumed “to explicitly express the existential closure over the event argument” (Matić 2011: 5), which pragmatically “corresponds to the commitment to the truthfulness of the proposition on the part of the speaker” (Matić 2011: 5).

The Tundra Yukaghir case introduced here strongly supports the view that what seems to be a focus marker may turn out to be something else on closer examination. I will show below that Korean *-i/ka*, which has often been argued to be a focus marker, is another example that supports this view.

2.3.2.2. Korean *-i/ka*

Korean *-i/ka*⁴⁵, which is widely known as a nominative marker⁴⁶, also has been argued to have a function of focus-marking (e.g. Y.-C. Jung 1990; J. Han 1999; C. Oh 2007, 2009). Its status as a focus marker is mainly motivated by the fact that it is accompanied by argument- and sentence-focus structure (in Lambrecht’s (1994) terms).

⁴⁵ The marker *-i/ka* alternates depending on its phonological environment: *-i* is used after a consonant and *-ka* is used after a vowel.

⁴⁶ But see J. Han (1999), J. Jun (2003), and I. Kim (2008) for different views on the nature of *-i/ka*.

(23) a. Argument-focus structure

Q: Who ate the bread?

A: John-**i** mek-ess-e

John-NOM eat-PAST-DEC

‘John ate (it).’

b. Sentence-focus structure

Q: What happened?

A: Mary-**ka** ku ppang-ul mek-ess-e

Mary-NOM the bread-ACC eat-PAST-DEC

‘Mary ate the bread.’

As shown in (23), *-i/ka* is preferred in both argument- and sentence-focus structure. If *-i/ka* is replaced, for example, by *-(n)un*, (23aA) and (23bA) necessarily come to convey contrastiveness and become felicitous only in a special context.

One might argue that *-i/ka* in (23) is natural not because it marks focus but because it marks subject. However, it is not true that grammatical subjects must be *-i/ka*-marked; which particle should be attached to a subject entirely depends on discourse context. That is why replacing *-i/ka* with *-(n)un* in (23aA) and (23aB) only yields infelicity but not ungrammaticality. Thus, it seems plausible enough to take *-i/ka* to be a focus marker since it makes the answers in (23) felicitous to their counterpart questions.

At least three problems exist for the view that *-i/ka* is a focus marker. First, unlike when it marks argument-focus (cf. (23a)), it is unclear how it can mark sentence-focus (cf. (23b)). That is, it is natural to treat *-i/ka* to be a focus marker when it marks an argument-focus, since it is directly attached to the focused argument itself.

However, when it is used in sentence-focus structure, it is not clear whether it is really used to mark (sentence-)focus or not, because it is only attached to the subject of the sentence (but not, for instance, to the end of the sentence). The fact that

it is used in sentence-focus structure itself does not guarantee that it is a sentence-focus marker.

Furthermore, as far as I know, what are known as focus markers across languages are always directly attached to the focused-item, (and only those markers are called focus markers). Thus, it would be typologically very exceptional if *-i/ka* can mark sentence-focus as well as argument-focus.

The second problem of viewing *-i/ka* as a focus marker is the fact that *-i/ka* is allowed to mark topic in presupposed subordinate clauses. An example shown in (24) is from the corpus data I collected. The conversation below is made by a male DJ and a guest actress.⁴⁷

(24) DJ: (I) feel that (you) are a beautiful woman with inner brightness.

(참 내면이 밝아서 아름다운 사람, 네 뭐 이런 느낌이 드는데요?)

Guest: sasil-un-yo cey-**ka** ilehkey pakkwi-n ci-ka
 in.fact-NUN-HON I(HON)-**NOM** like.this change-NMZ FN-NOM
 kulehkey olay toy-ci-n anh-ass-e-yo
 that long become-ADZ-NUN not-PAST-DEC-HON
 ‘In fact, it has not been long since I became like this.’

The subordinate clause in the guest’s utterance, that is, *cey-ka ilehkey pakkwi-n ci* ‘I became like this’, is presupposed by the previous DJ’s utterance. It is important to note that the subject of the presupposed subordinate clause is the topic of the clause, which is guaranteed by the fact that it is possible to omit the subject as shown in (25).

⁴⁷ In every corpus data introduced in this dissertation, English translation without Yale Romanization is provided unless the original Korean sentence is necessary for the discussion. When the sentence is translated into English, the original Korean sentence is provided in parenthesis.

(25) Guest: sasil-un-yo (cey-**ka**) ilehkey pakkwi-n ci-ka
 in.fact-NUN-HON I(HON)-**NOM** like.this change-NMZ FN-NOM
 kulehkey olay toy-ci-n anh-ass-e-yo
 that long become-ADZ-NUN not-PAST-DEC-HON
 ‘In fact, it has not been long since (I) became like this.’

In order to maintain that *-i/ka* is a focus marker, C. Oh (2007) claims that in this case *-i/ka* somehow loses its focus-marking function and functions as a mere subject indicator. But this is just an ad-hoc explanation with no explanatory power. That is, C. Oh’s account cannot explain why *-i/ka* sometimes maintains its focus-marking function and sometimes does not. Rather, I argue that the data like (25) are true counter-examples to the claim that *-i/ka* is a focus marker.⁴⁸

The third problem is the fact that *-i/ka* can mark topic in main clauses too. Let us look at the following data, which is also taken from the corpus I collected:

(26) Guest: Please come to see my performance.

(정엽씨도 오세요.)

DJ: cey-**ka** sikan toy-myen ha-keyss-supni-ta
 I(HON)-**NOM** time become-if do-will-HON-DEC
 ‘I will if I have time.’

The conversation in (26) was made after the guest actress introduced a play she performs. Again, it is important to note that the context in which DJ’s utterance is uttered makes it clear that the subject (i.e. *cey-ka* ‘I-NOM’) is a plain (non-contrastive)

⁴⁸ Why *-i/ka* is closely related to focus (and thus seems to be a focus marker) will be dealt with in Chapter 3, where the meaning of *-i/ka* is discussed.

topic. Also, the fact that the subject can be omitted without causing any infelicity further supports its topichood.⁴⁹

Given the problems introduced above, I conclude that Korean *-i/ka* is not a focus marker. Instead, I argue that *-i/ka* has its own pragmatic meaning which can be characterized as UNIQUE SPECIFICATION. What unique specification is will be discussed in detail in Chapter 3, where the meaning of *-(n)un* is compared with that of *-i/ka*. For the purposes of this section, suffice it to say that Korean *-i/ka* is another piece of counter-evidence to the widely-shared assumption that focus is directly related to some grammatical device in every language (cf. Matic & Wedgwood 2013).

2.4. Contrast

2.4.1. What is Contrast?

Just like topic and focus, the notion of contrast has been defined in various ways, and no consensus exists on what contrast really is (Repp 2010). Particularly, as discussed above, defining contrast is a very difficult problem for those who work under the Alternative Semantics theory, because under that approach it is hard to distinguish

⁴⁹ H.-W. Choi (1997) also provides some examples of *-i/ka* used to mark (continuing) topics. C. Oh (2007) refutes her claim based on Lambrecht's (2000) argument that sentence-focus structure is used for a sentence that (superficially) seems to fit in topic-comment structure if the event denoted by the sentence is SURPRISING or UNEXPECTED from the hearer's point of view. That is, according to C. Oh (2007), all the examples introduced by H.-W. Choi as topic-marking *-i/ka* in fact marks (sentence-)focus since they arguably report surprising or unexpected events. Even if all of H.-W. Choi's examples turn out to be sentence-focus structure as C. Oh claims, which I believe is unlikely, the example in (26) can never be thought of as being surprising or unexpected. It clearly shows that *-i/ka* can mark topic.

contrast from focus.⁵⁰ Here, since focus is strictly defined as what is relationally new (but not as indication of alternatives), we do not have this problem. So, can contrast be defined simply as what indicates alternatives?

The first question that arises from this simple definition is what the nature of “what” is in saying that contrast is what indicates alternatives. Unlike topic and focus, contrast is not a property of some element of a sentence; rather, it is a kind of RELATIONAL phenomenon established between alternatives. As Repp (2010: 1335) correctly points out, “we have focus [and topic] ON an item but contrast BETWEEN items”. Under this understanding of contrast, it is clear that contrast is not “something” that indicates alternatives. It is a relation between alternatives.

Then, the next question to be answered is what kind of relation contrast is. Surprisingly, this has been rarely asked by researchers. For instance, Vallduv í & Vilkuna (1998) suggest that “[t]he basic idea behind the notion of *kontrast*⁵¹ is the following: if an expression *a* is *kontrastive*, a **membership** set $M = \{ \dots, a, \dots \}$ is generated and becomes available to semantic computation as some sort of quantificational domain” (Vallduv í & Vilkuna’s 1998: 83).

The most crucial problem with seeing contrast as mere alternative-indication is that it does not properly capture our intuition about contrast. For instance, as mentioned above, Krifka (2007) argues that the additive meaning conveyed by English *too* is “truly contrastive”, which makes perfect sense if contrast is understood as alternative-indication. However, it is intuitively hard to say that additive meaning

⁵⁰ This will be dealt with in more detail below when the notion of CF is discussed.

⁵¹ The reason why they use the new term *kontrast* (instead of *contrast*) is to distinguish between relational newness and alternative-indication which are not clearly distinguished in the Alternative Semantics approach. To avoid a terminological confusion, they introduce RHEME for what expresses relational newness and KONTRAST for what conveys alternative-indication.

is contrastive; rather, additivity and contrast seem to have opposite meanings, since additive meaning expresses SIMILARITY whereas contrast conveys DISSIMILARITY between alternatives. After all, the motivation for discussing contrast in information structure theory is the fact that it is intuitively felt by the use of some linguistic device in discourse. Thus, it is crucial for a definition of contrast to capture this intuitive feeling of contrastiveness.

Turning back to the question of what kind of relation is expressed by contrast, let us first consider its everyday use. According to the Chambers Dictionary (1993), contrast is defined as “opposition or unlikeness of things compared”. Also, the OED defines contrast as “Comparison of objects of like kind whereby the difference of their qualities or characteristics is strikingly brought out; manifest exhibition of opposing qualities”. Assuming that these definitions best capture our intuition about contrast, what needs to be done is to “translate” them as explicit as possible so that it is usable for linguistic research.

To my knowledge, the best translation has been done by Mulkern (2007), who claims that “[t]he purpose of **contrast** is to partition a set of discourse entities with respect to some semantic property P such that it is established (either via assertion or implicature) that the value ‘true’ results when P is applied to one part of the set and ‘false’ or ‘unknown’ when applied to the other” (Mulkern 2007: 121). Here, the meaning of “opposition”, “unlikeliness”, and “difference” in the dictionaries is understood in terms of the difference in truth value with respect to some semantic property P, and the meaning of “juxtaposition” or “comparison” is captured by the notion of partitioning a set of discourse referents.⁵²

⁵² Note that the partitioning is PURELY PRAGMATIC in nature and a set of alternatives only can be determined by discourse context (Rooth 1992; Umbach 2004; Krifka 2007).

Based on the purpose of contrast proposed by Mulkern (2007), I propose the definition of contrast as in (27).

(27) Definition of contrast

Contrast is a relation between discourse referents⁵³ that are partitioned with respect to some semantic property P⁵⁴ such that it is established (either via assertion or implicature) that the value ‘true’ results when P is applied to one part of the set and ‘false’ or ‘unknown’ when applied to the other.

Note that, contra Chafe (1976) and É Kiss (1998), the number of discourse referents (or the size of the set of alternatives) need not be limited (or closed). For instance, trying to distinguish (non-contrastive) focus from CF, Chafe claims that contrastiveness is characterized by the speaker’s assumption “that a LIMITED NUMBER OF CANDIDATES [emphasis added] are available in the addressee’s mind” (Chafe 1976: 34). However, the Korean example in (28) shows that contrast can occur without a limited set of alternatives in the addressee’s mind.

(28) A: How much is the book?

B: o talle-**nun** nem-e.

5 dollar-NUN more.than-DEC

‘(It’s) more than 5 dollars.’ (e.g. ‘but less than 8 dollars.’)

In (28B), contrast between 5 dollars and bigger amounts is made possible by the use of *-nun*. What is important here is that the contrast can be evoked whether or not the set of alternatives is limited in the hearer’s (or in the speaker’s) mind.

Moreover, in (28B), the alternatives are NOT NECESSARILY IDENTIFIABLE by

⁵³ Discourse referents can be of any semantic type (e.g. <e>, <e,t>, <t>).

⁵⁴ Semantic property also can be of any type (e.g. <e>, <e,t>, <t>).

the discourse participants, which goes against É Kiss's (1998) claim that "[+contrastive] ... operates on a closed set of entities WHOSE MEMBERS ARE KNOWN TO THE PARTICIPANTS OF THE DISCOURSE [emphasis added]" (É Kiss 1998: 267).⁵⁵

Also, it is important to note that under the current approach, as with Chafe (1976), Lambrecht (1994), and Prince (1998), contrast is assumed to occur in discourse only if it is actually EVOKED in the hearer's mind. In contrast, Alternative Semanticists do not take this condition to be necessary for the existence of contrast (as indicating alternatives) in discourse. According to them, contrast can exist whether or not it is evoked in the hearer's mind, due to the theoretically-motivated nature of their view on contrast.

2.4.2. Types of Contrast

It is important to note that contrast can further be divided into multiple subtypes depending on the nature of the relation between alternatives. I will not attempt to provide a list of full subtypes of contrast here. Instead, I will introduce just three of them, which I think is enough to show that various kinds of meanings can be classified into contrast as defined in (27).

⁵⁵ É Kiss's (1998) definition of contrast is mainly based on the preverbal position in Hungarian and *it*-clefts in English, which are usually explicated in terms of CF. However, defining a concept based on linguistic data is problematic for its CIRCULARITY; that is, contrast is what contrast markers express and they are contrast markers because they express contrast. Thus, in defining contrast, instead of picking one or more lexical items known to convey contrast and trying to figure out their meaning, it is necessary to first define contrast independently and call any grammatical device that inherently expresses that meaning a contrast marker.

2.4.2.1. Correction

Correction occurs when one denies what the other interlocutor said and provides what she believes to be correct information. An example is shown in (29).

(29) A: John bought the book.

B: No. Mary bought the book.

In (29B), the speaker denies what is expressed by (29A) and provides new information which she believes to be true. This utterance is contrastive since it evokes a set of alternatives, John and Mary in this case, in the hearer's mind and different truth values come out when the semantic property of buying the book is applied to the alternatives.

Note that the corrected information, Mary in (29), is always focus (not topic), since it is the part that is relationally new (or "pragmatically asserted" (Lambrecht 1994)) and the rest of the sentence is relationally old (or "pragmatically presupposed" (Lambrecht 1994) or "ground" (Vallduv í & Engdahl 1996)). Thus, a correcting sentence always contains CF (i.e. the corrected part) in its information structure.

2.4.2.2. Selection

Selection is basically done by choosing one of several alternatives. Usually, selection occurs when the alternatives are evoked in the context, and what is selected is necessarily distinguished from the rest of the alternatives with respect to the property that motivates the selection. Hence, it is contrastive.

It is different from correction, however, because one who performs selection does not deny the other interlocutor's utterance, as shown in (30).

(30) A: Among John, Mary, and Kim, who is the oldest?

B: John is the oldest.

In (30), the speaker A provides a set of alternatives to be selected by the speaker B. And what the speaker B does is to partition the discourse referents into two groups with respect to their age, and apply the property of being the oldest to one group. Just like correction, selection necessarily includes CF, for what is selected is always relationally new.

2.4.2.3. Concession

The last subtype of contrast to be introduced is concession. Concession, unlike selection and correction, is not easy to define (Grote et al. 1995), part of the reason for which seems to be that concession itself is of various kinds and it is hard to determine the common property shared by all types of concession.⁵⁶

The purpose of this subsection is not to introduce different kinds of concession and find out what makes them all concessive, but to introduce just one kind and show that at least this type of concession belongs to the category of contrast. Let us first look at a Korean example.

(31) A: Did John and Kim meet Lee?

B: Kim-**un** manna-ss-e.

Kim-NUN meet-PAST-DEC

‘Kim met (Lee).’ (‘But John didn’t.’ or ‘But I don’t know about Lee.’)

In (31B), by using *-(n)un*, the speaker conveys concessivity as shown in the English translation. Note that the conjunctive *but* in the translation expresses concessivity in the given context.⁵⁷ It is clear that this concession is also contrastive in nature, for it

⁵⁶ For instance, see Horn (1991), Grote et al. (1995), Barth (2000), and Couper-Kuhlen & Thompson (2000) for different characterizations of concession.

⁵⁷ The source of the concessivity shown in (31) will be discussed in more detail in Chapter 4.

involves two alternatives (Kim and John) who are distinguished from each other with respect to the property of meeting Lee.

As to the information-structural status of a concession-evoking constituent, concession also differs from correction and selection. For instance, in (31B), the concession is evoked by the subject *Kim-un*, and it functions as topic rather than focus. That is, in question (31A), Kim and John are topics, which guarantees topichood of Kim in (31B). Topichood of Kim is further supported by the fact that it passes one of the aboutness-tests, the *as for X* test. English *as for X* can be translated into Korean as *X-uy kyengwu-ey-nun*, and (31B) naturally passes this test. Also, it can be safely assumed that the proposition denoted by (31B) “expresses information which is relevant to and which increases the addressee’s knowledge of” Kim.

In this subsection, it was shown that contrast can be further divided into sub-types such as correction, selection, and concession. It may well be the case that other types of contrast exist. Finding out and correctly characterizing them is a topic for future research.

In next subsection, I will discuss the nature of CT and CF. Contrary to most previous studies (e.g. É Kiss 1998; C. Lee 2007; Krifka 2007), it will be claimed that the meaning of CT and CF must be understood “compositionally”, by which I mean that the meaning of CT/CF is a simple combination of the meanings of contrast and topic/focus.

2.4.3. CT

According to Repp (2010), CT has been known to occur in two environments: “one is parallel structures, the other is question–answer discourses” (Repp 2010: 1339). First, an example of parallel structure is shown below.

(32) John bought chicken and Peter (bought) veal.

(Repp 2010: 1339)

The “listing” function in (32) is contrastive, for there are two alternatives (John and Peter) that differ from each other with respect to what they bought.⁵⁸ What Repp misses is the fact that whether John and Peter in (32) are topics or foci entirely depends on discourse context. For instance, if the sentence is an answer to a question “Who bought chicken and who bought veal?”, John and Peter should definitely be foci.⁵⁹ On the other hand, if it is an answer to a question “What did John and Peter buy?”, they become topics. Also, it will be shown below that CT can occur in non-parallel structures. Thus, parallel structure itself is neither a sufficient nor necessary condition for CT.

With respect to CT in question-answer discourses, what is interesting is that CT can be filled in the variable made by the *wh*-term in the question, which is normally thought to be filled by focus. Let us look at a Japanese example, which is from Hara (2006a).

⁵⁸ Thus, listing is also a subtype of contrast.

⁵⁹ John and Peter can still be topics with this question. For instance, if (32) is an answer to the question “(Among John and Peter), who bought chicken and who bought veal?”, John and Peter are topics, which is supported by the *as for X* test. I am grateful to Laurence Horn for pointing out this to me.

(33) a. Dare-ga paatii-ni ki-ta-ka?
who-NOM party-DAT come-PAST-INT
'Who came to the party?'

b. JOHN-wa ki-ta
John-wa come-PAST
'As for John, he came.'
(Implicature: It is possible that it is not the case that John and Mary came. ≈
I don't know about others.)

c. JOHN-ga ki-ta.
John-NOM come-PAST
'John came.' (complete answer)

(Hara 2006a: 38)

Both (33b) and (33c) are possible answers to question (33a), and the subject in (33b), *John*, is known to be CT (but not the subject of (33c)). The difference between the two is that in (33b) an uncertainty implicature can be generated while it is impossible in (33c); instead, in (33c), an exhaustivity implicature is induced.

Why is the subject in (33b) CT? Krifka's (2007) answer to this question is that it is CT because it (and CTs in parallel structures) consists "of an aboutness topic that contains a focus, which is doing what focus always does, namely indicating an alternative" (Krifka 2007: 44). Thus, according to Krifka, CT is a combination of (aboutness-)topic and focus (as alternative-indication). Although not overtly expressed, this seems to be the view shared by other formal analyses of CT (e.g. Büring 2003; Wee 2010b; Constant 2012).

At least two problems exist for this definition of CT. First, as discussed above, it gives rise to confusion on the notion of contrast. If CT is contrastive due to its status as focus, why is not focus CF? According to this definition of CT, in principle, there should be no non-contrastive focus but only CF. Characterizing contrastiveness of CF

differently from that of CT (for instance as exhaustivity (É. Kiss 1998)) makes it hard, if not impossible, to understand what contrast really is.

Secondly, as previously discussed, understanding contrast as mere alternative-indication is not intuitively satisfying. This understanding of contrast forces us to put even additive meaning, which is intuitively the opposite of contrast, into the category of contrast.

Instead of the “standard” definition of CT introduced by Krifka (2007), I propose a new definition of CT based on the notion of topic and contrast proposed above.

(34) Definition of CT

CT is a topic whose alternatives are evoked in the context and is distinguished from the alternatives with respect to some semantic property P in that some truth value results when P is applied to the topic and the opposite truth value or ‘unknown’ when applied to the alternatives.

It is important to note that, just like topic, aboutness of CT is a DERIVED property. Thus, according to this view, not every element marked by the so-called CT-marker is in fact CT. For instance, let us look at example (28), which is repeated below.

(28) A: How much is the book?

B: o-talle-**nun** nem-e.
5-dollar-NUN more.than-DEC
‘(It’s) more than 5 dollars (at least).’

According to those who believe that accented *-(n)un* is a CT-marker in Korean (e.g. C. Lee 1999, 2003, 2007), the subject of (28B) is CT. However, from the point of view of the proposed analysis, it is not CT because it is not what the sentence is about. That

is, it is clear that the proposition denoted by the sentence does not express “information which is relevant to and which increases the addressee’s knowledge of” 5 dollars. Rather, the topic of the sentence is definitely the book or the price of the book.

Then, how could (28B) be analyzed in terms of information structure? The topic (i.e. (the price of) the book) is omitted⁶⁰, and the overt clause represents focus, or a comment about the topic. Inside the focus, contrast exists due to the use of *-(n)un*. Notice that the *-(n)un*-marked element itself is not CF; that is, the sentence in (28B) is focus as a whole but not just the *-(n)un*-marked element.

2.4.4. CF

In determining what CF is, what has been controversial is of two aspects: 1) the size of the alternative set and the identifiability of its elements, and 2) exhaustivity. Different researchers have proposed different opinions on whether CF contains an open or closed set of alternatives, whether the alternatives are identifiable, and whether CF involves exhaustivity (e.g. Szabolcsi 1994; É. Kiss 1998; Kenesei 2006; Krifka 2007; Horvath 2010).

It is important to understand that the importance of these aspects did not originate from the question of what contrast or CF really is. Rather, they are considered as important criteria for contrast/CF because they are important for understanding the exact meaning of the linguistic devices that have been assumed to be CF markers (e.g. Hungarian preverbal position, English *it*-clefts). That is, for those who believe that certain linguistic devices are CF markers, figuring out their exact

⁶⁰ Whether the omitted topic is syntactically present (as a gap) or not is an interesting question. But answering this question is beyond the scope of this dissertation.

meaning is equivalent to finding out the exact definition of CF. However, it is not hard to see that this way of defining and understanding CF encounters the circularity problem (cf. footnote 55).

Given the problem of the previous studies with defining CF, I will not further discuss details of their analyses here. Instead, I propose a new definition of CF which is based on the notion of focus and contrast introduced in this chapter.

(35) Definition of CF

CF is a focus whose alternatives are evoked in the context and is distinguished from the alternatives with respect to some semantic property P in that some truth value results when P is applied to the focus and the opposite truth value or ‘unknown’ when applied to the alternatives.

Note that the definition of CF in (35) is exactly the same as the definition of CT in (34) except that what is ‘topic’ in (34) is ‘focus’ in (35). This is exactly what is intended because the reasonable difference between CT and CF should be only that the former is a topic and the latter a focus; that is, contrast in CT and CF should be the same thing. The definitions in (34) and (35) clearly capture this point.

Is there anything we lose by adopting these intuitively more direct definitions of contrast, CT, and CF? As far as I can tell, there is nothing. One might argue that with the current understanding of CF, for instance, it would be impossible to find a CF marker in any language. But this is a problem only if it has to be the case that any information structure category (including CF) is directly connected to a certain grammatical device in every language. And one of the main purposes of this dissertation is to show that this is not the case.

2.5. Summary

The main purpose of this chapter was 1) to provide the most reasonable definitions of topic, focus, and contrast, and 2) to figure out how topic and focus are related to grammar.

It was claimed that topic should be defined in terms of aboutness, which is intuitively appealing and the most widely accepted view. Other approaches to topic such as Chafe's (1976) topic-as-frame or von Stechow's (1994) topic-as-discourse topic were shown to be problematic. Also, aboutness was argued to be derived from the interaction of various factors, including the meaning of certain linguistic devices (e.g. English topicalization, Korean *-(n)un*) and the semantic type of the relevant element (i.e. entity vs. non-entity).

As for focus, I claimed that it should be understood as relationally new part of the sentence rather than as what indicates alternatives. The latter definition, mostly adopted by Alternative Semanticists, was argued to be less intuitive and to cause confusion on distinguishing focus from contrast.

Contrast may be the most controversial notion of the three, for there is no standard view on what contrast is. Part of the reason for its being hard to define is that 1) the definition of focus used by Alternative Semanticists (i.e. alternative-indication) overlaps with the intuitive meaning of contrast and that 2) it is often defined based on a specific linguistic phenomenon in a specific language (e.g. Hungarian pre-verbal position), thus causing the circularity problem.

Rather than relying on a specific grammatical device for the definition of contrast, it was defined in a way that best captures our intuition about the notion. Then, several subtypes of contrast were introduced such as correction, selection, and concession. CT and CF were defined based on the proposed definitions of topic, focus,

and contrast. In a nutshell, CT equals contrast plus topic, and CF is equivalent to contrast plus focus.

As for the relation between topic/focus and grammar, it was argued that the relation is indirect at least in languages like English, Korean, and Tundra Yukaghir. This claim is inconsistent with the standard assumption that the categories of information structure are discrete and stable entities, that is, primitives, that are directly manifested (or realized) by some linguistic device in every language. In order to get more insightful results from the study of information structure, it is necessary to withdraw this falsified assumption.

Chapter 3

On the nature of *-(n)un*

3.1. Introduction

In the previous chapter, it was shown that the function of *-(n)un* is not limited to (aboutness-)topic-marking, and that it also marks spatial/temporal/conditional frame and contrast. But is this all that *-(n)un* does? Or are there more functions of *-(n)un* that are not discussed in the previous chapter? In fact, *-(n)un* is widely regarded to mark just topic and contrast, with topic being vaguely understood (usually including the notion of frame). It has rarely been asked whether *-(n)un* has any other function.⁶¹ In order to better understand the nature of *-(n)un*, however, this is one of the crucial questions to be answered.

Another crucial issue to be resolved is why *-(n)un* does what it does. That is, what makes *-(n)un* express topicality, framehood, contrast, and others (if it does)? Unlike the first question, this has been discussed quite extensively by many Korean linguists. Despite much effort put into this issue, however, no satisfactory answer seems to exist. Almost every (logically) possible answer has been proposed on how it is possible for *-(n)un* to express both topichood and contrastiveness, but no consensus exists on this problem and it still remains controversial.

⁶¹ For instance, H.-W. Choi (1996: 202) claims that "a *nun*-marked phrase always yields a topic reading or a contrastive focus [contrast in my terms] reading and NOTHING ELSE [emphasis added]". This seems to be the shared assumption among most linguists who deal with *-(n)un*.

The main purpose of this chapter is to provide answers to the two questions raised above, based on the corpus data I collected from a Korean radio show. In doing so, I will first introduce previous studies on *-(n)un* and discuss their problems in 3.2. Particularly, the focus will be on how the relation between *-(n)un* and its two main functions, that is, topicality and contrast, has been explained. In 3.3, I will introduce the notion of discourse salience and other concepts related to it, which will be crucial for understanding the meaning (or function) of *-(n)un*. Then, in 3.4, based on the corpus study, I will propose a meaning for *-(n)un*. It will be claimed that the notion of IMPOSING SALIENCE (on a discourse referent) best captures what *-(n)un* does in discourse. In 3.5, the proposed meaning of *-(n)un* will be captured under the formal framework of multi-dimensional approach to meaning (e.g. Potts 2003, 2007; Gutzmann 2013). Finally, in 3.6, I will compare *-(n)un*-marked NPs with other types of NPs in Korean with respect to their pragmatic function, so that the proposed function of *-(n)un* is made clearer as well as further justified.

3.2. Previous Studies

Previous studies on *-(n)un* can be basically divided into two approaches: derivational and non-derivational.⁶² Then, each of the two approaches can be further divided into two subtypes. First, there are two views under the derivational approach depending on which function, between topic- and contrast-markings, is taken to be the basic function of *-(n)un*. Second, the non-derivational approach is divided into unified and

⁶² Please note that the term ‘derivational approach’ has little to do with the same term that is used in the tradition of Chomskyan generative grammar, which denotes an approach utilizing underlying and surface structures linked by transformations or the like.

non-unified approaches depending on whether *-(n)un* has a single meaning or multiple meanings.

3.2.1. Derivational Approach

The derivational approach to *-(n)un* takes either topic- or contrast-marking to be the basic (or inherent) function of *-(n)un* and explains the other function as a secondary (or derived) property. Let us first investigate the view that treats topic-marking as the basic function of *-(n)un*.

3.2.1.1. Topic-as-Basic Approach

Those who take topic-marking to be the basic meaning of *-(n)un* (e.g. Park 1999; J.-R. Kim 2005; Nam 2005; Jo et al. 2006; C. Oh 2007) seem to base their argument on the assumption that *-(n)un* always expresses topicality. For instance, Park (1999) claims that *-(n)un*-marked phrases are always topics whereas contrast is only derived when *-(n)un* gets high pitch. Jo et al. (2006) also argue that *-(n)un* is a grammatical device for topic and marks contrast (their focus) only when it is accented.

On the other hand, J.-R. Kim (2005), while agreeing that *-(n)un* inherently expresses topicality, differs from Park and Jo et al. in that she attributes the contrast-marking function of *-(n)un* not to the phonetic prominence but to the existence of an explicit set of alternatives in discourse context.

The “topic-as-basic” approach faces at least two crucial problems. First and most importantly, contrary to the core assumption of this approach, *-(n)un* does not always mark topic. For instance, examples like (28) in Chapter 2, which is repeated below in (1), clearly shows that *-(n)un* can mark just contrast without expressing aboutness or framehood.

(1) A: How much is the book?

B: o-talle-**nun** nem-e.

5-dollar-NUN more than-DEC

‘(It’s) more than 5 dollars.’ (e.g. ‘But less than 8 dollars.’)

In fact, it is well known that *-(n)un* can be attached to non-nominals such as adverbials and predicates, and all the occurrences of *-(n)un* in non-nominals are clear counter-examples to the assumption that *-(n)un* always marks topic.

(2) A: Are you good at playing soccer?

B: cal-**un** mos hay

well-NUN cannot do

‘(I) cannot play it well.’ (‘But I am not bad at it either.’)

In (2), *-(n)un* is attached to the adverb *cal* ‘well’, inducing contrast between ‘well’ and its scalar alternatives (e.g. ‘so-so’, ‘badly’). Here, what is important is that the *-(n)un*-marked phrase can never be topic; that is, the sentence cannot be about the adverbial *cal* ‘well’.⁶³ Rather, the topic in (2) is clearly the speaker of (2B). This kind of examples is rarely discussed by those who claim that the basic function of *-(n)un* is topic-marking.

The second problem is that the sources of contrast proposed by the topic-as-basic approach are not correct. First, contrary to Park (1999) and Jo et al. (2006), high pitch on *-(n)un* is not necessary for inducing contrast. Whether or not *-(n)un* is prosodically prominent, it can mark contrast once it is used in a proper context. For

⁶³ C. Lee (1999, 2000, 2002, 2007) argues that *-(n)un* attached to non-nominals also functions as a topic-marker, “in the sense that it has been a potential Topic, discussed or assumed in the previous discourse” (C. Lee 2007: 169). But it is hard to know what he means by “potential Topic”. At least intuitively, the adverb *cal* in (2) never seems to be a potential topic no matter how it is defined.

instance, *-(n)un* in (1) and (2) above can convey contrast regardless of whether or not it is accented. That *-(n)un* does not require phonetic prominence in order to mark contrast will be shown in more detail in Chapter 5, based on a phonetic experiment I conducted.

J.-R. Kim's (2005) claim that *-(n)un* can mark contrast only when there exists an explicit set of alternatives is also problematic. For instance, in (1) and (2), the given context is enough for *-(n)un* to evoke contrast, where no explicit set of alternatives is provided. In other words, the existence of *-(n)un* itself is enough to convey contrast in both (1) and (2).

It is also important to note that these explanations of contrast cannot capture the fact that *-(n)un* has a strong tendency to express contrast when it is attached to a non-subject element in its canonical (or non-sentence-initial) position. For instance, the *-(n)un*-marked object and adjunct in (3a) and (3b) are contrastive no matter what the context is and even if *-(n)un* is not accented at all.

- (3) a. John-i Mary-nun cohahay
 John-NOM Mary-NUN like
 'John likes Mary.' (e.g. 'But I don't know about others.')
- b. John-i hakkyo-ey-nun ka-ss-e
 John-NOM school-DAT-NUN go-PAST-DEC
 'John went to school.' (e.g. 'But he didn't meet his teacher.')

Thus, the source of contrast in these cases has nothing to do with the phonetic property of *-(n)un* or the nature of the alternatives. The topic-as-basic approach cannot account for this descriptive generalization.

3.2.1.2. Contrast-as-Basic Approach

In contrast to the topic-as-basic approach, many Korean linguists claim that *-(n)un* is basically a contrast marker and its topic-marking function is only derived in a special syntactic position, that is, the sentence initial position (e.g. I.-S. Lee & Ihm 1983; H.-W. Choi 1997; Lee & Chae 1999; Jung 2001; Hong 2005; Lim 2012). The biggest motivation for this approach is the assumption that *-(n)un* in its base position always conveys contrast (cf. (3)).

This “contrast-as-basic” approach also has two problems. First, the key assumption that *-(n)un* in its base position always marks contrast is not true. As pointed out above, *-(n)un* tends to induce contrast if it is attached to non-sentence-initial elements. However, as will be shown below, *-(n)un* can have a discourse function other than inducing contrast when it is attached to a non-sentence-initial element. Furthermore, if *-(n)un* is attached to a subject in its base position, that is, the sentence-initial position, it is totally optional for *-(n)un* to convey contrastiveness. For instance, the sentence in (4) is ambiguous between contrastive and non-contrastive reading.

- (4) John-**un** hakkyo-ey ka-ss-e
 John-NUN school-DAT go-PAST-DEC
 ‘John went to school.’

That is, in (4), whether *-(n)un* induces contrast or not entirely depends on discourse context, in particular whether a set of alternatives to John exists in the discourse context or the speaker’s intention.⁶⁴ Why only non-subjects are highly likely to be

⁶⁴ One might argue that the different readings of (4) are determined by different syntactic positions of the subject, by positing an independent slot for contrastive elements (e.g.

contrastive when they are *-(n)un*-marked is an important problem for understanding the nature of *-(n)un*, and it will be dealt with in detail below.

