

## -Nun/-Un and Scalar Implicature\*

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**Kim, Yong-Beom · Lee, Il-jae. 2010. -Nun/-Un and Scalar Implicature.** *Language Research* 27(1), 189-208. We propose in this paper that the Korean discourse marker *-nun/un* has the function of suppressing exclusiveness effect of the conversational implicature that presumably arises from a kind of cooperative principle of conversation, as proposed by Grice (1975). In order to argue for this proposal, we maintain a strict division regarding two types of implicature. One is the *general conversational implicature* that has been proposed by Grice and the other is a subtype of the former, the *scalar implicature* that has been posited by Horn (1972). It has been proposed in this paper that the distinction can be made by looking into the properties of the alternative set members. In the former the related set members are not ordered with respect to the relevant properties; in the latter the alternative set members are ordered on a scale of strength of the statement. It is suggested that the apparent exclusion effect of scalar implicature does not come from the discourse marker but from pragmatic inferences based on the scale. (Kwangwoon University)

**Key Words** implicature suppressor, conversational implicature, scalar implicature, upper-bound, referentially old, relationally old, alternative set

### 1. Introduction

It is well-known that there is a kind of exclusiveness implicature in the cases like (1).

- (1) A: Did John and Mary leave?  
B: JOHN left. (with JOHN having the falling coda of an A-accent)  
cf. JOHN left (with JOHN having the rising coda of a B-accent)<sup>1)</sup>

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1) A-accented phrases have a falling tone with a high pitched onset followed by a low pitched ending. B-accented phrases have a falling-rising tone. See Jackendoff (1972) and Pierrehumbert (1980) for details.

The utterance like (1B) implicates that Mary did not leave, although (1B) does not mention anything about Mary. This is due to what is called the conversational implicature. However, if *John* is pronounced with a B-accent, then this type of implicature disappears. The same kind of situation holds in Korean.

- (2) A: John-kwa Mary-ka twul ta ttenasse?  
       J.-and M.-nom two both left  
       'Did John and Mary both leave?'  
       B: Mary-ka ttenasse.  
       M.-nom left  
       'Mary left'  
       B': Mary-nun ttenasse.  
       M.-DM<sup>2)</sup> left

As in English, Korean counterpart (2B) has a kind of exclusiveness implicature whereas (2B') does not impart such a negative undertone.

According to Grice (1975) or Horn (1994), (2B') could be seen as unusual since the utterance seems to show lack of the conversational implicature which should be present in ordinary cases. In order to account for this, I will claim that *-nun/-un* is the suppressor of conversational implicature in Korean, providing a few pieces of evidence for the proposal.

However, there is a problem in treating *-nun/-un* as an implicature suppressor since there are cases that seem to go against such a proposal. Consider (3) and (4).

- (3) A: ku salam tochakhaysse?  
       the person arrived  
       'Did he arrive?'  
       B: tochak-un haysse.  
       arrival-DM did  
       '(It is true that he) Arrived'

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2) We will employ the convention of labelling *-nun/-un* as DM, abbreviating "Discourse Marker". *-Nun* is used after the word ending in vowels and *-un* is used if the word ends in consonants. I use this cover term because it is sometimes difficult to distinguish between topic and contrast in Korean.

- (4) Dongmedal-un hwakpohaysse.  
bronze medal-DM secured  
'(We) secured a bronze medal'

As C. Lee (2006) claims, (3B) does seem to have a negative implicature that [he is not on the stage]<sup>3</sup>; (4) also implicates that the speaker has not secured a silver or gold medal. *-Nun/un* seems to inhibit the implicature in some cases (e.g., (2B')) but not in other cases (e.g., (3B) and (4)). In this paper, we will attempt to explicate the different behavior of the particle that seems to manifest an apparent contradiction, as shown in (2B') and (3B) or (4).

## 2. Conversational Implicature and Scalar Implicature

We will assume that a generalized conversational implicature, or simply a conversational implicature exists independently of a scalar implicature. Let us consider (5):

- (5) A: John and Mary has come.  
B: Good. So John has come.

