Yekan and Focus[*]

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Yekan is typically used with a long-form negation, and the negation is interpreted like a metalinguistic negation. But I show that the negation associated with *yekan* is not metalinguistic but descriptive. The reason that descriptive negation gets the effect of metalinguistic negation is that *yekan* is focused and that when *yekan* is used with a gradable predicate, we only consider individuals that have positive degrees in the property denoted by the predicate. *Yekan* covers the lower half of the positive degrees in the scale of the property. The only meaning we get from a negative sentence with *yekan* is the upper half of the positive degrees, which is expressed with the corresponding affirmative sentence with *very*. And a focused expression is not negated by a short-form negation or negative predicate because it has to be in the scope of negation. On the other hand, if a contrastive topic-focus relation is involved, *yekan* can be associated with a short-form negation or negative predicate. In this case, *yekan* does not have to go into the scope of negation. A sentence with *yekan* is negative or conveys a negative implicature because the meaning conveyed by the corresponding affirmative sentence with *yekan* can be conveyed by the corresponding sentence without *yekan* plus an implicature, which makes *yekan* non-contributive.

Keywords: *yekan*, degree, association with focus, presupposition, contrastive topic

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1. Introduction

In Korean, *yekan* 'ordinary/ordinarily' is one of the morphemes which is not adequately understood. In this paper, I will look into environments in which it is used and show how a sentence with *yekan* is interpreted.

Syntactically, it is used in various structures. It can be used as an adverb which modifies a gradable predicate:[1]

(1) inho-nun yekan   khu-ci   anh-ta.
    inho-top   ordinarily be.big-nml   not.do-dec
    'Inho is very big.'

It modifies the gradable verb *khu* 'be big' as a degree adverb.

But it can be used as a noun too. It occurs before the copula *-i*. It also occurs with a genitive case marker:

(2) a. tochi nyesek-i   yekan-i-eya-ci. (Mwunyel Lee. 2014. *Pyenkyeng 1*)
        Tochi rascal-nom ordinary-be-must-dec
        'Tochi the rascal is above the ordinary.'
    b. yekan-uy   nolyek-ulo-nun toy-ci   anh-nun-ta.
       ordinary-of effort-with-top be.done-nml not.do-impf-dec
       '(It) won't be done with ordinary effort.'

In Korean, the copula *-i* only occurs with a NP or a P(ostposition)P(hrase) and *yekan* cannot be a PP. Thus it can be considered a NP. A genitive case marker is used with a NP.

It also occurs with the light verb *ha*. The light verb does not always occur with a noun. But if the preceding morpheme is not a bound morpheme, it is a noun. Together with other evidence, it can be considered supporting evidence for the claim that for the claim that *yekan* is a noun:[2]

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1) In this paper, I use the following abbreviations:
   acc(usative case), adn(ominal ending), c(o)mp(lementizer), dec(larative), imp(er)f(ec-tive aspect), int(errogative), mod(ality), n(or)m(ina)l(izer), nom(inative case), p(a)st, pl(ural), top(ic marker).

2) In Korean, it is possible for *ha* to combine with a bound morpheme: *kkaykkusha* 'be clean'. The morpheme *kkaykkus* is not used as a word. It is hard to say that *kkaykkus* is a noun. It is also possible for *ha* to combine with an onomatopoeic or imitative

(3) mina-nun yekan-ha-n   miin-i   an-i-ta.
   Mina-top ordinary-do-adn beauty-nom not-be-dec
   'Mina is not an ordinary beauty.'

(4) mina-nun yekan-hay-se-nun   wus-ci   anh-nun-ta.
   Mina-top ordinary-do-because-top laugh-nml not.do-impf-dec
   'Mina does not laugh about ordinary things.'

Although *yekan* occurs in various structures, one common restriction on *yekan* is that it has to occur in a negative sentence, as shown in the examples so far, or with a negative implicature, as Cho and Lee (2001) pointed out:

(5) inho-uy sengmi-ka   yekan-i-laya-ci.
   Inho-of temperament ordinary-be-should-dec
   'Inho's temperament should be an ordinary.'
   (~> Inho's temperament is above the ordinary.)

(6) mina-ka   yekan   yeppu-nya?
   Mina-nom ordinarily pretty-int
   'Is Mina ordinarily pretty?'
   (~> Mina is not ordinarily pretty.)

A declarative sentence with the modality marker *-laya* 'should' and an interrogative sentence can be used to implicate the meaning of their corresponding negative declarative sentence. As Fauconnier (1980) and van Rooy (2003) point out, a question or a sentence with negative implicature allows an expression that is normally considered a NPI. If *yekan* is used in an affirmative declarative sentence with no negative implicature, the sentence becomes odd:

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word: (macha-ka) *telkhengtelkheng-ha* 'The wagon rattled', (meli-ka) *tting-ha* 'I have a headache', etc. *Yekan* is not a bound morpheme and it is not an echoic or imitative word. Cf. Choy (1935), Ko (1999), etc.

(7) *inho-nun yekan   khu-ta.
     inho-top   ordinarily be.big-dec
     'Inho is ordinarily big.'

Cho and Lee (2002), Lee (2004), and Lee (2005) considered *yekan* a NPI. But there is a difference between NPIs and *yekan*. NPIs like *amwuto* 'anybody' can occur with a short-form negation, but *yekan* cannot, as Lee (2006) showed:[3]

(8) inho-nun amwuto an manna-ss-ta.
     Inho-top   anybody not meet-pst-dec
     'Inho did not meet anybody.'

(9) *inho-nun yekan   an khu-ta.
     inho-top   ordinarily not be.big-dec
     'Inho is extraordinarily big.'

There is another difference. Typical NPIs in Korean cannot be used in an interrogative sentence or a declarative sentence with the modality marker *-laya*, implicating their negative declarative statement:[4]

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3) But we sometimes come across an example in which *yekan* is used with a short-form negation. The following is from Chwungcheng dialect:

i. ···. kangnamchwun, cinpangnam, iayliswu soli-twu   yekan   an coha-ywu.
    Kangnamchwun, Cinpangnam, Iayliswu sound-also ordinarily not good-dec
    '.... Kangnamchwun, Cinpangnam, Iayliswu sound is very(= not ordinarily) good.'
    (from *Kwanchon essay* by Mwunkwu I, 1977)

This shows that *yekan* is not inherently incompatible with a short-form negation.