The second problem of the contrast-as-basic approach is how *-(n)un* can convey only topicality but not contrast if it inherently has the meaning of contrast. For instance, H.-W. Choi (1997) claims that topichood of a *-(n)un*-marked phrase is derived by the sentence-initial position (but not by *-(n)un* itself). However, she does not account for why and how contrastiveness inherent to *-(n)un* can disappear when the *-(n)un*-marked phrase is located sentence-initially.

In this subsection, two derivational approaches to *-(n)un* were discussed. It was shown that positing one function as basic (or inherent) has both empirical and theoretical problems in providing a plausible account of 1) how the basic meaning is sometimes not manifested and 2) how the other function is derived.

3.2.2. Non-Derivational Approach

If one does not take the derivational approach to *-(n)un*, the remaining possibilities are 1) to posit multiple lexical items *-(n)un* (as many as its meanings) and 2) to posit a single meaning of *-(n)un*, which is neither topic- nor contrast-marking, and explain the functions of *-(n)un* based on this meaning. Both of these possibilities have been pursued by previous studies, with the former being more popular.

Con(tractive)P). But, as far as I know, there is no independent motivation for positing two different syntactic positions for contrastive and non-contrastive elements in Korean syntactic structure. Moreover, this claim also leads to another unjustifiable claim that all *-(n)un*-marked non-subjects have to “move” to ConP, which must be done at some abstract level such as LF. Rather than accepting this empirically unmotivated mechanism, I take the view that syntactic structure is flat (e.g. Jackendoff 2002, 2007; Culicover & Jackendoff 2005).

3.2.2.1. Non-Unified Approach

Under the assumption that *-(n)un* has two functions, that is, topic- and contrast-marking, many researchers have explicitly claimed or implicitly assumed that there are two different lexical items *-(n)un* (e.g. H.-S. Choe 1995; C. Lee 1999, 2003, 2007; K.-S. Choi 2004; Y. Jun 2005, 2006), which I will call the non-unified approach. Note that this approach is empirically superior to the derivational approach, since it does not have the problems caused by positing one of the functions as basic and the other somehow derived.

However, it is less attractive than the approach that posits just one *-(n)un* in the lexicon from the point of view of the Modified Occam's Razor (Grice 1978), as briefly discussed in Chapter 2. More importantly, as pointed out by C.-h. Han (1998), "[l]anguages with a so called 'topic marker' generally allow the same marker to generate more than one reading. ... Hence a more attractive approach would be to posit that there is one lexical item *-(n)un* and try to find the reason for the presence of the different readings somewhere else" (C.-h. Han 1998: 4-5). For this reason, although the non-unified approach is in principle (and empirically) plausible, it must be preferred over the unified approach only if it turns out that the latter is untenable.

3.2.2.2. Unified Approach

The unified approach has been pursued basically from two different perspectives. First, one group of researchers have taken a "presuppositional" view of *-(n)un*, according to which, the meaning of *-(n)un* is to presuppose the existence of the discourse referent of a phrase to which it is attached (and its alternative(s)) (e.g. C.-h. Han 1998; S. Choi 2000; J. E. Kim 2010). The meanings of *-(n)un* proposed by those who take this view are shown below:

- (5) Presupposition of α -*(n)un*, where α is an individual and X is a set variable over individuals:

$$\exists X[(\alpha \in X) \wedge (|X| \geq 1)] \quad (\text{C.-h. Han 1998: 5})$$

- (6) I propose that *wa/nun* is fundamentally a marker for PRESUPPOSITION in the sense that it refers anaphorically to the previous information. In other words, the marker *wa/nun* has an anaphoric nature. Thus, the NP marked with *wa/nun* is referentially defective in the sense that it cannot occur without some type of antecedent, explicit or implicit. (S. Choi 2000: 76)

- (7) The meaning of the unaccented *-nun*⁶⁵ (J. E. Kim 2010: 143)

The existence of a *-nun* marked item and at least one other element which is an alternative to it is presupposed.

As shown above, despite the subtle differences in how they are worded, the core idea of the presuppositional view is shared by all of the three meanings.

For our purposes, the question is whether the presuppositional view can account for the discourse functions of *-(n)un*, that is, topic- and contrast-marking. The answer to this question seems to be negative. The crucial problem is that it is not obvious how topicality and contrastiveness can be derived from the meaning of *-(n)un*,

⁶⁵ The meaning of the accented *-(n)un* is provided below:

- (i) The meaning of the accented *-nun* (J. E. Kim 2010: 142)
- i. Presupposition of the existence of an alternative which differs minimally from the Contraster [or the referent of the *-(n)un*-marked element]
 - ii. Implicature of the non-existence of an alternative which does not differ from the Contraster

For J. E. Kim (2010), the basic meaning of *-(n)un* (which is the meaning of unaccented *-(n)un*) is to generate contrast and “an accent provides a quantified domain for the realization of ‘Contrast’” (J. E. Kim 2010: 34). Also, she claims that topichood of a *-(n)un*-marked item is indicated by syntactic position. In this sense, she could also be argued to take the derivational approach, the contrast-as-basic approach in particular.

that is, presupposition of the referent of a *-(n)un*-marked element (and its alternatives).

First, with respect to topicality, the fact that the existence of an entity is presupposed has little to do with whether the entity is topic or not. Since Hockett (1958), the notion of topic has been understood as a RELATIONAL notion and thus has been (either explicitly or implicitly) defined in terms of relational givenness but not by referential givenness (e.g. Gundel 1974, 1988; Reinhart 1981; Prince 1986; Vallduv í1990; Lambrecht 1994; Vallduv í& Engdahl 1996; Gundel & Fretheim 2004; Y. Jun 2005, 2006).

One of the most important reasons for taking topic to be a relationally given entity is that a referentially given entity can either be topic or focus depending on discourse context, which is already shown with Reinhart's (1981) example in footnote 20 of Chapter 2. The example is repeated below in (8).

(8) A: Who did Felix praise?

B: Felix praised HIMSELF.

Again, in (8B) Felix is not only topic but focus although he is presupposed (or referentially given) by (8A). Thus, an entity's being presupposed is not sufficient for deriving topichood of the entity.

One might argue that the meaning of *-(n)un* understood by the presuppositional view is related to topicality in that it provides a necessary condition for topicality. That is, it might be claimed that the presupposition of an entity is necessary in order for it to be topic and what *-(n)un* does is to guarantee that the referent of the phrase to which it is attached is presupposed.

However, the requirement that the referent of a *-(n)un*-marked phrase must be presupposed is too strong. When we say that a discourse referent is presupposed, it

means that the referent is both discourse- and hearer-old.⁶⁶

Indeed, topics are usually discourse- and hearer-old referents. However, it is not hard to find cases in which *-(n)un* is attached to an element whose denotation is both discourse- and hearer-new. For instance, in the corpus data I collected, when a DJ reads a text message from a listener, he introduces the listener with *-(n)un* as shown in (9). (The numbers in the subject position are the last four numbers of the listener's cell phone number.)

- (9) 7310-nim-kkeyse-**nun** “ttellin-ta-ko ha-si-nuntey
7310-HON-NOM(NOM)-NUN nervous-DEC-COMP say-HON-but
moksoli-ka hanato an ttelli-si-nunteyyo”
voice-NOM at all not nervous-HON-INT(HON)
ha-sye-ss-supni-ta
say-HON-PAST-HON-DEC
‘7310 said “(you’re) saying that (you’re) nervous but your voice does not sound
like that at all”.’

Here, the subject referent is newly introduced in the discourse context, and the hearers, who are the listeners to the radio show, of course have not heard of this person before the DJ's introduction. Thus, it is evident that the person identified as 7310 is not presupposed in the context because (s)he is both discourse- and hearer-new.⁶⁷

⁶⁶ “... a referent with which the hearer is (assumed by the speaker to be) acquainted is called HEARER-OLD, while a referent with which the hearer is assumed not to be acquainted is termed HEARER-NEW. Similarly, a referent which the speaker is licensed to treat as occurring for the first time in a particular discourse (regardless of its hearer-status) is called DISCOURSE-NEW, while a previously evoked referent in that discourse is called, not surprisingly, DISCOURSE-OLD” (Ward et al. To appear: 2).

⁶⁷ If, as Birner (2006) claims, discourse-old information includes so-called ‘inferrable’ information (in the sense of Prince 1981b, 1992), the referent of the subject in (9) could be assumed to be DISCOURSE-OLD and HEARER-NEW, because the existence and the identity of

Nevertheless, topichood of the subject referent is guaranteed by the use of *-(n)un*. To conclude, the presupposition requirement is neither a necessary nor a sufficient condition for topicality.

Second, with respect to contrast, it also seems unlikely that the presuppositional view can explain how contrast can be derived from the meaning of *-(n)un*. All the presuppositional approaches introduced above claim that contrast occurs when a *-(n)un*-marked phrase presupposes the existence of the referent of the *-(n)un*-marked phrase and its alternative(s). However, it has already been shown in Chapter 2 that the mere existence of alternatives does not guarantee contrast. There has to be something in the meaning of *-(n)un* that motivates DISSIMILARITY between alternatives, and the proposed meanings in (5)-(7) do not have such a semantic/pragmatic component in them.

Furthermore, attributing contrastiveness to *-(n)un*'s meaning of presupposing alternatives cannot explain why *-(n)un*-marked non-subject (but not subject) elements in their base position have a strong tendency to induce contrast. Under this approach, it must be just stipulated that *-(n)un* is somehow more likely to presuppose the existence of alternatives when it goes with non-subjects in base position. However,

the referent can be inferred on the basis of the peculiarity of the discourse context, that is, the fact that the DJ constantly introduces listeners' messages sent from their cell phones during the interview. That is, when the DJ utters (9), the hearer, if (s)he is familiar with the show, can infer that the subject referent is one of the listeners who sent their message to the radio show. In this case, one might argue that the referent is presupposed through the mechanism of PRESUPPOSITION ACCOMMODATION. Two points are to be made here. First, the previous studies that take the presuppositional view introduced above do not discuss this kind of examples and deal with only discourse- and hearer-old referents. Second, the notion of discourse-oldness seems to better capture the referential property of *-(n)un*-marked items than the notion of presupposition (accommodation), which is somewhat unclear and still controversial (e.g. Gauker 1998, 2008; von Stechow 2008).

this is just an ad-hoc explanation and has no independent motivation. Thus, the presuppositional view of *-(n)un* does not go along with the structurally determined contrast evoked by *-(n)un*.

Now, let us turn to another view of *-(n)un* within the unified approach, which I will call the SALIENCE-BASED view. The salience-based view basically relates the meaning of *-(n)un* to the notion of salience or something similar to it such as attention or prominence. To the best of my knowledge, there are just four previous studies that have taken this approach (S.-U. Kim 1983; H.-W. Choi 1996; H. Lee 2004; H.-g. Park 2007). First, according to S.-U. Kim (1983), “[t]he function of 'attention' is to direct the attention of the listener/reader to the elements that are at the center of the speaker/writer's interest” (S.-U. Kim 1983: 72) and *-(n)un* serves as a morphological device for directing attention. In other words, *-(n)un* “highlights the selected elements so that they may attract the listener/reader's attention” (S.-U. Kim 1983: 79).⁶⁸

However, his analysis is problematic in several ways. First, he claims that sentence-initial position is the primary linguistic device for directing the hearer's attention and the morphological marker *-(n)un* is only “secondary and eventually optional” (S.-U. Kim 1983: 77). The evidence he provides for this argument is the fact that many instances of Korean topic and contrast are not necessarily marked with *-(n)un*, which is certainly true as shown in Chapter 2. But this claim is problematic for at least two reasons.

⁶⁸ The core of his argument that *-(n)un* brings the hearer's attention to the referent of the *-(n)un*-marked element is very close to what will be claimed to be the meaning of *-(n)un* in this paper. However, according to my analysis, directing the hearer's attention to a referent is not the meaning of *-(n)un* itself but the PRAGMATIC EFFECT of the meaning.

First, S.-U. Kim cannot explain cases where the use of *-(n)un* is OBLIGATORY. As will be discussed in more detail below, there are cases in which *-(n)un* is not optional but obligatory as in (10).

(10) A: Which university did John go to?

B: He went to Yale University.

A: Mary-#(nun)?

Mary-NUN

‘What about Mary?’

As shown in (10), it is unacceptable to omit *-(n)un* in A’s second utterance, where the topic is being shifted from John to Mary. It is important to note that *-(n)un* is necessary even though it is attached to the subject, a sentence-initial element of the sentence. The obligatoriness of *-(n)un* in (10) would be impossible to explain if, as S.-U. Kim claims, sentence-initial position is the primary and *-(n)un* is the secondary and optional marker for directing attention.

Also, S.-U. Kim’s analysis cannot explain data like (11), where the use of *-(n)un* is prohibited.

(11) A: Did John go to the party?

B: Yes. He was late though.

A: When did he come back?

B: (Kyay)-(#nun) 11-si-ey tolawa-ss-e
11-o'clock-DAT come.back-PAST-DEC

‘(He) came back at 11 o’clock.’

In the second utterance of the speaker B, the use of *-(n)un* decreases the acceptability of the sentence significantly, making the sentence infelicitous (but not ungrammatical). According to S.-U. Kim’s analysis, however, the unacceptability

cannot be explained, since *-(n)un* can be optionally used for directing attention of the hearer to the topic, which is John in this case.

Although S.-U. Kim is aware of the fact that Korean topic and contrast are not always marked by *-(n)un*, he does not explain the difference between *-(n)un*-marked topic/contrast and *-(n)un*-less topic/contrast, which leads him to ultimately conclude that "it is obvious that the particle [*-(n)un*] does not obligatorily mark a full-fledged topic or contrast" (S.-U. Kim 1983: 79).

What I will show in the rest of this chapter is that *-(n)un* obligatorily marks a certain types of full-fledged topic and contrast. To be more specific, it will be claimed that different types of topic need to be distinguished in order to better understand the meaning of *-(n)un*, which are CONTINUING topic and NEWLY INTRODUCED topic, or ratified/established topic and unratified/unestablished topic (Lambrecht 1994; Lambrecht & Michaelis 1998). With respect to contrast, it will be claimed that *-(n)un* can and should be used to mark certain types of contrast (e.g. listing and concession) but not others (e.g. selection and correction) due to its meaning.

A similar approach to S.-U. Kim (1983) has been pursued by H.-g. Park (2007), who claims that the basic meaning of *-(n)un* is [+deulchum]. The feature [deulchum] can be literally translated as 'to lift up'. H.-g. Park states that the referent of a *-(n)un*-marked expression is assumed to be "lifted up" and consequently highlighted (compared to other referents) by the speaker. Thus, the meaning of *-(n)un* proposed by H.-g. Park seems to be intuitively very similar to that proposed by S.-U. Kim.⁶⁹

⁶⁹ However, H.-g. Park's notion of [deulchum] is so vague that it is hard to be sure about what he really means by it. He does not relate the feature to familiar notions like salience, prominence, or attention. Thus, I could only infer (without being sure) that [deulchum] is intended to mean 'to make salient/prominent' or 'to direct one's attention'.

The problem with H.-g. Park's account is that the relation between topic/contrast expressed by *-(n)un* and the meaning of *-(n)un* is not clearly explained; topicality and contrast are just assumed to be derived properties of [+deulchum]. Again, this analysis, just like S-U Kim's, cannot explain the fact that *-(n)un* is sometimes obligatory, sometimes optional, and sometimes even prohibited in expressing topicality/contrast.

Let us turn to H.-W. Choi's (1999) and H. Lee's (2004) analyses. First, H.-W. Choi claims that both topical and contrastive elements are prominent in discourse and that *-(n)un* is a morphological encoder of prominence. Similarly, H. Lee argues that *-(n)un* sets a context in which the referent of a *-(n)un*-marked element is sufficiently salient.⁷⁰

H.-W. Choi and H. Lee's analyses differ from S.-U. Kim and H.-g. Park's in that the function of *-(n)un* can be interpreted in two different ways. In the meanings of *-(n)un* proposed by H.-W. Choi and H. Lee, it is not clear whether *-(n)un* causes a non-salient referent to become salient or whether it indicates the salience of an already salient referent. In contrast, S.-U. Kim and H.-g. Park make it clear that what *-(n)un* does is to make a (non-salient) referent salient by claiming that *-(n)un* is a device for "directing attention" or "lifting up". As will be shown below, whether *-(n)un* INCREASES or merely INDICATES the salience of a referent is crucial for understanding the nature of *-(n)un*.

⁷⁰ H. Lee defines sentence topic "as setting a context in which the referent of a topic-marked expression is a *sufficiently salient* entity in the conversational record at the time of utterance" (H. Lee 2004: 109), which leads him to claim that *-(n)un* "is a linguistic device encoding this context-setting function of sentence topic" (H. Lee 2004: 109). At the same time, he also attributes contrast induced by *-(n)un* to this function of context-setting. Consequently, under his analysis, it is hard to understand how topic and contrast are different from each other.

Apart from this difference, H.-W. Choi and H. Lee have the same problem of not being able to explain why *-(n)un* is obligatory in some cases but optional or even prohibited in others. As far as I know, no previous study on *-(n)un* has provided a satisfactory answer to this problem.⁷¹ In next section, the notion of salience will be discussed, which will be the basis for solving this problem.

3.3. Salience in Discourse

As discussed above, notions like prominence, attention, and salience play a crucial role in the salience-based analyses of *-(n)un*. However, most of them do not provide a detailed discussion of these notions, which makes their argument theoretically ungrounded and thus seriously weakens the validity of their view of *-(n)un*. In this section, by proposing the nature of discourse salience and discussing two ways of looking at it with respect to its linguistic realization, I will lay the groundwork for my analysis of the meaning of *-(n)un*. The whole discussion in this section is largely based on Chiarcos (2009).

3.3.1. What is Discourse Salience?

The notion of salience is used in various fields that study human (and non-human) cognition such as psychology, artificial intelligence, and linguistics. In linguistics, it

⁷¹ C. Oh (2007) provides a partial account of this problem, by distinguishing ratified and unratified topics and arguing that *-(n)un* is an unratified topic marker. However, assuming *-(n)un* to be an (unratified) topic marker, he has little to say about non-topical *-(n)un*. For example, he cannot answer why *-(n)un* is obligatory in order to induce contrast without topicality.

has been mainly used by linguists who study referential coherence and discourse functions of grammatical roles and non-canonical word order.

Despite the important role it plays in explaining various linguistic phenomena, however, there is no consensus on how salience should be defined. For instance, Masharov (2008) points out that “[t]his notion of salience in language and discourse has been around for a long time, but has been notoriously difficult to define. It is sometimes used interchangeably with focus, accessibility, prominence, activation, retrievability, availability, etc.” (Masharov 2008: 6).

In spite of the various terms and meanings related to discourse salience, researchers generally agree that it “is a graded notion that expresses the availability of entities and/or the degree of attention they are assigned” (Chiarcos 2009: 134). It can also be roughly defined as “the cognitive prominence of the referent of an element in a discourse relative to all other elements in the discourse” (Clamons et al. 1993: 520). In addition to examining this general idea of discourse salience, I will scrutinize the nature of salience in detail below, particularly comparing it with the notion of attention.

According to Chiarcos (2009), due to a ‘bottleneck effect’ shown in all cognitive phenomena (including language), attention plays a key role in controlling our mental activity. That is, the world surrounding us is far too rich to be realized, understood, or described as a whole, thus forcing us to concentrate only on particularly relevant or significant aspects that need to be processed immediately.

The information on which our attention is concentrated in this way is considered to be in the FOCUS OF ATTENTION. Following the tradition of visual science (Koch & Itti 2000), Chiarcos (2009) assumes that attention is a binary characteristic

of a discourse referent as being either in the focus of attention or not.⁷²

But it has also been observed through a number of psychological studies that the attentional state of a referent is graded in nature. For instance, not only a binary but a ternary distinction between discourse referents is possible with respect to their attentional state; that is, there are referents that are the current focus of attention, those in short-term memory but not in the focus of attention, and those outside short-term memory. Of course, referents within each group must have different degrees of attentional state.

In linguistics, such graded nature of the attentional state of discourse referents has been captured by different degrees of ‘activation’ (e.g. Levelt 1989; Chafe 1994), ‘givenness’ (e.g. Chafe 1976; Gundel et al. 1993), ‘salience’ (e.g. Fillmore 1977; Lewis 1979; Sgall et al. 1986; Grosz et al. 1995), ‘discourse prominence’ (e.g. Pustet 1997; Gordon and Hendrick 1998), etc.⁷³

How can we reconcile the discrepancy between the binary nature of (focus of) attention and the graded characteristic of attentional state of a discourse referent? Following Chiarcos (2009), I propose that (discourse) salience is a GRADUAL ASSESSMENT OF ATTENTION. According to this view, focus of attention is an EPIPHENOMENON of salience. In other words, focus of attention can be understood as a binary (positive or negative) property of a selected subset of discourse referents, which is determined by the degree of salience imposed on them. In this sense,

⁷² “Attention imposes a binary division of the visual scene between elements in the focus of attention and elements that fall out of this focus” (Chiarcos 2009: 123).

⁷³ It seems that all these different terms are not getting at exactly the same notion. But how similar or different they are from one another is not relevant here. Suffice it to say that various terms have been introduced to explain linguistic phenomena related to different degrees of attentional states of discourse referents.

salience is “pre-attentive”.⁷⁴

In addition to its graded and pre-attentive nature, there is one more important characteristic of salience. Salience is DYNAMIC. That is, “[s]alience changes over time according to the dynamics of the context, e.g., the progress of a discourse” (Chiarchos 2009: 119). This is an important property especially when the meaning of *-(n)un* is considered, because, as will be shown below, the dynamics of discourse context in terms of salience is crucially and constantly affected by the speaker’s use of *-(n)un* in Korean.

3.3.2. Two Kinds of Discourse Salience

Although a number of studies exist on discourse salience, few of them seem to recognize the importance of distinguishing two different kinds of salience. Notable exceptions are Clamons et al. (1993), Mulkern (2003, 2007), and Chiarcos (2009), whose distinction between the two types of salience are introduced below:

One of the purposes of the present paper is to reveal the importance of the distinction between two types of salience: the salience of an element that is determined by prior characteristics of the discourse (given salience), and the changes in this previously determined salience that can be imposed by the speaker in a given sentence (imposed salience), for example, to indicate contrast or to select one of several potential topics as the primary topic of a particular sentence.
(Clamons et al. 1993: 522)

⁷⁴ But see Lappin & Leass (1994) for an opposite view.

... it is useful to distinguish between two different types of discourse salience: **inherent salience**, having to do with the centrality of the entity in the discourse (its “aboutness” with respect to the discourse), as determined by the history of the discourse up to this point; and **imposed salience**, having to do with the amount of prominence or foregrounding given to an entity for the purpose for signaling how the speaker intends the hearer to subsequently rank discourse entities relative to one another. (Mulkern 2007: 119)

- **HEARER SALIENCE** is mental salience within the hearer model⁷⁵, i.e., the speaker’s assumptions about the current attentional state an entity (e.g., a referent) attains in the hearer’s discourse model.
- **SPEAKER SALIENCE** is mental salience within the speaker model⁷⁶, i.e., the current attentional state an entity (e.g., a referent) attains from the perspective of a speaker. (Chiarcos 2009: 133)

Although different terms are used, the two types of salience introduced in each excerpt are fundamentally the same. In a nutshell, given/inherent/hearer salience is determined by previous discourse context, whereas imposed/speaker salience is determined by the speaker’s intention. To put it another way, the former is related to “attention indication” and the latter to “attention guidance”.⁷⁷

⁷⁵ “The HEARER MODEL is a mental model a speaker constructs as an approximation of the hearer’s current mental discourse model. The hearer model is constructed from the speaker’s assumptions about the state of mind of the hearer and the previous discourse” (Chiarcos 2009: 133).

⁷⁶ “The SPEAKER MODEL is the mental discourse model of the speaker, subsuming information of the previous discourse, but also speaker-private, discourse-relevant information, plans and goals to be achieved in the subsequent discourse, and information yet to be uttered” (Chiarcos 2009: 133).

⁷⁷ Similar (but not the same) distinctions made by previous studies include speaker-internal relevance vs. speaker-external salience (Pattabhiraman & Cercone 1990), current accessibility vs. future accessibility (Ariel 2001), anaphoric topicality vs. cataphoric topicality (Givon 2001), and backward-looking center vs. forward-looking center in Centering Theory (Poesio et al. 2004).

The distinction between the two types of salience is also empirically supported by experimental studies (e.g. Bosch et al. 2003, 2007; Kaiser & Trueswell 2004, 2008; Kaiser 2006, 2010a, b, 2011a, b). For instance, based on a series of psychological experiments, Kaiser (2011a) convincingly shows that a strong pronoun and a weak pronoun in Dutch are sensitive to different kinds of salience. According to the results of her experiments, the strong pronoun *zij* is sensitive to the presence of CONTRASTIVE, SWITCHED TOPICS, whereas the weak pronoun *ze* is sensitive to given/inherent/hearer salience (or her antecedent salience). Here, what is important is that contrastive, switched topics, as will be discussed below, are possible through imposed/speaker salience. Thus, Kaiser's study provides strong empirical evidence for the independence of the two types of salience.

3.3.3. Motivation for Imposing Salience

In order to figure out the nature of *-(n)un*, it is crucial to understand the motivation for imposing salience on a discourse referent. That is, what motivates the speaker to make a (non-salient) referent salient and thus possibly put it in the focus of attention in the hearer's mind?

As already stated in one of the excerpts above, Clamons et al. (1993) claim that the motivation is "to indicate contrast or to select one of several potential topics as the primary topic of a particular sentence" (Clamons et al. 1993: 522). Similarly, Mulkern (2003, 2007) proposes two motivations for imposing salience: contrast and emphasis. According to her, to emphasize is "to increase the salience of a referent relative to other entities, including the establishment of the referent as the new topic of the discourse" (Mulkern 2007: 123).

It is not hard to understand why the speaker needs to impose salience on a referent if she wants to indicate contrast or to establish it as a topic. First, a crucial difference between a non-topical (but discourse-old) element and a topical one⁷⁸ is that the former is not in the focus of attention while the latter is (Li & Thompson 1976; Gundel 1999). Thus, what one needs to do in order to make a non-topical referent the topic of a sentence is to impose salience on the referent so that it becomes prominent enough to be the center of attention in the hearer's mind.

As for contrast, one way of indicating (or inducing) contrast between two groups of referents is to “highlight” (only) one group so that contrastiveness arises in the hearer's mind between what is highlighted and what is not. This highlighting is possible through increasing the salience of the referent(s) in one group but not in the other. Gundel (1999) also points out that what is highlighted for contrast is also in the focus of attention (‘psychological focus’ in her terms).

Given the discussion on the nature of discourse salience, its two subtypes (i.e. given vs. imposed salience), and the motivation for imposing salience, now we are ready to understand the meaning of *-(n)un*. In next section, I will provide an analysis of the nature of *-(n)un* based on the corpus study. It will be shown that the fundamental meaning (or function) of *-(n)un* can best be captured by the notion of imposing salience and that the widely known functions of *-(n)un*, that is, topicality and contrast, are properties derived from the interaction of this basic meaning and various syntactic, semantic, and pragmatic factors.

⁷⁸ I assume that a sentence topic must be discourse-old in Birner's (2006) sense. That is, a discourse referent that is both hearer- and discourse-new cannot be a topic. The reason is that topic is what is relationally given, and something that is relationally given must be somehow related to a previous utterance (or discourse context), thus being referentially given (or discourse-old) (Y. Jun 2006). In other words, if a discourse referent is referentially new, it can never be relationally given.

3.4. Meaning of *-(n)un*: a Corpus Study

As a starting point for discussing the meaning of *-(n)un*, I would like to point out the importance of taking into account discourse context in which *-(n)un* is used. As Roberts (2012: 2) correctly points out, “[m]ost researchers who work on focus, topic, etc., talk about their relationship to felicity, and hence to the context of utterance. But few look beyond the sentence to examine in any detail the range of kinds of contexts in which an utterance with a given focus is actually felicitous”.

Indeed, most previous studies on the meaning of *-(n)un* also do not consider the discourse context in which it occurs.⁷⁹ Rather, as shown in the previous chapter, they provide just a couple of sentences without any context to support their argument. In this way, one cannot fully understand when and why *-(n)un* is used by Korean speakers. In order to overcome this problem, I collected corpus data from a Korean radio show and analyzed discourse functions of all the occurrences of *-(n)un* in the data. Before discussing the meaning of *-(n)un*, I will introduce the corpus data in the following subsection.

⁷⁹ Notable exceptions are J. Kang (2001), K.-h. Kim (2001), and C. Oh (2007), who look at *-(n)un* within (natural or made-up) conversational contexts. However, I will not discuss their analyses of *-(n)un* in this dissertation, mainly because they are not explicit enough. First, J. Kang and K.-h. Kim claim that *-(n)un* is a cohesive marker in discourse, without providing any semantic/pragmatic aspect of *-(n)un* that makes it possible. As for C. Oh, although he correctly captures the empirical generalization that *-(n)un* is used to “make a topic referent more salient” (C. Oh 2007: 86), he basically takes the derivational, particularly topic-as-basic, approach to *-(n)un* and only deals with contexts in which it is attached to an entity-denoting topical element. Thus, his view of *-(n)un* has all the problems of the topic-as-basic approach discussed above. But C. Oh’s work will be discussed throughout this dissertation when necessary.

3.4.1. Introduction to Corpus Data

The corpus data are collected from a Korean radio show, titled PHWULUN PAM ‘blue night’, to which a female actress is invited every week and a male DJ interviews her for about an hour. Topics they talk about include various aspects of the guest’s work and life. The interview is done in a casual manner, so the conversation made by the DJ and a guest actress is a good source for studying the discourse function of *-(n)un* in its everyday use.

I did not have to record the interviews because the sound files of each interview are uploaded on the internet.⁸⁰ I chose five actresses who speak the Seoul dialect, and downloaded and transcribed their interviews.⁸¹ After the transcription, I coded every occurrence of *-(n)un* in terms of topicality (whether it marks topic/frame⁸²), contrast (whether or not it marks contrast), grammatical function (whether it is subject, direct object, indirect object, or else), clausal status (whether it occurs in a matrix or a subordinate clause), contraction (whether it is phonetically contracted⁸³), and speech act (whether it is used in assertion, question, imperative, or something else). Also, if *-(n)un* is used to mark either topic or frame, I further marked

⁸⁰ The URL address for the sound files of the five interviews is the following:

<http://minicast.imbc.com/PodCast/pod.aspx?code=1000578100000100000>

⁸¹ The DJ is also a speaker of the Seoul dialect. The Seoul dialect is known as the standard Korean, and any linguistic research on Korean, if not mentioned otherwise, is on this dialect.

⁸² I adopted Jacobs’ (2001) definition of frame in coding the data (cf. (7) in Chapter 2). Thus, not only spatial or temporal phrases but conditionals are taken to be frames.

⁸³ By the phonetic contraction of *-(n)un*, I mean its becoming *-n* when it is preceded by a vowel (e.g. *Mary-nun* vs. *Mary-n*). The contraction is totally optional. The motivation for coding this feature is to test the standard view that *-(n)un* in its contrastive use gets phonetic prominence (i.e. high pitch) (e.g. Y. Jun 2006; C. Lee 2007; J. E. Kim 2010). If this view is correct, “contrastive *-(n)un*” should not be contracted, for it cannot get high pitch if it is contracted and does not form an independent syllable. This will be discussed in more detail in Chapter 5, where the phonetic property of contrastive *-(n)un* is dealt with.

whether the topic/frame is continuing, shifted, accepted⁸⁴, or newly proposed⁸⁵. If it is used to mark contrast, I checked whether a contrastive implicature is generated or not.

The total number of *-(n)un* occurrences used in the actual analysis is 933. If *-(n)un* is used in speech errors, fixed expressions like proverbs, and non-conversational setting (e.g. DJ's reading a given script), it is excluded from the analysis.

⁸⁴ When one interlocutor introduces a new topic, it could either be refuted (e.g. *Let's not talk about X*) or accepted by the other interlocutor. When it is accepted, it could be done overtly or covertly.

- (i) A: chwimi-nun mwe-ni
hobby-NUN what-INT
'What is (your) hobby?'
- B: (nay chwuymi-nun) tokse-ya
my hobby-NUN reading-DEC
'(My hobby is) reading.'

As shown in (i), the topic of the sentence introduced by the speaker A can be repeated or omitted by the speaker B. When the speaker B overtly expresses the topic, she is overtly accepting it as the topic of her utterance. In this sense, *-(n)un* in this case is not used to mark a continuing topic but to "re-establish" a new topic. If the topic is omitted, she is covertly accepting it and just provides the comment part of the sentence.

⁸⁵ The difference between topic shifting and topic proposing is that in topic shifting, the speaker introduces a new topic under the same discourse topic, whereas in topic proposing, the newly introduced sentence topic is also a new discourse topic. For instance, when the speaker introduces her father as a new topic while talking about her family members, it is treated as topic shifting. On the other hand, if she introduces her movie as a new topic after talking about her family, it is taken to be topic proposing. But note that this distinction is not crucial for the purpose of this dissertation, and they can be simply combined into "topic introduction".

3.4.2. Discourse Functions of *-(n)un*

Before discussing each discourse function expressed by *-(n)un* in detail, let us first look at what kinds of discourse functions are expressed by *-(n)un*, which is summarized in Table 1.

Table 1. Summary of Discourse Functions of *-(n)un*

Discourse function	Topic/frame	Contrastive topic/frame	Contrast	Simple emphasis
Number	239 (26%)	495 (53%)	120 (13%)	79 (8%)

As shown in Table 1, more than half of the *-(n)un* occurrences are used for contrastive topic/frame. By the fact that 13% of the occurrences of *-(n)un* are also used for contrast, we can see that the majority of the *-(n)un* occurrences (66%) convey contrast (either as contrastive topic/frame or as contrast). Also, it is important to note that *-(n)un* expresses not only topicality/contrast but simple emphasis, which is unexpected under the standard approach to *-(n)un*. From what follows, each function of *-(n)un* will be discussed in detail with examples from the corpus data.

3.4.2.1. Topic/Frame

As shown in Table 1, out of 933 occurrences of *-(n)un*, 239 are used with plain topic/frame. As mentioned above, the notion of topic/frame can be further divided into four different types: shifting, proposing, accepting, and continuing. The corpus data show that *-(n)un* can be attached to all the four types of topic/frame. Let us look at examples of each type of topic/frame marked by *-(n)un*.

First, an example of *-(n)un*'s marking shifting topic is shown in (12), which is translated into English for convenience. The conversation is made in a context where the DJ talks about the guest's personal relationship with a lot of celebrities.

(12) DJ: Those people do not make friends with just anybody. (They do so) only with good people (like you).

(그 분들도 마음을 열거나 뭐 누군가 손 내밀면 아무나 덮석 잡거나
그렇진 않습니다. 네. 좋은 사람들하고만 이렇게.)

Guest: You-**nun**, as a DJ, meet lots of guests, don't you?

(정엽씨는 라디오를 하시면서 게스트분들이 굉장히 많이
오시잖아요.)

After the DJ's utterance, the guest actress tries to shift a topic from her relationship with celebrities to the DJ's. In doing so, she introduces a new topic *you* (the DJ) by attaching *-(n)un* to it.

