The Syntax and Semantics of *Yekan* and Its Cousins

Hyunoo Lee*†

Inha University

Hyunoo Lee. 2006. The Syntax and Semantics of *Yekan* and Its Cousins. *Language and Information 10.2*, 1–20. This paper is concerned with the distribution and interpretation of *yekan* and its cognates. Syntactically they require negation, but semantically the sentences in which they occur are positive ones that make monotone increasing inferences possible. This syntax-semantics discrepancy can be best accounted for by showing that *yekan* and its cousins must be strictly c-commanded by metalinguistic negation at the surface structure and that the positive meaning of the sentences they are part of is derived from the cancellation of the pragmatic upper-bounding implicatum associated with them. These also enable us to explain why they do not occur in the environments where typical NPIs do and why only certain forms of negation license them. (**Inha University**)

Key words: *yekan*, degree words, scale, (cancelation of) implicatum, negation (descriptive vs metalinguistic), negative polarity items, scope, c-command, upper bound

1. Introduction

The distribution and interpretation of *yekan* and its cognates[1] pose thorny problems for the standard theory of negative polarity items (NPIs). They have been referred to as NPIs in the literature, since they require negation. The semantic behavior they show, however, is closer to that of positive polarity items (PPIs) than that of NPIs, in that they give rise to monotone increasing inferences. The purpose of this paper is twofold. From the descriptive viewpoint, it aims to spell out some peculiar properties of *yekan* and its analogues that differentiate them from typical

* Department of English Language Education, Inha University, 253 Yonghyun-dong, Nam-gu, Incheon 402-751, KOREA. E-mail: hylee@inha.ac.kr

† Earlier versions of this paper were read at various places such as a Monthly Meeting of KSLI, an Annual Meeting of Korea Society of Linguistics, etc. I would like to thank the audience present there for their encouragement and valuable comments. I would like to express my special thanks to Chungmin Lee and Eun-Ju Noh. All remaining shortcomings are, however, my responsibility. This work was supported by Inha University Research Grant (INHA-30297).

[1] What is meant by the 'cognates' or 'cousins' of *yekan* includes any compounds derived from it except *yekanhayse*, which functions as a verbal modifier. Cf. footnote 2.

NPIs that are said to be triggered by negation or other non-assertive expressions. Given the syntactic and semantic descriptive details, it argues (i) that they are licensed by metalinguistic negation, (ii) that they must be strictly c-commanded by their licensor at the surface structure, and (iii) that the syntax-semantics conflict can be resolved by the lexical properties of *yekan*, the notion of scalar implicature developed by Horn (1989), and the mechanism that enables negation to cancel the upper-bounding implicatum of *yekan*.

2. Statements of Problems

Lee (2002; 2006) investigates the distribution of *yekan* and its cognates. Based on *Doosan Donga New Dictionary of Korean* (1998, 3rd edition), he notes that *yekan* may be used as a degree noun, as in (1), or may be used as a degree adverb, as in (2).

(1) yekan (여간, 如干): being common, ordinary, or normal

a. ku salam sengmi-ka yekan-ilayaci?
that person temperament-Nom ordinary-is
'Is that person's temperament ordinary?'
= 'That person's temperament is extraordinary.'
b. ku ai-nun cengmal yekannayki-ka anita.
that kid-Top really ordinary man-Nom is not
'That kid is an extraordinary person.'
c. Mina-nun yekanhan kangsimcang-i anita.
Mina-Top ordinary stronghearted person-Nom is not
'Mina is an extraordinarily stronghearted person.'

(2) a. ku cip-un yekan khuci anhta.
that house ordinarily big is not
'That house is extraordinarily big.'

b. Jina-ka yekan manhi wulci anhnunta.
Jina-Nom ordinarily much crying is not
'Jina is crying a great deal.'

In (1a), a rhetorical question that amounts to a strong negative statement, *yekan* is followed by a copula *ita* 'be'. In (1b), it is used as the first component of the compound noun *yekan-nayki* 'ordinary person', and in (1c), as the root of the compound adjective *yekan-hata* 'be ordinary'.[2] As an adverb, *yekan* may modify an adjective like *khuci* 'big' in (2a), or an adverb like *manhi* 'much' in (2b).

[2] It is well-known that *yekanhata* may be used as a prenominal modifier, as in (1c), or may be used as a verbal modifier in the fixed form of *yekanhayse* 'readily', as in (i).

(i) changmwun-i yekanhayse yelici anhnunta.
window-Nom readily open does not
'The window hardly opens (well).'

As will be clearer, this use of *yekan* is of very special interest. Unlike the sentences we have discussed so far, (i) is a true negative sentence. It never means that the window opens ex-

Cho and Lee (2002), Lee (2005), and Lee (2002; 2006) identified *yekan* as a NPI that requires negation. Contrast the grammatical sentences in (2) with the ungrammatical ones in (3).

(3) a. *ku cip-un yekan khuta.
that house ordinarily big
'That house is ordinarily big.'

b. *Jina-ka yekan manhi wunta.
Jina-Nom ordinarily much crying is
'Jina is crying ordinarily much.'

Just like the deviant English sentences in (4b) and (4d), both sentences lack negation and are ruled out as ungrammatical.

(4) a. Jane hasn't had any lunch.

b. *Jane has had any lunch.

c. She doesn't ever visit us.

d. *She ever visits us.

Expressions like *any* and *ever* are representative of NPIs and they are said to be restricted to negative or other non-assertive sentences.

Although *yekan* requires a negative verb like *anita* 'not be (the case that ...)' or *anhta* 'do not', it has some other properties that typical NPIs do not possess. All the previous analyses claim, independently, that only a specific type of negation licenses *yekan* and its analogues. Note that they are prohibited from occurring with the so-called short-form negation. Contrast (2) with (5).