In a situation where John and Mary has come, we can truthfully say "John has come" through conjunction reduction. Thus, (5B) is a truth-conditionally viable statement in such a situation. Likewise, in a situation where John and Mary has arrived, the following question and response pair may truth-conditionally be an acceptable locution, but pragmatically it is not.<sup>4</sup>

- (6) A: Have (both) John and Mary come?  
B: JOHN has come.

(6B) is truth-conditionally as correct as (5B) is, but the speaker is not providing enough information to the inquirer. That is, if the responder knows that the both have come, he has to give the inquirer all the relevant information. This is what

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3) Let us imagine (3B) is uttered in a situation where the interlocutors are waiting for a singer to arrive to perform on a stage.

4) In (6b) JOHN is an A-accented expression.

Grice (1975) calls the Cooperative Principle in conversation. Since every conversation participant is supposed to expect such a "cooperative" answer, (6B) would be interpreted as implying [ Mary has not come ]. This portion of interpretation is not what is literally said but is *conversationally implicated*. The implicatum contained in (6B) is [ May has not come ] and this has to do with the quantity of information that the respondent provides, and thus could be called the *generalized conversational implicature* of quantity since this type of inference can be made in a general fashion regardless of the utterance situation. (See Horn 2004: 7)

There is another type of implicature that will be assumed in this paper. It is what Horn (1972, 2004) calls a *scalar implicature*. This is a special type of quantity implicature which involves *scalar predicates*. Scalar predicates could be considered an ordered set as shown in (7) for illustration:

- (7) a. <all, most, many, some, few>
  - b. <n, ... 5, 4, 3, 2, 1>
  - c. <excellent, good>
  - d. <hot, warm>
- (Levinson 1983)

Given the scalar predicates of an ordered set < $e_1$ ,  $e_2$ ,  $e_3$ , ...  $e_n$ > we can generate a well-formed formula like  $R(e_1)$ ,  $R(e_2)$ ,  $R(e_3)$ , etc. by substituting the alternative predicates; in this case we can draw a weaker proposition from a stronger statement as shown below:

- (8) (How many students appeared?)
- a. All of the students appeared.
- b. Most of the students appeared.
- c. Some of the students appeared.

According to Levinson (1983), (8a) entails (8b), and (8b) in turn entails (8c), but not vice versa. Therefore, if someone utters a sentence like (8c), then he implicates that neither *most* nor *all* of the students appeared.

Now, if we go a little formal, the notion of scalar implicature may be captured by formulating a rule as shown in (9):

- (9) Scalar Implicature: Given any scale of the form  $\langle e_1, e_2, e_3, \dots, e_n \rangle$ , if a speaker asserts  $R(e_2)$ , then he implicates  $\sim R(e_1)$ , if a speaker asserts  $R(e_3)$ , then he implicates  $\sim R(e_2)$  and  $\sim R(e_1)$ , and in general if a speaker asserts  $R(e_n)$ , then he implicates  $\sim R(e_{n-1})$ ,  $\sim R(e_{n-2})$  and so on up to  $\sim R(e_1)$ . (Levinson 1983: 133)

One of the problems in calculating a scalar implicature is that there may be no permanently determined basis on which the scale is constructed. As shown in (7), Horn (1972) and Levinson (1983) apparently think of the lexical meaning as the basis of the scale. However, Matsumoto (1991) has demonstrated that scales must be pragmatic in nature. For instance, if John is traveling westward from New York to California, one's utterance like *John has made it to Chicago* will implicate that John has not made it to Denver, but that he has passed Cleveland. However, if John is traveling eastward, these inference patterns should be reversed, and, therefore, the scale in this case should be in the opposite order. This means that scales should be set up differently depending on the situation that includes the utterance context.

### 3. -Nun/-un is an implicature suppressor

The conversational implicature can be seen as having a relatively weak assertion strength in English since it can be cancelled by explicitly negating it, as shown in (10).

- (10) A: Did you drink the beer in the fridge?  
B: It is true I drank some, and, uhm ... in fact, I drank all of it.

However, as mentioned earlier regarding (2), as repeated in (11), Korean discourse marker *-nun/-un* does not invoke an exclusiveness implicature<sup>5</sup>.