An example of topic/frame proposal is shown in (13). Here, the utterance in which *-(n)un* occurs is made by the guest when the DJ points out that she became 30 years old this year and asks how she feels about it.

(13) Guest: [On December 31 of last year]-**nun**, (I) was a little sad.

(작년 12 월 31 일쯤엔 참 좀 슬펐어요.)

DJ: But once you became 30, there was nothing special to it, right?

(막상 되보니까 근데 별거 없죠?)

Guest: Right.

(네.)

The function of *-(n)un* in this case is setting a temporal frame, before she talks about her feeling. One might argue that the *-(n)un*-marked phrase is not just a frame but a contrastive frame, based on the fact that there are in principle alternative dates to December 31 (e.g. December 30, 29, 28, etc.).

The reason why I consider it as non-contrastive is that in the given context, the guest does not intend to indicate or induce contrast between her feeling on December 31 and her feeling on other day(s). Rather, she just wants to convey that she was a

little sad on the last day of the year in which she was 29 years old. Indeed, as far as I can tell, no contrastive implicature is generated by her utterance, which should be the case if it were a contrastive frame. This, again, shows the importance of considering discourse context when figuring out the discourse function of *-(n)un*.

Although not as frequent as topic/frame shifting or proposing, topic/frame acceptance clearly exists and is done by *-(n)un*. Let us look at a conversation between the DJ and a guest actress.

- (14) DJ: *yensup-un kulem elmana ha-sey-yo?*
 practice-NUN then how.long do-HON-INT(HON)
 ‘Then, how long do (you) practice?’
[yenkuk yensup]-un?
 play practice-NUN?
 ‘(I mean) the practice for (your) play.’
- Guest: *[yenkuk yensup]-un, han twu-tal yensup ha-ko ...*
 play practice-NUN, about two-month practice do-and
 ‘(I) practiced about two months and ...’

In (14), the DJ is proposing a new topic (i.e. *yenkuk yensup* ‘rehearsal’), and the guest repeats the topic before she comments about it. What is important here is that *-(n)un* in the guest’s utterance neither proposes nor continues the topic. It is not proposing a new topic since it has already been done by the DJ. Also, it is not a continuing topic because of the peculiarity of the context; that is, the *-(n)un*-marked phrase in the guest’s utterance is an immediate repetition of the *-(n)un*-marked phrase proposed as a new topic by the DJ. As will be shortly discussed below, if a continuing topic is *-(n)un*-marked, it comes to convey a special pragmatic effect of either contrast or simple emphasis. However, an immediate repetition of a proposed topic with *-(n)un* in

cases like (14) does not have such a pragmatic effect, which would be hard to explain if the topic is a continuing topic.

Notice that out of 239 occurrences of *-(n)un* used to mark non-contrastive topic/frame, only 13 are used to for accepting topic/frame, which is not surprising considering how a proposed topic is usually accepted. That is, there is a much easier and more economical way to accept a proposed topic, which is to accept it COVERTLY. It is usually the case that when one discourse participant proposes a topic, it is established as a topic unless the other interlocutor rejects it.

This is in parallel with assertion acceptance, which is also mostly done implicitly. Researchers have noted and emphasized the proposal nature of assertion (e.g. Clark & Schafer 1989; Clark 1992; Ginzburg 1996, 2012, Farkas & Bruce 2009). That is, an assertion cannot be automatically put into the common ground as soon as it is uttered; rather, it is a kind of proposal to change the context by putting a proposition denoted by the asserted sentence in to the common ground. Thus, not every assertion can be stored in the common ground. When an assertion is proposed, it can be accepted, refuted (e.g. *No, it is not true*), or questioned (e.g. *Really?*) by the other discourse participants.

There are two ways of accepting a proposed assertion. First, as long as there are no objections from the other participants in the conversation, what is asserted is taken to be covertly accepted. Or, it can also be overtly accepted (e.g. *You're right, Yes, etc*). As easily seen by our everyday conversation, in most cases, people accept assertion covertly. In this respect, that topic acceptance is mostly done covertly is no surprise.

Lastly, let us look at an example of continuing topic. The utterance in (15) was made after the guest sang a song upon the DJ's request. The DJ is expressing how he felt with her song:

(15) DJ: (I) just want to go to some fancy bar and drink some socwu⁸⁶ right now.

After (this show), I-**nun** will have a drink.

(정말 당장이라도 어디 분위기 좋은 술집에서, 이렇게 막 왠지 좀 고즈넉한 곳에서 이모한테 여기 소주 한병 더 추가요, 이렇게 참 얘기하고 싶네요. 오늘 좀 끝나고 저는 술 한 잔 해야겠습니다.)

Here, it is obvious that the *-(n)un*-marked subject in the second sentence is a continuing topic, since the topic of the first sentence is also the DJ.

One of the characteristics of a continuing topic is that it can be omitted because it is already in the focus of attention (C. Oh 2007). Indeed, the second sentence is totally felicitous with the subject being omitted. Then, what led the DJ to overtly realize the continuing topic with *-(n)un*? To answer this question, let us compare the second sentence in (15), repeated in (16a), with its subject-omitted counterpart (16b).

(16) a. After this show, I-**nun** will have a drink.

(오늘 좀 끝나고 저는 술 한 잔 해야겠습니다.)

b. After this show, (I) will have a drink.

(오늘 좀 끝나고 술 한 잔 해야겠습니다.)

Although the two sentences are truth-conditionally the same, there is definitely some pragmatic difference between the two. The difference seems to be that the topic in

⁸⁶ Socwu is one of the most popular alcoholic drinks in Korea.

(16a) is MORE EMPHASIZED than in (16b), which is caused by the referent's being more salient than expected (by the hearer).⁸⁷

Note that no contrast is induced by this emphasis; that is, *-(n)un* in the context of (15) does not induce any contrastive implicature (e.g. 'But other people will not have a drink', 'But I don't know about others').⁸⁸ Interestingly, this function of simple emphasis is found in all the other occurrences of *-(n)un* that mark non-contrastive continuing topic/frame in the corpus data.

It is important to note that the total number of *-(n)un* attached to non-contrastive continuing topic/frame is only 9, which is surprising under the standard assumption that *-(n)un* is a topic marker. However, it is understandable if the pragmatic effect caused by *-(n)un* is considered. That is, there is no reason to emphasize a continuing topic (or to make it more salient), since it has already been the center of attention from the previous discourse.

⁸⁷ Emphasis understood in this way is different from Mulkern's (2003, 2007) understanding, according to which, emphasis is speaker's indication "to the hearer that the referent is expected to be the most salient entity relative to other entities in the discourse" (Mulkern 2003: 51). Here, she takes the source of emphasis to be the difference in salience between entities. But the emphasis in (15) can better be captured by the difference in salience of a single item, that is, the difference between the actual salience of one referent (attained by the use of *-(n)un*) and its given salience (expected without *-(n)un*). The notion of simple emphasis used here is also different from another kind of emphasis that amounts to maintaining p in the fact of a claim that $\neg p$ ("I do so/too").

⁸⁸ One might argue that *-(n)un* in this case induces contrast which is possible through a set of alternatives existing in the speaker's (but not hearer's) mind. This is surely a possibility. However, it is also equally possible that the speaker wants to simply emphasize the referent without contrasting it with its alternatives. Since I cannot "read" the DJ's mind at the point of the utterance and no set of alternative(s) is provided in the discourse context, I take the discourse function to be simple emphasis.

3.4.2.2. Contrastive Topic/Frame

Just like non-contrastive topic/frame, contrastive topic/frame can be divided into four types: proposed, shifted, accepted, and continuing. In the corpus data, 495 occurrences of *-(n)un* are used for contrastive topic/frame. First, let us look at an example of shifting a contrastive topic/frame. In (17), a guest actress is explaining how she felt when she was on a radio show for the second time.

(17) Guest: [At that time]-**nun**, (I) felt comfortable, because (I) was not alone but with other actors and actresses that acted with me in the movie.

(그 때는 이제 같이 영화 했던 친구랑 같이 들러서, 그 때는 뭐 아주 편안했죠.)

DJ: onul-**un** ette-si-l ke-lako yeysang ha-sip-nikka
today-NUN how-HON-FUT FN-COMP expectation do-HON-INT(HON)
'How do you expect you would feel today?'

In the conversation, the guest introduces a temporal frame by using *-(n)un*. Then, the DJ shifts a frame using *-(n)un* again. Note that contrast is also induced by the use of *-(n)un* in both cases. That is, by attaching *-(n)un* to 'at that time', the guest is contrasting her feeling at that time with the feeling she had when she was on a radio show for the first time, which she talked about before her utterance in (17). Also, by using *-(n)un* in his utterance, the DJ induces contrast between 'at that time' and 'today'.

Next, examples of proposing and accepting a contrastive topic/frame are shown in (18), where the DJ starts a new discourse with a topic of a guest's look on TV and her look in the flesh.

(18) DJ: Some people look better on TV while some don't, and

(실제보다 카메라가 잘 맞는 분들이 있는가 하면 카메라보다 실물이 더
팬찮은 쪽이 있는데,)

Chenga-ssi-**nun** enu ccok-i-n ke katha-yo

Chenga-HON-NUN which side-COP-ADN FN seem-INT(HON)

‘Which group do you think you belong to?’

Guest: I-**nun** seem to look better in the flesh.

(저는 카메라보다 실물이 더 난 거 같아요.)

In (18), the DJ proposes a new sentence topic, namely the guest, using *-(n)un*, and in the given context, contrast is induced by the use of *-(n)un* between the guest actress and other people mentioned in the previous sentence.

In the guest's utterance, *-(n)un* is used to accept the proposed topic and the same contrast is also generated here. It is important to note that in order to indicate contrast when accepting a topic/frame, one has to do it overtly using *-(n)un*. For instance, if topic acceptance is done either covertly by omitting the topical subject or overtly but without *-(n)un* as in (19B), the speaker cannot express contrast.

(19) A: John-un ettehkey cinay?

John-NUN how live

‘Is John doing well?’

B: (John) cal cinay.

well live

‘(John) is doing well.’

B’: John-un cal cinay.

John-NUN well live

‘John is doing well.’ (e.g. ‘But I don’t know about the others.’)

As in (19B’), *-(n)un* must be overtly attached to the topical subject in order to induce contrast between the topic and its alternative(s).

Lastly, let us look at an example of continuing contrastive topic/frame. The conversation in (20) was made when the DJ and a guest were talking about buying expensive accessories.

(20) DJ: Since (you) earn lots of money these days, (I guess you) often buy (expensive accessories)?

(이제는 돈 많이 버셨으니까 자주 사시겠어요?)

Guest: No matter how much money (I) earn, (I) feel that it is wasteful (to spend money on that). Because I-**nun** want to have (my own) house, (I) would save that money (to buy a house).

(암만 많이 벌어드요, 좀 아깝더라고요. 네. 저는 집욕심이 있어서, 그 돈 모아서 차라리 ...)

As shown in (20), the sentence topic in both the DJ's and the guest's utterances is the guest. In fact, she was the topic even before the DJ's utterance, and that is why the topic phrase is not overtly realized in the DJ's utterance.

When *-(n)un* is attached to the continuing topic in one of the guest's utterances, it induces contrast between the guest actress and other women who would buy expensive accessories instead of buying a house. The contrast would be impossible if *-(n)un* were not there.

One might argue that *-(n)un* in this case just simply emphasizes the topic rather than inducing contrast. This is surely a possibility and might have been what the guest really intended. The reason that I take it to express contrast is that, under the given context, I can strongly feel opposition between two properties, that is, buying a house and buying expensive accessories, which in turn leads to contrast between a group of people (including the guest) who would buy a house rather than buying expensive accessories and another group of people who would spend their money on

expensive accessories instead of a house. In any case, for the purposes of this chapter, what is important is the fact that the attachment of *-(n)un* to a continuing topic in cases like (20) causes the effect of either simple emphasis or contrast.

3.4.2.3. Contrast

The third discourse function expressed by *-(n)un* is contrast. Any *-(n)un*-marked phrase that evokes contrast but does not express aboutness or framehood is taken to have the discourse function of contrast. In the corpus data, the total number of *-(n)un* occurrences used to convey contrast is 121. To better understand how *-(n)un* can mark contrast, let us look at an example.

(21) Guest: I think I am good at doing things that require physical strength.

(전 몸으로 하는, 이렇게 체력이 요구되는 건 잘 하는거 같아요.)

DJ: (You) must like to take exercise then?

(운동 좋아하시는지요?)

Guest: *cohaha-ci-n* *ahn-nuntey*

like-ADZ-NUN not-but

cheylyek-i *coh-telako-yo*

physical.strength-NOM good-EM-DEC(HON)

‘(I) don’t like (it), but (my) physical strength is good.’

In the guest’s second utterance, *-(n)un* (in its contracted form) is attached to the adverbialized predicate *cohahaci* ‘to like’. First, note that the *-(n)un*-marked phrase expresses neither aboutness nor framehood. Also, note that by the use of *-(n)un*, contrast occurs between what is inferred by the DJ (i.e. ‘If one is good at doing things that require physical strength, one likes to take exercise’) and what is conveyed by the guest. That is, under the DJ’s assumption, if one does not like to take exercise, she must not be good at doing things that require physical strength. However, the guest

contrasts her utterance with this inference, and the role of *-(n)un* here serves exactly to evoke this contrast.

3.4.2.4. Simple Emphasis

The last discourse function to be considered is special in that, as far as I know, it has never been discussed by previous studies on *-(n)un*. The results of the corpus analysis show that *-(n)un* can be used to mark neither topic/frame nor contrast but to simply emphasize the denotation of the phrase to which *-(n)un* is attached. The total number of *-(n)un* occurrences that is used to convey this function is 79. The first example of this case is shown in (22), where a guest actress talks about how she overcame hardships in the past.

- (22) Guest: (I) endured through (all the hardships) for about [5 years]-**un**, thinking that (I) would never come off the stage until (I) hear people say that (I) am a good actress.
(잘 한단 소리를 꼭 듣고 그만 뒤야지라면서 한 5 년은 버텼던거 같아요.)

First, it is evident that the *-(n)un*-marked phrase (5 years) is neither topic nor frame. Also, as far as I can tell, *-(n)un* does not induce contrast at all in the given context. For instance, possible contrastive implicatures that can be generated by *-(n)un* above include ‘but not for 6 years’ and ‘but not less than 4 years’. However, these implicatures are not evoked at all in the above context; rather, what *-(n)un* does is to SIMPLY EMPHASIZE the duration of 5 years. The function of simple emphasis becomes clear when the sentence in which *-(n)un* occurs is compared to its *-(n)un*-less counterpart.

- (23) a. (I) endured through (all the hardships) for about 5 years, ...
b. (I) endured through (all the hardships) for about [5 years]-**un**, ...

Compared to *5 years* in (23a), where it is not *-(n)un*-marked, *5 years* in (23b) is definitely more emphasized. Again, note that the source of the emphasis is the difference in salience between the actual (extra) salience imposed by *-(n)un* and the normally expected salience (without *-(n)un*) of a single referent (i.e. ‘5 years’), but not the difference in salience between one referent and the other referents in the discourse context.

Another clear example of *-(n)un*’s expressing simple emphasis is shown in (24), where a guest actress introduces a play in which she acts. The play is based on a soap opera that was very popular in Korea.

- (24) Guest: Since this work is on the stage for the first time as a play, it feels [a little]-**un** like (this) is an original play.
 (이게 약간은 사실 연극으로 초연이기 때문에 창작극같은 느낌이 있는데)

In this context, the guest actress, by using *-(n)un*, does not indicate contrast between, for instance, ‘a little’ and ‘much’. Again, what she does is to simply emphasize the meaning of ‘a little’.⁸⁹

Furthermore, *-(n)un* marks simple emphasis when it is attached to a phrase that inherently denotes contrast.

- (25) a. Guest: But [first of all]-**un**, (I) want to take a rest a little more.
 (근데 일단은 좀, 조금 더 쉬고 싶어요.)
 b. DJ: [Rather than perplexing (me)]-**nun** (by being a bad speaker), (you) speak very well, and ...
 (전혀 곤혹스럽다기보다는 너무 말씀을 잘 해주시고, ...)

⁸⁹ This seems to correspond to phonetic stress in English: “it feels a LITTLE like ...”. I am grateful to Laurence Horn for providing the English example.

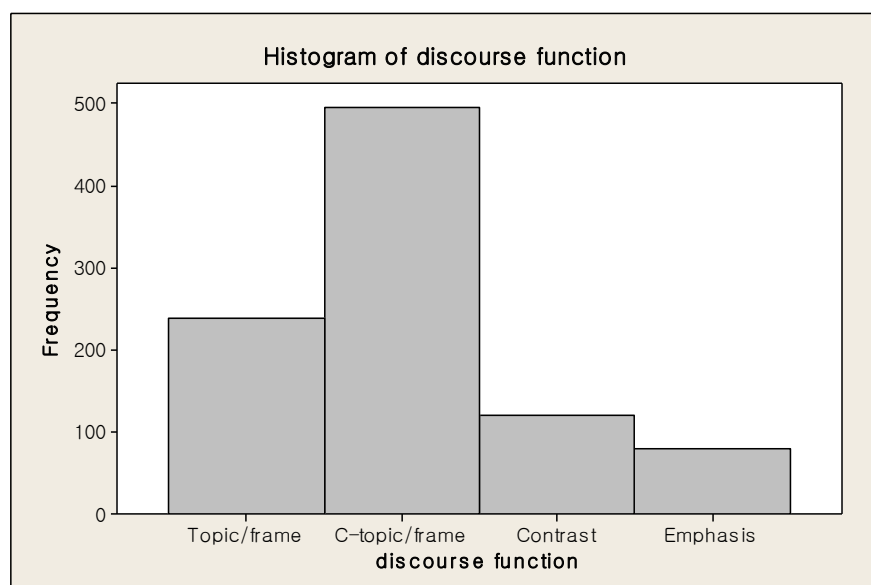
What is shared by the *-(n)un*-marked phrases in (25) is that both of them are inherently contrastive, which is shown by the fact that they are interpreted contrastively even without *-(n)un*. That is, ‘first of all’ contrasts with ‘second’, ‘third’, etc. and ‘rather than X’ with what follows it.

It is important to note that when *-(n)un* is claimed to mark contrast, it means that it gives rise to a contrast which would be impossible if *-(n)un* were not there. In this respect, what *-(n)un* in (25) does is not to mark contrast but to emphasize the already existing contrast by making the meaning of the *-(n)un*-marked phrases more salient.

3.4.3. Meaning of *-(n)un* as Imposing Salience

Before proposing the meaning of *-(n)un*, I summarize the results of the corpus analysis. First, a summary of the discourse functions marked by *-(n)un* is shown in Figure 1. (The label ‘C-topic/frame’ means ‘Contrastive topic/frame’.)

Figure 1. Discourse Functions of *-(n)un*

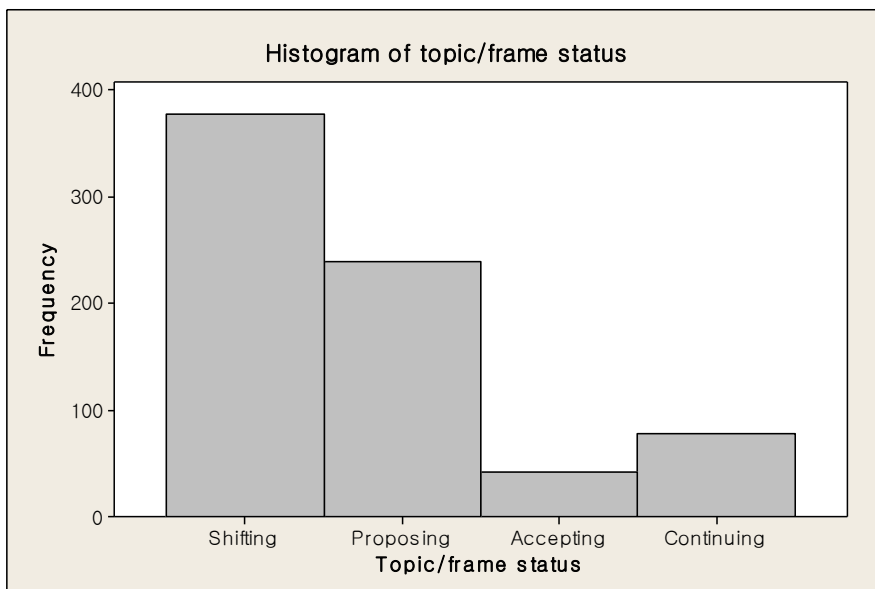


Again, the total number of $-(n)un$ occurring in the corpus data is 933. Among the 933 occurrences of $-(n)un$, the vast majority, that is, 854 of them are used to mark topic/frame, contrast, or both, which captures our intuition that $-(n)un$ marks either topic/frame or contrast.

However, it has to be emphasized that there still exist 79 occurrences of $-(n)un$ that neither marks topic/frame nor contrast but simply emphasize the referent of the $-(n)un$ -marked element. Thus, to simply claim that $-(n)un$ is a topic- and/or contrast-marker is incorrect.

Next, let us look at the subtypes of (contrastive) topic/frame marked by $-(n)un$, which are summarized in Figure 2.

Figure 2. Subtypes of (Contrastive) Topic/Frame Marked by $-(n)un$



Here, we can see that when $-(n)un$ marks (contrastive) topic/frame, it is mostly used to shift or propose a topic/frame. As discussed above, using $-(n)un$ to accept a proposed topic is predicted to rarely occur, since it is less economical than covertly

accepting it. Thus, the fact that the number of *-(n)un* occurrences that are used to accept a proposed topic is so small is not surprising.

What is really puzzling in Figure 2 is that 1) *-(n)un* is seldom used with continuing topic/frame, and that 2) when it does, it gives rise to a pragmatic effect (i.e. either simple emphasis or contrast). The number of *-(n)un* occurrences that are used to mark (contrastive) continuing topic/frame is 78. Even among these, 69 occurrences of *-(n)un* are used to mark contrastive topic/frame, which is understandable considering the contrast-inducing function of *-(n)un*. That is, *-(n)un* is necessary for contrastive continuing topic/frame in order to indicate contrast (but not to mark the continuing nature of a topic/frame). Note that only 9 occurrences of *-(n)un* are attached to phrases whose discourse function is non-contrastive continuing topic/frame, and in all these cases, the referents of the *-(n)un*-marked expressions are more emphasized compared to the same referents of the *-(n)un*-less counterparts.⁹⁰

Now it is clear that the standard view on *-(n)un* that treats it as a mere topic-and/or contrast-marker is not tenable. Most importantly, this view cannot account for 1) why *-(n)un* can mark not only topic/frame and contrast but (simple) emphasis, 2) why it is rarely used to mark non-contrastive continuing topic/frame, and 3) why it causes a special pragmatic effect of emphasis when it marks non-contrastive continuing topic.

All these puzzling facts about *-(n)un* are naturally explained if the meaning of *-(n)un* is to IMPOSE SALIENCE on a referent. First, the function of simple emphasis,

⁹⁰ It is possible that the number of *-(n)un* occurrences marking non-contrastive continuing topic/frame is bigger or smaller than suggested here. In fact, in several cases I was not sure of whether *-(n)un* marks contrastive or non-contrastive continuing topic/frame. However, the number of these ambivalent cases is not enough to crucially affect the validity of the proposed analysis.

which is incompatible with the standard view, is consistent with the proposed analysis of *-(n)un*, which does not limit its function to topic- and contrast-marking. Moreover, this function is well motivated by the meaning of imposing salience. That is, as discussed above, the source (or the nature) of emphasis is the greater salience of a referent than expected, which is exactly what *-(n)un* does under the proposed analysis.

Second, the fact that *-(n)un* is mostly used to shift or propose but rarely to continue a topic/frame is exactly predicted under the current analysis of *-(n)un*. In order to introduce a new topic/frame (either by shifting or proposing), one must make a referent the center of attention in the discourse. This can be done by increasing salience of the referent. In contrast, continuing a topic/frame does not require this process, for the topic/frame is already in the focus of attention.

Lastly, the pragmatic effect of simple emphasis caused by *-(n)un* that is attached to non-contrastive continuing topic/frame naturally follows from the meaning of *-(n)un* proposed here. Since the meaning of *-(n)un* is to impose salience on a referent, it is expected to give rise to the effect of emphasis when it marks non-contrastive continuing topic/frame, which is already salient enough.

To sum up, the meaning of *-(n)un* is not to mark topic and/or contrast. Topicality and framehood, as discussed in Chapter 2, are only derived properties arising from the interaction of the meaning of *-(n)un* and the semantic type of *-(n)un*-marked phrases. Contrast is also just one possible pragmatic effect caused by the use of *-(n)un*.⁹¹ The meaning of *-(n)un* that naturally accounts for all its discourse functions is to impose salience.

⁹¹ The nature of contrast induced by *-(n)un* will be discussed in more detail in Chapter 4.

3.4.4. Further Support

In this subsection, I will provide three more pieces of evidence that support the proposed analysis of *-(n)un* as a linguistic device to impose salience.

3.4.4.1. Root Phenomenon

Root phenomena are “a range of syntactic phenomena [e.g. English topicalization]⁹² whose application is restricted to root clauses⁹³ and embedded clauses with root properties” (Haegeman 2004: 158). It has not been pointed out by previous studies that *-(n)un* is also constrained by the root restriction.⁹⁴ For instance, the examples in (26) show that *-(n)un* is not felicitous in *if*-clauses regardless of discourse context.

(26) a. ???[manyak-ey John-**un** Mary-lul manna-myen], ...

if-DAT John-NUN Mary-ACC meet-if

‘If John meets Mary, ...’

b. ???[manyak-ey John-i Mary-**nun** manna-myen], ...

if-DAT John-NOM Mary-NUN meet-if

‘If John meets Mary, ...’

c. ???[manyak-ey Mary-**nun** John-i manna-myen], ...

if-DAT Mary-NUN John-NOM meet-if

‘If John meets Mary, ...’

d. ???[manyak-ey John-i Mary-lul nayil-**un** manna-myen], ...

if-DAT John-NOM Mary-ACC tomorrow-NUN meet-if

‘If John meets Mary tomorrow, ...’

⁹² Previous studies on English topicalization as a root phenomenon include Rutherford (1970), Emonds (1970, 2004), Hooper & Thompson (1973), Andersson (1975), Green (1976), Davison (1979); Haegeman (1984, 1991, 2002, 2004), Maki et al. (1999), and Heycock (2002).

⁹³ A root clause is a main clause which is not embedded.

⁹⁴ If the current view of *-(n)un* as a root phenomenon is on the right track, Haegeman’s (2004) definition of root phenomena as “a range of syntactic phenomena” is too restricted, since the use of *-(n)un* is not a syntactic but morphological phenomenon.

As shown in (26), *-(n)un* is unacceptable in *if*-clauses regardless of the grammatical function ((26a) vs. (26b) vs. (26d)) or the syntactic position ((26b) vs. (26c)) of the phrase to which it is attached.

Other examples of *-(n)un* that are unacceptable in non-root clauses are shown in (27)-(28). In (27), *-(n)un* is used in purposive clauses, while in (28), it is used in durative clauses.⁹⁵

(27) a. ???John_i-i [e_i Mary-**nun** manna-ki wihay], ...
 John-NOM Mary-NUN meet-NMZ in.order.to
 ‘In order to meet with Mary, John ...’

b. ???John_i-i [e_i Mary-lul yekise-**nun** manna-ki wihay], ...
 John-NOM Mary-NUN here-NUN meet-NMZ in.order.to
 ‘In order to meet with Mary here, John ...’

(28) a. ???[John-i Mary-**nun** manna-nun tongan], ...
 John-NOM Mary-NUN meet-ADN while
 ‘While John (is/was/will be) meeting with Mary, ...’

b. ???[John-i Mary-lul yekise-**nun** manna-nun tongan], ...
 John-NOM Mary-ACC here-NUN meet-ADN while
 ‘While John (is/was/will be) meeting with Mary here, ...’

However, it is important to note that the root restriction related to *-(n)un* is not so simple. For instance, unlike in *if*-clauses, a *-(n)un*-marked phrase can be used in embedded durative clauses if it is located sentence-initially.

⁹⁵ In (27), I did not provide an example with a *-(n)un*-marked subject, because the construction is similar to the infinitival phrase of English control constructions (e.g. *try to*, *promise to*) and does not usually contain an inner subject.

- (29) a. John-**un** Mary-lul manna-nun tongan, ...
 John-NUN Mary-ACC meet-ADN while
 ‘While John (is/was/will be) meeting with Mary, ...’
- b. Mary-**nun** John-i manna-nun tongan, ...
 Mary-NUN John-NOM meet-ADN while
 ‘While John (is/was/will be) meeting with Mary, ...’
- c. ecey-**nun** John-i Mary-lul manna-nun tongan, ...
 yesterday-NUN John-NOM Mary-ACC meet-ADN while
 ‘While John was meeting with Mary yesterday, ..’

As shown in (29), if a *-(n)un*-marked element is clause-initial, it is acceptable in a durative clause no matter what its grammatical function is. Notice that, in this case, the information-structural status of the *-(n)un*-marked phrases is necessarily contrastive topic/frame. For instance, (29a) has to be followed by a clause whose subject is a CT that is contrasting with the subject of (29a).

The complexity of the root phenomenon shown by *-(n)un* is furthered by the fact that the distinction between so-called “central” and “peripheral” adverbial clauses does not apply to *-(n)un*. Haegeman (2004) distinguishes the two types of adverbial clauses in order to explain the fact that English topicalization is possible only in some types of adverbial clauses. According to her, central adverbial clauses are “fully integrated in the host clause and are interpreted as modifying the event expressed in the associated clause” (Haegeman 2004: 161), whereas peripheral adverbial clauses are “less tightly connected to the host clause ... and serve to provide the discourse frame against which the proposition expressed in the host clause is evaluated” (Haegeman 2004: 161).

Based on the distinction between the two types of adverbial clauses, Haegeman accounts for the difference in acceptability of the two sentences in (30), claiming that in (30a), the topicalization is situated in a central adverbial clause which

refers to an event that would be a sufficient cause for the event in the main clause to be realized, whereas in (30b), the *if*-clause is a peripheral adverbial clause that expresses a premise serving as the privileged context for the processing of the main clause.

(30) a. *If these exams you don't pass you won't get the degree.

(Haegeman 2004: 159)

b. If these problems we cannot solve, there are many others that we can tackle immediately.

(Haegeman 2004: 160)

Although the central vs. peripheral distinction might be useful for explaining the root restriction of English topicalization, it is not so helpful for understanding the distribution of *-(n)un*, which is shown by the fact that the Korean counterparts of the examples in (30) with the topicalized phrases being *-(n)un*-marked are all unacceptable. Moreover, the fact that all the *if*-clauses in (26) are unacceptable by themselves implies that they are unacceptable regardless of whether they are central or peripheral, which further supports that the distinction between the two types of clauses does not play a role in explaining the root phenomenon of *-(n)un*.

Despite the complex nature of the root restriction on the distribution of *-(n)un*, one important generalization arises if the discourse functions of *-(n)un* are taken into account. That is, the sensitivity to the root restriction depends on the discourse functions of *-(n)un*, which is summarized in Table 2.

Table 2. Sensitivity of Discourse Functions of *-(n)un* to Root Restriction

	Sensitivity to root restriction
Non-contrastive topic/frame	Totally sensitive
Contrastive topic/frame	Partially sensitive
Contrast	Partially sensitive
Simple emphasis	Not sensitive

First, if *-(n)un* marks non-contrastive topic/frame, it is categorically prohibited in non-root clauses. For instance, note that the *-(n)un*-marked phrases in (29) cannot be interpreted to be non-contrastive topic/frame.

If *-(n)un* is used to express contrastive topic/frame or contrast, it is allowed in some non-root clauses as shown in (29) above.⁹⁶ Other types of non-root clauses that allow contrastive topic/frame and contrast include *because*-clauses and adversative clauses (e.g. *-n panmyen* ‘whereas’, ‘while’).

⁹⁶ Also, it is important to note that *-(n)un* for contrastive topic/frame and contrast is not restricted to root clauses if the alternatives are exhausted within a non-root clause.

- (i) a. *manyak-ey John-i Mary-nun manna-ko/ciman*
 if-DAT John-NOM Mary-NUN meet-and/but
Lee-nun an manna-myen, ...
 Lee-NUN not meet-if
 ‘If John meets with Mary and/but does not meet with Lee, ...’
- b. *John_i-i [e_i Mary-nun manna-ko Lee-nun an manna-ki wihay], ...*
 John-NOM Mary-NUN meet-and Lee-NUN not meet-NMZ in.order.to
 ‘In order to meet with Mary but to not meet with Lee, John ...’

Both (ia) and (ib) are examples that have been shown to be unacceptable when only one of the alternatives is introduced in the clause (cf. (26a) and (27a)). Although only two examples are introduced in (i), all the unacceptable contrastive topic/frames and contrastive elements marked by *-(n)un* become acceptable when the alternatives are exhausted within a non-root clause.

Lastly, simple emphasis marked by *-(n)un* seems relatively free from the root restriction. That is, *-(n)un* for simple emphasis, unlike *-(n)un* marking (contrastive) topic/frame or contrast, is acceptable in non-root clauses.

- (31) a. *manyak-ey John-i konan-ul han o-nyen-un*
 if-DAT John-NOM hardship-ACC about five-year-NUN
kyenti-myen, ...
 endure-if
 ‘If John endures hardships for about FIVE years, ...’
- b. *manyak-ey i cakphwum-i yakkan-un choyen kathu-myen, ...*
 if-DAT this work-NOM a.little-NUN original.play seem-if
 ‘If it feels A LITTLE like that this work is an original play, ...’

As shown in the examples in (31), which are slightly modified versions of *-(n)un*-containing sentences (22) and (24), *-(n)un* is acceptable in *if*-clauses if it is used for simple emphasis.⁹⁷

For the purpose of this subsection, I will focus on the fact that non-contrastive topic/frame marked by *-(n)un* is a root phenomenon. The reason is that if *-(n)un* were a mere topic marker, as the standard view of *-(n)un* assumes, there would be no reason that the distribution of *-(n)un* is constrained by the root restriction when it marks non-contrastive topic/frame. For instance, as shown in (32), *if*-clauses can have a non-contrastive topic in them without any problem.

⁹⁷ That simple emphasis is free from the root restriction also supports the proposed analysis of *-(n)un*, which distinguishes simple emphasis from contrastive topic/frame or contrast in classifying discourse functions of *-(n)un*.

- (32) a. John-un chwukkwu-lul cal hay. kulayse manyak-ey (John-i)
 John-NUN soccer-ACC well do. So if-DAT (John-NOM)
 chwukkusenswu-ka toy-myen, ...
 soccer.player-NOM become-if
 ‘John likes soccer. So if (John) becomes a soccer player, ...’
- b. Mary-nun khi-ka khe. kulayse manyak-ey khi khu-n
 Mary-NUN height-NOM tall. So if-DAT height tall-ADN
 yeca-lul coha-ha-nun namca-ka (kyay-lul) sakwi-myen, ...
 woman-ACC like-do-ADN man-NOM she-ACC go.out.with-if
 ‘Mary is tall. So if a man who likes a tall woman goes out with (her), ...’

In (32a) and (32b), the parenthesized phrases in the *if*-clause are guaranteed to be (continuing) topics by the previous sentence. What is crucial is that they are totally acceptable in the *if*-clauses. Thus, the root phenomenon of non-contrastive topic/frame marked by *-(n)un* seriously weakens the standard assumption that *-(n)un* is a mere topic marker.