(5) a. *ku cip-un yekan an khuta.
that house ordinarily not big
'That house is extraordinarily big.'

b. *Jina-ka yekan manhi an wunta.
Jina-Nom ordinarily much not crying is
'Jina is crying a great deal too much.'

In spite of the presence of the negative adverb *an*, whose scope may include the whole clause,[3] in (5a-b), the sentences are not grammatical at all.

Among negative predicates, it is not just the short-form negation that fails to license *yekan* and its cousins. Consider the following paradigm.

(6) a. He disliked doing any more than necessary.

traordinarily well. This difference suggests that *yekanhayse* is a true NPI but *yekan* and its other cognates in the other contexts are something else. For a more detailed discussion of *yekanhayse*, see section 3.

[3] The adverb *an* may be used to mark internal negation, as in (i), or external one, as in (ii).

b. They doubt that I need ever consider the problem.

c. He forbids her to accept any suggestions.

d. He was reluctant to see any more patients.

e. It lacked the power of any Italian cars.

(7) a. Jina-nun yeksa-ey tayhay amu kes-to molunta.
Jina-Top history-about anything not knows
'Jina does not know anything about history.'

b. *Jina-nun yeksa-ey tayhay yekan manhi molunta.
Jina-Top history-about ordinarily much not knows
'Jina knows extraordinarily much about history.'

(8) a. Jina-un amu ton-to epsta.
Jina-Top any money not exists
'Jina doesn't have any money.'

b. *Jina-un yekan manhun ton-i epsta.
Jina-Top ordinarily much money not exists
'Jina has extraordinarily much money.'

c. Jina-un yekan manhun ton-i issci anhta.
Jina-Top ordinarily much money exists not
'Jina has extraordinarily much money.'

Klima (1964) claims that adversative predicates like *dislike*, *doubt*, *forbid*, etc. allow a NPI to occur in their scope, as illustrated in (6). Although Korean does not have as many adversative predicates that license NPIs as English, some predicates like *moluta* 'not know' and *epsta* 'not exist' do license NPIs in their scope, as in (7a) and (8a).[4] However, even these predicates fail to license yekan in their scope, as in (7b) and (8b). To convey the intended message of (8b), the negated verb *issci anhta* 'exist not' must be substituted for the inherent negative verb *epsta*.

Note further that *yekan* and its cousins cannot be allowed in other environments in which typical NPIs are.

(i) manhun thim-i an chamkahaye, wusung thim-i cincenghan
man team-Nom not participated, champion team-Nom true
wusung thim-ilako pol swu epsta.
champion team-is consider cannot
'Because there were many teams that didn't participated in it, we can't consider the champion team to be a true champion one.'

(ii) manhun thim-i an chamkahayss-ciman, tayhoy-ka sengkongcek-iessta.
many team-Nom not participated-but tournament successful-was
'Although not many teams participated in it, the tournament was successful.'

In (i) *an* takes scope under *manhun* 'many', but in (ii) it takes scope over it.

[4] For a full discussion of what adversative predicates in Korean can license a NPI in their scope, see Joe and Lee (2002) and Lee (2004)

(9) a. Mary arrived before John sang any songs.

b. *aitul-i yekan manhi wulki-ceney, Jina-ka wassta.
kids-Nom ordinarily much cried-before Jina-Nom came
'Before kids cried ordinarily much, Jina came.'

(10) a. If John drinks any wine, he'll go to bed early.

b. *aitul-i yekan manhi wul-myen, Jina-ka ol kes-ita.
kids-Nom ordinarily much cry-if Jina-Nom come will
'If kids cry ordinarily much, Jina will come.'

(11) a. Every student who knows anything about the case should speak now.

b. *yekan manhi wul-ten aitul motwu-ka tasi wuski
ordinarily much had cried-Rel kids all-Nom again smiling
sicakhayssta.
started
'Every kid who had cried ordinarily much started smiling again.'

(12) a. Only John solved any questions.

b. *Jina-man yekan manhi wulessta.
Jina-only ordinarily much cried
'Only Jina cried ordinarily much.'

(13) a. Mary was surprised that John solved any questions.

b. *Mina-nun Jina-ka yekan manhi wule nolayssta.
Mina-Top Jina-Nom ordinarily much cried was surprised
'Mina was surprised that Jina cried ordinarily much.'

(14) a. Did John solve any questions?

b. *Jina-ka yekan manhi wulessni?[5]
Jina-Nom ordinarily much cried
'Did Jina cried ordinarily much?'

In the utterance of the *before*-clause in (9), the conditional in (10), the restriction on ∀ in (11), the *only* N in (12), the factive in (13), and the polar question in (14), something has been implied not to hold true. The above paradigm shows that unlike NPIs like *any* and *ever*, *yekan* is not allowed in these contexts.

To sum up, *yekan* and its variants are only allowed by the long-form negation V-*ci anhta* 'do not V' or the (sentential) negation (*kes-i*) *anita* 'be not the case that ∼'. Note that what I have shown so far is the mere fact that they are licensed by only the two forms of negation. What is missing in such a statement, however, is that the relation between them and their licensors are further structurally conditioned. Consider the following examples:

[5] As pointed out in relation with (1a), (14b) is grammatical when it is understood as a rhetorical question. However, the sentence is entirely ungrammatical as a true question.

(15) a. Jina-ka [NP [CP yekan khu-n] salam]-i anita.
Jina-Nom ordinarily big-Rel person-Nom is not
'Jina is the person who is extraordinarily big.'

b. *yekan khu-n salam-i Jina-ka anita.
ordinarily big-Rel person-Nom Jina-Nom is not
'The person who is extraordinarily big is Jina.'