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5) There are many studies investigating the discourse functions of *-nun/-un*. I.-S. Yang (1973) asserts that *-nun/-un* marks *theme* and *contrast*; S.-Y. Bak (1986) proposes that *-nun* is a marker of a *discourse topic*; M.-H. Kim (2001) asserts that NPs marked with *-nun/-un* denote a *global theme*; C. Lee (2003) claims that *-nun/-un* marks *contrast*. For the remainder of this paper, I will simply use *-nun* for brevity to refer to the alternating *-nun* and *-un*.

- (11) A: John-kwa Mary-ka ta ttenasse?  
           J.-and       M.-nom both left  
           'Did John and Mary both leave?'  
       B: Mary-ka ttenasse. John-un ce bang-ey isse  
           M.-nom left       J-DM that room-in is  
           'Mary left'       'John is in that room'  
       B': Mary-nun ttenasse.  
           M.-DM left  
           As for Mary she left.  
       B'': Mary-nun ttenasse. 'John-un edi issnunci molla.  
           M.-DM left       J.-DM where is-Q. know  
           As for Mary she left. As for John we do not know where he is

As is clear in (11), *ka*-marked NP implicates that the alternative member did not leave whereas the *nun*-marking of the NP does not induce negative implicature. Considering the cooperative principle of conversation, (11B') should implicate that John did not leave, since the mentioned alternatives should be interpreted as implicating the upper bound of the semantic value that satisfies the predicate *ttena* 'leave'. Seen from a different angle, (11A) is a type of question that can potentially induce an answer with a conversational implicature of a negative overtone. So as expected, the first utterance in (11B) properly generates the implicature [John did not leave], but the discourse marker *-nun* in (11B') can be said to be a suppressor of implicature because the negative implicature has disappeared from (11B') and also because there seems to be no other elements that can erase the implicature.

There are many other cases in which such inhibition is evident. Consider the following case where numerals are involved as shown in (12). Suppose the addressee has a total of three kids who took an interview for a visa.

- (12) A: Aitul-i intebywu-ey hapkyekhaysseyo?  
           kids-nom interview-at passed  
           'Did (your) kids pass the interview?'  
       B: Wi-lo twul-un hapkyekhaysseyo.  
           above-from two-DM passed

'The older two (of them) passed'

B': Wi-lo            twul-i    hapkyekhaysseyo.  
 above-from two-nom passed  
 'The older two (of them) passed.

(12B) does not seem to have a clear implication that the third kid failed, since we can add further remarks to the original utterance as shown in (13):

(13) B: Wi-lo    twul-un hapkyekhayseyo.   Maknay-nun   ajik   mollayo.  
above   two-DM passed                      youngest-DM yet know  
'The older two (of them) passed. We do not know about the  
youngest yet'

Of course, we can add other comments as shown in (14):

(14) B: Wi-lo                      twul-un hapkyekhaysseyo.    Maknay-nun    tteleciko.  
          above-from two-DM passed                                      youngest-DM failed  
          'The older two (of them) passed. The youngest failed'

I will assume that *-nun* in (14) expresses *contrast* and that two (or more) objects are contrasted in the following sentence frame<sup>6</sup>).

(15) *A*-nun P & *B*-nun Q  
(where  $\forall x \neg[[P(x) \rightarrow Q(x)] \text{ OR } [P(x) \rightarrow Q(x)]]$ )

In (15) the contrasted objects referred to by A and B should be 'autonomously'<sup>7)</sup> described without being influenced by other factors.

On the other hand, the use of nominative marker in (12B') seems to implicate

6) We do not attempt to give a formal definition of 'contrast' here, but offer a rough sketch that can be used for the purpose of this paper. In (15) P and Q will be posited as atomic terms for simplicity, in which case the denotation of one predicate cannot be the subset of the other. In other words their meanings should not involve hyponymy or synonymy.

7) The use of the word 'autonomous' here is to describe a situation where two contrasted individuals are described by the lexical meaning of the relevant predicates only, without any interference of implicature.

8) The second utterance in (17) *Makray-nun mollayo* could be acceptable if it is interpreted as [I don't care about the youngest], which means the speaker gave up probably because the youngest is hopeless, which implies that the youngest failed.