In contrast to the standard view, the proposed analysis of *-(n)un* is consistent with the descriptive generalization that non-contrastive topic/frame marked by *-(n)un* is constrained by the root restriction. It is important to note that *-(n)un* is not used to continue a topic/frame but to propose or shift a non-contrastive topic/frame. Shifting and proposing a topic/frame are the same in that both introduce a new sentence topic/frame.

Importantly, when a new sentence topic/frame is introduced, it must be sentence-initial and separated from the rest of the sentence (i.e. the comment), thus forming the typical [topic-comment] structure.⁹⁸ This structural constraint for

⁹⁸ Continuing topic does not have to be syntactically constrained by the [topic-comment] structure. That is, a continuing topic can be located anywhere in a sentence as shown in (32). English is the same as Korean in this respect.

topic/frame introduction is functionally well motivated. That is, for efficient and coherent communication, it would be undesirable to start with commenting on something before even introducing it. As will be discussed below, this is why topic/frame introduction is only possible in sentence-initial position in Korean (and probably all other languages⁹⁹).

Introducing a sentence topic/frame in a subordinate clause violates this structural constraint as shown in (33). In (33a), the syntactic constraint on topic/frame introduction is introduced, where X is the topic/frame and Y is the comment. In (33b), the syntactic structure of topic/frame introduction in a subordinate clause is represented.

(33) a. Syntactic constraint on topic/frame introduction

[S [NP/PP X]_{Topic/frame} [VP/S¹⁰⁰ Y]_{Comment}]

b. Topic/frame introduction in subordinate clause

[S [Ø]_{Topic/frame} [VP/S ... [Subordinate clause ... [NP/PP X]_{Topic/frame} ...]...]_{Comment}]

As shown in (33b), if a sentence topic/frame is introduced in a subordinate clause, it violates the constraint in (33a), for the topic is located within the comment.

Note that the surface position of the topic is not relevant here. Even if the introduced topic/frame is sentence-initial, if it is structurally within a subordinate clause, it is unacceptable. This explains why the topics in (29), despite their sentence-

(i) A: What about John? Who called him?

B: Bill called him.

In both (iA) and (iB), *him* is the topic and it is located sentence-finally. It would be interesting to find a language in which a continuing topic has its own syntactic position.

⁹⁹ For instance, the functional motivation for English left-dislocation, which is claimed to be mainly used for topic introduction (Geluykens 1992), is well explained in this way.

¹⁰⁰ Here, the node S is needed for clausal predicates in multiple subject constructions (MSCs).

initial position, cannot be non-contrastive topics. That is, since they are part of the durative subordinate clauses, they are not in the right structural position even though they are superficially sentence-initial.¹⁰¹

Bianchi & Frascarelli (2010) also recognize that newly introduced non-contrastive topic (their Aboutness-shifting topic), but not continuing topic (their Given topic), shows a root phenomenon. However, their analysis is different from what is proposed here. According to them, topic introduction is impossible in non-root clauses because they “must be hosted by (or conjoined to) clauses endowed with illocutive force¹⁰²” (Bianchi & Frascarelli 2010: 82). The reason why newly introduced topics must be within a clause with illocutive force is captured by their Interface Root Restriction.

(34) Interface Root Restriction (Bianchi & Frascarelli 2010: 82)

Information structure phenomena that affect the conversational dynamics (CG [common ground] management) must occur in clauses endowed with illocutive force that implement a conversational move, i.e. a nonreported speech act.

That is, Bianchi & Frascarelli claim that topic introduction affects the CG management in that it indicates which file card (in Heim’s (1982) sense) will be modified by the asserted proposition. This conversational move must be made in a clause with illocutive force, because every conversational move, they claim, is implemented by a clause with illocutive force.

¹⁰¹ Note that a *-(n)un*-marked phrase is necessarily interpreted as topic/frame of a subordinate clause (but not of a main clause) if it is in clause-initial position as shown in (29). Although contrastiveness is included, the clause-initial *-(n)un*-marked element gets aboutness or framehood, since it conforms to the syntactic constraint WITHIN THE SUBORDINATE CLAUSE.

¹⁰² It is not clear whether their illocutive force is the same as the traditional notion of illocutionary force. Here, I assume that they are the same.

One crucial problem with Bianchi & Frascarelli's analysis is that it cannot explain why contrastive topics/frames do not show the same root constraint that topic introduction does. According to Krifka (2007), who introduces the distinction between CG content and CG management, CTs "indicate a strategy of incremental answering in the CG management" (Krifka 2007: 44). If contrastive topics/frames participate in CG management, as claimed by Krifka, it is predicted that they should also exhibit the same root constraint.

Bianchi & Frascarelli avoid this problem by claiming that CTs, unlike topic introduction, do not participate in CG management. Contrary to Büring (2003), who argues that CT breaks down a superquestion into distinct subquestions, they propose that it "break[s] down a proposition into a conjunction of linguistically simpler entailed propositions" (Bianchi & Frascarelli 2010: 73). Then, they argue that this is why CTs do not have an impact on CG management in themselves; that is, since CTs are just restricted to clauses that denote propositions, their interpretation does not require a necessary association with illocutive force.

Although their analysis of CT might in principle be workable, they do not provide any convincing evidence that support their claim that CTs work on the level of proposition (but not lower or higher than that). Without empirical support, not only their analysis of CT but any other claims based on it (including their explanation of why CT is not a root phenomenon) remain unjustified.

Moreover, their definition of CG management is too restricted. They define CG management as "the sequence of CONVERSATIONAL MOVES [emphasis added] performed by participants (assertions, questions ...) that determines the way in which the CG content develops, and the information about these conversational moves that is reflexively stored in the CG" (Bianchi & Frascarelli 2010: 50).

By limiting CG management to include only conversational moves, they cannot capture other pragmatic uses of expressions that must be treated as CG management. For instance, it has been widely known that the choice of referring expressions is one of the most important aspects of information packaging for efficient communication (Arnold 1998). Because which referring expression is used does not affect the truth condition of a sentence (*he* vs. *John*), it must be treated to be part of CG management rather than CG content. However, saying *he* instead of *John*, for instance, can hardly be a conversational move however it is defined.

Therefore, it is problematic to account for the root restriction of topic introduction by resorting to the notion of CG management. Not every occurrence of CG management is a root phenomenon. Rather, the proposed analysis based on the functionally motivated structural constraint in (33a) naturally explains the root restriction of topic introduction. The generalization that topic introduction is always done in a clause with illocutive force also naturally follows from this syntactic constraint.

To sum up, the root restriction of non-contrastive topic/frame marked by *-(n)un* strongly supports the current analysis. Note that not any non-contrastive topic/frame shows the root restriction. Only the INTRODUCTION of non-contrastive topic/frame is a root phenomenon, the source of which is the functionally motivated syntactic constraint that requires a newly introduced topic/frame to be separated from and precede the comment. The standard view of *-(n)un*, which takes it as a mere topic marker, cannot capture this generalization. But the proposed analysis is totally consistent with it, since one of the main functions of *-(n)un* is to introduce a new topic/frame.

3.4.4.2. Structurally Determined Discourse Functions of *-(n)un*

The second piece of evidence for the current analysis comes from the fact that it can naturally capture two important descriptive generalizations. The first generalization is that a *-(n)un*-marked element cannot be a topic if it is not in clause-initial position. Several attempts have been made to explain this generalization (e.g. K.-s. Kim 1990; H.-W. Choi 1996; C.-h. Han 1998), but they are not without problems. Here, I will concentrate on H.-W. Choi's (1996) analysis and discuss its drawbacks.¹⁰³

Working under the Optimal Syntax (OT-LFG) framework, H.-W. Choi tries to explain the generalization with two phrase-structural and two information-structural constraints and a ranking between them. The phrase-structural constraints are shown in (36), the information-structural constraints in (37), and the ranking in (38) below.

(36) CANON¹⁰⁴ (H.-W. Choi 1996: 150)

- a. CN1: SUBJ should be structurally more prominent (e.g. 'c-command') than non-SUBJ functions.
- b. CN2: Non-SUBJ functions align reversely with the c-structure according to the functional hierarchy.
(SUBJ > D.OBJ > I.OBJ > OBL > ADJUNCT)

(37) Information structuring constraints (H.-W. Choi 1996: 215)

- a. NEW: A [-New]¹⁰⁵ element should precede a [+New] element.
- b. PROM: A [+Prom]¹⁰⁶ element should precede a [-Prom] element.

¹⁰³ See H.-W. Choi (1996) for a critique of K.-s. Kim's (1990) and C.-h. Han's (1998) analyses.

¹⁰⁴ CANON is abbreviation for canonical word order.

¹⁰⁵ The feature [New] refers to relational newness but not referential newness.

¹⁰⁶ The feature [Prom] refers to 'discourse prominence', which she defines as the "property of being singled out among potential alternatives" (H.-W. Choi 1996: 107)

(38) Constraint ranking (H.-W. Choi 1996: 219)

PROM >> {NEW, CANON}

In addition to the constraints, H.-W. Choi, adopting Vallduví's (1990, 1994) theory of information structure, posits three primitives of information structure: link (or topic), focus, and tail. She defines topic as [-New, +Prom], focus as [+New, -Prom], and tail as [-New, -Prom]. Also, she characterizes contrast and contrastive topic/frame (her 'contrastive focus') as [+New, +Prom].

With this theoretical machinery, she provides an account of why a *-(n)un*-marked phrase has to be interpreted as (contrastive) topic (but not contrast) if it is clause-initial. That is, because of the constraints PROM and NEW, topic (i.e. [-New, +Prom]), if it exists in a sentence, must precede any other information structure categories. Let us look at one example that she provides.

(39) A: What about Swuni? Who among her friends did she meet?

B: *Inho-lul Swuni-nun manna-ss-ta.

Inhoe-ACC Swuni-NUN meet-PAST-DEC

'Swuni met Inho.'

(H.-W. Choi 1996: 221)

The unacceptability of (39B) is well explained by PROM and NEW. That is, since the subject NP, *Swuni-nun*, is the topic with [-New] and [+Prom], it has to precede the object, *Inho-lul*, which is the focus and thus has [+New] and [-Prom].

Although her analysis can account for data like (39) and the generalization that clause-initial *-(n)un*-marked phrases are necessarily topics, it makes a wrong prediction on the linear order of tail and contrast (her contrastive focus). According to the OT account illustrated above, tail ([-New, -Prom]) cannot precede contrast

([+New, +Prom]) since PROM outranks NEW. Indeed, H.-W. Choi shows two examples in which a tail follows a contrast and thus, she argues, is unacceptable. One of them is shown in (40) below.

(40) A: chinkwu-tul cwung nwu-ka Inho-lul manna-ss-ni?
friend-PLU among who-NOM Inho-ACC meet-PAST-INT
'Who among his friends met Inho?'

B: *Inho-lul Swuni-nun manna-ss-ta.
Inho-ACC Swuni-NUN meet-PAST-DEC
'Swuni met Inho.'

(H.-W. Choi 1996: 222)

According to H.-W. Choi, *Inho-lul* is a tail ([-New, -Prom]) and *Swuni-nun* is a contrastive focus ([+New, +Prom]). The unacceptability thus naturally follows from the ranking of the two constraints (i.e. PROM >> NEW).

Two problems exist with this example. First, with the context given in (40), the information-structural status of *Inho-lul* as tail is not clear. It could be a topic depending on context. For instance, if (40A) is followed by the sentence '*What about Inho?*' the phrase is definitely a topic. Thus, we need an example in which *Inho-lul* is guaranteed to be a tail. Second and more importantly, (40B) is acceptable regardless of whether it is a topic or tail, at least to me and one other native Korean speaker whom I consulted with.

In (41), I provide an example in which topic, focus, and tail all clearly exist. The example is slightly modified from Vallduv í& Engdahl's (1996) example which they introduce to show the necessity of distinguishing topic and tail.

- (41) A: What about John? What did he give to Mary?
 B: John-i Mary-eykey ppang-un cwe-ss-e.
 John-NOM Mary-DAT bread-NUN give-PAST-DEC
 ‘John gave bread to Mary (e.g. but not milk).’
 B’: ??John-i ppang-un Mary-eykey cwe-ss-e.
 John-NOM bread-NUN Mary-DAT give-PAST-DEC
 ‘John gave bread to Mary.’

(41A) makes it clear that *John* is the topic and *to Mary* is the tail. As shown in (41B), the contrast is preceded by the tail *Mary-eykey* ‘to Mary’, and the sentence is totally acceptable. On the other hand, if the tail follows the contrast as in (41B’) the acceptability of the sentence decreases significantly.¹⁰⁷ Thus, the (un)acceptability of (41B) and (41B’) is just the opposite of the prediction made by H.-W. Choi’s OT analysis.

Rather than relying on the empirically falsified account, I propose that the meaning of *-(n)un* (i.e. imposing salience) and the structural constraint in (33a), which is repeated below, naturally explain why a *-(n)un*-marked element can be (contrastive) topic/frame only in clause-initial position.

- (33) a. Syntactic constraint on topic/frame introduction
 [S [NP/PP X]_{Topic/frame} [VP/S Y]_{Comment}]

A *-(n)un*-marked phrase cannot be a topic in non-clause-initial position simply because it violates the constraint (33a). Again, this simple account is possible because under the proposed view of *-(n)un*, it is not a mere topic or contrast marker. The

¹⁰⁷ (41B’) would be acceptable if it is uttered in a context where *Mary-eykey* is a focus. For instance, it could be a felicitous answer to questions like ‘What about the bread? To whom did John give the bread?’.

meaning of *-(n)un*, which is to impose salience, allows only topic/frame introduction (but not continuation) and contrast/emphasis, and the structural constraint interacts with this meaning to give rise to one discourse function or another.

The structural constraint also naturally captures the second empirical generalization, which was already introduced in 3.1.; that is, only *-(n)un*-marked non-subjects (but not subjects) in base position show a strong tendency to induce contrast. Given that the three main functions of *-(n)un* are 1) to introduce a new (contrastive) topic/frame, 2) to contrast, and 3) to simply emphasize, and that topic introduction is subject to the syntactic constraint in (33a), a *-(n)un* that is attached to any non-sentence-initial element cannot be used for a newly introduced topic/frame but only for either contrast or simple emphasis. And as shown in the results of the corpus analysis, the function of simple emphasis does not occur as often as contrast. Therefore, the proposed meaning of *-(n)un* and the structural constraint account for the asymmetry between *-(n)un*-marked subjects and non-subjects in base position in terms of their tendency to be used for topicality and contrast.

3.4.4.3. Pure Concessivity Conveyed by *-(n)un*

The last piece of evidence that further supports the proposed analysis of *-(n)un* comes from the fact that non-clause-initial *-(n)un* can be used to convey concessivity without contrast depending on the context and the speaker's intention. This would be hard to explain if the function of *-(n)un* is assumed to be just topic- and/or contrast-marking. An example of pure concessivity made possible by *-(n)un* is shown below, which is from the corpus data.

(42) DJ: And please call me if you need a guest singer for your show.

(그리고 혹시 행사 하시다가 가수 필요하시면 연락주세요.)

Guest: I don't know if I could do so, because you're so expensive.

(엽사마님 너무 개런티가 비싸가지구 제가 어떻게 해야 될 지
모르겠지만.)

DJ: cey-ka com kaylenthika com sangtangha-ki-n hay-yo
I-NOM little guarantee-NOM little worthy-NMZ-NUN do-DEC
'(I concede that) I am expensive.'

Guest: Right?

DJ: Yes.

In the context given in (42), it is clear that *-(n)un* in the DJ's second utterance does not indicate any contrast. He does not, for instance, intend to contrast the property of his being expensive to any of his other properties. Rather, what he wants to convey is just to admit (or concede) what the guest has just uttered previously.¹⁰⁸

This pure concessivity needs to be distinguished from concessivity containing contrast. That is, *-(n)un* can also induce concessivity that comes with contrastiveness. An example of this sort is introduced in (31) of Chapter 2, which is repeated below.

(31) A: Did John and Kim meet Lee?

B: Kim-**un** manna-ss-e.

Kim-NUN meet-PAST-DEC

'Kim met (Lee).' ('But John didn't.' or 'But I don't know about Lee.')

¹⁰⁸ As discussed in Chapter 2, concessivity can be divided into multiple subtypes. One type of concessivity is provided by Horn (1991), where he characterizes concession/affirmation as "I concede P and affirm Q, where Q may follow logically from P but contrasts rhetorically with it" (Horn 1991: 325). The concessivity shown in (42), on the other hand, can be characterized simply as 'I concede P'. The only requirement for this notion of concessivity is that P be asserted by the other interlocutor previously. A different type of concessivity conveyed by *-(n)un* will be discussed in Chapter 4.

As already discussed in Chapter 2, it is evident that *-(n)un* in this case not only conveys concessivity but also a contrastive implicature.

Turning back to the concessivity in (42), what is the relationship between *-(n)un* and concessivity? That is, how is the concessivity made possible? One logically possible answer is that the concessive meaning is lexically encoded by *-(n)un*. But this solution goes against the claim that only one *-(n)un* exists in the lexicon with the meaning of imposing salience. As argued above, positing multiple lexical items (or meanings) of *-(n)un* should be preferred only when a unified analysis is impossible.

In fact, the proposed analysis of *-(n)un* can naturally explain the concessivity. First, it is important to note that the VP of the concessivity-conveying sentence, which can be represented as [VP-*ki-nun hay*], is semantically peculiar in that the main predicate (i.e. *hay* ‘do’) is anaphoric; that is, it refers to the meaning of the inner VP that is nominalized by *-ki*. Interestingly, the anaphoric predicate can be replaced by the inner VP itself. For instance, *hay* in (42) is replaceable by *sangtanghay* as shown in (44).

- (44) *cey-ka com kaylenthika com sangtangha-ki-n sangtanghay-yo*
 I-NOM little guarantee-NOM little worthy-NMZ-NUN worthy-DEC
 ‘(I concede that) I am expensive.’

What would be the motivation for using *-(n)un* in (44)? It is already shown that no contrast is induced; hence, it is not for contrast. Also, aboutness is not derived either, for the sentence is about the DJ, which is the subject, but can hardly be taken to be about ‘to be worthy’. The only remaining discourse function possibly marked by *-(n)un* is simple emphasis. Whether the function of simple emphasis is consistent with

the concessivity, let us consider the motivation for emphasizing the meaning of the inner VP from the speaker's point of view.

One way of conceding what the other discourse participant asserted is to make the point of interest salient enough to be in the hearer's focus of attention and then overtly admit what she said about it. This is exactly what is being done by the construction [VP_i-*ki-nun ha*/VP_i]. In this construction, the point of interest is introduced by the inner VP, which in turn is put into the focus of attention by the use of *-(n)un*. Then, acknowledgement is provided by the main predicate, which is either the anaphoric predicate *-ha* or the repetition of the predicate of the inner VP.

Notice that the discourse function of *-(n)un* in this case is neither topic- nor contrast-marking. Rather, it must put the point of interest in the focus of attention in the hearer's mind. Crucially, this can be done by simply emphasizing what is at stake. Thus, the function of simple emphasis marked by *-(n)un* is not only consistent with but necessary for the concessivity shown above. To sum up, the concessivity in (42) and (44) is derived from the interaction of the proposed meaning of *-(n)un* and the peculiarity of the construction.

3.5. Formal Representation of Meaning of *-(n)un*

In the previous section, the meaning of *-(n)un* was claimed as that of imposing salience on a discourse referent. In this section, I will discuss how to understand and represent this meaning in a formal framework, so that the proposed meaning can be understood more explicitly. In doing so, I will work under the formal framework that posits multiple dimensions of meaning (e.g. Kaplan 1999; Potts 2003, 2007; Potts & Kawahara 2004; Gutzmann 2013).

Since as early as Frege (1897), it has been pointed out that human language has a means of conveying CONVENTIONAL NON-TRUTH-CONDITIONAL (or USE-CONDITIONAL in Gutzmann's (2013) terms) meaning. As convincingly shown by Gutzmann (2013), linguistic devices that express use-conditional (henceforth UC) meaning are of various kinds (e.g. affixes, words, syntactic processes, prosody).¹⁰⁹ Also, there are not one but multiple types of UC meaning, among which expressive meaning (in its narrow sense) seems to have received the most attention in formal semantics¹¹⁰.

In what follows, I will show that *-(n)un* is also a UC item (henceforth, UCI). In doing so, I will first introduce criteria for distinguishing UC meaning from truth-conditional (henceforth, TC) meaning. Then, five different types of UCI will be introduced, which will help determine the nature of *-(n)un* (as a UCI) in more detail. After that, I will introduce, based on Gutzmann, formal schemata for the class of UCI of which *-(n)un* is a member.

3.5.1. Characteristics of UC Meaning

According to Gutzmann (2013), a UCI can be defined as any lexical device that conveys “meaning that does not contribute to the truth conditions of a sentence, but instead, ... affect[s] the conditions in which the sentence can felicitously be uttered” (Gutzmann 2013: 33). In this respect, *-(n)un* is well qualified to be a UCI, since it only affects felicity but not the truth condition of a sentence.

¹⁰⁹ See Gutzmann (2013) for various examples of cross-linguistic devices that express UC meaning.

¹¹⁰ By expressives in its narrow sense, I mean, following Gutzmann (2013: 3-4), “expressions that express some emotional and evaluative attitude with a high degree of affectedness”.

- (45) a. John-un keki ka-ss-e
 John-NUN there go-PAST-DEC
 ‘John went there.’
- b. John-i keki ka-ss-e
 John-NOM there go-PAST-DEC
 ‘John went there.’
- c. John keki ka-ss-e
 John there go-PAST-DEC
 ‘John went there.’
- d. Ø keki ka-ss-e
 there go-PAST-DEC
 ‘(John) went there.’

In (45), all four sentences have the same truth conditions as shown in their translation.¹¹¹ Which sentence should be used entirely depends on pragmatic factors such as discourse context and the speaker’s intention.¹¹²

In addition to this definition of UCIs, Gutzmann, following (but slightly modifying) Potts (2007), proposes five more characteristics of UCIs. From what follows, I will introduce each criterion and discuss whether *-(n)un* satisfies it or not.

The first characteristic of UCIs is INDEPENDENCE, which requires UCIs to be independent of the TC (or descriptive) meaning. This property directly follows from the definition of UCI. From the characteristic of independence, Gutzmann derives four sub-characteristics as shown in (46).

¹¹¹ Note that the (surface) sentence in (45d) is not necessarily truth-conditionally identical to the others, since its subject is not necessarily understood as John. The subject of (45d) is understood as John only if context allows it.

¹¹² I investigate the pragmatic difference between *-i/ka* and *-(n)un* in next section.

(46) Independence (Gutzmann 2013: 38)

Expressive¹¹³ content contributes a dimension of meaning that is separate from the regular truth-conditional content.

- (a) Use-conditional content cannot be negated by ordinary negation.
- (b) Use-conditional content cannot be denied directly in dialogue.
- (c) Use-conditional content is not part of what is questioned by an interrogative.
- (d) Use-conditional content does not affect the descriptive content if not fulfilled.

Note that *-(n)un* satisfies all the four diagnostics of independence. First, an ordinary negation cannot deny the meaning of *-(n)un* as shown in (47).

- (47) a. John-un keki ka-ss-e
 John-NUN there go-PAST-DEC
 ‘John went there.’
- b. John-un keki an ka-ss-e
 John-NUN there not go-PAST-DEC
 ‘John did not go there.’

By putting *an* ‘not’ in (47b), which formally negates the sentence, one can select ‘John’, ‘there’, or ‘went’ as the target of negation, all of which contribute the TC content of the sentence. However, the negation cannot target the meaning of *-(n)un*, which is shown by the fact that even in (47b), the salience of John is increased so that John can be interpreted as the (contrastive) topic of the sentence.

Another way to employ negation to test the non-truth-conditionality of an expression is to directly deny a prior utterance in dialogue. That is, instead of trying to

¹¹³ The term ‘expressive’ should be replaced by ‘UC’. The reason why ‘expressive’ is used is that Gutzmann directly cites Potts (2007), who deals only with expressives but not other types of UCIs.

negate a UC content within a sentence, one can try to deny it in a response.

- (48) A: John-un keki ka-ss-e
John-NUN there go-PAST-DEC
'John went there.'
- B: ani-ya.
not-DEC
'No.'

Again, the negation in (48B) can focus on any expression that affects the truth condition of the sentence in (48A) (e.g. *John*, *went*, *there*). However, it is impossible to target *-(n)un*; that is, one cannot deny aboutness or topicality of John by saying *ani-ya* 'no' as in (48B).

According to the third subproperty of independence, UC content cannot be part of the content of a question. Example (49) shows that the meaning of *-(n)un* is not part of a question.

- (49) A: John-un keki ka-ss-ni
John-NUN there go-PAST-INT
'Did John go there?'
- B: Yes. But you're asking me about the wrong person.

As shown in (49B), one can provide a positive answer to a yes-no question but at the same time deny the UC meaning within the question, the topicality of John in this case. That is, committing to the descriptive content of a sentence does not commit oneself to the UC content of the preceding question.

Lastly, it is already shown in (45) that *-(n)un* passes the last diagnostic of independence, given that (45a) and (45c) are the same in terms of their TC meaning.

This clearly shows that *-(n)un* has nothing to do with the TC aspect of a sentence.

Let us now move on to the second characteristic of UCIs, NONDISPLACEABILITY. By saying that expressives are nondisplaceable, Potts (2007) means that they are always tied to the utterance situation itself. That is, UCIs “cannot be used to report on past events, attitudes, or emotions, nor can they express mere possibilities, conjectures, or suppositions” (Potts 2007: 169). The UC meaning is valid only for the speaker, at the time and place of utterance.

(50) Nondisplaceability (Gutzmann 2013: 39)

Expressives predicate something of the utterance situation.

It is important to note that not every occurrence of UCI passes the nondisplaceability criterion. For instance, an English UCI *bastard* is nondisplaceable in (51a) while it is displaceable in (51b).¹¹⁴

(51) a. That bastard Kresge was late for work yesterday. #But he’s no bastard today,
because today he was on time. (Gutzmann 2013: 41)

b. My father screamed that he would never allow me to marry that bastard
Webster. But I love him so much that I don’t care about my father’s opinion.
(Gutzmann 2013: 42)

Interestingly, *-(n)un* shows the same pattern as *bastard*. When it is used for topicality as in (52a), it shows nondisplaceability. However, when it is used for contrast as in (52b), it is displaceable.

¹¹⁴ The examples in (51) are based on Kaplan (1999) and Kratzer (1999).

- (52) a. John-un ecey keki ka-ss-e
 John-NUN yesterday there go-PAST-DEC
 ‘John went there yesterday.’
 ???But I’m not talking about John right now.
- b. John-i Mary-wa-nun celtay kyelhon an ha-keyss-ta-ko
 John-NOM Mary-with-NUN never marriage not do-will-DEC-COMP
 malhay-ss-e
 say-PAST-DEC
 ‘John said that he would never marry Mary.’
 But I know that there’s no one but Mary whom he wants to marry.

Instead of giving up the property of nondisplaceability, Gutzmann, following Potts (2007), proposes another property of UCIs in order to explain exceptional cases like (51b) and (52b). The property is called perspective dependence.

(53) Perspective dependence (Gutzmann 2013: 52)

Expressive content is evaluated from a particular perspective. In general, the perspective is the speaker’s, but there can be deviations if conditions are right.

By introducing the characteristic of perspective dependence, Gutzmann (and Potts) claim that UCIs are not actually displaced in cases like (51b) and (52b), even though they are not interpreted with respect to the speaker. Instead, according to him, UCIs can be evaluated from the perspective of an individual other than the speaker if the contextual conditions are met.

I will not go any further to show that perspective dependence is a valid property of UCIs. See Harris & Potts (2009a, 2009b) and Gutzmann (2013) for convincing evidence for its validity. Suffice it to say that *-(n)un* behaves exactly the same as prototypical UCIs like *bastard* with respect to nondisplaceability and

perspective dependence, which strongly supports the view of *-(n)un* that sees it as a UCI.

The fourth criterion for distinguishing between UCIs and non-UCIs is DESCRIPTIVE INEFFABILITY, which is defined in (54).

(54) Descriptive ineffability (Gutzmann 2013: 46)

It is impossible to paraphrase expressive content using only descriptive expression without changing the modus of expressing.

Note that this diagnostic has been criticized by Geurts (2007) because it does not only apply to UCIs but can be found all over the lexicon. For instance, it would be hard if not impossible to paraphrase the meaning of determiners, conjunctions, and prepositions using only descriptive expression, even though they are not UCIs. In fact, as Gutzmann correctly points out, even simple nouns such as *house* or *dog* are not different from all those function words in that it is almost impossible to give a precise definition that covers all the uses of those words.

Despite this problem, Gutzmann claims that the property of descriptive ineffability is a sound diagnostic for distinguishing UCIs from non-UCIs. The reason is that “even if we can find a perfect paraphrase for a UCI in purely truth-conditional terms and even if they *mean* (in a nontechnical sense) the same, they do not *express* the same” (Gutzmann 2013: 45). For instance, under the assumption that *oops* is equivalent to *I just observed a minor mishap* in meaning (cf. Kaplan 1999), and thus their being a perfect paraphrase to each other, Gutzmann argues that they still EXPRESS THE SAME MEANING DIFFERENTLY, which leads to the difference in acceptability between (55) and (56).

(55) A: Oops!

B: # That's not true. That was intentional!

(Gutzmann 2013: 45)

(56) A: I just observed a minor mishap.

B: That's not true. That was intentional!

(Gutzmann 2013: 45)

That is, (55A), which is originally from Kaplan (1999), is a direct expression of the speaker's surprise rather than a statement about it. In this respect, UCIs are similar to non-verbal communicational acts like hand gestures and facial expressions (e.g. frowning, smiling). In contrast, (56A) is a statement about a fact in the world, which could thus be challenged by utterances like (56B).

This characteristic of UCIs is also shared by *-(n)un*. By using *-(n)un*, the speaker does not state that it increases the salience of a referent; rather, uttering *-(n)un* itself is an act of imposing salience. Suppose that *X-(n)un* can be perfectly paraphrased as *I impose salience on a referent of X*. By the difference in modus of expressing, the former can be used in a question whereas the latter cannot.

(57) A: John went there.

B: Mary-nun? 'What about Mary?'

B': #I impose salience on a referent of *Mary*?

As shown in (57B'), one cannot ask about Mary by stating the meaning of *-(n)un*. It is possible only through the act of imposing salience on Mary using *-(n)un* as in (57B).

The last property of UCIs is closely related to their being a direct expression (rather than being a statement about a fact in the world). According to Potts (2007), expressives are just like performative speech acts and this characteristic is captured by

the property called IMMEDIACY.

(57) Immediacy (Gutzmann 2013: 46)

Like performatives, expressives achieve their intended act simply by being uttered; they do not offer content so much as inflict it.

What is stated in (57) is exactly what I argued as a property of *-(n)un* above, when discussing its descriptive ineffability. That is, the reason why *-(n)un* passes the diagnostic of descriptive ineffability is that it is a kind of performative.

That UCIs are performatives is supported by the fact that they cannot be denied in discourse as shown in (58).

(58) A: That bastard Kresge was late for work yesterday.

B: #No, you like him.

(Gutzmann 2013: 47)

Note that performatives are the same in that they cannot be denied. For instance, once an assertion is made, the act itself cannot be denied as shown in (59).

(59) A: David is a zombie.

B: #No, you didn't just assert that.

(Gutzmann 2013: 47)

It is not surprising that *-(n)un* shows the same pattern as performatives and other UCIs. Examples (60) and (61) show that the aboutness of John, which is derived from the meaning of *-(n)un*, cannot be denied either by the speaker herself or by the other interlocutor.

(60) John-un went there. #But I didn't talk about John.

(61) A: John-un went there.

B: #No, you didn't talk about John.

To sum up, UCIs can be distinguished from expressions denoting TC meaning by the five characteristics: independence, nondisplaceability, perspective dependence, descriptive ineffability, and immediacy. Also, I have proposed that *-(n)un* is a UCI by showing that it has all the five properties.

It is important to note that the meaning of *-(n)un* is not expressive in its narrow sense. Adopting Portner's (2007) terminology, I will call the type of meaning conveyed by *-(n)un* INSTRUCTIONAL meaning.¹¹⁵ It is instructional in the sense that the speaker guides the hearer's attentional state by imposing salience on a discourse referent that is not prominent enough at the point of her utterance. In other words, the speaker gives the hearer an instruction as to which discourse referent is the focus of attention at that point.¹¹⁶

¹¹⁵ Portner (2007) claims that the meanings of vocatives, topics, and force markers share an important pragmatic property, and captures it by introducing the term instructional meaning. "In informal terms, a vocative identifies to whom the sentence's content is addressed, a topic informs the addressee what it's about, and a force marker says how the speaker wishes to use it to update the conversational context. I include all of these functions under the broad label 'instructions for interpretation'" (Portner 2007: 407).

¹¹⁶ It seems that within the framework of relevance theory, instructional meaning, or probably every dimension of UC meaning, corresponds to procedural meaning but not conceptual meaning. Conceptual meaning of a lexical item "can potentially contribute to the truth-conditional content of an utterance containing that lexical item" (Bezuidenhout 2004: 102). In contrast, lexical items conveying procedural meaning "indicate something about the context in which the utterances of which they are a part are to be processed. They guide the hearer towards intended contextual effects" (Bezuidenhout: 2004: 103).

3.5.2. *-(N)un* as an Expletive Functional Non-Shunting UCI

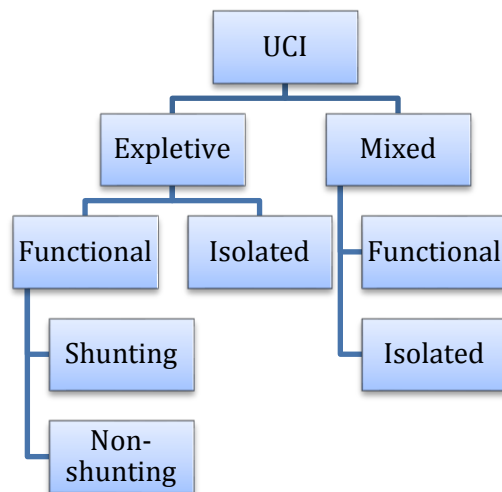
Gutzmann divides UCIs into five different subtypes based on three criteria: DIMENSIONALITY, FUNCTIONALITY, and RESOURCE-SENSITIVITY. First, dimensionality considers whether a UCI only conveys UC meaning or both UC and TC content. If a UCI has only UC meaning, it is one-dimensional; if it contains both dimensions of meaning, it is two-dimensional. The former are called EXPLETIVE UCIs, and the latter MIXED UCIs. Expletive UCIs include words like *damn*, *bastard*, and *fucking*, while mixed UCIs involve ethnic slurs for Germans like *Boche* and *Kraut* and the familiar/formal pronouns in German (*du*, *Sie*) and (*tu*, *vous*).

Functionality is about whether a UCI requires an argument or not. For instance, an English interjection *ouch* directly expresses the emotion of pain without any argument. In contrast, an expressive *bastard* needs a nominal argument in sentences like *That bastard Kresge is famous*. UCIs that require an argument are called FUNCTIONAL UCIs, whereas those that stand alone are called ISOLATED UCIs.