(16) a. Jina-ka yekan khu-n salam-ul cohaha-n kes-i anita.
Jina-Nom ordinarily big-Rel person-Acc liked-that was not
'It was the case that Jina liked the person who was extraordinarily big.'

b. yekan khu-n salam-i Jina-lul cohaha-n kes-i anita.
ordinarily big-Rel person-Nom Jina-Acc liked-that was not
'It was the case that the person who was extraordinarily big liked Jina.'

(17) a. Jina-ka yekan khu-n salam-ul cohahaci anhassta.
Jina-Nom ordinarily big-Rel person-Acc liked not
'Jina liked the person who was extraordinarily big.'

b. *yekan khu-n salam-i Jina-lul cohahaci anhassta.
ordinarily big-Rel person-Nom Jina-Acc liked not
'The person who was extraordinarily big liked Jina.'

The verb *anita* may be used as a negative copula, as in (15), or it may mark sentential negation, as in (16). When anita is used to express sentential negation, *yekan* may be embedded not only by VP but also by subject NP, as seen in (16). The contrast between (15a) and (15b), however, shows that *yekan* may be embedded by the VP headed by *anita*, but not by subject NP. Note that this subject-predicate asymmetry arises even with the long-form negation, as seen in (17).

As we saw, *yekan* and its cognates have two distinctive syntactic properties. First, they require the long-form negation and *anita*, which may serve as a copula or express sentential negation. Second, a subject-predicate asymmetry arises when they are licensed: their occurrences are restricted to VP. In addition to these syntactic properties, they exhibit a very special semantic property that typical NPIs do not possess at all. Consider the following examples:

(18) a. John didn't eat any fast food.

b. John didn't eat any hamburgers.

(19) a. Jina-ka phaysutuphwutu-lul yekan manhi mekci anhassta.
Jina-Nom fast food-Acc ordinarily much eat did not
'Jina ate an extraordinarily great deal of fast food.'

b. Jina-ka haymbege-lul yekan manhi mekci anhassta.
Jina-Nom hamburger-Acc ordinarily much eat did not
'Jina ate an extraordinarily large number of hamburgers.'

(18a) asymmetrically entails (18b). This is due to the semantic value of *not*, which is construed as a monotone-decreasing function in (20a), and the inclusion relation in (20b).

(20) a. Let (B, $\leq$) and (D, $\leq$) be partially ordered sets. Then a function f from (B, $\leq$) to (D, $\leq$) is *monotone-decreasing* iff for all x, y $\in$ B, x $\leq$ y) $\rightarrow$ f(y) $\leq$ f(x).

b. hamburgers$'$ $\leq$ fast food$'$

On the other hand, in (19) the entailment relation is reversed. That is, (19b) entails (19a), but not vice versa. Despite the presence of the long-form negation, whose semantic denotation is a monotone decreasing function, it seems that the entailment relation in (19) is the one we obtain with a monotone increasing operator, as defined in (21).

(21) Let (B, $\leq$) and (D, $\leq$) be partially ordered sets. Then a function f from (B, $\leq$) to (D, $\leq$) is *monotone-increasing* iff for all x, y $\in$ B, x $\leq$ y) $\rightarrow$ f(x) $\leq$ f(y).

The above entailment patterns indicate that the two sentences in (19) may not be semantically negative, even though they take the form of the negative sentence. There are two pieces of evidence in favor of this claim. The first evidence comes from the fact about multiple occurrences of NPIs.

(22) a. *Jina-ka te isang malhayssta.
Jina-Nom any more talked
'Jina talked any more.'

b. Jina-ka te isang malhaci anhassta.
Jina-Nom any more talk did not
'Jina didn't talk any more.'

(23) a. amwuto te isang malhaci anhassta.
anyone any more talk did not
'No one talked any more.'

b. No one has ever said anything to either of us.

(24) a. *Jina-ka yekan khun soli-lo te isang malhaci anhassta.
Jina-Nom ordinarily loud voice-in any more talk did not
'Jina didn't talk in an ordinarily loud voice any more.'

b. *Jina-ka te isang yekan khun soli-lo malhaci anhassta.
Jina-Nom any more ordinarily loud voice-in talk did not
'Jina didn't talk in an ordinarily loud voice any more.'

The contrast between (22a) and (22b) just shows that *te isang* 'any more' is a NPI. The grammaticality of the two sentences in (23) indicates that more than one NPI

may occur in the same sentence in Korean as well as in English. The fact that neither of the sentences in (24) is grammatical strongly suggests that true NPIs like *te isang* are not suitable for the environments where *yekan* is licensed.

In an attempt to formulate the derivative licensing condition for NPIs in English, Linebarger (1980; 1987) argues that a NPI contributes to a sentence S expressing a proposition P the conventional implicature that the following two conditions are satisfied.

(25) a. There is some proposition NI (which may be identical to P) which is implicated or entailed by S and which is part of what the speaker is attempting to convey in uttering S. In the LF of some sentence S' expressing NI, the lexical representation of the NPI occurs in the immediate scope of negation. In the event that S is distinct from S', we may say that in uttering S the speaker is making an *allusion* to S'.

b. NI strengthens P. The truth of NI, in the context of the utterance, virtually guarantees the truth of P.

Now consider (26).

(26) Jina-nun yekan ppalli tallici anhnunta.
Jina-Top ordinarily fast run does not
'Jina run extraordinarily fast.'