4) One anonymous reviewer points out that a weak NPI like *amwulato* can be used in an interrogative sentence or a sentence ending with *-eya* 'must'. But it is not used in a negative sentence. Thus it does not have to be compared with *yekan*. Cho and Lee (2002) claims that *kyelkho* cannot be used in an interrogative with negation:

i. *Marcia- ka **kyelkho**   wul-ci **anh- nya**?
    Marcia-nom by.any.means cry-nml not.do-int

However, the reason that the sentence is odd is that *kyelkho* needs a type of modality. With a modal marker, the sentence becomes fine.

ii. Marcia- ka **kyelkho**   wul-ci **anh-{ul-kka, keyss-nya}**?
     Marcia-nom by.any.means cry-nml not.do-{mod-int, mod-int}

(10) a. *inho-ka   amwuto manna-nya?
        Inho-nom anybody meet-int
        'Does Inho meet anybody?'
    b. *inho-ka   amwuto manna-(e)ya-ci.
        Inho-nom anybody meet-must-dec
        'Inho would have to meet anybody.'

NPIs tend to strengthen the meaning of the negative sentence, as Kadmon and Landman (1993) claim. But *yekan* strengthens the meaning of a sentence in the opposite direction:

(11) mina-nun yekan   yeyppu-ci   anh-ta.
     Mina-top ordinarily be.pretty-nml not.do-dec
     'Mina is not ordinarily pretty.' (= Mina is very pretty.)

The negative sentence ultimately has the meaning of a strengthened affirmative sentence. Similarly, sentence (1) says that Inho is not ordinarily big, which means that Inho is very big.

Yekan is different from a typical NPI in that it does not occur with a short-form negation or negative predicate, as shown in (9). We also saw that it can occur in a declarative sentence with modality or an interrogative sentence, if they implicate the negative meanings. A negative sentence with *yekan* gets the strengthened meaning of the corresponding affirmative sentence without *yekan*, but a negative sentence with a NPI strengthens the meaning of the negative sentence. I need to explain why *yekan* needs to be negated, if it is not a NPI, and how it is interpreted in a negative sentence. This is the goal of this paper.

The paper is organized in the following order. In Section 2, I show that *yekan* is always focused, and that a focused expression can be negated by a long-form negation that has scope over it, not by a short-form negation or negative verb. In Sention 3, I show that there is no syntactic restriction on the association of negation with *yekan*, but that the association of negation with a focused phrase formed from *yekan* is subject to island constraints. *Yekan* can occur in an adjunct clause ending with *-(e)se*, and in such a construction, it looks as if *yekan* were associated with a short-form

negation or negative verb. Actually there are two foci involved in such a construction. Two foci yield two sets of alternatives, and *yekan* as a member in one set of alternatives pairs with a negative predicate as a member in the other set of alternatives, and an alternative of *yekan* pairs with a positive predicate, which is an alternative of the negative predicate. This leads to the effect that *yekan* is negated. In Section 4, I claim that a negative sentence with "*yekan* G", where G is a gradable predicate, presupposes the meaning of the corresponding affirmative sentence with G. The presupposition prevents a negative sentence with "*yekan* G" from getting the negative meaning. This is the reason that a negative sentence with *yekan* gets the strengthened meaning of the corresponding affirmative sentence without *yekan*. Finally, I claim that a sentence with *yekan* has to be a negative sentence because in an affirmative sentence, *yekan* would make no meaning contribution, with implicatures from alternative sentences considered. The same meaning can be conveyed by the corresponding sentence without *yekan* plus pragmatic inferences. In Section 5, I summarize the discussions in the paper.

2. Scope of a Short-form Negation or Negative Verb

   In general, *yekan* is not used with a short-form negation or a negative predicate. We often assume that a short-form negation takes narrower scope than a quantifier in the same clause. But actual scope interactions are more complicated than this. There are cases where a quantifier has narrower scope than a short-form negation. This leads to the question of why *yekan* does not go into the scope of a short-form negation. I will show that this is related to focus.
   I will start with an example in which a short-form negation takes narrower scope than a quantifier:

(12) inho-nun motun haksayng-ul an manna-ss-ta. (all > not)
     Inho-top all   student-acc not meet-pst-dec
     'Inho did not meet all students.'

The short-form negation *an manna* 'not meet' has narrower scope than the universal quantifier *motun haksayng* 'all students', and not the other way around.

However, some floating quantifiers can show scope interaction with a short-form negation:5)

> (13) a. inho-ka manhun haksayng-ul an manna-ss-ta. (many > not)
>   Inho-nom many   student-acc not meet-pst-dec
>   'There were many students Inho did not meet.'
>   b. inho-nun haksayng-ul manhi an manna-ss-ta. (many > not, not > many)
>   Inho-top student-acc many not meet-pst-dec
>   'Inho did not meet many students.'

The quantifier NP *manhun haksayng* 'many students' only has scope over the short-form negation, but the floating quantifier *manhi* 'many' has wide scope over, or narrower scope than, the short-form negation.6)

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5) And some adverbials also show scope interaction with a short-form negation or negative predicate:

   i. a. inho-nun yocum **cal an** o-a.   (not > well)
         Inho-top lately well not come-dec
         'Inho does not come often lately.'
      b. inho-nun **cal mol**-la.   (not.know > well)
         Inho-top well not.know-dec
         'Inho does not know well.'

6) On the other hand, quantifiers like *taypwupwun* 'most' tend to have wide scope over a short-form negation:

   i. inho-nun haksayng-ul taypwupwun an manna-ss-ta. (most > not)
      Inho-top student-acc most   not meet-pst-dec
      'Inho did not meet most of the student.'