Lastly, functional UCIs can be divided into two subtypes; the first type of UCIs, which are called SHUNTING UCIs, shunt their argument over to the UC dimension, and the second type of UCIs leave their descriptive argument unmodified in the TC dimension. The former are said to be resource-sensitive in that they “consume their argument”, while the latter are not resource-sensitive. An example of a shunting UCI is unexpected intonation in exclamative sentences (e.g. *How tall John is!*). That is, if it were not for the special intonation, the sentence would have to be treated as either an embedded question or an ungrammatical sentence. The sentence is grammatical because the intonation moves its argument, the whole sentence in this case, to the UC dimension. On the other hand, functional expletive UCIs like *damn* pass their argument back to the descriptive layer, and are not resource-sensitive.

Figure 3 illustrates classification of the different types of UCIs based on the three features. Note that there are five but not six types of UCIs. The reason is that mixed functional UCIs cannot be further divided by resource-sensitivity, for mixed UCIs inherently have both UC and TC contents and thus cannot shunt the descriptive part over the UC dimension.

Figure 3. Classification of Different Types of UCIs



Given the different types of UCIs as shown in Figure 3, which type of UCI is $-(n)un$? First, since it does not convey any TC meaning, it is one-dimensional, or expletive. Also, because it must have an argument to which it is attached to, it is functional but not isolated. Lastly, it does not move the meaning of its argument to the UC dimension, thus being non-resource-sensitive, or non-shunting. Therefore, $-(n)un$ is an expletive functional non-shunting UCI.

3.5.3. Formalization of the Meaning of $-(n)un$

In this subsection, based on Gutzmann (2013), I will provide a formal schema for the meaning of $-(n)un$. Let us first start with isolated expletive UCIs, which are the

simplest type in that they do not interact with the rest of the sentence in any significant way.

(62) Schema for expletive isolated UCIs (Gutzmann 2013: 31)

$$S[\dots \varepsilon \dots] = \frac{\varepsilon}{S}$$

Here, the variable S ranges over a sentence, and ε over a UCI. Brackets are used to denote that something is included in a sentence. Thus, $S[\dots \varepsilon \dots]$ denotes a sentence that includes a UCI in a non-specified position. On the right side of the equation, a fraction is used for distinguishing between UC and TC meaning. That is, the numerator is occupied by UC content, and the denominator by TC content. An example of a sentence with an expletive isolated UCI is shown in (62).

$$(63) \text{ Ouch, I've hit my thumb} = \frac{\text{ouch}}{\text{I've hit my thumb}}$$

In (63), the descriptive meaning of a sentence containing interjection *ouch* consists of the semantic content of the sentence without the interjection, while its expressive part is given solely by the UC content of the interjection itself.

Now, let us turn to the schema for the group of expletive functional non-shunting UCIs, to which *-(n)un* belongs. Since functional UCIs need their argument, we need to introduce a new symbol α for an argument of the UCI.

(64) Schema for expletive functional non-shunting UCIs (Gutzmann 2013: 31)

$$S[\dots \varepsilon(\alpha) \dots] = \frac{\varepsilon(\alpha)}{S[\dots \alpha \dots]}$$

As shown in (64), expletive functional non-shunting UCIs are the same as expletive isolated UCIs except that they have an argument. It is important to note that the argument stays on the lower level of the fraction, which means that its TC meaning is not shunted.¹¹⁷ An example of the schema for a sentence with *-(n)un* is represented below.

$$(65) \text{ John-un went there} = \frac{\text{The salience of John is increased by the speaker}}{\text{John went there}}$$

As shown in (65), the role of *-(n)un* in (65) is to impose salience on John, which has an effect of putting him in focus of attention and ultimately making him the topic of the sentence. Again, note that the schema in (65) well captures the fact that the meaning of *-(n)un* has nothing to do with the TC meaning of the sentence.

In this subsection, I have shown that the meaning of *-(n)un* can be characterized as conventional non-truth-conditional meaning, or UC meaning. Also, I have proposed that *-(n)un* can be classified as an expletive functional non-shunting UCI, based on Gutzmann’s classification of UCIs. This type of UCI was formalized using the schema in (65).

Before closing this section, I’d like to point out that there is a parallel between the distinction between TC and UC meanings and the distinction between CG content and CG management. According to Krifka (2007), CG content is related to “the properties of CG ... [that have] to do with the truth-conditional information in the CG” (Krifka 2007: 17), whereas CG management pertains to “information about the manifest communicative interests and goals of the participants”. Thus, when an utterance is made, its TC meaning should belong to CG content, and its UC content to

¹¹⁷ See Gutzmann (2013) for the schemata for the other types of UCIs.

CG management. In this respect, contra Bianchi & Frascarelli (2010), the meaning of *-(n)un*, whatever discourse function it ultimately exhibits, definitely belong to CG management.

3.6. Pragmatic Functions of Different Types of NPs

As shown in (45), which is repeated below, *-(n)un*-marked NPs can be replaced by other types of NPs without affecting the truth condition of a sentence.

- (45) a. John-un keki ka-ss-e
 John-NUN there go-PAST-DEC
 ‘John went there.’
- b. John-i keki ka-ss-e
 John-NOM there go-PAST-DEC
 ‘John went there.’
- c. John keki ka-ss-e
 John there go-PAST-DEC
 ‘John went there.’
- d. Ø keki ka-ss-e
 there go-PAST-DEC
 ‘(John) went there.’

Then, the difference between the sentences in (45) must be explained by the pragmatic functions of the different NPs, or their felicity conditions in context, rather than by their semantic content (i.e. John).

The main purpose of this section is to provide an account of the pragmatic differences between the different types of NPs. This will, I believe, help to understand the nature of not only each type of NP itself but that of *-(n)un* more clearly.

3.6.1. NP-*i/ka*

3.6.1.1. Background

The meaning of *-i/ka*, together with the meaning of *-(n)un*, is one of the topics that have attracted a great number of Korean linguists but still remain controversial. Its status as a nominative marker is relatively well established¹¹⁸, but no consensus exists on what its additional special meaning/function is.

It is clear that *-i/ka* is not a mere nominative marker given that it is neither necessary nor sufficient for marking subject in Korean. That is, as shown in (45), Korean subjects can be realized in various forms without *-i/ka*; also, Korean non-subjects can be *-i/ka*-marked as shown below.

- (66) a. *na-nun kkoch-i coh-a*
I-NUN flower-NOM like-DEC
'I like flowers.'
- b. *Mary-nun kekise-ka anila yekise ca-ss-e*
Mary-NUN there-NOM not here sleep-PAST-DEC
'Mary slept here not there.'

In (66a), the subject is *na* 'I' whereas the *-i*-marked phrase, *kkoch* 'flower', is a non-subject argument.¹¹⁹ In (66b), *-ka* is attached to the adverb *kekise* 'there', which is clearly not a subject. Both examples show that *-i/ka* does not guarantee subjecthood of the phrase to which it is attached.

¹¹⁸ Korean is an SOV language, and the subject and (direct) object are typically distinguished by different morphological markers, namely, *-i/ka* and *-(l)ul*. However, whether their nominative- and accusative-marking functions are syntactic or semantic in nature is still controversial. See, for instance, I. Kim (2008) for a semantic account of the Korean case system.

¹¹⁹ The exact grammatical function of the argument is not clear. But it is clear that it is not a subject.

Then, what is it that makes Korean speakers use *-i/ka*? Crucially, the function/meaning of *-i/ka* concerned here is pragmatic in nature, for its absence does not change the truth-conditional meaning of a sentence. For example, the sentences in (66) have the same truth conditions even if *-i/ka* is not used.

It has already been shown in Chapter 2 that, contra C. Oh (2007), *-i/ka* is not a focus marker. It can be attached to a topic, which cannot be explained if it is a focus marker. Before providing a new analysis, I will discuss two more recent analyses of *-i/ka* proposed by Ko (2002) and M. Kim (2011).

First, Ko claims that the meaning of *-i/ka* is “*senthayk ciceng*” which can best be translated as selection (for *senthayk*) (and) specification/designation (for *ciceng*). That is, according to Ko, one uses *-i/ka* when she wants to select and specify/designate one of alternatives provided by discourse context. Here, it is clear that *senthayk* ‘selection’ means to select one entity among alternatives, but it might not be clear what he means by *ciceng* ‘specification/designation’.¹²⁰

The notion of *ciceng*, which will also be the core of my analysis, can be understood as ‘to point at (something)’ in informal terms for our purposes. The most typical way of pointing at something is to use one’s finger. But I assume that it can also be done by a linguistic device. From now on, I will use the term ‘specification’ exactly for this meaning.¹²¹

¹²⁰ In fact, he introduces the meaning of *-i/ka* as ‘selectional listing’ in his English abstract. But I think that the word *listing* is a wrong translation of *ciceng* and cannot capture what he intends to convey by using the word.

¹²¹ With the understanding of *-i/ka* as a linguistic “pointer”, one might take *-i/ka* to be a kind of demonstrative (e.g. *this/that*). But as will be discussed in more detail below, the pointing function of *-i/ka* is closer to English *it*-clefts rather than demonstratives. That is, it does not seem to be unreasonable to say that by using *it*-clefts the speaker performs an act of specifying (or pointing at) the referent of the cleft element.

In fact, Ko is not the first to propose that the meaning of *-i/ka* is some sort of specification. But as he correctly points out, most previous studies that posit the meaning of *-i/ka* to be a kind of specification remain vague on what this really means and provide little meaningful evidence. In this respect, Ko's analysis is better than those previous studies, because he provides a number of pieces of evidence that support the claim that the meaning of *-i/ka* is specification.

However, his proposal has one problem, which is the first part of the meaning he assigns to *-i/ka*, that is, *senhayk* 'selection'. According to him, *-i/ka* cannot be attached to a phrase if its referent has no (possible) alternative in a given context, for the meaning of selection is valid only when there is more than one alternative. One type of evidence he provides is shown in (67).

(67) If we define Chelswu in one word, he-??Ø/*ka/-nun is an idiot. (Ko 2002: 236)

Ko claims that *-ka* is not felicitous in (67) because the context (provided by the *if*-clause) allows Chelswu as the only entity that can be talked about and thus no alternative exists. However, as already shown in (24) and (26) in Chapter 2, which are repeated below, *-i/ka* can be felicitously attached to a topical phrase that has no alternative in the given discourse context.

(24) DJ: (I) feel that (you) are a beautiful woman with inner brightness.

Guest: sasil-un-yo cey-**ka** ilehkey pakkwi-n ci-ka
in.fact-NUN-HON I(HON)-**NOM** like.this change-NMZ FN-NOM
kulehkey olay toy-ci-n anh-ass-e-yo
that long become-ADZ-NUN not-PAST-DEC-HON
'In fact, it has not been long since I became like this.'

(26) Guest: Please come to see my performance.

DJ: cey-**ka** sikan toy-myen ha-keyss-supni-ta
I(HON)-**NOM** time become-if do-will-HON-DEC
'I will if I have time.'

In both (24) and (26), the continuing topic, that is, the speaker, has no alternative topic(s) in the discourse context. What is important is that examples like (24) and (26) are not exceptional cases. There are a number of cases in which the referent of an *-i/ka*-marked phrase has no alternative in the discourse context and is still felicitous. Thus, rather than attributing the unacceptability of *-i/ka* in (67) to the lack of alternative(s), we have to find the source of the unacceptability somewhere else.

In fact, there is a very good solution to this problem. The construction *If we define X in one word* requires a specific construction as its matrix clause, that is, a topic-comment structure with a *-(n)un*-marked topic. By positing this construction-specific constraint, we can also explain the fact that the omission of the topic is significantly less infelicitous than the overtly realizing the topic with *-(n)un*, which violates the prediction based on the proposed meaning of *-(n)un*.

To be more specific, since the topic is introduced in the *if*-clause and thus is already the center of attention by the time the main clause is uttered, there is no reason to reintroduce the topic using *-(n)un* in the main clause; consequently, topic omission is predicted to be more acceptable than overt realization of it with *-(n)un*. Without the proposed constraint, however, it would be hard to explain why the *-(n)un*-marked topic is preferred over topic omission in examples like (67).

Another type of evidence he proposes is shown in (68), where an exclamative with *-i/ka* is unacceptable.¹²² Ko claims that the use of *-i/ka* is unacceptable since no alternative to the subject exists in exclamatives.

(68) Ai, wuli Swuni-Ø/*ka/?nun yeyppe-ela
 wow, our Swuni-Ø/-NOM/-NUN pretty-EXC
 ‘How pretty Swuni is!’ (Ko 2002: 236)

However, the unacceptability of the exclamative in (68) also must be explained by a construction-specific characteristic of the exclamative ending *-(e)la*, rather than by the fact that in an exclamative there is no alternative to the referent of the subject argument. The reason is that there are several exclamative markers in Korean and *-i/ka* is perfectly acceptable with other exclamative markers.

(69) Wuli Swuni-Ø/-ka/-nun yeyppe-kwuna
 our Swuni-Ø/-NOM/-NUN pretty-EXC
 ‘How pretty Swuni is!’ (Ko 2002: 236)

As shown in (69), *-i/ka* is perfectly acceptable with the exclamative marker *-kwuna*. Interestingly, the example in (69) is from Ko himself, but he does not discuss this sentence at all. In addition to the exclamative ending *-kwuna*, exclamative markers like *-kito hayla* also allow *-i/ka* as its subject. Note that these markers do not require the subject referent to have alternatives. Thus, the unacceptability of *-i/ka* in (68) has to be explained by the construction-specific property of *-(e)la* that does not allow overt realization of its subject argument.

¹²² Unlike Ko (2002), who puts an asterisk mark only on *-ka*, all the three types of NPs in (68) seem to be totally unacceptable to the same degree. The sentence is only acceptable when the whole subject is omitted (i.e. *Ai, Ø yeyppe-la* ‘Wow, How pretty (Swuni) is!’).

Let us turn to M. Kim's (2011) analysis, the most recent study on the meaning of *-i/ka* (and *-(n)un*). Comparing *-(n)un* and *-i/ka*, she proposes that the difference between the two is that *-(n)un* is used when the subject is fixed while the predicate is not, whereas *-i/ka* is used when the predicate is fixed but the subject is not in the speaker's mind. According to her, whether a subject/predicate is fixed or not depends on whether its alternatives exist or not; if it has no alternative in the speaker's mind, it is fixed, and if it has alternatives, it is not fixed.

M. Kim's analysis is problematic in two respects. First, the generalization introduced above is simply wrong. Examples (24) and (26) in Chapter 2, which are repeated above, clearly shows that even *-i/ka*-marked subjects can be fixed in that there is no alternative to the subjects.

Also, the contrastive use of *-(n)un* is counter-evidence to the claim that *-(n)un* is attached to the subject only when it is fixed, since contrast is induced only when a set of alternatives exist. M. Kim tries to avoid this problem by arguing that *-(n)un* can be used when both the subject and the predicate are not fixed, which is just an ad-hoc explanation and does not really solve the problem.

The second problem of M. Kim's analysis is that she does not propose meanings for *-i/ka* and *-(n)un* at all. In other words, she only provides the contexts in which they are used, but does not explain why they occur there. In order for her analysis to be explanatory, she must provide an account of what makes those morphological markers appear only in certain contexts.

3.6.1.2. Meaning of *-i/ka*

Now, I will propose a new analysis of *-i/ka*, which is based on the notion of specification as defined above. The meaning of *-i/ka* is to UNIQUELY SPECIFY a referent. That is, by attaching *-i/ka* to a phrase, the speaker performs an act of

uniquely specifying (or pointing at) the referent of the phrase. The notion of uniqueness is added in order to emphasize that the target of specification is only the referent of the *-i/ka*-marked element but nothing else.

It is important to note that unique specification has nothing to do with the specificity or definiteness of a referent. Non-specific entities, or even non-entities can be uniquely specified. For instance, by attaching *-ka* to the adverb *keki-(ey)se* ‘at that place’, the speaker “points specifically at” the place. To sum up, *-i/ka* can be understood as a linguistic “pointer” that one can use to point at not only physical entities within one’s sight but any type of meaning linguistically expressed.

One might be curious as to what makes unique specification a special property of *-i/ka*, because in a sense all referring expressions (are used to) point at the referent.¹²³ The special status of *-i/ka* is gained by its having unique specification as UC meaning, which is a kind of performative. This is the difference between *-i/ka* and ordinary referring expressions. Although both are used to uniquely specify a discourse referent, *-i/ka* is special in that the speaker performs an act of unique specification with *-i/ka*, while it is impossible to do with referring expressions. Ordinary referring expressions only convey TC but not UC meaning.

To sum up, *-i/ka* is parallel to *-(n)un* with respect to its dimension of meaning. Just like *-(n)un*, *-i/ka* can be classified as encoding an instructional meaning, since the act of unique specification is surely a kind of instruction for interpretation from the hearer’s point of view. For this reason, *-i/ka* should also be taken to be a UCI. To be more specific, it is a mixed functional UCI; it is mixed since it also has the nominative-marking function, which can affect the truth condition of a sentence, and it is functional, for it necessarily takes an argument.

¹²³ I am grateful to Laurence Horn for pointing out this to me.

Based on the discussion so far, the difference between *-i/ka* and *-(n)un* can be summarized in Table 3.¹²⁴

Table 3. Pragmatic Difference between *-(n)un* and *-i/ka*

	Imposing salience	Unique specification
<i>-(n)un</i>	Yes	No
<i>-i/ka</i>	No	Yes

As will be discussed below, the difference shown in Table 3 not only captures our intuition about their meaning but well explains different felicity they show in different contexts. The contexts of interest are selection, “argument focus” (Lambrecht 1994), correction, echo questions, and “mention-some” (van Rooy 2003) readings. The context of selection is also dealt with by Ko (2002), but the other four types of examples are newly introduced here as supporting evidence for the meaning of *-i/ka* as unique specification.

First, in a context where it is required to select one of alternatives, *-i/ka* is felicitous while *-(n)un* is not, as shown in (70).

(70) A: Who was late? Mary or John?

B: John-*i/#un* was late.

¹²⁴ In principle, there is no reason that one morphological marker can have both the meanings of unique specification and imposing salience. The reason why I posited only one meaning for each marker is that, as will be shown below, the difference between the two can be well captured by doing so. I strongly suspect that English *it*-clefts have both the functions of imposing salience and unique specification. Explaining the pragmatic function(s) of *it*-clefts based on these meanings would be an interesting topic for future research.

Note that selection is one of the contexts that require unique specification; that is, if selection has to be done non-linguistically, one (or maybe the only) way to select one item among many would be to specifically point at it with a pointer such as one's finger. This supports the proposed meaning of *-i/ka*, according to which the speaker uniquely specifies John as the person being late in (70).

The infelicity of *-(n)un* in (70) can be naturally explained by its lack of this function. That is, by imposing salience on a referent without uniquely specifying it, one can only introduce the referent as the topic in sentences like (70B), which is felicitous only in the topic-comment structure. The expected information structure of (70B) is not the topic-comment structure but the focus-ground structure.

The second context to be considered is argument focus. It is widely known that *-i/ka* but not *-(n)un* is possible for simply marking argument focus in Korean as shown in (71).

(71) A: Who came to the party?

B: John-*i/#un* came.

Again, answering to the question in (71A) can be non-linguistically done by specifically pointing at a person who came to the party, which is linguistically done by *-i/ka* but not by *-(n)un*.

Thirdly, contexts of correction like (72) necessitate the meaning of *-i/ka*, because in order to correct (after pointing out and negating the wrong information), one has to specify the correct information among possible alternatives.

(72) A: John was late.

B: No, Mary-*ka/#nun* was late.

For instance, by uttering (72B), the speaker intends to correct the other interlocutor about who was late. In this case, *-ka* is felicitous since its job is exactly what is required in correction, that is, to “pinpoint” the correct information, Mary in this case. However, *-(n)un* is infelicitous since it lacks this function and does something else instead.

It is important to note that the proposed meaning of *-i/ka* is consistent with the various kinds of foci in (70)-(72), which sometimes led to an illusion that *-i/ka* is a focus marker. However, the following context further supports the current analysis, which sees *-i/ka* as a means of unique specification rather than as a focus marker. It is a context in which *-i/ka* but not *-(n)un* is felicitously attached to a non-focus argument.

(73) A: John won the race.

B: John-*i/#un*? (‘John did?’ or ‘Is it (really) John that won the race?’)

B’: John(-*???i/???un*)? Who is he?

(73B) is an echo question which can be uttered if one is surprised by the fact that it is John who won the race. The surprise can be expressed by specifically pointing at the person that has been claimed to have won the race and asking if that person really won the race. That is why *-i/ka* but not *-(n)un* is felicitous. If *-(n)un* is used instead, then the sentence (73B) comes to mean ‘what about John?’, which is predicted by the proposed meaning of *-(n)un*, that is, to impose salience on a referent without uniquely specifying it.

Interestingly, after hearing (73A), if the speaker wants to ask who John is, she must use the bare NP form, i.e., *John*, and cannot attach *-i/ka* or *-(n)un* to the NP, as shown in (73B’). This is also expected from the meaning of *-i/ka*, because there is no

reason to uniquely specify John in order to ask who John is in the above context. It is just enough to repeat the name and ask who he is.

Furthermore, the use of *-i/ka* conversationally implicates that the speaker knows the person denoted by the *-i/ka*-marked phrase, which is shown by the fact that (73B) implicates that the speaker knows John. Thus, the infelicity of using *-i/ka* in (73B') is also explained by the mismatch between the conversational implicature induced by the use of *-i/ka* and the speaker's epistemic state.

The last context to be discussed is the context which invites the "mention-some" reading. According to van Rooy (2003), there are situations in which a question does not require an exhaustive answer. For instance, if somebody wants to smoke and asks a question in (74A), she does not need or intend to know the exhaustive list of people who has a lighter around her. Thus, an answer to questions like (74A) needs to mention just some but not all the members that make the sentence true.

(74) A: Who has a lighter?

B: John iss-e. ('John does.')

B': John-i iss-e. ('John (and only John) does.')

What is important here is that the mention-some reading is only possible with a bare NP form as in (74B). If the NP is *-i/ka*-marked as in (74B'), then the exhaustive implicature is induced and only the "mention-all" reading is allowed.¹²⁵ Again, the exhaustivity in (74B') naturally follows from the meaning of *-i/ka*; that is, the unique

¹²⁵ The nature of the exhaustive implicature generated by *-i/ka* is conversational, for it is not necessarily produced by the use of *-i/ka*. For instance, *-i/ka* attached to a continuing topic in (24) and (26) of Chapter 2 does not induce any exhaustive implicature. For other pieces of evidence for the conversational nature of exhaustivity caused by *-i/ka*, see Chapter 4.

specification of John leads the hearer to infer that he is the only one who has a lighter. Also, the difference between (74B) and (74B') shows that *-i/ka* is not a mere nominative marker but conveys a special pragmatic meaning.

Although I have not shown with examples as I did with *-i/ka*, Korean *-(l)ul*, the accusative marker, behaves the same as *-i/ka* with respect to the above contexts: selection, argument focus, correction, echo question, and the mention-some reading. Thus, I propose that *-(l)ul* is also a mixed functional UCI with the UC meaning of unique specification.

Before closing this subsection, let me point out one important effect caused by the difference between *-i/ka* and *-(n)un*. It has been shown in Chapter 2 that there are multiple types of contrast, and that the two particles express different kinds of contrast. On the one hand, *-i/ka* is used for the exclusive/exhaustive type of contrast such as selection (70), correction (72), and “mention-all” readings (74).

On the other hand, *-(n)un* cannot induce those types of contrast, which is well explained by its lack of unique specification. Instead, the type of contrast it generates is usually characterized by uncertainty about other alternatives (e.g. Hara 2006b; C. Lee 2006, 2007).¹²⁶ Let us look at example (31) from Chapter 2, repeated below.

(31) A: Did John and Kim meet Lee?

B: Kim-**un** manna-ss-e.

Kim-NUN meet-PAST-DEC

‘Kim met (Lee).’ (‘But John didn’t.’ or ‘But I don’t know about Lee.’)

¹²⁶ In Chapter 4, it will be shown that the uncertainty implicature is not the only possibility made possible by *-(n)un*.

By using *-un* in (31B), the speaker conveys a contrastive implicature which could either mean that she does not know whether John met Lee or that John did not meet Lee, depending on the discourse context and/or her intention.

What is important here is that the uncertainty that is possible with *-(n)un* is impossible with *-i/ka*. As far as I know, why *-(n)un* but not *-i/ka* is able to express uncertainty has never been discussed, let alone questioned, by previous studies. If we consider the difference between the proposed meaning of *-(n)un* and that of *-i/ka*, this question can be naturally answered.

In a typical context of *wh*-questions, a set of alternatives exists and one is expected to specify only the alternative(s) that, when put into the variable created by the *wh*-word, makes the proposition true. In this context, if one just highlights one (or some) of them and makes a statement with regard to it (or them), the hearer would become curious about the other alternative(s) that has not been discussed, because the speaker deliberately avoided uniquely specifying them as the answer for the question even though she could have by using *-i/ka*. This curiosity, I believe, is the source for the uncertainty. Thus, the use of *-(n)un* in an answer to a *wh*-question, where unique specification is usually expected, is felicitous when the speaker intends to make the hearer curious and thus uncertain about the unmentioned alternatives.

3.6.2. Bare NPs

The nature of bare NPs in Korean has recently been the interest of many linguists (e.g. Ahn & Cho 2006, 2007; S. Lee 2006; C. Oh 2007; T. Kim 2008; Kwon & Zribi-Hertz 2008; H. Lee 2009, 2010, 2011, 2012).¹²⁷ In this subsection, I will briefly examine the

¹²⁷ The same construction is also discussed with the name of ‘particle omission’ or ‘case ellipsis’.

problems of some of the previous functional approaches, and explain the function of Korean bare NPs from a different perspective.¹²⁸

3.6.2.1. C. Oh (2007)

According to C. Oh (2007), “zero pronouns and bare NPs are linguistic devices by which a speaker expresses active topics [continuing topics in my terms] in Korean” (C. Oh 2007: 63). The difference between the two devices is that a zero pronoun is used when its referent can be easily identified by the meaning of the predicate whereas a bare NP is used when its referent is not easily identifiable by the denotatum of the predicate. The following two conversations seem to support his analysis:

(75) A: How is Mary? Does she eat well?

B: cal mek-supni-ta.
well eat-HON-DEC
'(She) eats well.'

(76) A: Who came to the party?

B: John and Mary came.
#(John) manhi nulke-ss-tela
John much old-PAST-EM
'John seems to have gotten very old.'

First, in (75B), the subject argument, *Mary*, is an active topic and it can be omitted in the utterance, for the meaning of the predicate makes it clear that the speaker is talking about *Mary*.

On the other hand, in (76B), the second sentence must have an overt subject. Although *John* is active, it is not the only active referent in the context; that is, *Mary*

¹²⁸ See H. Lee (2010, 2012) for the problems in Ahn & Cho 2006, 2007, which is the most recent formal (or syntactic) approach to particle omission.

is as active as John given the first sentence in (76B). Importantly, the predicate of the second sentence does not guarantee that the referent of the subject is John. Thus, as predicted by C. Oh (2007), the sentence needs its active topic overtly realized.

However, to limit the usage of bare NPs to express (continuing) topic is simply wrong. As shown in (77), bare NPs can be freely used to express argument focus.

(77) A: What did John buy yesterday?

B: *kapang* (sa-ss-e).

bag buy-PAST-DEC

‘(He) (bought) a bag.’

In (77B), the bare NP *kapang* ‘bag’ is neither active¹²⁹ nor topical. It is a typical argument focus, which is also shown by the fact that *-(l)ul* can be attached to the phrase. Thus, contra C. Oh (2007), bare NPs are not directly related to the information structure category of (continuing) topic.

3.6.2.2. Kwon & Zribi-Hertz (2008)

Working under the Erteschik-Shir’s (1997, 2007) theory of information structure, Kwon & Zribi-Hertz (2008) argue that bare NPs, whether they are subjects or objects, are “invisible” in f(ocus)-structure (or information structure in my terms). By something being invisible in f-structure, they mean that it is not represented in f-structure as an independent topic or focus.

I will not go into any detail about the validity of their theoretical

¹²⁹ Among identifiable referents, “[a]ctive referents are those which are currently in the consciousness of an addressee, and inactive referents are those which are in the addressee’s long-term memory” (C. Oh 2007: 22-23).

assumptions.¹³⁰ For our purposes, it is just enough to point out that one of their important descriptive generalizations, which is crucial for their analysis to be on the right track, is simply incorrect.

In refuting Aissen's (2003) theory of differential function marking, Kwon & Zribi-Hertz argue that *-(l)ul* is obligatorily attached to a grammatical object when it is focus. For instance, they provide the following example to show that an argument focus, if it is on a grammatical object, needs *-(l)ul*.

- (78) A: Minsu-nun mwe-l sa-ss-ni?
 Minsu-NUN what-ACC buy-PAST-INT
 ‘And Minsu, what (kind of thing) did he buy?’
 B: Minsu-nun sakwa-*(lul) sa-ss-ta
 Minsu-NUN apple-ACC buy-PAST-DEC
 ‘Minsu bought apples.’

(Kwon & Zribi-Hertz 2008: 263)

First, note that the ungrammaticality they mark is too strong; only one or two question marks (???) would be more accurate for the degree of unacceptability of the sentence. Second, the decreased acceptability is not due to the lack of *-(l)ul* but the declarative ending *-ta*, which is a formal ending that is used mainly in written texts.

In contrast, the interrogative ending in (78A) is an informal one, which is used

¹³⁰ Although they claim that their analysis can easily be accommodated by other theoretical frameworks such as Lambrecht's (1994), I suspect that it is not the case. The reason is that their analysis is crucially dependent on theory-internal assumptions, some of which cannot easily be adopted in other frameworks. For instance, their theory allows that a “topic-bound pronoun is contained in a focus constituent in f-structure, although it does not itself contribute new information” (Kwon & Zribi-Hertz 2008: 268). As far as I know, this is impossible in Lambrecht's theory of information structure, in which focus is strictly defined in terms of relational newness.

in everyday conversation. If the ending in (78B) is changed to an informal one as in (79), the sentence becomes totally acceptable even without *-(l)ul*.

- (79) A: Minsu-nun mwe-l sa-ss-ni?
Minsu-NUN what-ACC buy-PAST-INT
'And Minsu, what (kind of thing) did he buy?'
- B: Minsu-nun sakwa-(lul) sa-ss-e
Minsu-NUN apple-ACC buy-PAST-DEC
'Minsu bought apples.'

What is important is that sentences like (79B) and (77B) are very strong counter-evidence to Kwon & Zribi-Hertz's analysis, since the object in (79B) is clearly focused (even in their theoretical framework), and thus definitely needs to be represented (or visible) in f-structure.¹³¹

3.6.2.3. H. Lee (2010)

Unlike the two previous studies discussed above, H. Lee (2009, 2010, 2011a,b, 2012) does not relate the function of bare NPs directly to information structure. Instead, she explain case ellipsis in Korean based on economy principles as shown in (80).¹³²

- (80) a. The more predictable a sign is, the shorter it is.
b. The more frequent a sign is, the shorter it is.

(H. Lee 2010: 303)

¹³¹ In fact, their acceptability judgments on a number of Korean examples seem to be problematic. But I will not deal with this problem here; providing simple but crucial counterexamples like (77B) and (79B) is enough to motivate a different approach to the nature of Korean bare NPs.

¹³² The economy principles in (80) are in fact Zipf's Law of Abbreviation (Zipf 1935, 1945), which is not cited by H. Lee. Instead, she cites Hawkins (2004) and Haspelmath (2008) for the principles. I am grateful to Laurence Horn for pointing out this to me.

In particular, she is interested in the effects of focus type (i.e. selection vs. correction vs. informational focus), animacy, and definiteness on case ellipsis. Based on a series of experiments, she convincingly shows within the OT framework that these factors play a significant role in case ellipsis of both subject and object in Korean and that the economy principles are the underlying force that controls how these factors work.

Although it is true that H. Lee has provided important factors and the underlying principles that motivate particle omission, her analysis cannot explain 1) why bare NPs, if they mark topic at all, are mostly used to express active topic, 2) why bare NPs sometimes have different semantic/pragmatic effects from their particle-attached counterparts as shown in (73) and (74), and most importantly, 3) what motivates particle omission when this is unmotivated by the economy principles. From what follows, I will answer these questions based on a new analysis of bare NPs based on the notions of imposing salience and unique specification.

3.6.2.4. The Nature of Bare NPs

It is not hard to define bare NPs with respect to the properties of imposing salience and unique specification. Since it is neither *-(n)un-* nor *-i/ka-* (or *-(l)ul-*)marked, it cannot have the UC meanings of imposing salience and unique specification. In other words, bare NPs are not UCIs, and only convey TC meaning which is denoted by the NP itself. Thus, the difference between *-(n)un*, *-i/ka*, and particle omission can be represented as in Table 4 below.

Table 4. Pragmatic Difference between *-(n)un*, *-i/ka*, and Particle Omission

	Imposing salience	Unique specification
<i>-(n)un</i>	Yes	No
<i>-i/ka</i>	No	Yes
Particle omission	No	No

In other words, the speaker chooses not to use any particle when she does not want to perform an act of imposing salience or unique specification. In particular, the lack of the function of imposing salience naturally explains why bare NPs are mostly used to express active topic if they mark topic at all; since they cannot increase the salience of a referent, they can basically only mark a topic which is already salient enough.

The different semantic/pragmatic effects bare NPs have from their particle-attached counterparts can also be explained by their lacking the function of unique specification. First, it has been shown that the reason why (73B') cannot express what (73B) expresses is that the bare NP, by not uniquely specifying the referent, cannot convey the implicature that the speaker knows John, and cannot overtly designate the referent, which is a requirement for asking identification questions like (73B'). (73) is repeated below for convenience.

(73) A: John won the race.

B: John-i/#un? ('John did?' or 'Is it (really) John that won the race?')

B': John(-??i)? Who is he?

The reason why a bare NP cannot induce a mention-all reading in special contexts like (74), repeated below, that require a mention-some reading was also accounted for by the fact that it lacks the function of unique specification, which is the source for the exhaustivity.

(74) A: Who has a lighter?

B: John iss-e. ('John does.')

B': John-i iss-e. ('John (and only John) does.')

As for the question of what motivates particle omission that is unmotivated by the economy principles, the answer is also simple and clear. Bare NPs can and should be used when the speaker wants neither to impose salience on its referent nor to uniquely specify it. Of course, it is not the case that the speaker wants to perform an act of increasing the salience of or uniquely specifying a discourse referent whenever she mentions it, which is why we can find a number of bare NPs in everyday conversation.

3.6.2.5. Bare NPs as Focus

One curious fact about bare NPs is that they can mark various types of foci that require unique specification of a referent. It has already been shown in (77) and (79) that bare NPs as well as *-(l)ul*-marked NPs can be used for argument foci. Moreover, through psycholinguistic experiments, H. Lee (2009, 2010) shows that *-i/ka* and *-(l)ul* can also be omitted when the NP refers to contrastive foci in selection and correction contexts, which is inconsistent with the assumption made by many previous studies (e.g. Ko 2000; Kwon & Zribi-Hertz 2008).