(19) A: Tim sengcek-un ettayyo?  
 team performance-DM how-is  
 "How is the team doing?"

B: sam wi-nun hwapotoyesseyo.  
 3rd place-DM secured  
 "The third place has been secured"

Let us imagine that the team belongs to a baseball league and (19a) is a question about the team standing at the final stage of the intra-league competition. (19B) mentions the third place and this should be interpreted as denoting the upper bound of the semantic value; so (19B) implicates that the second place or the first place has not been attained yet.

Now what is the difference between the cases like (11B') and (12B) where the implicature is absent and the ones like (18B) and (19B) where the implicature is preserved in spite of the appearance of *-nun*? In this paper we will argue what causes the difference between the two cases has to do with the property of an alternative set, namely whether the set is ordered or not.

Let us look at the alternative set evoked in (11) and (12). By uttering (11A), the speaker evoke a set {John, Mary}<sup>9)</sup>, which apparently has no order between the two members regarding the possibility of their leaving. In the case of (12), the first speaker introduces the offsprings of the addressee and it evokes a set of three kids, but there is no reason to believe that there is any inherent order among the members regarding the possibility of their passing the interview. So the sets evoked by the first utterances in (11) and (12) are unordered. In this situation the members are more or less independent of each other in the sense that there is no inference relation holding among the members with respect to the relevant properties mentioned in the utterance.

If we look into (18) and (19), however, the alternative sets that are exploited by these situations are ordered and their members are not introduced by the discourse participants. The sets employed in (18) and (19) would be something like <appear-on-stage, get-ready, arrive, ...> and <1st place, 2nd place, 3rd place,

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9) The set evoked by the expression *John and Mary* would be  $\langle \emptyset, j, m, j+m \rangle$  within semantic scheme, but we are focusing on non-null atomic members in order to capture the pragmatic intuition behind the exclusiveness implicature. See Matsumoto (1995) for the pragmatic nature of this set.

...>, respectively. The membership of these sets seems to be determined by the situation based on the background knowledge of the interlocutors. Compare these with the alternative sets which are evoked by the utterances like (11) and (12).

The alternative sets exploited in (18), for instance, reflect our common knowledge that an entertainer has to arrive at the performance site before he gets ready and performs on the stage. Thus the sequential order is not a product of what is 'said' by the discourse participants, but the result of an inference based on our background knowledge. Therefore, we would predict that if the inference was based on background knowledge, the implicature would be the same with or without *-nun*, and this is borne out by (20B).

(20) A: ku salam ettehkey toyesse?  
           the person how become  
           "What happened to him?"

B: cokum cen-ey tochak-haysse.  
      moment ago arrival-did  
      "(It is true that he) Arrived a moment ago"

(20B) which does not carry the discourse marker in question has the same implicature as (18B): the performer did not appear on the stage yet.

Likewise, the speaker of (19B) would dispense with *-nun*, still producing the same illocutionary effect, as shown in (21).

(21) A: Tim sengcek-un ettayyo?  
           team performance-DM how-is  
           "How is the team doing?"

B: sam wi(-lul) hwakpohaysseyo.  
      3rd place(-acc) secured  
      "(We) have secured the third place"

On the basis of this discussion we can propose that the *scalar implicature* should be distinguished from an ordinary *conversational implicature* in that the

background knowledge is to be ultimately held accountable for the ordered alternative set; and that the ordinary implicature is generated by the maxim of quantity exploiting the unordered set whose members are introduced during the discourse.

There is a transitive relation between propositions that exploits the ordered sets mentioned above. According to our background knowledge, the first place is more difficult to attain than the second place, which in turn is more difficult to attain than the third place, which in turn is more difficult to attain than the fourth place, and so on. On the other hand, ordinary individuals do not evoke such a scale and [John] and [Mary] evoked in (11), for instance, are not ordered with respect to the possibility or the necessity of their leaving.