   Despite this exceptional tendency, there is no reason that a short-form negation necessarily takes narrower scope than a quantifier in the sentence. *Motwu* 'all' also tends to have wide scope over a short-form negation, as one anonymous reviewer points out, but narrow scope reading is not impossible. I do not think B's statement below is contradictory.

   ii. A: aitul-i   motwu o-nya?
          children-nom all   come-int
          'Will the kids all come?'
       B: motwu an o-a.   twu myeng-man o-a.
          all   not come-dec two person-only come-dec
          'Not all of them will come. Only two will come.'

One structural condition for a floating quantifier to get narrower scope than a short-form negation or a negative predicate is that the floating quantifier occur just before the negation or negative verb:[7]

(14) a. haksayng-tul-i <u>manhi</u> inho-lul **an** manna-ss-e. (many > not)
         student-pl-nom many Inho-acc not meet-pst-dec
         'Many students did not meet Inho.'
     b. haksayng-tul-i <u>manhi</u> **an** o-ass-e.[8] (not > many, many > not)
         student-pl-nom many   not come-pst-dec
         'Not many students came.'

Only when *manhi* 'many' occurs just before the negation can it take narrower scope than the negation.

NPIs are different. They can go into the scope of a short-form negation or a negative verb like *molu* 'not know', *eps* 'not exist', etc., even when they occur apart from the negation or negative verb:[9]

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7) Dowty and Brodie (1984) and McCawley (1998) make a similar observation in English. A floating quantifier can show scope interaction against the surface structure, when it is adjacent to a tensed auxiliary verb:

i. a. The students all didn't leave.
   b. The boys can all play tennis.

In the two examples, *all* can have narrower scope than *not* and *all* can have scope over *can*. McCawley tries to account for this phenomenon by a syntactic movement from V to T(ense).

8) It would be better to compare (14a) with the following:

i. haksayng-tul-i inho-lul <u>manhi</u> **an** manna-ss-e. (not > many)
   student-pl-nom Inho-acc many not   meet-pst-dec
   'Not many students met Inho.'

But one anonymous reviewer does not like this sentence. To me, the sentence with the intended meaning sounds fine. If this is odd, there should be some restriction on the distribution of floating quantifiers. This is beyond the scope of this paper and I will not discuss this issue. And *manhi* can be construed as a frequency expression, but such an interpretation is not our concern.

9) In English, a NPI must occur in the scope of negation:

i. a. John did not meet anybody.
   b. *Anybody did not meet John.

(15) a. inho-nun amwu   chayk-to **an** ilk-ess-ta.
     Inho-top   any   book-also not read-pst-dec
     'Inho did not read any book.'

   b. haksayng-tul-i amwuto inho-lul **an** chacao-ass-ta.
     student-pl-nom anybody Inho-acc not visit-pst-dec
     'No students visited Inho.'

(16) a. amwuto inho-lul **molu**-n-ta.
     anybody Inho-acc not.know-impf-dec
     'Nobody knows Inho.'

   b. cip-ey   amwuto **eps**-ta.
     home-at anybody not.be-dec
     'Nobody is at home.'

This clearly shows that *yekan* is different from NPIs.

This has been pointed out a lot, but instead of explaining how the negative predicate takes scope over the subject or object, it is assumed that in Korean a NPI is a universal quantifier that takes a negative predicate, as in Chung and Park (1998), Kim (1999), Lee (2001), A.-R. Kim (2002), Sells and Kim (2006), among others. This issue is beyond the scope of this paper, but there is no analysis unanimously accepted. To mention one problem with this analysis, if *amwuto* is a universal quantifier, the following example cannot be explained:

(17) *[amwuto   inho-lul molu]-ci   anh-nun-ta.[10]
     anybody   Inho-acc not.know-nml not.do-impf-dec
    'It is not the case that nobody knows inho.'

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10) One anonymous reviewer mentions that the following sentence is fine:

  i. [amwuto inho-lul molu]-nun   kes-un   an.i-ta.
    anybody Inho-acc not.know-adn thing-top not.be-dec
    'It is not the case that nobody knows Inho.'

  But *kes-i ani* 'thing-nom not.be' is an expression for metalinguistic negation, and it does not change the monotonicity of the embedded clause.

If *amwuto* were a universal quantifier, the sentence would be fine: adding negation would not affect the environment for the universal quantifier that takes a negative predicate. The sentence is odd because the environment for *amwuto* is affected by the overall semantic restriction: if *amwuto* must be in the scope of a monotone-decreasing, addition of negation will affect the monotonicity, and thus the grammaticality of the sentence.

This phenomenon has to be explained structurally, on the one hand, and it is also necessary to propose a semantic solution in which a NPI in a clause takes narrower scope than a negative predicate. The important thing is that a floating quantifier or a NPI can go into the scope of a short-form negation or a negative predicate.

This implies that there is no reason that *yekan* cannot have narrower scope than a short-form negation or a negative predicate. But we saw that *yekan* does not go into the scope of a predicate with negation or a negative predicate, unlike NPIs. This may not be explained on the basis of the assumption that a short-form negation or a negative predicate takes narrower scope. In addition, there are cases where *yekan* is licensed by a short-form negation or negative verb:

(18) a. inho-nun **yekan**-hay-se-nun **an** wus-e.
         Inho-top ordinarily-do-if-top not laugh-dec
         'Inho does not laugh if you try to make her laugh only to
         some degree.'
     b. inho-nun **yekan**   malhay-se-nun **mol**-la.
         Inho-top ordinarily say-if-top   not.know-dec
         'Inho does not understand if you do not explain something
         sufficiently.'

In these examples, the sentence would be odd without the negation or negative verb. Thus we have to say that a phrase including *yekan* is somehow associated with the short-form negation or negative verb.

Then the question is why *yekan* does not go into the scope of a short-form negation or a negative predicate in (9). The reason that it does not is that it carries focus. For comparison, I will show that a NPI does not

need to be focused:

> (19) amwuto [inho-lul]ₐ an cohahay. motwu [mina]ₐ-man cohahay.
> anybody inho-acc not like everybody Mina-only like
> 'Nobody likes Inho. Everybody likes only Mina.'