In order to understand why bare NPs are possible for the various types of foci, it is important to note that every type of foci discussed above is required by the discourse context, the previous utterance in particular. For instance, argument foci and selection are invoked by a *wh*-question and correction by overt negation of the previous utterance. These prior contexts lead the hearer to interpret the following utterance as foci by default. That is, if not specified otherwise, the NP that is located in a position for a certain type of focus is interpreted as that type of focus. Given that this default interpretation is possible, particle omission can be motivated by the economy principles suggested by H. Lee.

Compare the contexts for foci with the contexts of echo-question and mention-some reading. In the latter two cases, the NPs of interest are not required or expected by the prior context at all. Since these contexts do not require any default reading, whether one uses bare NPs or *-i/ka-* (or *-(l)ul-*)marked NPs causes the semantic/pragmatic differences as discussed above. Thus, in these contexts, particle omission cannot occur even though it is motivated by the economy principles, for it can change the meaning of the utterance in an undesired way.

The contexts in which *-(n)un* occurs are the same as the contexts of echo-question and mention-some reading (but not as the contexts of correction, selection, and argument foci) in that they do not invoke any specific discourse function. First, topic/frame introduction is not required by prior discourse; rather, it is done purely by the speaker's intention to do so regardless of the prior context. Also, the kind of contrast induced by *-(n)un* is not expected from the hearer's point of view, since the contexts in which it occurs are mostly (if not always) the same as the contexts that require unique specification, that is, typical *wh*-questions. The reason why bare NPs can never mean what *-(n)un*-marked NPs do in an answer to a *wh*-question is thus naturally explained: the meaning conveyed by *-(n)un* is not the unmarked reading but a marked meaning that can be only expressed by the use of *-(n)un*.¹³³

3.6.3. NP Ellipsis

Surprisingly, the pragmatic function of NP ellipsis or zero pronouns in Korean has little been studied. As far as I know, the most recent (and probably the only) study that seriously deals with the function of Korean zero pronouns is done by C. Oh

¹³³ In this respect, I agree with Tomioka (2010a), who claims that information focus is unmarked and his "CT" (or contrast in my terms) is marked. This is contrast with Büring (2003), who argues for the opposite conclusion.

(2007), who claims that they are basically used for marking continuing topics. Of course, it has been noticed by previous studies (e.g. C. Lee 2006) that topic phrases can be easily deleted, but it has not been seriously asked in what conditions they are used.

As C. Oh (2007) rightly points out, the pragmatic function of NP ellipsis is mainly to express continuing topic. It is not hard to understand why this is the case if we take the property of continuing topic into account, its cognitive prominence in particular. The biggest difference between continuing topic and newly introduced topic is that the former has been the center of attention from the prior context, whereas the latter has not been salient enough to be the topic until it is introduced.

From the speaker's point of view, it is unnecessary and even undesirable to increase the salience of a referent that is already the center of attention in both the speaker's and the hearer's mind. In this respect, the unacceptability of the *-(n)un*-marked NP in (81B) can be naturally explained.

- (81) A: John-un com ettay? kamki kellye-ss-ta-ko tule-ss-e.
 John-NUN little how? cold catch-PAST-DEC-COMP hear-PAST-DEC
 'How is John? (I) heard (he) got a cold.'
 B: (???John/kyay-nun) acic aph-a
 John/he-NUN still sick-DEC
 '(He) is still sick.'

In (81), John is introduced as the sentence topic in the first sentence of (81A). Then, in the second sentence, the topic phrase is omitted because it is already salient enough and thus can be identified by the hearer.

In the context where a sentence topic is already firmly established as in (81A), to attach *-(n)un* to the topic phrase in the next utterance is unacceptable unless there is

a special purpose for it such as contrasting him with other person. Instead, a zero pronoun is preferred. This analysis is also consistent with many previous studies that invoke accessibility or givenness (Givón 1983; Ariel 1990, 2001; Gundel et al. 1993).

In this section, I have proposed the pragmatic functions of four different NP types and their differences. First, by understanding the meaning of *-i/ka* and comparing it with the meaning of *-(n)un*, the UC meaning of the two particles were more clearly understood than when each of them was discussed separately. The pragmatic function of bare NPs has been clarified, by attributing the particle omission to the speaker's not performing an act of imposing salience and unique specification. Lastly, the analysis of *-(n)un* as imposing salience was further supported by the pragmatic function of NP ellipsis as marking continuing topic.

3.7. Summary

This chapter provided a comprehensive analysis of *-(n)un* taking a salience-based approach. Based on the corpus study, it was claimed that the notion of discourse salience, imposed salience in particular, is crucial for understanding the nature of *-(n)un*. That is, the fundamental function of *-(n)un* was claimed to impose salience on a discourse referent. Pragmatic effects such as aboutness, framehood, contrast, and simple emphasis conveyed by *-(n)un* are argued to be derived from the interaction of the basic meaning of *-(n)un* and other syntactic, semantic, and pragmatic factors such as the syntactic position and the semantic type of the *-(n)un*-marked phrase, the speaker's intention, and the discourse context.

Also, the meaning of *-(n)un* was formally represented under the framework that posits multiple dimensions of meaning. It was claimed that *-(n)un* conveys

conventional non-truth-conditional meaning which is captured on the instructional dimension of meaning. In particular, *-(n)un* was characterized as an expletive functional non-shunting use-conditional item (UCI). Based on the distinction between CG content and CG management made by Krifka (2007), it was suggested that the meaning of *-(n)un* belongs to CG management.

Lastly, the proposed meaning of *-(n)un* was clarified and further justified by comparing the pragmatic function of *-(n)un*-marked NPs with that of different types of NPs: *-i/ka*-marked NPs, bare NPs, and null NPs. First, the meaning of *-i/ka* was suggested to be unique specification of a referent, which was also captured on the level of instructional meaning. As for bare NPs, they were argued to be used when the speaker does not want (or need) to perform an act of either increasing the salience of or uniquely specifying a discourse referent. Lastly, the pragmatic function of null NPs was explained by the notion of continuing topic. The reason that they are used to mark a continuing topic is closely related to the fact that they only can be used to refer to a referent that is sufficiently salient at the time of utterance.

Chapter 4

On contrastiveness induced by *-(n)un*

4.1. Introduction

In this chapter, I will delve into the nature of the contrastiveness induced by *-(n)un*. I will especially focus on the uncertainty, the scalarity, and the concessivity, which have been explicitly claimed or implicitly assumed to be inherent properties of “contrastive *-(n)un*”¹³⁴. This is important for our purposes because if any of the claims above turn out to be true, it will be crucial evidence for the view that there are two lexical items *-(n)un* in the lexicon, that is, contrastive and non-contrastive *-(n)un*. And this will be problematic for the current proposal that provides a unified analysis of *-(n)un* based on the notion of imposing salience.

It will be argued that neither aspect is an inherent property of contrastive *-(n)un*. First, the uncertainty and the concessivity will be shown to be conversationally derived from the interaction of the discourse context and the proposed meaning of *-(n)un*, namely, to impose salience on a referent.

As for the scalarity between contrasting alternatives, it will be argued that contrastive *-(n)un* can only evoke a scale that is already formed by the lexical meaning or discourse context. If no scale is possible through either of them,

¹³⁴ It has to be emphasized that this term is used just for convenience. As will be shown below, I deny the independent existence of contrastive *-(n)un* that is fundamentally different from non-contrastive *-(n)un*.

contrastive *-(n)un* cannot (conventionally) evoke a scale. Therefore, what is discussed in this chapter further supports the current analysis of *-(n)un*, which does not distinguish between contrastive and non-contrastive *-(n)un*.

Furthermore, contrastive *-(n)un* will be compared with the English rise-fall-rise (RFR) contour, also known as B-accent (Jackendoff 1972). It will be claimed that contrastive *-(n)un* and the RFR contour shows the same distribution, and that the notion of contrast introduced in Chapter 2 well captures the contrast they express. The only difference between contrastive *-(n)un* and RFR is whether the contrast is expressed conventionally or conversationally. Contrastive *-(n)un* induces contrast conversationally, whereas RFR does it conventionally. Finally, the meaning of contrast and the contrastive implicature induced by the two lexical devices are formalized.

4.2. On Contrastive Implicatures Induced by *-(n)un*

Although uncertainty and scalarity conveyed by contrastive *-(n)un* are widely assumed to be conventional in nature (e.g. C. Lee 1999, 2000, 2003, 2006, 2007; Y. Jun 2005, 2006), this assumption has never been fully justified. The main purpose of this section is to discuss whether this assumption is valid.

In doing so, Japanese *-wa* will be discussed together with *-(n)un*, since it is widely observed that *-wa* behaves similarly, if not identically, to *-(n)un* at least with respect to these aspects (e.g. Hara 2006a, b; C. Lee 2007; Tomioka 2010a, b).

4.2.1. Setting the Stage

4.2.1.1. Standard View

The standard view on the nature of the contrastive implicature induced by *-(n)un/-wa* (henceforth, CI) is to see it as CONVENTIONAL (e.g. C. Lee 2000, 2002, 2003, 2004, 2005, 2006, 2007; Y. Jun 2005, 2006; Hara 2006a, b; Hara & van Rooij 2007).¹³⁵ Under this view, two different notions, contrastive topic (CT) and non-contrastive topic, are linked to two different linguistic devices, ACCENTED *-(n)un/-wa* and UNACCENTED *-(n)un/-wa*. The CI is assumed to occur due to the combination of the specific morphological marker (i.e. *-(n)un/-wa*) and the prosodic prominence attached to it (i.e., high pitch). This morphological-phonetic source of the CI is the main reason for the claim that it is conventional.

Although the standard view at first glance seems plausible enough, it has a crucial problem. If this view is correct, one has to assume that accented *-(n)un/-wa* is fundamentally different from its unaccented counterpart, for the contrastive implicature is generated only by the former. Unless one shows how the different pitch, which is the only difference, leads to the semantic/pragmatic difference (plain topic vs. CT), one needs to posit two different lexical items in the lexicon: unaccented *-(n)un/-wa* as a plain topic marker without any conventional implicature and accented *-(n)un/-wa* as a CT marker conveying conventional contrastive implicatures.

Whether positing two different items of *-(n)un/-wa* in the lexicon is desirable or not must be determined by how well it is motivated both empirically and theoretically. And I have partly shown in the previous chapter that it is neither

¹³⁵ This view also seems to be widely shared among many researchers other than Korean/Japanese linguists. For instance, Asher (2004: 165) says that “[c]ontrastive topic is grammatically marked in Hungarian, Korean, Chinese, and other languages, while it is typically intonationally marked in French, German and English”.

empirically nor theoretically motivated. Discussing the nature of the CI, this section provides further evidence for the proposed view.

4.2.1.2. What is CT?

Although the term CT is used by those who take the standard view, it seems to be understood differently from researcher to researcher. This is not about whether CT is a topic, focus, or both, which was discussed in Chapter 2. The issue here is whether CT includes so-called “list contrastive topics” (LCTs, henceforth) or not. C. Lee (2007: 155) defines LCT as “the exhaustive list of all the contrastive topics that constitute a big Topic”, and distinguishes LCT from CT claiming that the former does not induce any (contrastive) implicature.¹³⁶ In contrast, Hara (2006a, b) and Hara & van Rooij (2007) also take LCTs to be CTs and include the phenomenon of LCTs in their formal analyses of CT.¹³⁷

¹³⁶ He further supports the distinction between LCT and CT with the fact that the so-called B-accent in English cannot be used for the last item that exhausts the “big topic” as shown in (ia), which are from C. Lee (2007: 156).

- (i) a. *Fred ate the [beans]_{B-accent} but Sam ate the [peanuts]_{B-accent}.
b. The [beans]_{B-accent}, he doesn't like; the [eggplant]_{B-accent}, he doesn't like; and the [peanuts]_{B-accent}, he doesn't like either.

Based on this fact, he argues that “the notion of ‘Contrastive’ may better be understood as showing a contrast between the said part and the polarity-reversed, implicated unuttered part of the partly realized, contrastively conjunctive complex sentence” (C. Lee 2007: 156). Two problems exist for this claim. First, the notion of contrast becomes too narrow to capture all the contrasts, including, for instance, contrast between the said part and presupposed unuttered part. Second, in fact, true LCTs in (ia) are referents of the subject NPs, and the referents of the object NPs should be understood as argument foci rather than LCTs. This is supported by the fact that (ib), in which the objects are LCT expressions, is totally acceptable.

¹³⁷ Other previous studies on the so-called CT seem to be inexplicit about what they take to be CT in this respect and exclude LCTs from their discussion.

Who is right? I think both are right and wrong in different respects. C. Lee (2007) is right in claiming that LCTs do not generate any implicature but wrong in excluding them from his analysis of CT. On the other hand, Hara (2006a, b) and Hara & van Rooij (2007) are correct in claiming that the category of CT should also include LCTs but wrong when they argue that every LCT induces CIs.

To be more specific, by excluding LCT from CT, C. Lee (2000, 2007) needs to explain how the contrastiveness shown in LCTs is different from the contrastiveness induced by CTs. The fact that LCTs also convey contrastiveness cannot be denied (Prince 1981a), and this seems to be the reason that C. Lee himself calls them list CONTRASTIVE topics and not, for instance, just list topics. So, how is the contrastiveness conveyed by LCTs different from that created by CTs? Should we posit another *-(n)un* for LCTs in the lexicon which is different from both (non-contrastive) plain topic marker and CT marker?

In fact, the contrast in LCTs and that in CTs both belong to the category of contrast defined in Chapter 2. That is, both of them indicate a set of alternatives for which some semantic property P exists such that the value ‘true/false’ results when P is applied to one part of the set but not to the other (for whatever reason)¹³⁸. Thus, according to the definition of contrast provided here, no distinction can or should be made between the two.

As for Hara (2006b) and Hara & van Rooij’s (2007) approach, they claim that every LCT, even the last introduced item, induces a contrastive implicature. However, by listing the last element of a group of entities that are concerned, no implicature about the alternatives can be generated, for all the information about the alternatives

¹³⁸ The reasons could be known falsehood, lack of evidence, “meaninglessness (non-definition)” (Constant 2008), and so forth.

is already shared by the discourse participants and thus (under the assumption that no rejection is made of what has been asserted about the alternatives) stored in the common ground. This is a typical case of a conversational implicature's being overridden by context (e.g. Horn 1972; Gazdar 1979). This point will be further discussed below as evidence for the conversational nature of the CI.

4.2.2. Conversational Nature of CI

Surprisingly, few of the previous studies that take the standard view provide any detailed discussion on the issue of WHY the CI is conventional. Most of them either (explicitly or implicitly) just assume that CIs are conventional because it is generated by a specific morpheme (i.e., *-(n)un/-wa*) with prosodic prominence (e.g. C. Lee 2000, 2007; Y. Jun 2006), or remain vague on this issue (e.g. J.-r. Kim 2009; J. E. Kim 2010, 2011). But conventional implicature, if we accept that such a notion exists (*pace* Bach 1999), has its own properties that distinguish it from conversational implicature, and the CI can be safely treated to be conventional if and only if it is shown to have those properties.

4.2.2.1. Is Uncertainty Conventional?

In this subsection, I examine Hara's (2006a) analysis, which is, as far as I know, the only previous study that explicitly deals with the issue whether CIs are conventional or conversational. Ultimately, I will claim that the evidence she provides is neither valid nor sufficient.

Before discussing her evidence for the conventional nature of the CI, let us first understand what she argues to be conventional, that is, the content of the CI. According to Hara (2006a), CTs always induce SCALAR IMPLICATURES that express UNCERTAINTY about the alternative(s). The alternatives which form a scale are

presupposed by the appearance of contrastive *-(n)un/-wa*.

Modeling after the structured meaning approach (von Stechow 1990; Krifka 2001), Hara (2006b: 29)¹³⁹ defines the interpretation of Japanese contrastive *-wa* as follows.^{140, 141}

(1) Let w be a world variable, sp the speaker, F the focus-marked elements, B the background, R : restriction.

CON (w) (sp) ($B(F)$)

- a. asserts: $B(F)(w)$
- b. presupposes: $\exists F'[[F' \in R] \ \& \ [B(F') \Rightarrow B(F)] \ \& \ [B(F) \not\Rightarrow B(F')]]$
(There exists $B(F')$ which is stronger than $B(F)$)
- c. implicates: $\exists w'[[w' \in \text{DOX}_{sp}(w)][B(F')(w') = 0] (= \Diamond(\neg(B(F'))))]$

According to Hara (2006a), the uncertainty scalar implicature (henceforth, USI) in (1c) is conventionally generated by the use of contrastive *-(n)un/-wa*. Although scalar implicature is traditionally categorized under conversational implicatures, she provides three pieces of evidence for the conventional nature of the USI.

The first piece of evidence is the fact that the USI is DETACHABLE. This is based on Grice (1975) who argues that conventional implicatures are detachable whereas conversational ones are not. For instance, Hara (2006a) provides the following example to show that the USI is conventionally conveyed by contrastive

¹³⁹ I introduce the formalization in Hara (2006b) instead of that in Hara (2006a), because the former is more explicit. But the contents are not different.

¹⁴⁰ C. Lee (2000, 2004, 2005, 2006, 2007) also claims that Korean CTs always induce scalar implicatures but does not provide a formal analysis of the Korean CT. Hara (2006a) claims that her analysis is also applicable to Korean CTs.

¹⁴¹ This formalization is modified and further developed in Hara (2006b) and Hara & van Rooij (2007). But the basic idea that the CI is conventional does not seem to change.

-(n)un/-wa:

(2) a. Dare-ga paatii-ni ki-ta-ka?
who-NOM party-DAT come-PAST-INT
'Who came to the party?'

b. JOHN-wa ki-ta.
John-wa come-PAST
'As for John, he came.'
(Implicature: It is possible that it is not the case that John and Mary came. ≈
I don't know about others.)

c. JOHN-ga ki-ta.
John-NOM come-PAST
'John came.' (complete answer)

(Hara 2006a: 38)

Here, it is shown that sentence (2b), whose subject is *-wa*-marked, induces the USI while sentence (2c), whose subject is *-ga*-marked, does not.

However, Hara misses the point that (2c) is not without any implicature; with the nominative marker *-ga*, the utterance conveys an EXHAUSTIVITY implicature (e.g. 'It is only John that came to the party.'). If we follow Hara's logic, the nature of the exhaustivity implicature should also be conventional, for the implicature also disappears if *-ga* is replaced by *-wa*. However, it has been convincingly shown that the exhaustivity implicature is conversational rather than conventional in both Japanese and Korean (e.g. Shibatani 1990; Heycock 1994; Y.-S. Lee 1995).^{142, 143} Thus, her argument based on the data given in (2) is not valid.

¹⁴² The non-conventionality of the exhaustivity implicature induced by Korean *-i/ka* and Japanese *-ga* will be discussed in more detail below.

¹⁴³ See Horn (1981) for a similar argument for the exhaustivity generated by English *it*-clefts, and Onea & Beaver (2011) for the exhaustivity generated by pre-verbal position in Hungarian.

Instead, an ideal datum for the detachability test would be examples like (3) below. The object of sentence (3a) is *-nun*-marked, whereas *-nun* is “detached” from the object in (3b).

- (3) (As an answer for a question ‘Which fruit did John eat at the party?’)
- a. John-i sakwa-**nun** mek-ess-e
 John-NOM apple-nun eat-PAST-DEC
 ‘John ate an apple.’ (‘But I don’t know whether he ate other fruits.’)
- b. John-i sakwa mek-ess-e
 John-NOM apple eat-PAST-DEC
 ‘John ate an apple.’ (‘And he didn’t eat any other fruit.’)

Here, the contrast between (3a) and (3b) in terms of the implicature they convey seems to support the view that the USI in (3a) is conventionally conveyed by contrastive *-(n)un*, because the difference in the content of the implicature is indeed due to the presence or absence of *-(n)un*.

However, two explanations are in principle possible for this. First, it can be argued, as Hara does, that contrastive *-(n)un/-wa* conventionally induces the USI. On the other hand, it can also be claimed that the USI itself is not inherently conveyed by contrastive *-(n)un/-wa*, and that the salience imposed on *sakwa* ‘apple’ by *-(n)un*, which is missing in (3b), conversationally gives rise to the USI in proper contexts.¹⁴⁴ That the two competing explanations are possible for the difference between (3a) and (3b) indicates that the detachability test, at least in this case, does not work in determining whether the USI is conventional or not.¹⁴⁵

¹⁴⁴ In the latter case, it has to be shown how uncertainty is generated by imposing salience on the referent. This will be discussed below.

¹⁴⁵ Pointing out Sadock’s (1978) criticism of the detachability test, Horn (1991: 316) also claims:

The second piece of evidence for the conventional nature of the USI comes from Hara's (2006a) observation that it is NOT CANCELLABLE. C. Lee (2002, 2007) also uses this characteristic as evidence for the conventional nature of the scalar implicature induced by contrastive *-(n)un*.

According to Grice (1975), conventional implicatures are not cancellable since they are tied to a particular linguistic item employed in a sentence. As an example the non-cancellability of the USI, Hara provides sentence (4).

- (4) #*Minna-wa* *kita*.
 Everyone-wa came (no implicature is possible) (Hara 2006a: 39)

That is, she claims that if the USI were not necessary (and thus cancellable), there would be no reason for (4) to be infelicitous.

However, the unacceptability of (4) cannot be evidence for the conventional nature of the USI. Regardless of whether the USI is conventional or conversational, the infelicity of (4) can be explained by the simple fact that, with *minna-wa* 'everyone-wa', no alternative can be posited, for it exhausts all the alternatives that are under discussion. Thus, contrast cannot be involved here either conventionally or conversationally, which in turn makes the use of contrastive *-(n)un/-wa* inappropriate.

In fact, if we apply the traditional cancellability tests originally suggested by Grice (1975), the USI turns out to be conversational. According to Grice, two kinds of cancellability exist, which I will call, following Blome-Tillmann (2008), Explicit

Perhaps to capture what Grice had in mind, we need a restricted notion of detachability which would apply to putative synonyms which correspond morpheme-to-morpheme or word-to-word (in the manner of Carnapian intensional isomorphism), but would disregard pairs of expressions P, Q such that P and Q are purported to have the same literal meaning BUT WHERE Q DIFFERS FROM P IN CONTAINING ADDITIONAL LINGUISTIC MATERIAL WHOSE PRAGMATIC FUNCTION IS TO INDICATE THAT A GENERALIZED IMPLICATUM THAT WOULD OTHERWISE ATTACH TO THE ASSERTION OF P DOES NOT IN FACT ATTACH [emphasis added].

Cancellability (EC) and Contextual Cancellability (CC). They are represented as below:¹⁴⁶

(EC) If an utterance of P conversationally implicates q in C, then there is a context C' – not necessarily identical to C – in which the implicature is present but can be explicitly cancelled. (Blome-Tillmann 2008: 159)¹⁴⁷

(CC) If an utterance of P conversationally implicates q in C, then there is a context in which utterances of P do not commit the speaker to q. (Blome-Tillmann 2008: 157)

First, let us look at how EC works for the USI. Suppose that the sentences in (2), which are repeated below, are uttered in a situation in which the speaker of (2b) does not know whether other people came to the party or not. In this case, the USI (e.g. 'I don't know if Mary came') seems not easily cancellable, because, given the speaker's uncertainty and the Cooperative Principle (particularly the Q-Principle (Horn 1984)), it seems hard (though not impossible) to add *but it is not the case that I don't know if Mary came* or *but I do not mean to imply that I don't know whether Mary came*.

¹⁴⁶ The original claim made by Grice (1975) is the following:

[A] putative conversational implicature that *p* is explicitly cancellable if, to the form of words the utterance of which putatively implicates that *p*, it is admissible to add *but not p*, or *I do not mean to imply that p*, and it is contextually cancellable if one can find situations in which the utterance of the form of words would simply not carry the implicature. (Grice 1975: 44)

¹⁴⁷ EC proposed here is a slight weakening of Grice's (1975) original EC. See Blome-Tillmann (2008) for how it is different from the original EC and what motivates this change.

- (2) a. Dare-ga paatii-ni ki-ta-ka?
 who-NOM party-DAT come-PAST-INT
 ‘Who came to the party?’
- b. JOHN-wa ki-ta
 John-wa come-PAST
 ‘As for John, he came.’

With regard to the fact that the uncertainty implicature in (2b) is harder to cancel than ordinary conversational implicatures, I would like to point out two things. First, it can be explained by the fact that a speaker who uses contrastive *-(n)un/-wa* has GONE OUT OF HER WAY to employ the morphological marker which imposes salience on John and hence induce the uncertainty in the given context. This is based on Horn’s (1981) account of the non-cancellability of the exhaustivity implicature induced by *it*-clefts, who concludes that “[i]t might thus be speculated that non-cancellability derives *not* FROM THE CONVENTIONAL STATUS OF AN IMPLICATURE [emphasis added], but rather from the form of the implicature-carrying expression and the availability of conceivable "simpler" alternatives” (Horn 1981: 134).

The second point is that if (2a-b) are uttered in a discourse context in which the speaker of (2b) knows that the speaker of (2a) believes that the speaker of (2b) knows whether other people came to the party, the USI, if it is generated at all, can be canceled out without any problem. For instance, the speaker of (2b) can felicitously add *but I do not imply to mean that I don’t know whether Mary came. I just don’t want to let you know whether she came or not.* This indicates that cancellability of the USI crucially depends partly on the SPEAKER’S KNOWLEDGE STATE, which would be impossible if USIs were conventional. Thus, as Laurence Horn (p.c.) points out, the USI is better captured as a standard case of Q-implicature, which is calculable based

on the principles of conversation.¹⁴⁸

As for the second cancellability, that is, CC, one can easily come up with a context where neither the USI nor indeed any kind of contrastive implicature is induced by contrastive *-(n)un/-wa*. For instance, by the time Kim responds to Lee's utterance in (5), Kim and Lee clearly know that Lee's boyfriend bought a ring for her, so any possible contrastive implicature (e.g. 'But I don't know whether your boyfriend bought a ring for you.' or 'But your boyfriend has bought a ring for you.') is overridden and thus canceled by the context.

(5) Kim: Where did you get that ring? It's beautiful!

Lee: My boyfriend bought it for me.

Kim: My boyfriend-*nun/wa* has never bought me a ring.¹⁴⁹

¹⁴⁸ The principles of conversation proposed by Horn (1984: 13) are shown in (i) below, which is a boiled-down version of Grice's (1975) Maxims (leaving aside Quality).

- (i) a. The Q-Principle (Hearer-based):
MAKE YOUR CONTRIBUTION SUFFICIENT (cf. Quantity 1)
SAY AS MUCH AS YOU CAN (given R)
Lower-bounding principle, inducing upper-bounding implicata
- b. The R-Principle (Speaker-based):
MAKE YOUR CONTRIBUTION NECESSARY (cf. Relation, Quantity2,
Manner)
SAY NO MORE THAN YOU MUST (given Q)
Upper-bounding principle, inducing lower-bounding implicata

¹⁴⁹ One might argue that the referent of *-(n)un*-marked NP is not contrastive at all. For instance, in English one would not have the prosody typically associated with CT (i.e. B-accent) on *boyfriend*, but a plain focus on *my*, thus contrasting between A's boyfriend and B's boyfriend. I would like to point out two things. First, the standard understanding of CT is different from mine, which is discussed in detail in Chapter 2. According to the view taken here, it is definitely a CT, for it is topical (that is, it is what the rest of the sentence is about) and contrastive (that is, it is contrasted with Lee's boyfriend). As discussed in Chapter 2, the

Thus, contrary to Hara's (2006) claim, the cancellability tests strongly suggest that the CI is conversational, not conventional.

Lastly, based on Chierchia's (2004) theory of local computation of scalar implicatures, Hara claims that the fact that the USI cannot be suspended in a Downward Entailing (DE) context is evidence for the conventional nature of the implicature. This claim is based on "a well-observed fact that a conversational scalar implicature is suspended in a DE context" (Hara 2006a: 39).

- (6) a. John-ga hon-o 3-satsu yon-da.
John-NOM book-ACC 3-CLASS read-PAST
'John read 3 books.' (Conversational Scalar Implicature: He did not read 4)
- b. John-ga hon-o 3-satsu yom-eba, goukaku-suru.
John-NOM book-ACC 3-CLASS read-COMP, pass-do
'If John reads 3 books, he will pass.' (He will pass even if he reads 4.)
(Hara 2006a: 39)

As shown in (6), the scalar implicature survives in (6a) whereas it is suspended in (6b) in a DE context. Hara attributes the lack of the implicature in a DE context to Chierchia's (2004) STRENGTH CONDITION, which prohibits a strong value (the plain meaning plus the implicature) from becoming weaker than a plain value (truth-conditional meaning).¹⁵⁰ Thus, according to her (and Chierchia's) analysis, a locally computed implicature must be suspended in a DE context; otherwise, it would yield a weakening of information.

view that directly links B-accent to the notion of CT has no empirical or theoretical motivation. Second, it seems that B-accent on *my boyfriend* is still possible for the purpose of contrasting Kim's boyfriend to Lee's boyfriend. Note also the rise on "ring" at the end, which would not be expected if "my" were a plain focus.

¹⁵⁰ See Hara (2006a) for a specific mechanism on how unsuspected implicature in a DE context would result in weakening of information.

At least two problems exist in this argument. First, whether implicatures are locally (or compositionally) computed is a controversial issue rather than a well established idea. In fact, Chierchia's LOCALIST approach has been criticized both on theoretical and empirical grounds by those defending the more traditional GLOBALIST approach (e.g. Blutner 2004; Horn 2006; Russell 2006, 2012; Geurts 2009, 2010; Geurts & Pouscoulous 2008, 2009), and it seems hard at this stage to find crucial motivation for preferring the localist over the globalist view.¹⁵¹ The fact that her analysis relies on a highly controversial and thus not firmly grounded claim significantly weakens its validity.

Second and more importantly, what Hara takes for granted as the evidence for her argument, namely, that the USI is not suspended in a DE Context, is not true. Her claim is based on Japanese and Korean data like (7) and (8).

- (7) *Moshi John-ga hon-o 3-satsu-wa yom-eba, goukaku-suru.
 if John-NOM book-ACC 3-CL-wa read-COMP, pass-do
 'If John reads [_{CTop} 3] books, he will pass.' (Japanese)
- (8) *Manyak John-i chayk-ul sey-kwon-un ilku-myen,
 if John-NOM book-ACC 3-CL-un read-COMP,
 hapkyek-ha-l kes-i-ta.
 pass-do-FUT thing-be-DEC
 'If John reads [_{CTop} 3] books, he will pass.' (Korean)
 (Hara 2006a: 41)

That is, Hara claims that the USI is not suspended in a DE context based on the unacceptability of sentences like (7) and (8). However, Hara does not provide any

¹⁵¹ But see Chemla & Spector (2011) for an experimental study that supports the localist view. Also, see Sauerland (2012) for an overview of the arguments sympathetic to the localist/grammatical view.

evidence for her claim that the USI still exists in (7-8). Thus, we first need to figure out whether the USI is suspended or not.

According to Hara's formalization, the USI would be something like 'But it is possible that John doesn't read 4 books'. In contrast to Hara's claim, we can see that sentence (8) is true even if it is impossible (or it is necessary) that John reads 4 books. That is, the USI in (8) is also suspended just like ordinary scalar implicatures.¹⁵²

Further evidence against Hara's claim comes from the fact that it is not only contrastive *-(n)un/-wa* that makes sentences like (7-8) bad; even non-contrastive *-(n)un/-wa* in *if*-clauses is unacceptable as already shown in Chapter 3. Let us look at another example in (9).

- (9) Manyak John-i/???un chayk-ul sey-kwen ilku-myen,
 if John-NOM/un book-ACC 3-Class read-if,
 hapkyek ha-l kes-i-ta.
 pass do-FUT FN-be-DEC
 'If John reads three books, he will pass.'

In (9), even if John has no alternative in the discourse context, the sentence is unacceptable by the mere existence of *-(n)un*, which can be well explained by the root restriction on topic introduction, as discussed in Chapter 3.

Just as the unacceptability in (9) does not support the conventional nature of the function of topic/frame introduction expressed by non-contrastive *-(n)un*, the

¹⁵² In fact, my claim that the USI is still suspended is made under the assumption, following Hara, that a (conversational) scalar implicature is suspended in a DE context. However, one can even refute this underlying assumption; many previous studies have convincingly shown that DE contexts REVERSE informativeness inferences instead of suspending them (e.g. Gazdar 1979; Hirschberg 1985; Levinson 2000). On this view, scalar implicatures are not suspended (or blocked) but just reversed due to the reversal of the scale.

unacceptability of (7)-(8) does not guarantee the conventional nature of contrastive *-(n)un/-wa*, whatever the source of the unacceptability is.

Finally, Tomioka (2010a, b) also provides counter-evidence to the view that the USI is conventional. His evidence comes from the fact that contrastive *-(n)un/-wa* can be used not only for assertions but for other speech acts such as questions, imperatives, exhortatives (*let's do X*), and volitionals (*I shall do X*).

When contrastive *-(n)un/-wa* is used in these speech acts, it does not necessarily convey the speaker's uncertainty but other nuances like politeness. For instance, he correctly points out that "the speaker may utter a sentence with a CT [contrastive *-(n)un/-wa*] out of politeness, intentionally leaving out information that is known to the speaker but judged inappropriate or impolite by the speaker" (Tomioka 2010b: 115-116).

4.2.2.2. Is Scalarity Conventional?

According to the CI formulated by Hara (2006a) in (1), which is repeated below, the implicature basically consists of two components, scalarity and uncertainty.

(1) Let w be a world variable, sp the speaker, F the focus-marked elements, B the background, R : restriction.

CON (w) (sp) ($B(F)$)

- a. asserts: $B(F)(w)$
- b. presupposes: $\exists F'[[F' \in R] \ \& \ [B(F') \Rightarrow B(F)] \ \& \ [B(F) \not\Rightarrow B(F')]]$
(There exists $B(F')$ which is stronger than $B(F)$)
- c. implicates: $\exists w'[[w' \in \text{DOX}_{sp}(w)][B(F')(w') = 0] (= \diamond(\neg(B(F'))))]$

Scalarity is expressed by the asymmetrical entailment relationship between $B(F')$ and $B(F)$ (i.e. $B(F')$ entails $B(F)$ & $B(F)$ doesn't entail $B(F')$), and uncertainty is captured by $\diamond(\neg(B(F')))$. In fact, what I have shown above is only that the CI (or USI) in (1c) is

not conventionally conveyed by contrastive *-(n)un/-wa*. Thus, one might argue that it is only scalarity of contrasting alternatives, which is shown in (1b), that is conventionally conveyed by contrastive *-(n)un/-wa*. Indeed, this claim has been implicitly made by C. Lee (2006, 2007) who argues that contrastive *-(n)un/-wa* evokes CONVENTIONAL SCALAR IMPLICATURES. Although he is not explicit about the content of the CI (e.g. whether it is uncertainty or exhaustiveness), it is certain that he takes (at least) scalarity to be conventionally generated by contrastive *-(n)un/-wa*.

It is not hard to show that this claim still does not hold. Let us look at example (5) again, which is repeated below.

(5) Kim: Where did you get that ring? It's beautiful!

Lee: My boyfriend bought it for me.

Kim: My boyfriend-*nun/wa* has never bought me a ring.

In her response to Lee, Kim contrasts her boyfriend with Lee's boyfriend, so the alternative that is under consideration can be represented as a singleton set {Lee's boyfriend}. What does Kim want to express by her second utterance? In this context, it is most likely that she wants to compare (or contrast) her boyfriend with Lee's boyfriend and assert that her boyfriend is not like Lee's boyfriend with respect to the property of buying a ring for a girlfriend. With this interpretation, it does not seem that the two boyfriends (Kim's and Lee's) form a scale with Lee's boyfriend being in any sense stronger than Kim's boyfriend.