Careful examination of the meaning of this sentence shows that there is no negative implicatum (NI) that strengthens the proposition of (26). The only candidate for the NI in question is the proposition of (26) itself. But as we already saw, semantically (26) is not a negative but a positive sentence. This in turn indicates that *yekan* is not a true NPI.

Virtually the same point is made by Kadmon and Landman (1993). According to them, the distribution of NPI *any* is governed by the semantic/pragmatic properties of widening and strengthening it induces. Let us take (27) as an example.

(27) a. I don't have any potatoes.

b. $\neg\exists$x(potato(x) $\wedge$ I-have(x))

The meaning of (27a) is represented in (27b). In some context, *potato* in (27a) can be understood to mean cooking potato and then (27b) would mean we have no cooking potatoes. *Any* widens the interpretation of *potato*, for example, to include decorative potted potatoes, in which case (27b) would mean that we don't even have potted potatoes. Since the widening it induces makes the statement expressed by (27a), namely the statement given in (27b), stronger–(27b) on the wide interpretation of *potato* entails (27b) on the narrow interpretation of *potato*.

(28) wide: I don't have potatoes, cooking or other $\rightarrow$ narrow: I don't have cooking potatoes.

Note that the use of *any* here strengthens the negative meaning of the sentence that it occurs in. This is the feature that NPIs in general have in common, and as we already saw, *yekan* and its cousins show complete lack of this feature.

3. Towards An Explanation

In the previous section, I have shown that *yekan* and its variants are only licensed by the long-form negation and the (sentential) negation *anita*, subject to the subject-predicate asymmetry, and that they are not true NPIs or the sentences they are part of are not semantically negative. In this section, I will propose an account that derives these syntactic and semantic peculiarities of *yekan* and its analogues.

I attribute the distributional properties in question to the Strict C-Command Condition in (29a).

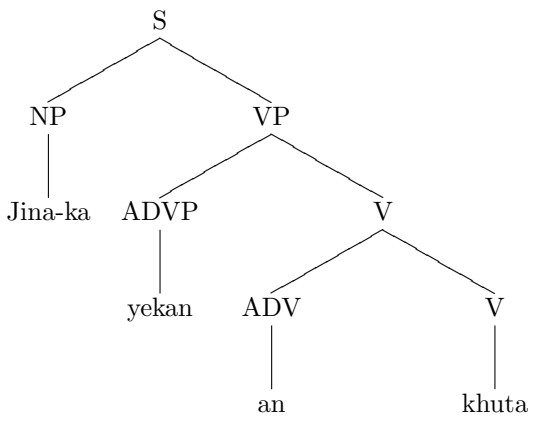
(29) a. Strict C-Command Condition
Yekan and its analogues must be strictly c-commanded by their licensor at the surface structure.

b. Node A *strictly c-commands* node B iff (i) neither dominates the other, and (ii) every node that dominates A also dominates B.[6]

Assume that the short-form negation *an(i)* is an X^0-level modifier but the long-form negation *-ci anhta* is a verb that takes a VP as its complement. Given this reasonable assumption, we can provide a natural account of why the short-form negation is not qualified as a legitimate licensor for *yekan*. Consider (30).

(30) a. Jina-ka yekan an khuta.

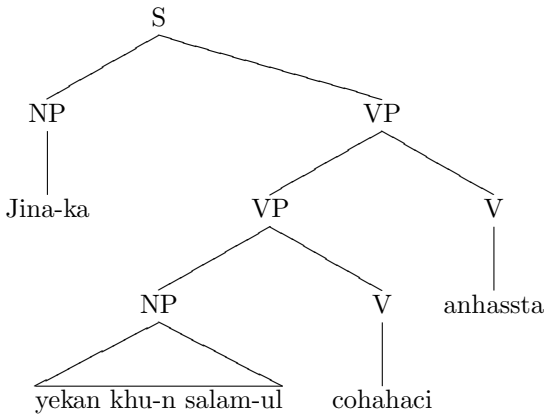
b.



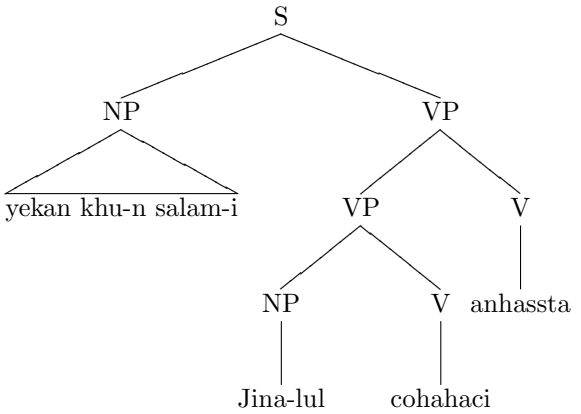
In (30b), the adverb *an* fails to strictly c-command *yekan*, which is a V^0 modifier, violating (29a). On the approach taken here, the subject-predicate asymmetry regarding the long-form negation is also naturally explained. Consider (31a) and (31b), which represent the surface structures of (17a) and (17b), respectively.

[6] This is the same as the original definition of c-command given in Reinhart (1976).

(31) a.



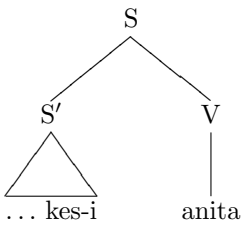
b.



In (31a) the long-form negation *anhta*, as a head verb, strictly c-commands its complement VP and every material contained by it, including *yekan*, which is a subconstituent of the object NP. In contrast, in (31b) *anhta* fails to strictly c-command *yekan*, which is a subconstituent of the subject NP, violating (29a).

When used to mark sentential negation, it would be plausible to assume that *anita* takes a clause as its complement. That is, sentences like those in (16) have the following schematic surface structure.