Even though negation is necessary to license the NPI *amwuto*, the object *inho-lul* is focused. But such a phenomenon is not allowed in a sentence with *yekan*:

> (20) ?*mina-nun yekan [yeyppu]ₐ-ci anh-ko acwu [ttokttokha]ₐ-y.
> Mina-top ordinarily pretty-nml not.do-and very be.smart-dec
> 'Mina is not ordinarily pretty. She is very smart.'

Yekan not only needs negation to be licensed, but it has to be focused. If something else were focused and associated with negation, Mina's smartness would be able to be asserted instead. But the sentence becomes odd. This shows that *yekan* does not just need to be in the scope of negation. It has to be the focus phrase that is associated with negation.

Moreover, the focus can be expressed by pronunciation: *yekan* can be pronounced stronger and longer to emphasize the extremity of degree. To see the contrast we want, I will discuss *pothong*, which can be used with a similar meaning to *yekan*. *Pothong* can also be focused and pronounced longer, in contrast to its use with other meanings:

> (21) mina-ka {pooothong, yeeekan} yeyppu-{n kes-i an-i-ya, ci anh-a}.
> Mina-nom ordinarily, ordinarily pretty-{adn thing-nom not-be-dec nml not.do-dec}
> 'Mina is not ordinarily pretty.'

> (22) inho-nun koki-lul {pothong, ??poooothong} khuki-lo call-ass-ta.
> Inho-top meat-acc {ordinary ordinary} size-into cut-pst-dec
> 'Inho cut the meat into the usual size.'

In (21), *pothong* and *yekan* can be pronounced longer before a gradable verb in a negative sentence. In this use, they are degree modifiers and require negation. In (22), on the other hand, *pothong* is used in an affirma-

tive sentence, in which case it cannot be pronounced longer. We cannot see the same contrast between uses of *yekan*, because *yekan* is not used in an affirmative declarative sentence. But from the contrast in uses of *pothong*, the phenomenon is not peculiar to *yekan*.

Lee (2006) claims that there is an asymmetry between a subject and a predicate:

(23) a. jina-ka   yekan   khu-n salam-ul   cohaha-ci anh-ass-ta.
         Jina-nom ordinarily big-adn person-acc like-nml   not-pst-dec
         'Jina liked the person who was extraordinarily big.'
     b. *yekan   khu-n salam-i   jina-lul cohaha-ci anh-ass-ta.
          ordinarily big-adn person-nom Jina-acc like-nml   not-pst-dec
         'The person who was extraordinarily big liked Jina.'

But this is not a matter of whether *yekan* occurs in the subject or predicate:

(24) inho-lul yekan   manhun salam-i   cohaha-ci anh-ass-ta.
     Inho-acc ordinarily many   person-nom like-nml   not-pst-dec
     'Inho is not liked by ordinarily many people.'

If the object is scrambled to the front and the subject occurs before the verb, the sentence becomes fine. I suppose that this is also what is observed in a focus phenomenon: a focused phrase tends to occur before the verb in Korean. This also supports the claim that *yekan* is focused.

Even with an expression that can have narrower scope than a short-form negation or a negative predicate, if it is focused with some pause after it, it does not get narrower scope:

(25) a. inho-nun kukos-ey cacwu an ka-ss-e. (often > not, not > often)
         Inho-top there-at   often   not go-pst-dec
         'Inho did not go there often.'
     b. inho-nun kukos-ey (acwu) [cacwu]$_F$ an ka-ss-e. (often > not)
         Inho-top there-at (very)   often   not go-pst-dec
         'Ihho often did not go there.'
     c. inho-nun kukos-ey (acwu) [cacwu]$_F$ ka-ci   anh-ass-e. (not > often)
         Inho-top there-at (very)   often   go-nml not.do-pst-dec
         'Ihho did not go there often.'

If *cacwu* 'often' is not focused, as in (25a), it can take narrower scope than a short-form negation. But if it is focused, it does not, as shown in (25b). On the other hand, the focused expression goes into the scope of a long-form negation.

From the discussions so far, we can assume that if a quantificational expression has narrower scope than a short-form negation or negative verb, it is incorporated into the negative predicate, assuming that only a non-focused expression is incorporated:[11]

(26)

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                    V
          ┌─────────┴─────────┐
         Adv                   V
          │            ┌───────┴───────┐
        manhi         Neg              V
        a.lot          │               │
                       an            manna
                      not             meet
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11) One question on this configuration is how the structure is interpreted. One possible way is to assume that a short-form negation or negative verb is a higher ordered one. Before I gave the interpretation rules necessary for such a structure, I will give the basic meaning of a short-form negation or negative verb, depending on the arity of the verb:

i. ⟦ [$_V$ an [$_V$ P]] ⟧ = (i) $\lambda x[\neg P'(x)]$, (ii) $\lambda y \lambda x[\neg P'(x,y)]$, (iii) $\lambda z \lambda y \lambda x[\neg P'(x,y,z)]$

If this combines with a quantifier, the meaning is as follows:

ii. ⟦ [Q A [an P]] ⟧ = $Q'(⟦ A ⟧) (\lambda x[(\neg P'(x)])$

Here, the negation has narrower scope than Q.
If the quantifier is to get narrower scope, the meaning of the short-form negation must be higher-ordered as follows:

iii. ⟦ an P ⟧ = a. $\lambda Q \lambda A[\neg Q(A)(P')]$, where P' = $\lambda x P'(x)$
                b. $\lambda Q \lambda A \lambda x[\neg Q(A)(\lambda y[P'(y)(x)])]$,
                   $\lambda Q \lambda y \lambda A[\neg Q(A)(\lambda x[P'(y)(x)])]$
                c. $\lambda Q \lambda A \lambda y \lambda x[\neg Q(A)(\lambda z[P'(z)(y)(x)])]$,
                   $\lambda Q \lambda z \lambda A \lambda x[\neg Q(A)(\lambda y[P'(z)(y)(x)])]$,
                   $\lambda Q \lambda z \lambda y \lambda A[\neg Q(A)(\lambda y[P'(z)(y)(x)])]$

If a floating quantifier is incorporated in a short-form negation or negative verb, the predicate with the floating quantifier is saturated with an argument that corresponds to the restrictor of the floating quantifier. It is represented as "A" in the interpretation rules.