Or, is there a semantic scale formed by the "member-set" relation that looks like $\langle \{ \text{Kim's boyfriend, Lee's boyfriend} \}, \text{Kim's boyfriend} \rangle$ in this context? It is clearly not what Kim intends to commit to in using contrastive *-(n)un* in her second

utterance. That is, she intends to contrast her boyfriend with Lee's boyfriend, but not with the two boyfriends.

In order to better understand that there is no scale evoked in (5), let us look at examples where scalarity is clearly shown. Example (11) is from C. Lee (2007: 161).

(11) Q: Which Beatle's autograph do you have?

A: George Harrison's.

“Standard” partition: 4 Beatles \sim 16 cells [via poset relation]

Autographic prestige:

Starr < Harrison < {Lennon, McCartney}

In (11), two scales can be posited: a semantic one and a pragmatic one. First, a semantic scale arises from the poset relation (Hirschberg 1985), or the hierarchy of the sum of Beatles' autographs. Also, based on the different popularity of each member of the group, a pragmatic scale (i.e. the autographic prestige) can be formed as shown above.

C. Lee (2007) claims that the pragmatic scale is unmistakable by the use of special prosody (e.g. English B-accent) or morphology plus prosody (e.g. contrastive *-(n)un/-wa*), from which he concludes that the scalar implicature (e.g. 'But I don't have John Lennon's') is conventional.

Another typical example of the existence of scalarity is shown in (12). Here, contrastive *-(n)un* is attached to the adverb *cal* 'well'.

(12) Q: Can you play soccer?

A: *cal-un* mos hay.

well-NUN cannot do

'(I) can't play it well.' ('But I can play it anyway.')

Here, the answer in (12A) is negative and thus an affirmative proposition with a weaker value than ‘well’ is implicated. Based on the fact that the same sentence without contrastive *-(n)un/-wa* does not necessarily have such a scalar implicature (and can be used, for instance, even when the speaker cannot play soccer at all), C. Lee (2007) argues that contrastive *-(n)un/-wa* conventionally induces scalar implicatures.

How can we explain the difference between (5) and (11-12) in terms of the (non-)existence of a scale? I contend, contra C. Lee and Hara, that scalarity is neither presupposed nor conventionally implicated by the use of contrastive *-(n)un/-wa*. If it were, scalarity should be necessarily shown in (5) too. Instead, I attribute the existence of the scalarity in the CI in (11-12) to the interaction of the existence of a scale among alternatives arising from discourse context (i.e. the autographic prestige in (11)) or a lexical item (i.e. *cal* ‘well’ in (12)) and the salience imposed by contrastive *-(n)un* on one of the alternatives which derives contrast. If no scale is formed among alternatives, no scalarity is evoked from contrastive *-(n)un/-wa* as in (5). In other words, contrastive *-(n)un/-wa* evokes scalarity only if it already exists among contrasting alternatives; it cannot newly create scalarity by itself.

Also, note that pragmatic scales formed by discourse context can be easily canceled out. For example, imagine a situation where the speaker (11A) knows that the speaker of (11Q) likes George Harrison as much as she likes John Lennon. In this situation, utterance (11A) does not induce any scalar implicature; instead, the nature of the implicature is simply contrastive just as shown in (5). Further evidence against the conventional nature of scalarity of contrastive *-(n)un/-wa* is shown in (13), which is from C. Lee himself.

(13) (After hearing that Inho didn't come, regarding his friend Yengswu)

Yengswu-**nun** wa-ss-e

Yengswu-NUN come-PAST-DEC

'Yengswu_{CT} came.'

C. Lee (2007: 157)

Interestingly, C. Lee provides this example to argue for the necessity of prosodic prominence for contrastive *-(n)un*, but he does not discuss whether contrastive *-(n)un* here induces a scalar implicature or not. In fact, as with (5), this is exactly the case where the CI, which is *not* scalar, is overridden by context. There might be a scale between Inho and Yengswu depending on context, but it is definitely not the case that contrastive *-(n)un* inherently evokes a scale.

4.2.2.3. Source of Uncertainty and Exhaustivity

Since it was shown that the uncertainty conveyed by contrastive *-(n)un/-wa* is not its conventional meaning, let us investigate how the uncertainty is made possible by the use of contrastive *-(n)un/-wa*.

In fact, part of the answer was already given in the previous chapter, where the source of uncertainty conveyed by *-(n)un* was attributed to its function of imposing salience on a referent without uniquely specifying it. Together with this nature of *-(n)un*, the speaker's uncertainty can be conversationally calculated by the Q-Principle (see footnote 148). In other words, the meaning of *-(n)un* and the principles of conversation naturally give rise to uncertainty in appropriate contexts.

Unlike uncertainty, the exhaustivity conveyed by Korean *-i/ka* and Japanese *-ga* has been discussed by several previous studies. In what follows, I will introduce two most recent studies on this issue and discuss their problems.

First, note that the uncertainty implicature is not generated by the use of *-i/ka* (and Japanese *-ga*); instead, *-i/ka* induces only an exhaustivity implicature. The

difference is shown in the Japanese example (2), repeated below with a slight modification of the implicatures in (2b) and (2c).

- (2) a. Dare-ga paatii-ni ki-ta-ka?
who-NOM party-DAT come-PAST-INT
'Who came to the party?'
- b. JOHN-wa ki-ta
John-wa come-PAST
'As for John, he came.'
(Implicature: I don't know about others.)
- c. JOHN-ga ki-ta.
John-NOM come-PAST
'John came.' (Implicature: No other people came.)

Tomioka (2010a, b) explains the difference between examples like (2b) and (2c) based on "focus-CT competition". The basic idea of the focus-CT competition is that a CT is a more marked option than an ordinary focus, which generates an exhaustivity implicature. Thus, by using a CT, the speaker avoids this ordinary (and more informative) exhaustive implicature and thus conveys an uncertainty implicature instead.

At least intuitively, this approach seems more convincing than Büring's (2003) approach which takes a CT to be unmarked and a typical focus to be marked. Tomioka supports the view that a typical focus is the unmarked option with the fact that bare NPs, that is, NPs without any postposition or case marker (e.g. *-ga*, *-wa*) attached to it, give rise to an exhaustivity but not an uncertainty implicature when they are used in a focus position.¹⁵³

However, what is missing in Tomioka's analysis is WHY a "typical" focus is

¹⁵³ Why bare NPs are consistent with typical foci but not with CTs is pointed out in Chapter 3.

marked by *-ga* and a CT by *-wa*. In his analysis, they are just stipulated to be so. That is, he does not explain what (inherent) aspect(s) of *-wa* and *-ga* lead them to be used to mark CT and focus respectively.

Kimura (2011) tries to solve this problem, by arguing that Japanese *-wa* and *-ga* form an informativeness scale $\langle -ga, -wa \rangle$. By assuming that *-ga* (but not *-wa*) has the property of exclusive specification, which is, according to Kimura, interchangeable with the meaning of exhaustive listing, he claims that *-wa* is INFORMATIONALLY WEAKER than *-ga*. Thus, by using *-wa*, a speaker eliminates the possibility that the referent of the NP to which *-wa* is attached is the one and only one item in the discourse.

Although Kimura's analysis is surely an improvement compared to Tomioka's in that it seeks to explain the why question, it is not without problems. First, the meaning of exclusive specification (or exhaustive listing), which he posits to be an inherent property of *-ga*, cannot be the conventional aspect of *-ga*. If it were, the use of *-ga* in any context should necessarily convey exhaustiveness. But it is widely known that no exhaustiveness occurs when *-ga* is used for "neutral description" (Kuno 1972).

Even if we assume that there are two different lexical items of *-ga* in the lexicon, i.e., $-ga^1$ for neutral description and $-ga^2$ for exhaustive listing, it still cannot save Kimura's proposal. The "dual" approach predicts that the exhaustiveness conveyed by $-ga^2$ must be detachable and not cancellable since it is conventional.

At first glance, the exhaustivity implicature seems to be a conventional implicature. For instance, it is not easy (although not impossible) to continue (2c) with a Korean/Japanese sentence that can be translated into English as 'But it is (possibly) not the case that only John came' or 'I don't know about the others', which

shows that the implicature is not cancellable.¹⁵⁴

But it is not hard to show that the exhaustivity implicature induced by *-ga*² is cancellable and not detachable. A clear example that shows the cancellability of an exhaustivity implicature induced by *-i/ka* (and probably *-ga*) is shown below.

(14) Q: Who came to the party?

A: John-*i/ga* came. That is good enough for me.

Imagine a situation where ten people came to the party and the speaker of (14A) is satisfied with John's coming because he was the *only* person that the speaker wanted to see at the party. If (14A) is uttered in this situation, the second sentence in (14A) cancels the exhaustivity implicature generated by the preceding sentence.

Also, as mentioned above, bare NPs also usually induce an exhaustivity implicature when it is used in a typical focus position, which shows that *-ga* is not detachable. Thus, the non-conventional nature of the exhaustivity implicature induced by *-ga* makes Kimura's analysis not tenable.

The second problem for Kimura's analysis is related to the scale he posits between *-ga* and *-wa*. Kimura claims that the $\langle -ga, -wa \rangle$ scale is very similar to the $\langle \text{the}, a \rangle$ scale in its informativeness-based nature. In order to support this claim, he argues that the "property of *wa* as a topic marker shows that *wa* is semantically more general than *ga*. In other words, *wa* is informationally weaker than *ga*" (Kimura 2011: 94).

His claim that *-wa* is semantically more general than *-ga* comes from the fact

¹⁵⁴ Note that the low degree of cancellability in this case can also be explained by the same reason that the uncertainty induced by *-(n)un* is hard to cancel. That is, the speaker has "gone out of her way" to employ the morphological marker to indicate exhaustiveness. How *-i/ka* can induce exhaustiveness will be discussed in detail below.

that a *-wa*-marked NP can more easily refer to the element in the previous discourse. I would like to point out two things. First, it is very hard to understand how *-wa*'s ability to more easily refer to the element in the previous discourse makes it semantically more general, especially since the notion of semantic generality is undefined and thus hard to grasp. Second, even if we accept that the ability to easily refer to a discourse-given referent is due to semantic generality, it is still not clear how something that is semantically more general is informationally weaker. Unless Kimura provides an explicit definition of semantic generality and how it is related to the strength of informativeness, the validity of his claim is hard to evaluate.

Furthermore, Kimura does not provide enough evidence that the <*-ga*, *-wa*> scale is really a scale. In order to support the view that *the* and *a* form an informativeness scale, Horn & Abbott (2012) show that the <*the*, *a*> scale does have the characteristics of a regular scale, except for the fact that their difference is conventionally signaled but not entailed.

The first characteristic is that the members of a scale are “natural paradigmatic alternatives, a fact that clearly emerges in focus or contrastive environments” (Horn & Abbott 2012: 334). The second characteristic is that the scalar implicature induced by the member with weaker informativeness can be canceled, suspended or reinforced. These phenomena are known to be standard diagnostics for weak vs. strong scalar competitors (e.g. Horn 1972; 1989, Ch. 4). Lastly, scalar competitors can be involved in metalinguistic negation, which is “a metalinguistic or echoic device to reject an utterance with a scalar value as overly weak” (Horn & Abbott 2012: 337). Examples of each characteristic are introduced below, all of which are from Horn & Abbott.¹⁵⁵

¹⁵⁵ See Horn & Abbott (2012) for many more examples of each diagnostic.

(15) Paradigmatic alternatives (Horn & Abbott 2012: 334)

A (host to guest): “Did you find a towel?”

B (guest to host): “I found **the** towel.”

(16) Implicature cancellation (Horn & Abbott 2012: 335)

Yet time and again, North Korea is cited as **not only “a” but “the”** major threat to US security.

(17) Metalinguistic negation (Horn & Abbott 2012: 337)

Graham claims that cancer selection is **not a but the** driving force in the emergence of complex animal life.

Kimura applies the first two diagnostics to the <-ga, -wa> scale. First, in terms of the first diagnostic, that is, whether *-ga* and *-wa* are natural paradigmatic alternatives, he concludes that they are paradigmatic alternatives because the two particles are mutually exclusive and cannot be attached to a NP together (e.g. **John-ga-wa* or **John-wa-ga*), which is also the case in Korean (*-i/ka* vs. *-(n)un*).¹⁵⁶

Secondly, he also claims that *-ga* and *-wa* can be used in contrastive environments as shown in (18), and that a “non-specificity” implicature (or an uncertainty implicature in my term) can be canceled by the use of *-ga*.

(18) Mr. Tanaka is out of the office today. Someone asks what happened to him.

One of his colleagues answers:

Tanaka-kun-wa Tokyo ni it-ta. Iya, Tanaka-kun-ga it-ta noka.

Tanaka-Mr.-wa Tokyo to go-PAST. No, Tanaka-Mr.-NOM go-PAST FP

‘Mr. Tanaka has gone to Tokyo. Oh, it is Mr. Tanaka who has gone to Tokyo, isn’t it?’

¹⁵⁶ However, he also notes that the distribution of *-ga* is much more restricted than that of *-wa* due to the nominative-marking nature of *-ga*.

However, the context given in (18) can hardly be taken to be contrastive. Rather, the subject of the first sentence is more likely to be a plain (non-contrastive) topic. If this is correct, there is no “non-specificity” implicature to be canceled in the example above. (My intuition that the Korean translation of (18) does not sound natural could be attributed to my non-contrastive interpretation of the first sentence.)

In order to see whether *-i/ka* felicitously cancels the non-specificity (or uncertainty) implicature, let us look at an example that clearly conveys contrast induced by *-(n)un*.

(19) Q: Did John and Kim eat the apples?

A: John-un ate the apples. ???No, actually John-i ate the apples.

It is interesting to note that the acceptability of the second sentence in (19A) is hard to judge. It is not totally bad, but it is not totally good either. This is not predicted if *-i/ka* and *-(n)un* form an informativeness scale, $\langle -i/ka, -(n)un \rangle$. Note that prosodic focus on *-i* cannot help to improve the acceptability. The degraded acceptability of (19A) is also shown by the fact that if *-i* is replaced with *-man* ‘only’, which conventionally conveys exhaustivity, the sentence becomes totally acceptable.

Moreover, *-i/ka* and *-(n)un* (and probably *-ga* and *-wa*) do not pass the metalinguistic negation test. Let us look at the example in (20).

(20) ???John-un-i anila John-i phathi-ey ka-ss-e
 John-un-NOM not John-NOM party-DAT go-PAST-DEC
 ‘Not John-un but John-i went to the party.’

The metalinguistic negation in (20) makes the sentence unacceptable, which is not predicted if *-i/ka* and *-(n)un* form an ordinary scale. This is clearly contrasted with (17) where the $\langle \text{the}, a \rangle$ scale passes the metalinguistic negation. In the following, I will

provide a new analysis of why *-i/ka* (and possibly *-ga*) generates only an exhaustivity (but not uncertainty) implicature, without resorting to the putative <*-i/ka*, *-(n)un*> scale.

The property of *-i/ka* introduced in the previous chapter, that is, the UC (or *non-at-issue*) meaning of unique specification, is crucial to understanding why *-i/ka* only gives rise to an exhaustivity implicature. As shown in the previous chapter, by adding *-i/ka* to a NP, the speaker performs an act of uniquely specifying a discourse referent. What is crucial is that when *-i/ka* is used in a (contrastive or typical) focus position, this instructional meaning guarantees that the referent of the NP is (uniquely) IDENTIFIED with the focus variable (e.g. [John ate x], [x = the apple]). This identification effect then can be naturally inferred to give rise to an exhaustivity implicature.

Of course, as noted above, bare NPs that lack the inherent meaning of unique specification also induce an exhaustivity implicature in a typical focus position. This can be explained by the assumption that 1) exhaustivity through identification is the unmarked interpretation of a focus expression (cf. Kenesei 2006; Wee 2010; Tomioka 2010a, b), and that 2) bare NPs, which do not convey any conventional non-truth-conditional meaning, get their interpretation in terms of topic- and focus-hood according to the context. Based on the two assumptions, a discourse participant who answers an implicit or explicit *wh*-question CONVERSATIONALLY implicates exhaustivity. Therefore, *-i/ka*-marked NPs and bare NPs are the same in that they do not conventionally generate exhaustive implicatures. The difference between them is that the speaker uniquely specifies the referent of the NP CONVENTIONALLY using *-i/ka* in the former but CONVERSATIONALLY by the discourse context in the latter.

From the perspective of the current analysis, *-i/ka* and *-(n)un*, contra Kimura

(2011), do not form a scale because the relationship between the two is symmetric rather than asymmetric. In other words, exhaustivity and uncertainty are conversationally (not conventionally) derived from each particle due to their symmetric difference with respect to their UC meanings (i.e. unique specification vs. imposing salience).

The symmetric relation between the two is further supported by the fact that both exhaustivity implicature and uncertainty implicature are not easy to be canceled as discussed above. Especially, one is not easier or harder than the other to be canceled, which is not predicted if *-i/ka* is more informative than *-(n)un*. Horn & Abbott (2012: 333) provide an example below to show that asymmetry exists between *the* and *a* in terms of informativeness.

- (21) a. #Russell was the author of Principia Mathematica; in fact there were two.
b. Russell was an author of Principles of Mathematics, and in fact the only one.

What (21) shows is that the uniqueness conventionally conveyed by *the* is harder to cancel than non-uniqueness conversationally conveyed by *a*. Without the asymmetry of this kind, *-i/ka* and *-(n)un* (and *-ga* and *-wa*) cannot be argued to form a scale.

4.3. The Source of Concessivity

In the previous section I have shown that uncertainty and scalarity are not inherent properties of contrastive *-(n)un/-wa*. They are generated by the interaction of the meaning of *-(n)un* and the discourse context. In this section, I will investigate the

nature of the concessivity conveyed by contrastive *-(n)un*, which is also (implicitly) assumed to be conventional by C. Lee (2000, 2005).

Based on examples like (11), which is repeated below, C. Lee (2000, 2005) claims that the English B-accent and contrastive *-(n)un* are employed to convey a pragmatic (“intra-type” in his terms) scalar implicature (e.g. ‘but not John Lennon’s’) in addition to a semantic (“inter-type” or “part-whole” in his terms) scalar implicature (e.g. ‘but not the rest of the Beatles’ autographs’).

(11) Q: Which Beatle’s autograph do you have?

A: George Harrison’s.

“Standard” partition: 4 Beatles \sim 16 cells

Autographic prestige:

Starr < Harrison < {Lennon, McCartney}

Then, he correctly points out that in this case the utterance is nothing but a “concessive commitment”, and the speaker’s real intent is to convey what is implicated (i.e. ‘but not John Lennon’s’) rather than what is said (i.e. ‘George Harrison’s’). In this sense, the concessivity can be defined as ‘I concede P (what is said) but want to affirm Q (what is implicated)’.¹⁵⁷ The purpose of this subsection is to find out the source of this concessivity.

C. Lee (2005) argues that the concessivity shown in examples like (11) is the underlying force for deriving the pragmatic scalarity. In other words, he attributes the pragmatic scalarity conveyed by contrastive *-(n)un* to the underlying concessivity.

Although he is not explicit where this concessivity comes from, it is evident that he

¹⁵⁷ Because C. Lee (2005) does not provide an explicit definition of concessivity, it is hard to know what he exactly means by concessivity conveyed by contrastive *-(n)un*. But intuitively, it is clear that some concessivity is felt in (11), and the proposed definition here is explicit enough for our purposes.

assumes (and has to assume) that contrastive *-(n)un* inherently has this property. Otherwise, the pragmatic scalarity, which is, according to C. Lee, derived from concessivity, cannot be conventionally conveyed by contrastive *-(n)un*.

Contrary to this claim, I will claim that the concessivity is neither conventionally conveyed by contrastive *-(n)un* nor the source for the pragmatic scalarity. Instead, I argue that it is pragmatically derived from the interaction of the INCOMPLETE nature of the utterance and the *SCALAR CONTRAST* which is formed by discourse context and then evoked by contrastive *-(n)un*. Before discussing what the incompleteness and the scalar contrast are and how they interact with each other to give rise to the concessivity, let me first show that the concessivity is not conventionally conveyed by contrastive *-(n)un*.

Again, example (5) is a clear counterexample to the claim that concessivity is inherent in contrastive *-(n)un*. In this example, repeated below, it is hard to say that the overt assertion is just a concessive commitment and the speaker's real intention is to convey what is implicated.

(5) Kim: Where did you get that ring? It's beautiful!

Lee: My boyfriend bought it for me.

Kim: My boyfriend-*nun* has never bought me a ring.

Rather, the speaker's real intention is conveyed by her utterance and there is no implicature, let alone a scalar one, such that it is really meant by the speaker. On the other hand, example (13), also repeated below, shows an ambiguity in terms of whether concessivity exists or not.

(13) (After hearing that Inho didn't come, regarding his friend Yengswu)

Yengswu-**nun** wa-ss-e

Yengswu-NUN come-PAST-DEC

'Yengswu_{CT} came.'

First, if it is uttered in a situation where both Inho's and Yengswu's coming are desirable or expected (for whatever reason), concessivity arises, which is shown by the fact that one can add *kulayto* 'though' in front of the sentence.¹⁵⁸ In contrast, if no subjective value is placed on whether they come or not, concessivity seems hard to be derived; rather, the sentence simply contrasts Yengswu with Inho. Thus, the ambiguity shown in (13) is another supporting evidence for non-conventionality of the concessivity conveyed by contrastive *-(n)un*.

Note that the concessivity shown in (11A) is different from that in (13). First, the concessivity in (13) is not captured by the concessivity defined above (i.e. merely conceding what is said but affirming what is implicated), since it is evident that the real intention of the speaker of (13) is conveyed by what is said. To be more specific, the concessivity in (13) can be expressed as 'I assert P (what is said) although I concede Q (what is presupposed).'

Moreover, there is no ambiguity in (11A) in terms of whether concessivity is induced or not. Given (11Q), as C. Lee claims, the concessivity in (11A) seems "unmistakable". It is the source of this unmistakable concessivity (i.e. 'I concede P (what is said) but want to affirm Q (what is implicated)') that is of interest here. I will call this concessivity U(nmistakable)-concessivity from now on. Once the source of

¹⁵⁸ Still in this case, no pragmatic scale between Inho and Yengswu is necessary for the concessivity.

the U-concessivity is unveiled, it will become clear why it is not shown in examples like (5) and (13).¹⁵⁹

4.3.1. First Source of U-Concessivity: Incompleteness

Since the U-concessivity is not always conveyed by contrastive *-(n)un* but occurs only in certain contexts, the first step of unveiling the source of the U-concessivity is to find out exactly in which situation it arises. I propose that the U-concessivity appears only when a speaker uses contrastive *-(n)un* in an incomplete utterance. In order to understand what an incomplete utterance is, let us first look at an example.

(22) A: Did John meet Kim and Lee?

B: Kim-**un** manna-ss-e.

Kim-NUN meet-PAST-DEC

‘(He) met Kim.’ (‘But not Lee.’ or ‘But I don’t know about Lee.’¹⁶⁰)

B’s response in (22) is incomplete in that she provides only a PARTIAL answer to the question. That is, what is uttered by B provides partial information (about Kim) but NOT FULL information (about Kim and Lee) expected by A. Here is another example of an incomplete utterance.

(23) A: Do you have some coins?

B: ciphyey-**nun** iss-e.

bill-NUN have-DEC

‘I have bills.’ (‘But not coins.’ or ‘But I don’t now about coins.’)

¹⁵⁹ The concessivity in (13) can be also explained by the interaction of the discourse context and the meaning of *-(n)un*. But in this dissertation, I will not go into discussing what kind of context is needed for this concessivity. I leave it as a future research topic.

¹⁶⁰ Other implicatures are also possible (e.g. ‘But I’m not going to tell you about Lee’) depending on which principles/motives interact with the Q-principle.

In (23), what makes B's response incomplete is not the partiality of her answer but its INDIRECTNESS. What A wants to know is whether B has coins, but B does not provide any information about it. Instead, she provides information that is only indirectly related to A's question, by saying that she has bills. (By making this indirect utterance, B's intention is, for instance, to ask whether bills can also be used for A's purpose.)

What if no question is explicitly provided? Would it still be possible to make a partial or indirect utterance? Under the assumption that every assertion is an answer to a question under discussion (QUD) (Roberts 2004, 2012), we can apply the notion of partiality or indirectness to an assertion that is not an answer to an overt question.

(24) A: Harry's the biggest fool in the state of New York.

B: In Ithaca, maybe.

In (24), which is borrowed from C. Lee (2005) (and originally from Ladd (1980)), although no question is asked by A, B's utterance is interpreted to convey partial information about the QUD, that is, whether Harry is the biggest fool in the state of New York, which is made possible by A's utterance. Also, note that if the B-accent or contrastive *-(n)un* is attached to *Ithaca* in (24B), the utterance comes to have the U-concessivity with, for instance, an implicature 'but not in the whole state of New York'.

Now, we are ready to define what an incomplete utterance is. What is shared by (22B), (23B), and (24B) is that none of them provide the full information the hearer wants/needs; that is, speakers of those utterances make either a partial or indirect answer to the QUDs and thus do not fully answer them. Thus, I define incomplete utterance as an utterance that does not provide full information about the QUD. And the U-concessivity occurs only in an incomplete utterance.

4.3.2. Second Source of U-Concessivity: Scalar Contrast

The core of the U-concessivity is that the speaker's real intent is to express what is implicated rather than what is said signaling that what is said. In other words, the speaker signals a CONTRAST between what is said and what is implicated, putting more emphasis on the latter. What is the source of this contrast and the difference in emphasis underlying the U-concessivity?

First, contrast is induced by the function of *-(n)un*, which is to impose salience. The reason why *-(n)un* is not (only) used for marking topic but contrast in this case can be explained by the special discourse context, particularly the fact that the utterance provides a partial/indirect answer to a QUD. By using *-(n)un* in an utterance that provides an incomplete information, contrast is necessarily induced between partial/indirect information and what remains to be resolved.

As for the stronger emphasis on what is implicated than what is said, two conditions have to be met in order for it to exist. First, there has to be a semantic/pragmatic scale formed between the referent of the *-(n)un*-marked phrase and its alternative(s). Second, the utterance with *-(n)un* must be about the element with the lower value in the scale whereas the QUD set by the discourse must be about the element with the higher (or stronger) value. For instance, in (22), a semantic scale based on partial order (Hirschberg 1985) is formed between {Kim and Lee} and Kim, $\langle\{\text{Kim, Lee}\}, \text{Kim}\rangle$, and in (23), a pragmatic scale is formed between coins and bills, $\langle\text{coins, bills}\rangle$. Note that the utterances with *-(n)un* are about the lower values in the scale (i.e. Kim in (22) and bills in (23)) while the QUDs are about the higher values (i.e. Kim and Lee in (22) and coins in (23)).

If the two conditions are met, what is said becomes less important in its informational value than what is implicated because it comes to convey only

partial/indirect information (and thus cannot fully resolve the QUD), while what is implicated conveys full information either by directly answering the QUD (cf. (22)) or answering the rest of the sub-question(s) (cf. (23-24)).¹⁶¹ That is, in a situation where what is said does not fully resolve the QUD, the hearer's interest naturally leans toward the information about the contrasting alternative(s), namely, what is implicated.¹⁶² Therefore, the scalar contrast, which is the core of the U-concessivity, is naturally captured by the use of contrastive *-(n)un* and the incomplete nature of the utterance.

It is important to note that a pragmatic scale (and its corresponding scalar implicature), contra C. Lee (2005), is not derived by the U-concessivity. In fact, as shown in (22) it is neither a necessary nor a sufficient condition for the U-concessivity. Let us look at another example illustrating this point.

(25) A: You should have taken Syntax II and Semantics II before this seminar. Did you take them?

B: Syntax II-**nun** tul-ess-e.

Syntax II-NUN take-PAST-DEC

'(I) took Syntax II.' ('But not Semantics II.')

¹⁶¹ One might argue that an uncertainty implicature, which is a possibility, cannot be treated to fully answer a QUD in that it does not satisfy the hearer in terms of resolving the QUD. But an uncertain answer is clearly a full answer to the QUD from the speaker's point of view if we assume that the speaker follows the Cooperative Principle (Grice 1975; Horn 1984). That is, there must be some reason that the speaker wants/needs to convey uncertainty instead of fully satisfying the hearer, and that is exactly her intention.

¹⁶² Note that an implicature that answers the rest of the sub-question(s) does not contain full information itself. Thus, both the assertion and the implicature convey only partial information by themselves. But the implicature can be considered to be (informationally) stronger than its counterpart assertion in that what is indicated by the assertion with its partial information is incompleteness whereas the partial information of the implicature supplements this incompleteness and fully resolves the QUD.

Here, Syntax II and Semantics II are assumed to have the same degree of importance as a prerequisite and thus no pragmatic scale is possible between the two. However, what is said is still weaker than what is implicated, giving rise to the U-concessivity. This can be easily explained by the semantic scale (via poset), namely, $\langle \{ \text{Syntax II, Semantics II} \}, \text{Syntax II} \rangle$ and the fact that the utterance in (25B) is about the weaker value whereas the QUD is about the stronger value in the scale. Again, this example shows that the U-concessivity and pragmatic scalarity are not related to each other at all.

It has to be emphasized that in order for the U-concessivity to be derived, the utterance must be about the lower value, and the implicature about the higher value. Let us imagine a situation where Kim is a college student and she is taking three courses, History, English, and Linguistics. She can graduate as long as she passes the History test, and the conversation in (26) was made by Kim and her friend after the exam period.

(26) Q: How did you do on your exams?

A: History-**nun** thongkwa hay-ss-e

History-NUN pass do-PAST-DEC

‘(I) passed the History test.’ (‘But not the other tests.’ or ‘But I don’t know about the other tests.’ or ‘So I can graduate.’)

Note that (26A) does not convey the U-concessivity anymore, even though contrastive *-(n)un* is used in an incomplete (partial in this case) utterance. This is because the speaker’s real intent is expressed in what is overtly said, and it is the implicature that is concessively committed. This is shown by the fact that (26A) can be naturally paraphrased as ‘Although P (what is implicated), Q (what is said)’.

The lack of the U-concessivity can be explained by the fact that the utterance

with *-(n)un* no longer conveys weaker information than what is conveyed by the implicature. Rather, given the context provided above, the pragmatic scale <History, {English, Linguistics}> overrides the semantic scale <{History, English, Linguistics}, History>, which makes the uttered part conveys more important information than what could have been said but was not. Thus, the reversal of the scale also reverses the relative assertorial force of the assertion and the implicature.

Lastly, note that, just like uncertainty, concessivity does not arise from an incomplete utterance if *-(n)un* is replaced by *-i/ka*. Compare the two incomplete utterances in (27).

(27) A: Did John and Kim meet Lee?

B: Kim-**un** manna-ss-e.

Kim-NUN meet-PAST-DEC

‘Kim met (Lee).’ (‘But John didn’t.’ or ‘But I don’t know about Lee.’)

C: Kim-**i** manna-ss-e.

Kim-NOM meet-PAST-DEC

‘Kim met (Lee).’ (‘But John didn’t.’)

Both (27B) and (27C) are incomplete utterances in that they provide partial information about the QUD (27A). But concessivity is felt only in (27B). (27C) only generates an exhaustive implicature and does not convey concessivity at all. The lack of concessivity in (27C) can be explained by the fact that *-i/ka* does not induce scalar contrast, which is only possible by imposing salience on one of the scalar elements. Since *-i/ka* does not have this function, it cannot induce contrast by itself. Rather, the function of unique specification leads to the implicature that only the referent of the *-i/ka*-marked element has the property of meeting Lee. Importantly, the contrast in

(27C) is derived not by the particle itself, which is the case in (27B), but the interaction of the particle and the discourse context.

4.4. Contrastive *-(n)un* vs. English Rise-Fall-Rise (RFR)

The English counterpart of contrastive *-(n)un* is not a morphological marker but an intonation contour known as rise-fall-rise (RFR)¹⁶³. The contour has been described as “introspection with close attention to some single item” (Pike 1945), a sense of reservation (Halliday 1967), focusing within a set (Ladd 1980), incompleteness (Bolinger 1982), scalar speaker uncertainty (Ward & Hirschberg 1985), indication of a “strategy”¹⁶⁴ (Büring 2003), or a focus quantifier over “post-assertable” alternative propositions (Constant 2008).

In this section, I will examine problems of previous works on RFR, focusing on the most recent, Büring’s (2003) and Constant’s (2008) analyses. I will not delve into all the details of their formal mechanisms of getting the right meaning of RFR. Rather, I will focus on their descriptive generalization on the meaning of RFR and show that neither of them is satisfactory. Then, it will be claimed that RFR, just like contrastive *-(n)un*, is used to induce (or evoke) contrast defined in Chapter 2.

¹⁶³ The term rise-fall-rise, which is transcribed as [L*+H L- H%] under the ToBI system (Silverman et al. 1992), was coined by Pierrehumbert (1980). According to Constant (2008: 3), it “has gone under various names, including ... ‘2–4–3 contour’, ‘2₀32↑’, ‘Tones III and V’, ‘Tone 4’, ‘a subset of Bolinger’s Accent A’, ‘Bolinger’s Accent B’, ‘contrastive stress within contradiction contour’, ‘A-rise’, ‘fall-rise’ and ‘rise-fall-rise’”. It also corresponds to Jackendoff’s (1972) B-accent. Recently, the contour has been associated directly with CT (Büring 2003; Oshima 2008).

¹⁶⁴ Büring’s (2003) analysis of RFR, including the notion of strategy, will be introduced and discussed below.

4.4.1. B üring (2003)

B üring’s (2003) analysis of RFR, or CT in his terms, is based on the assumption that a discourse is a hierarchical structure consisting of questions and answers (van Kuppevelt 1991, 1996; Roberts 2012). A question in a discourse structure (or d(iscourse)-tree) can have multiple sub-questions that need to be answered to fully resolve the question. According to B üring (2003: 518), a strategy is “any sub-tree of a d-tree which is rooted in an interrogative move [sentence]”. Thus, a strategy can be thought of as a set of sub-questions of a “root” question. And B üring claims that the conventional meaning of RFR is to indicate that there are sub-questions other than the sub-question answered by the sentence with RFR in a local strategy.¹⁶⁵

Regarding our purposes, it is important to note that he does not discuss whether RFR can indicate sub-questions that have already been answered. But in his earlier work, B üring (1999) assumes that “[g]iven a sentence A, containing an S-Topic [RFR or CT], there is an element Q in $\|A\|^t$ [a set of sub-questions indicated by the use of RFR] such that Q is still under consideration after uttering A” (B üring 1999: 151). He calls this remnant and thus disputable question a RESIDUAL TOPIC. However, Constant (2008) and C. Lee (2007) show that RFR can be used in an utterance which, by answering its sub-question, fully resolves the root question as in (28-29).

(28) A: What did John and Bill do yesterday?

B: [John]_{RFR} [went dancing]_F. [Bill]_{RFR} [stayed home]_F.

Constant (2008: 29)

(29) [Fred]_{CT} ate the beans but [Mary]_{CT} ate the peanuts.

C. Lee (2007: 156)

¹⁶⁵ See B üring (2003) for the formalization of this idea.