(32)



Given (32), no subject-predicate asymmetry is expected to arise regarding the licensing of *yekan*, since the sentential negation *anita* strictly c-commands everything inside its complement clause. The grammaticality judgment of (16) bears this out.

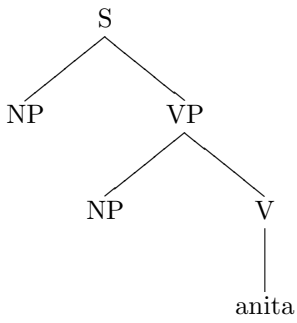
As we saw in (15), repeated as in (33), the copula *anita* allows *yekan* to be contained by the second NP only.

(33) a. Jina-ka [$_{NP}$ [$_{CP}$ yekan khu-n] salam]-i anita.
Jina-Nom ordinarily big-Rel person-Nom is not
'Jina is the person who is extraordinarily big.'

b. *yekan khu-n salam-i Jina-ka anita.
ordinarily big-Rel person-Nom Jina-Nom is not
'The person who is extraordinarily big is Jina.'

This fact is also accounted naturally for if we assume that *anita* takes as its complement the second NP of the sentence. Under this assumption, the sentences in (33) will have the following schematic surface structure:

(34)



In (34) the material inside the subject NP, but not inside the complement NP, lies outside the c-command domain of *anita*. Hence, according to (29a), only (33a) is ruled in.[7]

We are now in a position to account for the semantic fact that *yekan* and its cognates are not true NPIs or the sentences they are part of are not semantically negative. Elaborating on Lee's (2005) claim, I will argue that the negation that licenses them is metalinguistic negation and spell out how the positive meaning of the sentences they are part of is derived.

[7] One reviewer casts doubt on the Strict C-Command Condition in (29). S/he argues that it is too strong to rule in the scrambled versions of the sentences in (17). Consider (i).

(i) a. yekan khu-n salam-ul Jina-ka cohahaci anhassta.
ordinarily big-Rel person-Acc Jina-Nom liked not
'The person who was extraordinarily big, Jina liked.'

b. Jina-lul yekan khu-n salam-i cohahaci anhassta.
Jina-Acc ordinarily big-Rel person-Nom liked not
'Jina, the person who was extraordinarily big liked.'

Sentences (ia) and (ib) are scrambled sentences of (17a) and (17b), respectively. The reviewer claims that in spite of the unavailability of (29), both sentences are judged grammatical. I believe that the reviewer's judgment is quite controversial. To my judgment, (ia) is far worse than its unscrambled counterpart (17a). Although the sentence seems to sound "natural", it is not likely that it means that Jina liked the person who was extraordinarily big. On the other hand, scrambling appears to make sentence (ib) sound better than its unscrambled counterpart (17b), which is simply ungrammatical. The question is, however, how good (ib) is.

Lee (2005) claims that *pothong* 'common(ly)' and *yekan* behave as NPIs because they take metalinguistic negation with contrastive focus stress on their first syllables. I agree with some part of this claim, but disagree with the other. I take the position that *yekan* and its variants are licensed by metalinguistic negation, but as argued in the above discussion, I deny the possibility that they are true NPIs. It has been well-known that metalinguistic negation cannot trigger NPIs. Karttunen and Peters (1979) point out that contradiction negation, a type of metalinguistic negation, is incapable of triggering NPIs.

(35) a. Chris managed to solve the problem.

b. Chris didn't manage to solve the problem.

c. It was difficult for Chris to solve the problem.

d. Chris didn't manage to solve the problem—it was quite easy for him.

(36) a. Chris managed to solve some problems.

b. Chris didn't manage to solve any problems.

c. Chris didn't manage to solve some/*any problems—he solved them easily.

(35a) and its logical negation (35b) both conventionally implicate (35c). With the right intonation contour (Liberman and Sag (1974), Ladd (1980)) and an appropriate continuation, (35b) can be realized as (35d), with a contradiction negation assigned wide scope to the potential implicatum (35c). With contradiction negation, which does not preserve conventional implicature, no *some/any* suppletion is possible, as in (36c). This means that contradiction negation, unlike ordinary conventional-implicature-preserving negation, does not trigger a NPI.

It is obvious that metalinguistic negation does not trigger NPIs. This fact is quite compatible with our claim that *yekan* and its variants are not true NPIs. Since they are not NPIs, the negation that licenses them is more likely to be metalinguistic negation. In fact, the positive meaning of the sentences they are part of just follows from the nature of their licensor. In order to show this, let us consider (37) first.

(37) a. He doesn't have three children, he has four.

b. You didn't eat some of the cookies, you ate all of them.

Discussing such examples, Horn (1989) argues for the one-sided reading approach on which *three* means at least three, and *some*, some if not all.[8] On this approach,

[8] In contrast, the two-sided reading approach, *three* means at least three (one-sided reading) or exactly three (two-sided reading), and *some*, some if not all (one-sided reading) or some but not all (two-sided reading). The putative ambiguity of such items extends to every scalar predicate, including each of the $\aleph_0$-many cardinal numbers that can be substituted for *three* in (37a).

the lower bound is built into the meaning of a lexical item, but the upper bound is pragmatically implicated. The role of the negation in the sentences in (37) is to disconnect the implicated upper bound of relatively weak scalar predicates like *three* and *some*. For example, the negation in (37a) does not negate the proposition that he has three children, but to reject the implicatum that may be associated with the assertion of that proposition, namely, that he has only three children.

Yekan and its cognates are degree expressions that modify gradable words whose meaning can be thought of in terms of a scale. As we can see in (38), they readily modify those gradable words that indicate a relative position on a scale (scale words) but hardly modify those gradable words that indicate the end-point of a scale (limit words).