In this configuration, either *manhi* 'a lot' or *an* 'not' can have scope over the other. In contrast, *yekan* is not incorporated into a negative predicate because it is focused. This claim naturally accounts for why a quantificational expression with narrower scope than a short-form negation or a negative verb is not focused and is immediately followed by negation. This also accounts for why *yekan* is used only with a long-form negation: a focused phrase is not incorporated.

One remaining question is how *yekan* is licensed by a short-form negation or negative verb in (18). In such a configuration, *yekan* cannot be incorporated into a short-form negation or negative verb. Still *yekan* is licensed somehow. I will come to this question soon.

3. Non-locality of negation

3.1. Association with focus or focus phrase

I claimed that *yekan* is always focused. This leads to another difference from a NPI. That is, *yekan* can be associated with negation over a long distance. This is contrasted with a NPI, which is licensed by negation in a local clause:[12)]

(27) a. kukes-un [CP ton-i   **cenhye** tul-ci   **an**h-nun] il-i-ta.
        it-top   money-nom at.all   take-nml not-adn   thing-be-dec
        'It is a thing that does not take any money at all.'

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12) One reviewer points out that some NPIs can be licensed by a non-local negation:

    i. na-nun amwu-to   manna-ki silh-ta.
       I-top   anybody-also meet-nml dislike-dec
       'I do not like to meet anybody.'

But even such a NPI cannot be licensed by a negation over a syntactic island:

    ii. *na-nun amwu-to   cohaha-nun salam-ul   manna-ki silh-ta.
         I-top   anybody-also like-and   person-acc meet-nml dislike-dec
        'I do not like to meet a person who likes anybody.'

b. ??kukes-un [CP ton-i **cenhye** tu(l)-nun] il-i **an**-i-ta.
   it-top   money-nom at.all   take-adn   thing-nom not-be-dec
   'It is not a thing that takes any money at all.'

c. *inho-nun [CP[CP ton-i   **cenhye** tu(l)-nun] il-ul   math-un]
   Inho-top   money-nom at.all   take-adn job-acc undertake-adn
   kes-i   **an**-i-ta.
   thing-nom   not-be-dec
   'Inho did not undertake a job that takes any money at all.'

On the other hand, *yekan* does not show the strict locality that a NPI does. *Yekan* can be associated with negation over a syntactic island:

(28) a. kukes-un [CP ton-i   **yekan**   tul-ci   **an**h-nun] il-i-ta.
        it-top   money-nom ordinarily take-nml not-adn   thing-be-dec
        'It is a thing that does not take ordinarily much money.'

b. kukes-un [CP ton-i   **yekan**   tu(l)-nun] il-i   **an**-i-ta.
   it-top   money-nom ordinarily take-adn   thing-nom not-be-dec
   'It is not a thing that takes ordinarily much money.'

c. inho-ka [CP [NP [CP ton-i   **yekan**   manhi tu(l)-nun] il-ul
   Inho-nom   money-nom ordinarily much take-adn   job-acc
   math-un]   kes-i   **an**-i-ta.
   undertake-adn thing-nom not-be-dec
   'Inho did not undertake a job that takes ordinarily much money.'

In (28a), *yekan* is associated with negation locally and the sentence is fine. In (28b), *yekan* is associated with negation over a Complex NP. In (28c), association holds over two Complex NPs. Still they are fine.

I showed that *yekan* is focused. A focus is associated with a focus-sensitive operator, and it is well-known that there is no syntactic constraint between a focus and a focus-sensitive operator:

(29) inho-nun [[[[mina]F-ka cwu-n]CP senmwul-ul]NP pokwanha-nun]CP
     Inho-top   Mina-nom give-adn present-acc   keep-adn
     pang]NP-eyse]PP-**man** maum-i   phyenha-ta.
     room-at-only   mind-nom comfortable-dec
     'Inho is comfortable only in a room where he keeps presents that Mina gave him.'

The focused expression *mina* is embedded in a Complex NP from the focus-sensitive operator *-man*. But the sentence is fine. This explains why *yekan* can be associated with negation over syntactic islands.

Following Drubig (1994), Yeom (2001), and Krifka (2006), we can assume the notion of a Focus Phrase (FP), which is something between a focus and a focus-sensitive operator. The association of a FP with a focus-sensitive operator is subject to island constraints. A FP can be marked with a contrastive topic marker *-(n)un*. Thus in (29), the NP headed by *senmwul* 'present' cannot be marked with the contrastive topic marker:

(29') ?*inho-nun [[[[mina]$_F$-ka cwu-n]$_{CP}$ senmwul-<u>un</u>]$_{NP}$ pokwanha-nun]$_{CP}$
     Inho-top   Mina-nom give-adn present-**top**   keep-adn
   pang]$_{NP}$-eyse]$_{PP}$-**man** maum-i   phyenha-ta.
   room-at-only   mind-nom comfortable-dec

The contrastive topic must be associated with the focus-sensitive operator *-man* 'only' across the Complex NP. This makes the sentence odd.

In (28.c), the focus and negation is far apart, but we can assume a FP in between. Then the association of the FP with negation is subject to island constraints. This can be observed more clearly with the help of the contrastive topic marker *-nun*, as discussed in Yeom (2001). A FP can be marked with *-(n)un*:

(30) a. *inho-ka [$_{CP}$ [$_{NP}$ [$_{CP}$ ton-i   **yekan**   manhi tu(l)-nun] il-<u>un</u> math-un]
     Inho-nom   money-nom ordinarily much take-adn job-top undertake-adn
     kes-i   **an**-i-ta.
     thing-nom not-be-dec
     'Inho did not undertake a job that takes ordinarily much money.'
   b. inho-ka [$_{CP}$ [$_{NP}$ [$_{CP}$ ton-i   **yekan**   manhi tu(l)-nun] il-ul   math-un]
                                                      -acc
     kes-<u>un</u>   **an**-i-ta.
       -top

In (30.a), *-(n)un* is attached to the NP headed by *il* 'job', and the association of that NP with negation violates the CNPC. In (30.b), *-(n)un* is attached to the NP headed by *kes* 'thing', which is associated with negation in the same clause. This makes the sentence fine. This supports the idea

that *yekan* is focused and that it has to be associated with negation through the FP.