According to Büring, RFR on *Bill* in (28B) and on *Mary* in (29) must not be allowed since the sub-questions indicated by it are already answered and no residual topic exists any more. Based on examples like (28-29), we can eliminate Büring's stipulation introduced above.

Another problem for Büring (2003) is that, as pointed out by Tomioka (2010a, b), Kamali & Büring (2011), and Constant (2012), RFR indicates (sub-)questions ONLY when it is used in assertions. If it is used in other speech acts such as questions, imperatives, and exhortatives, which is surely possible, Büring's analysis does not work. For instance, if RFR is used in a question, the utterance with RFR itself is a sub-question, and it seems not easy to represent this fact under his analysis.

Instead of introducing problems already pointed out by the previous studies, I will point out a crucial problem that has not been noticed by those previous studies. First, let us look at RFR in an interrogative in (30), which is from Constant (2010). (Note that RFR is impossible in questions and the contour needs to be modified.)

(30) (And) what did [Fred]_{CT} eat?

H* L-L%

Here, what is important is that by using "CT-marking", the speaker is not thought of as indicating unresolved sub-questions. Rather, the CT marking induces contrast between Fred and its alternatives that have been already introduced and predicated of.

4.4.2. Constant (2008)

Constant (2008) solves the problem of RFR's being allowed to mark the last alternative (28-29) by distinguishing RFR from Büring's (2003) CT. That is, he takes the rise-fall-rise (or fall-rise) contour in (28-29) to be CT-marking and claims that this

CT-marking is different from true RFR.¹⁶⁶ By excluding such problematic cases from his analysis of RFR, he ultimately maintains Büring's (1999, 2003) view that RFR is licensed on "non-resolving" answers, or "any response that leaves a part of a larger question unresolved" (Constant 2008: 24). Formally, his analysis is summarized in (31), which is from his (58) on p. 21.

- (31) a. RFR is a focus quantifier over assertable alternatives.
b. RFR resists vacuous quantification.
c. RFR takes effect after the main proposition is evaluated.

What (31a) and (31b) do together is guarantee that RFR has some alternatives to quantify over. And by adding (31c), Constant claims that the alternatives must remain assertable even after the main proposition is evaluated. Although the formal mechanisms are different from Büring's (2003), the core idea is the same; that is, RFR is used for "signaling" the existence of unresolved questions.¹⁶⁷

Again, Constant's analysis has the same problem as Büring's. The empirical data covered by his analysis are limited. In fact, he cannot explain one of his own examples, which is shown in (35).

¹⁶⁶ However, he still admits that Büring's CT and his RFR are phonologically and semantically so close to each other that they can and should be treated under the same analysis in future research.

¹⁶⁷ There are two claims on RFR on which I agree with Constant (2008). First, Constant claims that the meaning of RFR is a conventional implicature in the sense of Potts (2003), which is similar to the proposed analysis of *-(n)un* and *-i/ka* in that they are also argued to have UC (non-*at-issue*) meaning. Also, he convincingly shows that the scalarity, which Ward & Hirschberg (1985) argue to be conventionally conveyed by RFR, is only conversationally generated, which is also consistent with the analysis of contrastive *-(n)un/-wa* I proposed above.

(32) She is [sad]_{RFR}, but she's not [miserable]_{RFR}. (Constant 2008: 4)

Here, the RFR in the second clause does not seem to naturally fall under his explanation of RFR. Note that the utterance is infelicitous when it is uttered out of blue; rather, it needs a proper context. One of the contexts that makes the sentence in (32) felicitous is shown in (33), where (32) is embedded in (33B).

(33) A: Mary must be sad. She could even feel miserable.

B: She is [sad]_{RFR}, but she's not [miserable]_{RFR}.

In the given context, the role of (33B) is to partly concede and partly deny what is uttered by (33A). Here, the first RFR in (33B) indicates an unresolved question, that is, whether Mary feels miserable or not. However, the speaker does not seem to indicate any unresolved question by using the second RFR in (33B), because by uttering the second clause, the speaker COMPLETES her evaluation of the assertion made by her interlocutor and no remaining subquestion exists with regard to the QUD, namely, Mary's feeling.

Rather, it appears that the second RFR conveys CONCESSIVITY, the source of which is the contrast between the meaning of the first clause and that of the second clause. That is, the concessivity can be represented as 'although I concede P (i.e. she is sad), I assert Q (i.e. she is not miserable)'. Here, it is important to note that the contrast induced by the second RFR is between what is said and what is PRESUPPOSED, which makes it impossible for the RFR contour to indicate an unresolved subquestion.

Interestingly, the most natural Korean translation of (32) uses *-(n)un* where RFR is used, as shown in (34).

(34) *kunye-nun sulphu-ki-nun ha-ciman pichamha-ci-nun anh-a*
she-NUN sad-NMZ-NUN do-but miserable-ADZ-NUN not-DEC
 ‘She is [sad]_{RFR}, but she’s not [miserable]_{RFR}.’

In (34), *-(n)un* is attached to both adjectives (i.e. *sulphu-* ‘sad’ and *pichamha-* ‘miserable’) and again, the second *-(n)un* does not give rise to any unresolved question. It also generates concessivity that is of the same kind as the concessivity induced by the second RFR in (32).

Therefore, examples like (32), together with the other English examples introduced above, suggest that contrastive *-(n)un* and RFR might have the same function in discourse, that is, inducing contrast. Indicating a strategy in Buring’s (2003) sense is just part of their fundamental function of contrast. This possibility will be pursued in the next subsection.

4.4.3. Contrastive *-(n)un* = RFR

We have seen above that both Buring’s (2003) and Constant’s (2008) analyses of RFR are too limited in their empirical coverage. Also, it seems that contrastive *-(n)un* and RFR have the same distributions. Both can be used to mark listing contrastive topics (LCTs), to “indicate a strategy” in Buring’s terms, and to indicate contrast in questions or assertions.

It is important to note that all the occurrences of contrast just mentioned above fall under the rubric of contrast as defined in Chapter 2. That is, all the uses of contrastive *-(n)un* and RFR can be captured by the proposed notion of contrast, since all of them indicate a set of alternatives for which some semantic property P exists such that the value ‘true/false’ results when P is applied to one part of the set but not to the other.

Note that in contrast expressed by RFR and contrastive *-(n)un*, the semantic type of alternatives can be entities, actions, states, or propositions depending on discourse context. This is different from the view shared by most current approaches to CT which, based on Rooth's (1985, 1992) alternative focus semantics, posit only propositions as alternatives. As Asher (2004: 168) points out, "[t]he contribution of CT really depends on the discourse context, and that is something totally missing from the alternatives story".

There is one crucial difference between contrastive *-(n)un* and RFR. Whereas RFR conventionally conveys contrast, contrastive *-(n)un* does not. As argued in Chapter 3, the contrastive use of *-(n)un* is determined by the interaction of the basic function of *-(n)un* (i.e., imposing salience), the discourse context, and the syntactic position of a *-(n)un*-marked phrase. On the other hand, the contrastive meaning of RFR is necessary as long as the contour is used.

4.4.4. Formalization

In Chapter 2, I defined contrast as an existence of a set of alternatives for which some semantic property P exists such that the value 'true/false' results when P is applied to one part of the set but not to the other (for whatever reason). The goal of this subsection is to provide a new formal analysis of the contrast induced by *-(n)un* and RFR, thus making the definition more explicit.

Let us suppose that c is a context and T is a (partial) function assigning to a sentence ϕ its *-(n)un*-marked phrase $T(\phi)$. When $T(\phi)$ is used for contrast, it evokes alternative(s) α to $T(\phi)$ in c such that the proposition denoted by ϕ , P , possibly does not hold under the substitution of α for $T(\phi)$. This can be formalized as (35).

(35) The meaning of contrastive *-(n)un* and RFR

$$\exists \alpha [\diamond \neg P [T(\phi) / \alpha]]$$

I define P as “content” or “meaning” of a declarative sentence. If a sentence is not declarative, the propositional content of the sentence is the content of a declarative counterpart of the sentence. For instance, the propositional content of an interrogative ‘Did John meet Mary?’ is ‘John meet Mary’. This makes it possible to explain the contrast induced by contrast *-(n)un* or RFR in a sentence with any sentential force.

The reason for using \diamond in the formalization is that the substitution of α for $T(\phi)$ does not have to make the proposition false for the existence of contrast. As shown in the uncertainty case, contrast is still allowed even if the speaker is not certain that the proposition is false with the substitution.

With the contrast defined above, the contrastive implicature conveyed by contrastive *-(n)un* and RFR in assertion can be represented as in (36).

(36) Contrastive implicature conveyed by contrastive *-(n)un* and RFR (to be modified)

$$(\mathbf{K}_{sp} \neg P[T(\phi) / \alpha]) \vee (\neg \mathbf{K}_{sp} P[T(\phi) / \alpha] \& \neg \mathbf{K}_{sp} \neg P[T(\phi) / \alpha]) \text{ in } c.$$

The formalization in (36) contains both exhaustivity and uncertainty. In fact, this disjunction is very similar to Hirschberg (1985)’s analysis of scalar implicature: “either the speaker knows the stronger proposition doesn’t hold or she doesn’t know whether or not it holds” (Horn 2009: 9). And just like the scalar implicature, the disjunction in (36) can logically reduce to the proposition that the speaker does not know that $P[T(\phi) / \alpha]$ is true (Horn 2009: 10-11). Also, following Horn, I claim that the uncertainty is the primary (or direct) implicature and the exhaustivity is possible only if the speaker’s epistemic security is guaranteed. Thus, the formalization

proposed in (36) can be simplified as shown in (37).

(37) Contrastive implicature conveyed by contrastive *-(n)un* and RFR (final version)
 $\neg K_{sp} P[T(\phi) / \alpha]$ in *c*

This modification also goes along with our intuition that contrastive *-(n)un* in an incomplete utterance is likely to induce uncertainty rather than exhaustivity, unless the speaker's knowledge about the alternatives is guaranteed by the hearer.¹⁶⁸

It is important to note that the nature of the contrastive implicature in (37) is conversational but not conventional, whether its source is contrastive *-(n)un* or RFR. That is, to get the contrastive implicature from the meaning of the contrast in (35), specific pragmatic conditions have to be met such as the type of speech act and the speaker's knowledge state.

4.5. Summary

In this chapter, I have shown that the uncertainty, the scalarity, and the concessivity expressed by contrastive *-(n)un* are all conversationally derived from the interaction of various factors such as the basic function of *-(n)un* and the discourse context. All the claims made in this chapter strongly support the unified approach of *-(n)un* proposed in the previous chapter. That is, there is neither empirical nor theoretical

¹⁶⁸ In fact, H.-W. Choi (1996, 1997) and C.-h. Han (1998) claim that contrastive *-(n)un* generates an exhaustivity implicature, and they do not consider the possibility of uncertainty at all. I think this is because they are more concerned with syntactic rather than semantic/pragmatic aspects of contrastive *-(n)un*.

motivation to think that contrastive *-(n)un* is a lexical item that is independent from non-contrastive *-(n)un* in Korean.

In addition, I have shown that the previous analyses of English RFR are problematic in that they do not capture all the uses of RFR but just some of them. It was claimed that RFR is the same as contrastive *-(n)un* in terms of the nature of the contrast it expresses. The contrast they induce was shown to be well captured by the notion of contrast defined in Chapter 2. Finally, the formalization of the contrast was provided, together with that of the contrastive implicature they generate in assertion.

Chapter 5

On the Prosodic Property of Contrastive *-(n)un*

5.1. Introduction

In this section, I will further support the claim that only one *-(n)un* exists in the lexicon, by showing that, contra C. Lee (2007), contrastive *-(n)un* does not have its own prosodic properties and is not phonetically different from non-contrastive *-(n)un*.

In doing so, I will first introduce previous phonetic analyses of contrastive *-(n)un* and examine their problems and limitations. Then, a new phonetic experiment on contrastive *-(n)un* will be introduced, which I conducted with the purpose of investigating whether contrastive *-(n)un* shows any prosodic difference from non-contrastive *-(n)un*. It will be shown that contrastive *-(n)un* and non-contrastive *-(n)un* are not fundamentally different from each other in terms of their prosodic properties, pitch and length in particular.

5.2. Previous Studies

5.2.1. Y.-B. Kim (2004)

As far as I know, Y.-B. Kim (2004) is the first to provide a phonetic analysis of different types of discourse functions marked by *-(n)un*.¹⁶⁹ The discourse functions he investigates are non-contrastive topic, list contrastive topic (LCT) (contrastive topic in his terms), and CT (contrastive focus in his terms).

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.

- (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.

(Y.-B. Kim 2004: 46)

During the experiment, the experimenter read the questions and the participants read the answers. 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 or situation.

In order to understand the phonetic property of each discourse function, Y.-B. Kim measured the pitch and the length of the syllables of the *-(n)un*-marked phrases.

¹⁶⁹ 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. But to examine his analysis of *-i/ka* is beyond the scope of this chapter.

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 Y.-B. Kim also points out, Korean expresses various syntactic, semantic, and pragmatic information through particles like *-(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*, 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, contrastive *-(n)un*, non-contrastive *-(n)un*, and “LCT-*-(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. Y.-B. 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. Y.-B. Kim does not discuss what implication this result has on his analysis of *-(n)un*.

In addition to this problem, 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*, Y.-B. Kim provides only three sentences, to which 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.

5.2.2. Jo et al. (2006)

Jo et al. (2006) also provide a phonetic analysis of the information-structural notions marked by *-(n)un* and *-i/ka*. Again, for our purposes, we only need to look at the phonetic property of discourse functions marked by *-(n)un*. The discourse functions they posit to be marked by *-(n)un* are topic and topic/focus. It is important to note that what they call topic includes not only plain (non-contrastive) topic but also “contrastive predicate topic” (C. Lee 1999, 2000, 2002, 2007). Contrastive predicate topic is my contrast that is expressed by predicates. Also, their focus/topic can be either my (entity-denoting) CT or contrast depending on its syntactic position.

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.¹⁷⁰

Their phonetic analysis seems to partly support this hypothesis. That is, the results of their experiment show that topic/focus gets pitch accent but only in non-

¹⁷⁰ According to Jo et al., the meaning of topic/focus can also be expressed by “dissociated topic constructions”. An example of topic/focus and its corresponding dissociated topic construction is shown below. The boldface represents high pitch.

(i) A: Who did John meet?

B: John-i [**Mary-nun**]_{Topic/Focus} manna-ss-e
John-NOM Mary-NUN meet-PAST-DEC
‘John met Mary (but I don’t know about the others).’

B’: John-i [**Mary-lul**]_{Focus} [manna-ki-nun]_{Topic} hay-ss-e
John-NOM Mary-ACC meet-FN-NUN do-PAST-DEC
‘John met Mary (but I don’t know about the others).’

In (iB), the sentence has the topic/focus (*Mary-nun*) which gets pitch accent. In (iB’), the focus argument is accusative-marked, and *-(n)un* is attached to the predicate, thus forming “dissociated topic”. Here, Jo et al. argue that the NP focus but not the *-(n)un*-marked predicate gets high pitch. What is important here is that they take the dissociated topic to be just topic. However, it seems problematic to see it as plain topic, for it does induce contrast as shown in the translation.

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 Y.-B. 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.¹⁷¹ 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 also seems to be 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 C. Lee’s 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).

¹⁷¹ In fact, they also introduce their experiment as a pilot study.

5.2.3. C. Lee (2007)

C. Lee (2007) characterizes the phonetic 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” (C. Lee 2007: 157). This claim is directly related to the issue dealt with in this chapter, that is, whether contrastive *-(n)un* is categorically distinguished from non-contrastive *-(n)un* with respect to its phonetic property.

C. Lee’s analysis is problematic because 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, C. 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 Y.-B. Kim’s phonetic analysis discussed above, contrastive *-(n)un* is significantly shorter than non-contrastive topic.

5.2.4. M. Oh (2008)

To my knowledge, M. Oh (2008) provides the most elaborated phonetic study of *-(n)un* in various contexts. 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, 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 C. Lee (2007), M. 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*]_{Contrast} VP
- c. [NP-*(n)un*]_{CT} [NP-*i/ka*]_{Neutral}¹⁷² VP
- d. [NP-*(n)un*]_{LCT} [NP-*i/ka*]_{Focus} VP, and [NP-*(n)un*]_{LCT} [NP-*i/ka*]_{Focus} VP

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 directly contradicts C. Lee's claim that contrastive *-(n)un* is longer than any other phrase-final elements.

As for pitch, M. Oh measures 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

¹⁷² The term 'neutral' means that it is part of the ground in the focus-ground partition (Vallduv í1990, 1994).

phrase-final rising 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 C. Lee's claim that contrastive *-(n)un* is higher in pitch than the last element of an ordinary (accentual) phrase, M. Oh also compares the pitches of contrastive *-(n)un* and *-(n)un* 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.¹⁷³

Despite the enough number of experimental stimuli and the elaborate

¹⁷³ It is not clear why only non-sentence-initial CT phrases necessarily form an independent IP. This is an important future research topic for those who are interested in the pragmatics-prosody interface.

statistical analysis, M. 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 an important confounding factor.

5.2.5. J. E. Kim (2010)

J. E. Kim (2010) provides the most recent prosodic analysis of *-(n)un* in various contexts. However, I will not discuss her analysis in any detail here, because all of her participants are speakers of the Kyengnam dialect, which is spoken in the south-eastern area of Korea.

But I would like to point out that her 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 (C. Lee 2003) is not always observed” (J. E. Kim 2010: 44). Thus, she concludes that “in Korean, Contrastive Topic does not have a special prosodic property distinguished from a plain Focus construction” (J. E. Kim 2010: 59).

5.3. Experiment

As shown in the last section, most previous phonetic 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 most of these

studies have problems and limitations, 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*, and thus differs from other previous studies that only indirectly deals with this issue.

5.3.1. Participants

The participants were twenty nine 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.

5.3.2. 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 swuntay¹⁷⁴? 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.
- (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.University-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.University-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. 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 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

¹⁷⁴ Suintay is Korean food made by kneading together a seasoned mixture of glutinous rice, bean curd, scallions, and shiitake mushrooms.

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 prosodic property.

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 *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.^{175, 176} 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.¹⁷⁷ 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*-

¹⁷⁵ Glides are treated as a consonant in the experiment.

¹⁷⁶ 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.

¹⁷⁷ The full experimental material is provided in Appendix.

marked phrases are controlled to be located at clause-initial position regardless of their grammatical function, which is the typical position of the discourse functions of topic, LCT, and CT in colloquial Korean.

5.3.3. Procedure

The experiment was conducted in a recording room at Seoul National University. Before recording began, subjects 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 formed 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 phonetic analysis.

5.3.4. 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* (C. Lee 2007), I measured the length of *-(n)un*, the pitch range between *-(n)un* and its preceding syllable, and the pitch of *-(n)un*.

5.3.4.1. Length of $-(n)un$

The results show that contrastive $-(n)un$, whether it induces contrastive implicature or not, is not longer than $-(n)un$ marking any other discourse functions. The mean lengths and standard deviations of different types of $-(n)un$ are summarized in Table 1.

Table 1. Length of $-(n)un$ for Each Discourse Function

Discourse function	Mean	StDev
Topic	0.15616	0.07158
CT+Imp	0.12659	0.04654
CT-Imp	0.14408	0.06548
LCT1	0.18946	0.06420
LCT2	0.15723	0.03990

Interestingly, $-(n)un$ for CT+Imp, which is the typical CT discussed by C. Lee (2007), is the shortest. The difference between CT+Imp and the second lowest function, that is, CT-Imp, is statistically significant ($t(281) = -2.14, p = 0.007$).

Also, note that this result is inconsistent with M. Oh's (2008) result, according to which $-(n)un$ for LCT is the shortest. As shown in Table 1, $-(n)un$ for LCT1 and LCT2 are the longest. Particularly, $-(n)un$ for LCT1 is even significantly longer than that for LCT2 ($t(268) = 5.18, p = 0.000$).

5.3.4.2. 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.

Table 2. Pitch Range between $-(n)un$ and Preceding Syllable

Discourse function	Mean	StDev
Topic	-18.30	29.99
CT+Imp	-18.57	28.83
CT-Imp	-22.89	22.27
LCT1	-24.98	21.81
LCT2	-9.38	19.43

Surprisingly, as shown in Table 2, there is no phrase-final rising in any of the discourse functions. The minus values in Table 2 mean that the pitch of $-(n)un$ is lower than that of the preceding syllable. According to M. Oh (2008), this dephrasing (or phrase-final lowering) is a characteristic of focus and never found in CTs in non-sentence-initial position.

Note that the pitch range for LCT2 is especially smaller than that for the rest. The differences between Topic, CT+Imp, CT-Imp, and LCT1 are not significant ($F(3, 632) = 2.54, p = 0.056, \eta^2 = 0.73$), but the difference between LCT2 and Topic, which has the second lowest pitch range, is significant ($t(269) = 3.02, p = 0.003$).

5.3.4.3. Pitch of $-(n)un$

Contrary to C. Lee's claim, contrastive $-(n)un$ is no higher than $-(n)un$ for plain topic or LCT1. Table 3 summarizes the pitch means of $-(n)un$ for each discourse function.

Table 3. Pitch of $-(n)un$ for Each Discourse Function

Discourse function	Mean	StDev
Topic	220.81	72.34
CT+Imp	223.55	67.01
CT-Imp	224.44	71.98
LCT1	223.17	80.53
LCT2	188.10	63.55

The results of the statistical analysis show that no significant difference exists between Topic, CT+Imp, CT-Imp, and LCT1 ($F(3, 629) = 0.07, p = 0.976, \eta^2 = 0.00$).

The pitch of $-(n)un$ for LCT2 is significantly lower than that for Topic, which has the second lowest pitch of $-(n)un$ ($t(277) = -4.04, p = 0.000$).

5.4. Discussion

The results of the phonetic analysis contradict the hypothesis that contrastive $-(n)un$ is fundamentally different from other types of $-(n)un$, thus strongly supporting the proposed analysis of $-(n)un$ that posits only one $-(n)un$ in the lexicon.

5.4.1. Length of $-(n)un$

First, the length of contrastive $-(n)un$ is not longer than the other types of $-(n)un$. In particular, the length of $-(n)un$ for CT+Imp is significantly shorter than the length of $-(n)un$ for the other discourse functions. One might argue that this significant shortness is evidence for the independent existence of $-(n)un$ for CT+Imp. However, it is not theoretically clear why $-(n)un$ for CT+Imp would be shorter than it is with the other discourse functions. Furthermore, if we follow the same logic, we have to posit different lexical items of $-(n)un$ for different types of LCT, that is, one for LCT1 and one for LCT2, since $-(n)un$ for LCT1 is significantly longer than any other types of $-(n)un$. This is implausible given that LCT1 and LCT2 are identical from the perspective of information structure.

Thus, rather than relating the difference in length to different lexical items of $-(n)un$, it would be more plausible to look for the source of the durational differences somewhere else. To find out the exact source is beyond the scope of this dissertation.

For our purposes, suffice it to say that the experimental results introduced here are inconsistent with the claim that contrastive *-(n)un* is longer than non-contrastive *-(n)un* due to its special nature.

5.4.2. Phrase-Final Rise

According to C. 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 rising is shown neither in CT+Imp nor in CT-Imp in our data. Rather, together with the other types of *-(n)un*, they show phrase-final lowering, or dephrasing, which seriously weakens the validity of C. Lee's claim.

It is surprising that phrase-final rising is not shown in any discourse function marked by *-(n)un*, for it is widely known that dephrasing is a characteristic of focus (M. Oh 2008). Also, M. 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 rising is not a necessary condition for the felicitous use of contrastive *-(n)un*. In Korean, the mere existence of *-(n)un* itself, however it is pronounced, is enough to convey the contrast, which is different from English, in which the specific intonation contour, that is, "rise-fall-rise", is necessary for the same effect.

5.4.3. 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 M. Oh's (2008) results.

In fact, it is not really necessary to look at experimental data to see this point. The fact that contrastive *-(n)un* can also be freely contracted clearly shows that the prosodic prominence is not obligatory for the contrast. As briefly discussed in Chapter 3 (cf. footnote 83), *-(n)un* can become *-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 corpus and the experimental data, it is not hard to find contraction of contrastive *-(n)un*. Let us first look at an example from the corpus data.

- (7) Guest: *ce-n* *mom-ulo* *ha-nun,* *ilehkey* *chelyek-i*
 I(HON)-NUN body-with do-NMZ like this physical strength-NOM
yokwu *toynu-n* *ke-n* *cal* *ha-nun* *kes* *katha-yo*
 requirement get-NMZ FN-NUN well do-NMZ FN seem-DEC(HON)
 ‘It seems that I am good at doing things that require physical strength.’
 (전 몸으로 하는, 이렇게 체력이 요구되는 건 잘 하는 것 같아요.)

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. They are not significantly longer in duration or higher in pitch compared to other syllables around them.

Figure 1. Spectrogram of Sentence (7)

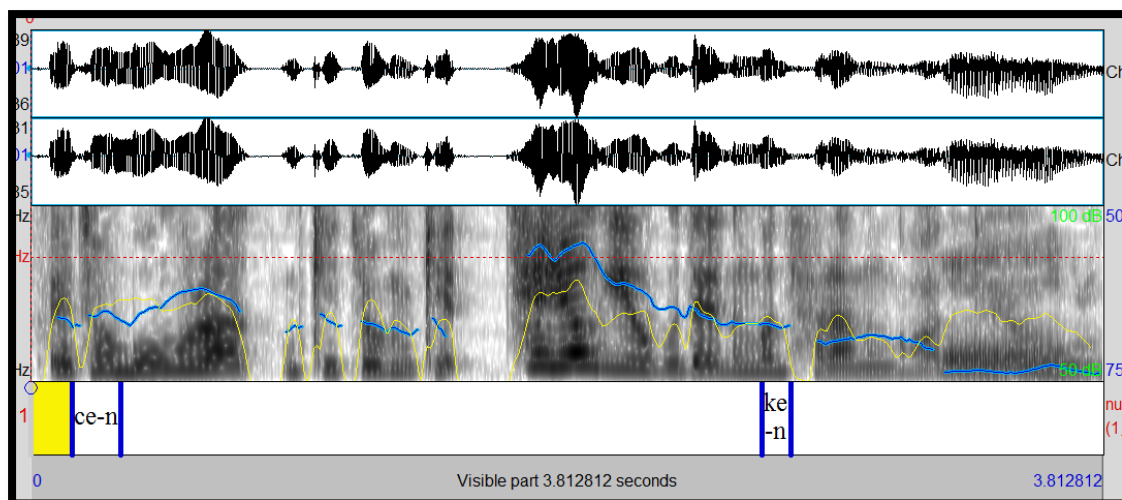


Figure 1 shows the spectrogram of the sentence in (7). Blue lines (or bold lines in the white and black version) illustrate pitch and the two *-(n)un*-marked phrases are annotated in the lowest tier. From Figure 1, it is clear that the pitches of the *-(n)un*-marked phrases do not show a sharp rise at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

Also, 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 items of contrastive *-(n)un* in the script even though they were all provided in non-contracted forms. To sum up, as also pointed out by Park (2003), *-(n)un* can mark contrast in a contrastive context however phonetically reduced it is.

5.5. Summary

In this chapter, the prosodic property of contrastive *-(n)un* was investigated in order to find out whether it is fundamentally different from non-contrastive *-(n)un*. The phonetic experiment conducted on 29 participants with 18 experimental conversations convincingly supports the view that the contrastive and non-contrastive *-(n)un* cannot be phonetically distinguished from each other. 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 *-(n)un* refutes C. 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 proposed analysis of *-(n)un* that does not posit independent entries for contrastive *-(n)un* and non-contrastive *-(n)un* in the lexicon.¹⁷⁸

¹⁷⁸ Depending on one's assumption about the nature of the lexicon, one might not include any functional markers (including *-(n)un*) in the lexicon. I assume that both lexical (or content) and functional elements are stored in one's mental lexicon.

Chapter 6

Concluding Remarks

6.1. Introduction

This dissertation is intended to shed light on two closely related issues: 1) the nature of *-(n)un* and 2) the relation between *-(n)un* and the categories of information structure related to it (i.e. topic and contrast). The main argument of the thesis, that is, that *-(n)un* directly marks neither topic nor contrast but imposes salience on a referent, strongly supports the view that posits an indirect relation between the information-structural categories and their linguistic markers. Topicality (or aboutness) and contrastiveness are only PRAGMATIC EFFECTS arising from the interaction of the meaning of *-(n)un* and various syntactic, semantic, and pragmatic factors. In what follows, a more detailed discussion on the status of the information-structural categories will be provided based on the distinction between descriptive categories and comparative concepts.

6.2. Descriptive Categories vs. Comparative Concepts

As mentioned in Chapter 1, in information structure theory, notions like topic, focus, and contrast are commonly assumed to be discrete and stable categories (or primitives) that are simply realized through the grammars of different languages (Vallduv í & Engdahl 1996; Rizzi 1997; Kidwai 1999; Erteschik-Shir 2007; C. Lee 2007; B üring

2010). In fact, this CATEGORICAL UNIVERSALISM is in direct contradiction to CATEGORICAL PARTICULARISM, according to which "languages are best described in their own terms ... rather than in terms of a set of preestablished categories that are assumed to be universal" (Haspelmath 2010b: 664).

Of course, the analysis presented here is consistent with the categorical particularism. By understanding the function of *-(n)un* in terms of imposed salience instead of topicality or contrastiveness, we can provide a better account of the empirical facts related to *-(n)un* and helps to gain deeper insights into it. So, if topic and contrast are not directly marked by *-(n)un*, what are they for in Korean information structure?

Following Haspelmath's (2010b) suggestion, I propose to distinguish carefully between DESCRIPTIVE CATEGORIES and COMPARATIVE CONCEPTS. Descriptive categories are linguistic categories that a linguist must create in order to describe a specific language. Thus, they are not necessarily available or instantiated in every language; that is, they are not universal entities. On the other hand, comparative concepts are concepts specifically designed by typologists for the purpose of crosslinguistic comparison. Thus, they are "universally applicable, and they are defined on the basis of other universally applicable concepts: universal conceptual-semantic concepts, general formal concepts, and other comparative concepts" (Haspelmath 2010b: 665).

In this respect, the notions of topic and contrast can be considered as comparative concepts. Similarly, based on their research on the relationship between focus and focus markers in various languages, Matic' & Wedgwood (2013) deny the widely held conception of focus "as a cross-linguistically stable category that is merely manifested by different structural means in different languages" (Matic' &

Wedgwood 2013: 127), and “propose to see focus as a heuristic tool and to employ it as a means of identifying structural patterns that languages use to generate a certain number of related pragmatic effects, potentially through quite diverse mechanisms” (Matić & Wedgwood 2013: 127). Based on the findings about *-(n)un* throughout this dissertation, it seems that topic and contrast can also be safely considered as such heuristic tools.

According to Haspelmath (2010b: 665), “there has not been any detailed and explicit discussion of the difference between comparative concepts and language-particular descriptive categories”. Instead, “the idea that linguists need to identify ‘crosslinguistic categories’ before they can compare languages is still widespread, especially (but not only) in generative linguistics” (Haspelmath 2010b: 663).

I hope this thesis is a good example to show the necessity of making a distinction between descriptive categories and comparative concepts in information structure theory. Without such a distinction, it is hard to provide a correct description of Korean information structure, the meanings of *-(n)un* and *-i/ka* in particular.¹⁷⁹

6.3. Comparative Study

Although I am opposed to postulating any a priori universal descriptive category of

¹⁷⁹ Extending his claim, Haspelmath (2010a) argues for a framework-free grammatical theory. However, I agree with Laurence Horn (p.c.) who claims that “avoiding theoretical straitjackets is not the same as being (entirely) ‘framework-free’, which I suspect is impossible”. Indeed, this dissertation, which adopts the framework of one positing “instructional” meaning à la Portner (2007) and multiple dimensions of meaning à la Kaplan (1999), Potts (2003, 2007), and Gutzmann (2013), shows that making the distinction between descriptive categories and comparative concepts is independent of working under a certain (formal) framework.

information structure, I am open to the possibility that some universal aspect, whatever it is, exists for information structure in human language. Finding such universals, if any, would be important for understanding human language. In order to figure out whether such universals exist or not, we need to conduct comparative research across languages.

In this section, I would like to suggest some interesting topics for future comparative research related to *-(n)un* and *-i/ka*. First, although a number of previous studies exist on Korean *-(n)un* and Japanese *-wa*, few previous studies have looked at what they have in common and how they differ from each other (notable exceptions are Haig 1982, S. Choi 2000, and Choi & Shimojo 2001). With the characterization of *-(n)un* as [+imposed salience, -unique specification], it would be interesting to see whether Japanese *-wa* can be characterized in the same way with this respect. Also, for the same reason, the comparison between Korean *-i/ka* and Japanese *-ga* would be an important research topic.

Second, as briefly mentioned in Chapter 3 (footnote 124), both Korean *-i/ka* and English *it*-clefts seem to be characterized as [+unique specification], and the difference between the two appears to be that the former is [-imposed salience] while the latter is [+imposed salience]. This possibility is worth further investigation.

Lastly, *-(n)un* is able to do what both English topicalization and left-dislocation do, which means that both English topicalization and left-dislocation can be characterized as [+imposed salience, -unique specification]. But this should not be the end of the story, since topicalization and left-dislocation are surely not the same. They need to be distinguished from each other by some other feature(s)/function(s) (cf. Rodman 1974; Prince 1978). Thus, how the two differ from each other and how it is possible for *-(n)un* to cover the functions of the two constructions are good topics

for future research.

In conducting the research suggested above, of course, the notions of topic, focus, and contrast will play an important role as comparative concepts. Also, if the notions of imposed salience and unique specification turn out to be inherently conveyed by various linguistic markers across languages as predicted, they will be good candidates for universal descriptive categories of information packaging in human language.

Appendix

Experimental Stimuli for the Phonetic 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 봤니?

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: 찬구 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 가고 싶어하는데, 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 가고 싶어하지 않았나?

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

Filler 1

- A: 여기서는 강남역이 가까워 역삼역이 가까워?
B: 강남역이 가까울거야. 저 위로 20 분만 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 5 분만 걸어가면 맛있는 찻집 있어. 그리로 가자.

3. Third Set

Topic

- A: 너 길상사 어딴는지 아니? 이번에 범정스님 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 했다며?

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: [민기는]_{LCT1} 교수님이 싫대고, [선미는]_{LCT2} 숙제가 너무 많대.

CT

A: 민지랑 선기 본 지 정말 오래 됐다. 개네 결혼은 했나?

B: [민지는]_{CT+Imp} 작년에 했어. 선 본 남자랑 두 달만에 했대.

A: 그래? 빨리 했네? 암튼 잘 됐다.

B: [선기는]_{CT-Imp} 아직도 안 했더라. 결혼생각이 전혀 없나봐.

Filler 1

A: 경차는 모닝이랑 레이 중에 뭐가 더 좋아?

B: 모닝이 더 좋아. 레이는 너무 위험하고, 사고 나면 수리비도 더 많이 든대.

A: 근데 연비는 레이가 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 했다며? 어떻게 됐대?

B: [건대는]_{CT+Imp} 떨어졌대. 정말 아쉬워 하더라.

A: 아쉽네. 홍대보다는 건대를 가고싶어했던 것 같은데.

B: [홍대는]_{CT-Imp} 과수석으로 붙었다던데? 눈썹을 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 인기도 50 만명이나 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.

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