(38) a. John-i yekan celmci/yenglihaci anhta.
John-Nom ordinarily young/smart was not
'John was extraordinarily young/smart.'

b. *ku kes-un yekan pwulkanunghaci/thullici anhta.
that thing-Top ordinarily impossible/wrong was not
'That was extraordinarily impossible/wrong.'

Leech and Svartvik (2002) classify degree expressions modifying scale words into three types. Degree expressions of Type A indicate extreme position on the scale. Expressions like *very*, *(very) much*, and *a great deal* belong to Type A. While expressions of Type B slightly intensify the meaning of the scale word to be modified, those of Type C tone down the effect of the scale word. Degree words like *quite, rather, fairly, considerably*, and *pretty* belong to Type B, but expressions like *a bit, a little, slightly* to Type C.

(39) a. He's very friendly.

b. She's still quite young.

c. She's a bit upset.

Note that these three types of degree expressions form a scale on their own, as borne out by the relations among the sentences in (40).

(40) a. It's a very tall building.

b. It's a quite tall building.

c. It's a little tall building.

Insofar as the truth-conditional meaning of the sentences is concerned, (40a) asymmetrically entails (40b), which in turn asymmetrically entails (40c).

The semantics of *yekan* and its analogues suggests that there be a further type of degree expressions. This type of expression is between Type B and Type C. That is, it neither intensifies nor tones down the meaning of a scale word that

follows it. Included in this new type are *yekan* and any other degree expressions that indicate a mid-point on a scale.

Note that degree expressions of the new type are semantically vacuous when they are used in the positive sentence. This is because their presence in the positive context does not have a heightening or lowering effect. Their semantic effect surfaces only when they are presented in the negative context. In order to explain this characteristic feature, I adopt the one-sided reading approach on which the meaning component of *yekan* is spelled out as follows:

(41) one-sided reading of *yekan*

a. literal meaning: at least ordinary
b. implication: at most ordinary

Some pieces of empirical evidence in favor of (41) can be provided. First, *yekan* is interchangeable with *pothong* 'common(ly)' with no difference in meaning at all, as seen in (42).

(42) a. John-i pothong celmci/yenglihaci anhta.
John-Nom ordinarily young/smart was not
'John was extraordinarily young/smart.'

b. ku ai-nun cengmal pothongnayki-ka anita.
that kid-Top really ordinary man-Nom is not
'That kid is an extraordinary person.'

The sentences in (42a) correspond to those in (38a), and (42b) is a paraphrase of (1b), repeated as in (43).

(43) ku ai-nun cengmal yekannayki-ka anita.
that kid-Top really ordinary man-Nom is not
'That kid is an extraordinary person.'

Note that unlike *yekan*, *pothong* can be used in many positive sentences, as illustrated in (44).

(44) a. John-un khi-ka pothong-ita.
John-Top height-Nom ordinary-is
'John is ordinarily tall.'

b. John-un kongpwu-lul pothong-ulo hanta.
John-Top study-Acc ordinary-in does
'John learns ordinarily well.'

The fact that *yekan* and *pothong* are synonyms strongly suggests that *yekan* literally means 'at least ordinary'. Second, the meaning of *yekanhayse*, which was discussed briefly in footnote 2, supports the same point.

(45) John-i yekanhayse nolayhaci anhnunta.
John-Nom ordinarily sing does not
'John does not sing in an ordinary situation.'

Unlike the sentences that contain *yekan*, sentence (45) is a true negative sentence and the literal meaning of *yekanhayse* becomes obvious in such a true negative sentence. Since there is no reason not to treat *yekan* and the root of *yekanhayse* as the same word, we can draw a conclusion that the literal meaning of *yekan* is 'at least ordinary'.

Notice that the use of *yekanhayse* in (45) pragmatically implies the upper bound, 'at most ordinarily'. Without the upper bound being assumed, the sentence would be incorrectly predicted to implicate that John never sings. What differentiates *yekan* from *yekanhayse* is, then, that the upper bound of the former, but not of the latter, is canceled by the negation in the sentence in which it occurs. That is, the negation in (38a) has the effect of canceling the implicated upper bound of *yekan*. This cancelation opens up the possibility that John is extraordinarily young/smart. On the other hand, the negation in (45) is a descriptive truth-conditional negation, so does not disconnect the upper-bounding implicatum of *yekanhayse*. It simply negates the meaning of the verb *nolayhata* 'sing'.

In a sum, *yekan* and its variants are licensed by metalinguistic negation, and its cancelation of the upper-bounding implicatum associated with them makes the sentences in which they occur positive rather than negative. It might be objected that the use of *yekan* does not show characteristic features of metalinguistic negation. Consider the following examples from Carston (2002):

(46) a. Jane doesn't eat tom[eɪDouz]; she eats tom[a:touz].

b. The points aren't at different locuses; they're different loci.

c. She hasn't read some of Chomsky's books; she's read everything he ever wrote.

d. I won't deprive you of my lecture on negation; I'll spare you it.

e. We're not halfway there; we've got halfway to go.

f. Poor old Mr Dean's not a bachelor; he's an unmarried man.

The above examples have the properties that are standardly cited as characterizing metalinguistic negations. Among them are the following properties:

(47) a. They are rejoinders to previous utterances, aspects of which they reject.

b. They consist of a negative sentence followed by a 'correction' clause.