However, even a set of individual objects in an organization can sometimes induce scales of the type exploited in (18). Let us suppose a project draft is being prepared by a planning section, and reviewed by a finance section, and approved by vice president, and then finalized by the president of a university. If an office clerk in charge is getting an approval for a certain project, the order of approval would be <Chief of Planning Division, Chief of Finance Division, Vice President, President> but the relevant scale which reflects the strength of the approval would be the reverse. So the president's approval comes after vice president's, which in turn follows the approval of the finance section, and so on. In this case the scalar implicature will also be generated, if we are correct. Let us imagine the following conversation is taking place between employees who are familiar with the internal process of the project approval.

- (22) A: ku selywu-ka    eti    issci?  
         the document    where is  
         "Where is the document?"  
         (By whom is the document being reviewed?)

B: Caymwuche-kkaci-nun    kyelcai-lul haysse.  
    Finance div.-up-to-DM    approval-acc did  
    "(Up to) Finance division approved it"

B': Caymwuche-kkaci        kyelcai-lul haysse.  
    Finance div.-up-to        approval-acc did

"(Up to) Finance division approved it"

(22B) which contains the discourse marker *-nun* would be interpreted as implicating that vice president and above have not signed. (22B') which do not have the discourse marker *-nun* also implies that the signature has been obtained up to Finance Division and no further. This is what is predicted from our proposal. In other words, in (22) regardless of the presence or absence of *-nun*, the utterances like (22B) and (22B') implicate that the two final personnels in charge have not signed the document<sup>10)</sup>.

It should be further noted that the order mentioned above is specific to a certain task. If the same individuals were involved in a different task, such an order would not be available. For instance, the four people would be seated in a different order in an academic ceremony, and the same people, on casual occasions, would be expected to arrive in a still different order or without any order.

This is reminiscent of Matsumoto's (1995) proposal that attempts to set up a pragmatic scale involving a travel westward from New York to Los Angeles, optionally stopping at Cleveland, Chicago, Denver and Las Vegas. The scales reflecting these specific situations will be viewed as pragmatic in nature since the order of the alternatives should be determined based on the knowledge involving the specific tasks being performed and the factors related to those tasks. In this sense the scalar implicature of this sort could be regarded as pragmatic in nature.

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10) One might doubt that the exclusion implicature is due to *-kkaci* ('up to') which has a kind of delimiting nature of meaning. However, the same effect can be observed without such delimiters. Consider the following examples which have the same exclusion effect.

(i) Caymwuche-nun thongkwahaysseyo.  
 Finance Div.-DM pass through  
 '(The document) passed the Finance Division (at least)'

(ii) Caymwuche-lul thongkwahaysseyo.  
 Finance Div.-acc pass through  
 '(The document) passed the Finance Division'

These two utterances imply that the document has not yet reach the office of the vice president.

#### 4. Informational Status and *-nun* marker

In the preceding section, I have shown that *-nun* can be analyzed as an implicature suppressor. In this section we will attempt to show that *-nun* is compatible with a phrase carrying a certain information status. Lee (2007) claims that *nun*-marked phrases can express contrastive topic and that it carries the pragmatic implication of being *given*, *presupposed*, or *anchored in the speech situation*. Although we agree to the general spirit of this claim, we will show that a more fine-grained account is needed to capture the intuition lying behind the usage of the discourse marker in question.

First of all, I will claim that *-nun* has the function of eliciting information stored in the background knowledge. Let us consider (23) and (24):

- (23) A: Nwukwu nwukwu wasse? Minswu-hako Minho-nun wasse?  
           who     who       came-Q   M.- and       M.-DM     came-Q  
           'Who and who came? Did Minho and Minsu come?'  
       B: Minho-ka nwukwuya?  
           M.-nom   who-is  
           'Who is Minho?'  
       B': Minho-nun wassten     kes katta.  
           M.-DM     came-com   that seem  
           'Minoho seems to have come'

- (24) A: 731 pwutai-lul   aseyo?  
           unit-acc       know-Q  
           'Do you know about 731 regiment?'  
       B: 731- pwutai-ka hangil       toklipkwun-inkayo?<sup>11)</sup>  
           unit-nom anti-Japanese independence-army-Q  
           'Is the 731 unit a anti-Japanese resistance army group?'  
       B': 731 pwutai-nun 2 cha seykyetaijen tangsi ilponkwun  
           unit-DM     2nd world war   during Japanese-army

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11) The actual answer at the hearings was "hangil toklipkwun-inkayo?", but the newspapers made the utterance more formal providing the subject of the sentence like (24B). (Chosun Ilbo, 2009. 11. 6)

pwutai-lose pholotul-ey tayhay sayngchey silhem-ul hayssten  
 unit-as captives-to toward living body experiment-acc did  
 pwutayipnita.  
 unit-is

"The 731 Unit was a Japanese regiment that conducted live body  
 experiments on the captives during the 2nd World War."