3.2. Contrastive topic and indirect association with negation

I have shown in (18) that *yekan* occurs with a short-form negation or negative verb when it is used in a clause ending with *-(e)se*. We need to explain how. In general, a construction of the form *yekan ··· -(e)se* also does not show any island constraint between *yekan* and negation. *Yekan* occurs in an adjunct clause and negation occurs in the matrix clause. The adjunct clause normally occurs with the contrastive topic marker *-nun*:

> (31) a. [**yekan**   manhi mek-ese-??(<u>nun</u>)] heki-ka   kasi-ci **an**h-ass-ta.
>   ordinarily much eat-if-top   hunger-nom stop-nml not-pst-dec
>   'Hunger did not go away if I ate moderately.'
>   b. mina-nun [**yekan**   pissa-n   senmwul-ul hay-se-??(<u>nun</u>)] cohaha-ci **an**h-nun
>   Mina-top ordinarily expensive-adn present-acc give-if-top   like-nml   not-adn
>   salam-i-a.
>   person-be-dec
>   'Mina is a person who does not like a present if it is only a little expensive.'

Even if *yekan* and the negation *an* is far apart, the association of the *nun*-phrase with a focus-sensitive operator is subject to island constraints, which explains why the following sentence is odd:

> (32) *mina-nun [senmwul-i **yekan**   pissa-se-<u>nun</u>]   cohaha-nun salam-i
>   Mina-top   present-nom ordinarily expensive-if-top like-adn   person-nom
>   **an**-i-ya.
>   not-be-dec
>   'Mina is not a person who likes a present if it is only a little expensive.'

In this example, the phrase with *-nun* is in a syntactic island below the clause that the negation *an* belongs to. This makes the sentence odd.

A focus is realized as a pitch accent. There are two pitch accents called A and B accents in the sense of Bolinger (1965) and Jackendoff (1972). One crucial difference between them is that the A accent concludes with a fall in pitch, while the B accent concludes with a rise in pitch. When

yekan is associated with negation directly, it is pronounced with the A accent contour. I suppose that the focus on *yekan* yields an alternative set {*yekan*, *acwu/maywu* (*yelsimhi/manhi*) 'very hard/much'}. The negation of a sentence with *yekan* yields the meaning of the corresponding affirmative sentence with *acwu/maywu* 'very'. The details of the interpretation will be discussed below. On the other hand, in a construction with *yekan* ··· *-(e)se*, there are two foci involved. The adjunct clause ending with *-(e)se* is normally followed by *-nun*, and the clause prosodically concludes with a rise in pitch. The focus in the adjunct clause yields two alternatives based on the alternative set {*yekan*, *acwu/maywu*}. Then in the matrix clause, the short-form negation or negative verb takes the A accent contour. The focus in the matrix clause yields two alternatives {negative predicate, positive predicate}. The elements in the two alternative sets are associated as follows:

(33) yekan   —   negative predicate;
     acwu/maywu (yelsimhi/manhi)   —   positive predicate

More concretely, in (18.a) the two pairs are *yekan* — *an wus* 'not laugh' and *acwu/maywu yelsimhi - wus* 'laugh very much'. Thus the sentence means that if you try only moderately to make Inho laugh, he will not laugh, but that if you try very hard to make him laugh, then he will laugh. In (18.b), the two pairs are *yekan* — *molu* 'not know' and *acwu/maywu manhi* 'very much' — *al* 'know'. Thus the sentence means that if you explain something only ordinarily, Inho does not understand it, but that if you explain something very much, he will understand it. The effect of negating the meaning of *yekan* comes from its pairing with the negative alternative from the A accent. Thus the expressions with the B accent, which includes *yekan*, do not have to lie structurally in the scope of negation.

3.3. Descriptive negation

It has been generally assumed that *yekan* is a scalar term that has the meaning of 'at least'. Behind this assumption, it is also assumed that a sentence with *acwu/maywu* 'very' entails the corresponding sentence with *yekan*, which in turn entails the corresponding sentence with *cokum* 'slightly'. Then if a sentence with *yekan* is negated, as in (34.a), it is expected that (34.b) or (34.c) holds. However, the negative sentence with *yekan* actually means something like (34.d):

(34) a. mina-nun yekan   yeyppu-ci   anh-a.
         Mina-top ordinarily be.pretty-nml not.do-dec
         'Mina is not ordinarily pretty.'
     b. Mina is only a little pretty.
     c. Mina is not pretty.
     d. Mina is very pretty.

This leads Lee (2006), Kim (2014) and Lee (2015) to conclude that the negation that is used with *yekan* is metalinguistic negation, in terms of Horn (1989). One problem with this idea is that a similar observation is also made with other degree expressions like *cokum*. Since we are concerned with metalinguistic negation, we deal with a sentence in which a long-form negation is used and *cokum* is focused:[13)]

(35) inho-ka   cokum masi-ci   anh-ass-e.   manhi masi-ess-e.
     Inho-nom slightly drink-nml not.do-pst-dec much   drink-pst-dec
     'Inho did not drink a little. He drank a lot.'

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13) A reviewer points out that *cokum* can have a different meaning in the following example:

i. ??kyeyney cip-i   cokum mos sal-a.   acwu cal   sal-a.
   his/her   home-nom slightly not   live-dec quite well live-dec
   'His family is not a little poor, but very rich.'

But this is not a good example at this point because it has a short-form negation and *cokum* is not focused.