In the light of the properties in (47), let's examine the sentences that *yekan* is part of. Unlike the sentences in (46), the *yekan*-sentences cannot be rejoinders to any previous utterances. However, this fact does not necessarily show that they do not involve metalinguistic negation. As mentioned before, the literal meaning

of *yekan* is semantically vacuous when it is used in the positive sentence, and a principle comparable to the prohibition of vacuous movement in syntax keeps scale words from being vacuously modified. Then it can be said that the lack of positive sentences corresponding to the *yekan*-sentences is responsible for their failure to exhibit the property in (47b). In addition, Carston (2002), Noh (2000), and Carston and Noh (1996) argue against characterizing metalinguistic negation as a rejoinder to another utterance. Consider the following example:[9]

(48) A: Their contributions were important.

B: Right, but YOUR contributions were not important, they were invaluable.

Here the negation is not understood as an objection to A's previous utterance, but rather as rejecting a thought or view that someone (perhaps A) could be holding.

Carston (1996) and Noh (2000) also challenge the view that metalinguistic negation is accompanied by a follow-up correction clause. Noh discusses a case where there may be no follow-up correction clause and hence no contradiction.

(49) [After proceeding just one mile in two hours, a driver sees a road sign which reads "ROADWORKS AHEAD, DELAYS POSSIBLE" and says]
Delays are not POSSible.

The sentence does not mean that delays are impossible, and the negation can be interpreted metalinguistically, meaning that "possible" is not strong enough to describe the terrible delay caused by the roadworks. In (49) there is no correction clause; hence no semantic contradiction. Given an example like (49), no one would claim that an optional correction clause that may accompany a *yekan*-sentence, as in (50), constitutes evidence against treating the licensor of *yekan* as metalinguistic negation.

(50) John-i yekan khuci anha. (acwu khe.)
John-Nom ordinarily tall is not very tall is
'John is extraordinarily tall. (He) is very tall.'

Taking the two-sided reading approach, Cho and Lee (2002) derive the positive meaning of a sentence like (38a) by directly negating (51a) and assuming (51b).

(51) two-sided reading of *yekan*

literal meaning: ordinary but not extraordinary
upward implicature: a stronger degree than the one denoted by *yekan*

On their account, the negation in (38a) is a descriptive truth-conditional one, and thus the sentence means that John is not (even) ordinarily young/smart or she is extraordinarily young/smart. To derive the meaning of the sentence, they have to

[9] This example is taken from Noh (2000).

appeal to (51b). Thus the combined meaning of the utterance (38a) is that John is extraordinarily young/smart.

There is some empirical evidence that argues for our approach but against Cho and Lee's. Consider (52).

(52) Jina-ka manhun aitul-eykey yekan khun soli-lo malhaci anhassta.
Jina-Nom many kids-to ordinarily loud voice-in talk did not
'Jina talked to many kids in an extraordinarily loud voice.'

As the translation suggests, (52) is not ambiguous. The quantifier *manhun* 'many' and the negation are scopally independent. This is exactly what we expect to be the case from our approach since metalinguistic negation yields no scope ambiguities. In contrast, it is not clear how the positive meaning of (52) is derived on Cho and Lee's account. What is the truth-conditional meaning of this sentence on this account? If (52) means that Jina didn't talk to many kids in an ordinarily loud voice or she talked to many kids in an extraordinarily voice, is it possible that the conventional implicature that she talked to many kids in an extraordinarily voice nullifies the first disjunct of the truth-conditional meaning? Even if Jina talked to many kids in an extraordinarily voice, it is not necessarily the case that there were many kids to whom she didn't talk in an ordinarily voice. Therefore, Cho and Lee's account does not guarantee that the utterance of (52) *always* yields the positive meaning.

4. Concluding Remarks

In this paper I discussed the peculiar syntactic and semantic behaviors of *yekan* and its cognates. On the account proposed here, the fact that they are only licensed by the long-form negation or the (sentential) negation *anita* is attributed to the Strict C-Command Condition that must hold at the surface structure. This surface condition has been shown to provide a natural account of the subject-predicate asymmetric licensing pattern: unless it is triggered by sentential negation, *yekan* is not licensed when it is embedded by subject NP.

I then argued that *yekan* and its variants are degree expressions that neither intensify nor tone down the meaning of scale words they modify. Since their semantic effect is vacuous in the positive sentence, something that prohibits vacuous modification forces them to be used only in the context where their contribution is obvious. One way to meet this requirement is to let them licensed by metalinguistic negation, which has the role of disconnecting the conventional upper-bounding implicatum associated with the assertion of the sentences they are part of. From this follows the positive meaning of the sentences they are part of.

I have not discussed exactly what positive meaning is yielded by the cancelation of the upper-bounding implicatum associated with *yekan*. Examination of a follow-up correction clause that may accompany a *yekan*-sentence helps. Besides the one we just saw in (50), the following correction clause is also possible:

(53) John-i yekan khuci anha. (kkway khe.)
John-Nom ordinarily tall is not quite tall is
'John is not ordinarily tall. (He) is quite tall.'

In the correction clause of (50), *acwu* 'very' is used, and in that of (53), *kkway* 'quite' is. The former is a Type A degree word that indicates extreme position on the scale and the latter is a Type B degree word that slightly intensifies the meaning of a following scale word. Since the upper-bounding implicature that *yekan* induces, 'at most ordinarily', is canceled, both (50) and (53) are expected to obtain. Note, however, that if there is no follow-up correction clause in (53), the sentence means that John is extraordinarily/very tall. This is because the Grician maxim of quantity favors the strongest reading possible.

That *yekan* is licensed and thus focused by metalinguistic negation has the same effect as its being locally negated. From a somewhat different angle, one may think *yekan* must be raised to an appropriate negation that c-commands it. Then the complex composite [[yekan] [anita]] is converted to something that roughly means extraordinariness. The Strict C-Command Condition follows from this view. Whether or not it is a viable view, it is reasonable to constrain metalinguistic negation's ability to license *yekan* in terms of the structural relation they stand in with each other.