(23A) has two individuals introduced by the first speaker. Since the two individuals are mentioned by the speaker A, they can be said to be 'discourse' old at the point when the speaker B produces a reply. If the addressee does not know who they are, he should use *-ka* as shown in (23B). So we can say, regarding (23B), the phrase marked by *-ka* may be 'discourse' old but not 'background' old. However, in uttering (23b'), the speaker is supposed to know who Minhø is, implying that the referent of the *nun*-marked phrase, i.e., Minhø is not only 'discourse' old but 'background' old. In other words, the individual mentioned in (23B') is 'given' in the discourse and 'known' in the background knowledge. This tells us that *-nun* is used when the addressee already knows the mentioned individual. The same is true with (24), which is quoted from the hearings held at a national organization in 2009. As all the newspapers at that time implicated, the answer like (24B) indicates that he does not know about the 731 regiment. If he had known about the army unit, he would have used the expression like (24B'). These examples show that a general sense of 'givenness' is too broad to account for the distribution of *-nun*.

There are some more cases indicating that the interpretation of *-nun* has to exploit background information as its final resource. For instance, scalar implicatures crucially hinge on some kind of scale as Horn (1972, 2004), Gazdar (1978), Matsumoto (1995) and many others suggest. Scales are based on the pragmatic knowledge as well as semantic knowledge. As has been shown in section 3, the alternative members on the scale can be marked by *-nun*, as shown in (25), as repeated from (18B) and (19B).

- (25) a. cokum cen-ey tochak-un haysse. (=18B)  
 moment ago arrival-DM did  
 "(It is true that he) Arrived a moment ago"

- b. sam wi-nun      hwapotoyesseyo. (=19B)  
     3rd place-DM secured  
     "The third place has been secured"

Clearly, the scales like <appear-on-stage, get-ready, arrive>, <1st place, 2nd place, 3rd place, ...>, and <Denver, Chicago, Cleveland, ...> are to be assumed to be part of the background knowledge of the discourse participants. Thus, in these cases we can say the scales are 'background' old.

Secondly, there are, however, cases where expressions which carry discourse-old but no backgrounded information<sup>12)</sup> can be marked with *-nun*. The previous utterance in (23) can be modified as shown in (26)

- (26) A: Nwuka nwuka wasse? Minsu-hako Minho-nun wasse?  
         'Who and who came? Did Minho and Minsu come?'  
       B: Minho-nun nwukwuya?  
         'Who is Minho?'

I will assume that (26B) is a case where contrastiveness<sup>13)</sup> is expressed. Unlike (23B) or (23B'), (26B) implies that the speaker B does not know Minho. Here the implication is that the speaker knows Minsu but that he does not know Minho.

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12) I will follow Prince (1981) and assume that backgrounded information is referentially older than the information content introduced during any discourse.

13) It will be assumed that (26B) as well as (23B) has nothing to do with the kind of implicature that has been discussed so far since it initiates a new issue. Implicature is usually found when a previously raised issue is resolved as in (2A). We will further assume with Monlar (2001) that contrast involves an alternative set since contrast is a relational notion that has to do with comparison of alternative members. I will follow Halliday (1967), Chafe (1976), Rooth (1992), and Repp (2009) that contrast involves contrariety to some predicted or stated alternative. Also following Kim (2004), I will further posit that the contrasted members should come from a closed set of the alternatives. This is because contrast is usually made between a small number of alternatives. Especially this seems to be true because many sentences exemplifying contrastive topic or contrastive focus usually introduce two alternatives, as shown in (i) and (ii).