In this example, if *cokum* were interpreted as 'at least a little', the first sentence would mean that Inho did not drink at all. But it does not have such a reading. This does not mean that the negation is metalinguistic. If it were metalinguistic, we could expect that there is another interpretation in which the negation is taken as a descriptive one. That is, it would have to mean that Inho did not drink at all. But for this interpretation, *cokum* has to be marked with *-to* 'also/even'.14) However, (35) does not have that meaning. If *cokum* were assumed to mean 'at least a little', it would have to be explained why *-to* is necessary in that meaning. With no explanation, we can assume that the negation in (35) is descriptive and that *cokum* does not have the meaning 'at least a little'. This implies that in (34), *yekan* does not have the meaning 'at least ordinarily'.

Second, there is a case where *yekan* can be licensed by a negation, separately from metalinguistic negation:

(36) A: yeki-nun yekan   siwenha-ci anh-a.
          here-top   ordinarily be.cool-nml not-dec
          'It is not ordinarily cool here.' (= It is very cool here.)
     B: yekan   siwenha-ci anh-un ke-y   ani-ko acwu chwup-un kes-i-keyss-ci.
          ordinarily be.cool-nml not-adn thing-be not-and very be.cold-adn thing-be-mod-dec
          'It is not that it is not ordinarily cool, but it must be very cold.'

In (36.B), *ke-y ani-ko* is definitely a metalinguistic negation. Then what is the status of *ahn*? It must not be a metalinguistic negation. I do not know if it is possible to use double metalinguistic negation, and I do not know what a sentence with double metalinguistic negation would mean, if ever possible. But the metalinguistic negation *ke-y ani-ko* contrasts the state of being very cold with the state of not being ordinarily cool

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14) If the sentence is to be interpreted as meaning that Inho did not drink even a small amount of alcoholic beverage, we have to add *-to* 'also, even':

   i. inho-ka   cokum-to   masi-ci   anh-ass-e.
      Inho-nom slightly-even drink-nml not.do-pst-dec
      'Inho did not drink at all.'

   The reason is that *cokum* must be focused, which yields a set of alternatives, but that the alternatives form a scale. But without *-to*, the degree expression gets the 'exactly' meaning, which is discussed below.

(that is, the state of being very cool), not with the inappropriateness of saying that it is ordinarily cool. This clearly shows that the long-form negation is not metalinguistic negation. We cannot assume that there are two metalinguistic negations that are associated with the same phrase.

Third, metalinguistic negation is normally added to a statement which can be uttered without the negation. Thus a sentence with metalinguistic negation is normally used when there is a explicit or implicit affirmative sentence. Thus the utterance (37.B) can be preceded by (37.A), but not by (37.A') or (37.A''):

(37) A: inho-ka   mina-lul   cohaha-y.
        Inho-nom Mina-acc like-dec
        'Inho likes Mina.'
   A': inho-nun mina-lul cohaha-nya, silheha-nya?''
       Inho-top Mina-acc like-int   hate-int
       'Does Inho like or hate Mina?'
  A'': inho-nun mina-ey.tayhay ettehkey sayngkakha-nya?
       Inho-top Mina-about   how   think-int
       'What does Inho think about Mina?'
    B: inho-nun mina-lul   cohaha-nun kes-i   an-i-ko   salangha-y.
      Inho-top Mina-acc like-adn   thing-nom not-be-and love-dec
      'Inho does not like Mina. He loves her.'

In (37.A') and (37.A''), the speaker is neutral about whether Inho likes Mina. In this context, it is odd to utter (37.B). No metalinguistic negation is allowed.

A negative sentence with *yekan* does not have a corresponding affirmative sentence. Thus (38.A) is quite odd. This does not allow the negation in (38.B) to be metalinguistic. And (38.B) is only slightly odd, regardless of whether it is preceded by A' or not. This implies that B does not require a corresponding affirmative sentence, and that the negation in B is not metalinguistic. The reason that (38.B) is slightly odd is that *kes-i an.i* 'thing-nom not.be' should be descriptive, but that the statement sounds if it were metalinguistic negation:

(38) A: *?inho-ka   yekan   khu-ta.
          Inho-nom ordinarily be.big-dec
        'Inho is ordinarily big.'

    A': inho-uy khi-nun   etteh-nya?
        Inho-of height-top how-int
        'How is Inho's height?'

    B: ?inho-nun yekan   khu-n kes-i   an-i-ko   acwu kh(u)-e.
       Inho-top ordinarily be.big thing-nom not-be-and very be.big-dec
       'Inho is not ordinarily big, but very big.'

Fourth, a sentence with *yekan* does not have an alternative interpretation. The normal long-form negation *ci an.h* 'nml not.do' can be used as either metalinguistic negation or descriptive negation. Thus (37.b) can be changed to (37.B'), with no change in acceptability. (37.B') can be preceded by (37.A), but not by (37.A') or (37.A'').

(37) B': inho-nun mina-lul cohaha-ci anh-a.   salangha-y.
         Inho-top Mina-acc like-nml   not.do-dec love-dec
         'Inho does not like Mina, but loves her.'

In B's utterances, we normally understand the first sentence as meaning that Inho does not have a favorable thought about Mina, taking the negation to be descriptive. For this reason, the second statement is rather surprising because the discourse becomes contradictory. Thus the negation is re-interpreted as metalinguistic.

   In (38.B), the *kes-i ani* can be replaced with a long-form negation:

  (38) B': inho-nun yekan   khu-ci   anh-a.   acwu kh(u)-e.
           Inho-top ordinarily be.big-nml not.do-dec very be.big-dec
           'Inho is not ordinarily big. He is very big.'

B's utterance sounds better. (38.B') can be preceded by the utterance of (38.A'), with no re-interpretation. In interpreting the first statement in (38.B'), we already get the meaning that Inho is very big, and the second statement is considered redundant. There is no contradiction and

re-interpretation. This indicates that the negation in (38.B') is not meta-linguistic but descriptive.