Before closing this paper, I'd like to make some brief comments on recent attempts to explain why the short-form negation fails to license *yekan*. Lee (2005) claims that only metalinguistic negation can license *yekan* and that the short-form negation cannot be used to express metalinguistic negation. But Carston and Noh (1996) note that although the long-form negation is a preferred form of metalinguistic negation, the short-form negation can also be metalinguistic negation, when an appropriate context such as a preceding positive utterance is provided. Consider (54).

(54) A: Jina-ka ku mwuncey-l kyewu phwulesse.
Jina-Nom that problem-Acc barely solved
'Jina managed to solve that problem.'

B: ku mwuncey-l kyewu an phwulesse. swipkey phwulesse.
that problem-Acc barely not solved easily solved
'Jina didn't manage to solve that problem. She solved it easily'

B's utterance is a natural continuation of A's statement, and it is clear that the negation an in B's utterance does not negate the proposition of A's statement, but the conventional implicatum associated with it. Cf. (35d). That the short-form negation an can sometimes be metalinguistic negation strongly suggests that the licensor problem is syntactic.

On the other hand, Cho and Lee (2002) attempt to explain the licensor problem by proposing that the short-form negation never gives rise to the upward implicature. Careful examination shows that their proposal is, in essence, the same as Lee's (2005) claim. Notice that the upward implicature is another way of saying metalinguistic negation. With an appropriate context provided, the short-form negation can produce the upward implicature, as borne out by (55).

(55) Jina-ka ppang twu kay-lul an mek-ko sey kay-lul mekesse.
Jina-Nom bread two slices-Acc not ate-and three slices-Acc ate
'Jina didn't eat two slices of bread, (she) ate three slices.'

Again, such examples as (55) suggest that the licensor problem is syntactic.

Throughout the paper, I hope, I have shown that the optimal account of the syntactic and semantic behaviors of *yekan* and its cousins is only possible when it is based on a division of labor among syntax, semantics, and pragmatics.

<References>

Carston, Robyn. 1996. Metalinguistic negation and echoic use. *Journal of Pragmatics* 25, 309–330.

Carston, Robyn. 2002. *Thoughts and utterances: the pragmatics of explicit communication*. Blackwell Publishing, London.

Carston, Robyn and Eun-Ju Noh. 1996. A truth-functional account of metalinguistic negation, with evidence from Korean. *Language Science* 18, 485–504.

Cho, Sae-Youn and Han-Gyu Lee. 2002. Syntactic and pragmatic properties of the NPI yekan in Korean. In Noriko M. Akatsuka and Susan Strauss (eds.), *Japanese/Korean Linguistics*, 10, pp. 509–521. CSLI Publications & Stanford Linguistics Associations.

Editorial Board of Doosan Donga. 1998. *Doosan Donga New Dictionary of Korean*, 3rd edition. Doosan Donga, Seoul.

Horn, Laurence R. 1989. *A natural history of negation*. The University of Chicago Press, Chicago.

Joe, Jieun and Chungmin Lee. 2002. A 'removal' type of negative predicates. In Noriko M. Akatsuka and Susan Strauss (eds.), *Japanese/Korean Linguistics*, 10. CSLI Publications & Stanford Linguistics Associations.

Kadmon, Nirit and Fred Landman. 1993. Any. *Linguistics and Philosophy* 16, 353–422.

Karttunen, Lauri and Stanley Peters. 1979. Conventional implicature. In Choon-Kyu Oh and David A. Dinneen (eds.), *Syntax and Semantics*, 11, pp. 1–56, New York. Academic Press.

Klima, Edward. 1964. Negation in English. In Jerrold Fodor and J. Katz (eds.), *The structure of language*. Prentice-Hall, Englewood Cliffs, NJ, pp. 246–323.

Ladd, D. R. 1980. *The structure of intonational meaning*. Indiana University Press, Bloomington.

Ladusaw, William. 1979. *Polarity sensitivity as inherent scope relations*. Ph.D. thesis, University of Texas, Austin.

Lee, Chungmin. 2005. Adverbial negative polarity items. In Kuno et al. (eds.), *Harvard Studies in Korean Linguistics*, XI. Harvard University.

Lee, Hyunoo. 2002. The syntax and semantics of yekan and its cousins. A talk delivered at the 2002 Winter Meeting of Linguistic Society of Korea, December 14, 2002.

Lee, Hyunoo. 2004. *Negative polarity items in English and Korean*. Kyungjin Mwunhwasa, Seoul. (in Korean).

Lee, Hyunoo. 2006. Polarity and focus. A talk delivered at the Monthly Meeting of Korea Society for Language and Information, March 25, 2006.

Leech, Geoffrey and Jan Svartvik. 2002. *A communicative grammar of English.* Longman, London.

Liberman, Mark Y. and Ivan Sag. 1974. Prosodic form and discourse function. *CLS* 10, 402–415.

Linebarger, Marcia. 1980. *The grammar of negative polarity.* Ph.D. thesis, MIT, Cambridge, Mass.

Linebarger, Marcia. 1987. Negative polarity and grammatical representation. *Linguistics and Philosophy* 10, 325–387.

Noh, Eun-Ju. 2000. *Metarepresentation: a relevance theory approach.* John Benjamins, Amsterdam.

Reinhart, Tanya. 1976. *The syntactic domain of anaphora.* Ph.D. thesis, MIT, Cambridge, Mass.

Submitted on: November 2, 2006
Accepted on: December 11, 2006