- (i) a. John bought chicken and Peter (bought) veal.  
       b. Max got an A in English and Eva a B in math.  
       (Repp 2009)
- (ii) a. Fred ate beans and Tom (ate) peanuts  
        (Jackendoff 1972)  
       b. Sue-nun ttenako Mary-nun namassta.  
         'Sue left and/but Mary stayed'

So Minho is not backgrounded, but the term is marked with *-nun* contrary to our proposal. Our position is that if there is a contrast between individuals denoted by the expressions, then they can be marked with *-nun*, although their denotatum is not backgrounded but simply 'discourse-old'. So contrastiveness can be observed between objects not only in the background knowledge frame but also in the discourse domain.

The third point is that *-un/nun* has to do with referential oldness rather than relational oldness, according to the notions suggested by Gundel and Fretheim (2004), who states that there can be two types of givenness-newness: referential givenness-newness and relational givenness-newness. Gundel and Fretheim state as follows:

... referential givenness-newness involves a relation between linguistic expression and a corresponding non-linguistic entity in the speaker/hearer's mind, discourse (model), or some real or possible world, depending on where the referents or the corresponding meanings of these linguistic expressions are supposed to reside.

(Gundel and Fretheim 2004: 176)

According to these authors, the notions like existential presupposition, specificity, and identifiability statuses are examples of this type.

On the other hand, relational givenness-newness involves a partition of the semantic representation of a sentence into two complementary parts, X and Y, where X is a piece of information that resolves the issue arising from the previous discourse and Y is the remainder of the information of the utterance in question. In such a discourse configuration, X is new in relation to Y in the sense that what is added to Y gives the addressee new 'relational' information. Some representative examples of this type are various kinds of foci in an utterance as contrasted with 'presupposition' (Chomsky 1971, Jackendoff 1972). Consider (27) and (28).

(27) A: Who ate the pizza?

B: John said HE did.

(28) A: Was it a car or a truck that hit the passenger?

B: It was a truck.

In (27) *HE* refers back to John and the person picked by the expression *John* is an entity that is identifiable or familiar with the speaker and the hearer, in the sense that the individual concept John resides in the interlocutor's mind. Thus, John can be background old. At the same time, however, *HE* add newness to the open proposition [x ate the pizza]. In this sense *John* or *He* is relationally new. In sum, *John* or *He* can be referentially old and relationally new at the same time.

In (28) *a truck* is also new and it is not referentially as old as *John* in (27) since it is non-specific, unfamiliar and probably not uniquely identifiable in the sense that no one knows whose truck it was. So the referent of *a truck* is referentially new. Furthermore, in terms of relational newness, it is a new piece of information that resolved the choice question.

In Korean, the *-nun* marker is regularly used when the phrase imparts referential oldness. Consider (23) again repeated in (29), for instance.

- (29) A: Nwukwu nwukwu wasse? Minswu-hako Minho-nun wasse?  
           who     who       came-Q M.- and       M.-DM     came-Q  
           'Who and who came? Did Minho and Minsu come?'

B: Minho-nun wasse.  
      M.-DM       came  
      'As for Minho, he came'

The entity denoted by the expression *Minho* is background old in (29A) and (29B) in the sense that the interlocutors already know who Minho is; so it is referentially old.

In sum, we have argued that *-nun* can be used in marking phrases whose denotation is discourse old or background old, although its implication shows subtle difference as we have seen. There are cases where *-nun* is attached to referentially new items in a contrastive context and it does not harm our proposal that *-nun* is a suppressor of an exclusiveness implicature.

## 5. Conclusions

This paper argued that *-nun* can be seen as an implicature suppressor and that some apparent confusions regarding the discourse marker *-nun* can be solved by distinguishing the properties of two different types of alternative sets; one is non-scalar and the other is scalar. In order to argue for this proposal, we maintain a strict division regarding two types of implicature. One is the *generalized conversational implicature* that has been proposed by Grice and the other is a subtype of the former, the *scalar implicature* that has been posited by Horn (1972). It has been proposed in this paper that the distinction can be made by looking into the properties of the alternative set members. Furthermore, it has been suggested that *-nun* is compatible with discourse old or background information. There are other notions like focus, contrastive topic, contrastive focus and so on which seem to need further refinement. These topics need to be studied in a more comprehensive project.

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