Fifth, if metalinguistic negation is involved, it cannot be embedded in a relative clause. Metalinguistic negation prefers the expression *-(nu)n kes-i ani*, but it cannot be used in a relative clause. And in a relative clause, a long-form negation is not interpreted as metalinguistic negation, either:

(39) inho-nun mina-ka cohaha-{?*nun kes-i an.i-n, ??ci anh-nun}
　　 Inho-top Mina-nom like-{adn thing-nom not.be-adn, nml not-adn}
　　 salam-i-ta. acwu salangha-nun salam-i-ta.
　　 person-be-dec much love-adn person-be-dec
　　 'Inho is not a person who Mina likes. He is a person who she loves.'

The context requires the negations in (39) to be metalinguistic, and the sentence sounds odd. This shows that a clause with metalinguistic negation cannot be embedded.

Yekan is not used with the typical form of metalinguistic negation in a relative clause, as shown in (40). It is rather used with the normal long-form negation, as in (41), and with the meaning of descriptive negation. And more important, it can be embedded, together with the negation associated with it:

(40) a. ?*kukes-un yekan son-i ka-nun kes-i ani-n il-i-ta.
　　　　 it-top ordinarily care-nom take-adn thing-nom not-adn job-be-dec
　　　　 'It is not a job that takes a lot of care.'
　　 b. ?*yekan yeyppu-n kes-i ani-n yeca-ka tuleo-ass-ta.
　　　　 ordinarily pretty-and thing-nom not.do-adn woman-nom come.in-pst-dec
　　　　 'A woman who is not ordinarily (i.e., very) pretty came in.'

(41) a. kukes-un yekan elyep-ci anh-un il-i-ta.
　　　　 it-top ordinarily be.difficult-nml not-adn job-be-dec
　　　　 'It is a job that is very(= not ordinarily) difficult.'
　　 b. na-nun yekan yeyppu-ci ahn-un yeca-lul manna-ss -ta.
　　　　 I-top ordinarily be.pretty-nml not.do-adn woman-acc meet-pst-dec
　　　　 'I met a woman who was very(= not ordinarily) pretty.'

This shows that the negation that is used with *yekan* is different from

metalinguistic negation.

If a negation that is used with *yekan* is not metalinguistic, the next question is how a negative sentence with *yekan* gets the meaning of the corresponding affirmative sentence with a stronger degree modifier than *yekan*. This is discussed next.

4. *Yekan* as a Degree Modifier

4.1. Meaning of a negative sentence with yekan

The main issues I need to account for are as follows:

1. why *yekan* is overtly negated in a declarative sentence, or a negative implication is made in an interrogative or a sentence with modality;
2. why a negative sentence with *yekan* gets the meaning of the corresponding affirmative sentence with *acwu/maywu* 'very'.

Logically, I should deal with the issues in the order given, but the answer to the first issue is based on the answer to the second issue that *yekan* is a degree modifier, just as *very* is. Thus I will discuss the second first.

In the standard analysis, which is a modified semantics of Cresswell's (1976), gradable adjectives are analyzed as relations between individuals and degrees, just like the meaning of a measure verb like *cost*, or *weigh*:

(42) a. John weighed 70 kg.
   b. The weight of John = 70kg

(43) a. John is 6 feet tall.
   b. John's height = 6 feet

The verb *weigh* denotes a functional relation between individuals and weights. And a gradable adjective like *tall* can be analyzed in a similar way.

Degrees behave like numerals in that in some cases they behave like semantic scalar terms, but in other cases, they do not. In the two uses, focus plays an important role, as pointed out in van Kuppevelt (1996).[15] If numerals are not focused, they behave like semantic scalar terms:

(44) A: Do you have ten dollars?
B: Yes. You can borrow up to 25 dollars.

In this case, a numeral gets the meaning of 'at least'. When you have 25 dollars, it is also true that you have ten dollars. This can be contrasted with a case where a numeral is focused:

(45) A: How much do you have?
B: ??I have [ten]$_F$ dollars. You can borrow up to 25 dollars.

In this case, a numeral gets the meaning of 'exactly'. This shows that when focused, numerals do not constitute a semantic scale.

A similar observation is made in uses of degree adverbs:

(46) A: mina-ka   com   yeyppu-nya?
Mina-nom slightly pretty-int
'Is Mina a little pretty?'
B: {kulem, ??ani}. emcheng yeypp(u)-e.
{yes,   no} very   pretty-dec
'Yes. She is very pretty.'

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15) Van Kuppevelt (1996) claims that one crucial factor in determining whether a numeral has the 'at least' or 'exactly' interpretation is whether the numeral occurs in the topic or comment of the information structure of a sentence including it.

i. A: How many children does John have?
   B: He has three children, (?? in fact five). (focused, 'exactly' interpretation)
ii. A: Who has three children?
   B: John has three children, (in fact five). (not focused, 'at least' interpretation)

Krifka (1999) argues against this claim with the following example:

iii. A: How many children does Nigel have?
   B: Nigel has fourteen$_F$ children, perhaps even fifteen$_F$.

For more discussions on numerals, see Yeom (2006).

A's statement could be interpreted as a rhetoric question, but here it is intended as a non-rhetoric question.[16)] The adverb *com* is a non-focused form of *cokum* 'slightly', and it can be used even when the degree is actually very high.

On the other hand, a longer form *cokum* 'slightly' can be focused, and when it is focused, it gets the 'exactly' reading and it cannot cover the degree that is higher than 'slightly':

(47) A: mina-ka   [cokum]$_F$ yeyppu-nya?
        Mina-nom slightly   be.pretty-int
        'Is Mina a little pretty?'
     B: {??kulem, ani}.   emcheng yeypp(u)-e.
          yes   no   very   pretty-dec
        '{Yes, No}. She is very pretty.'

In this context, it is assumed that being very pretty does not entail being a little pretty. This shows that when degree modifiers are focused, they do not constitute a semantic scale.

We can say the same thing about an expression denoting a middle degree. If a sentence with a middle degree is negated, it does not have to mean a degree less than the middle. It simply means that the degree is not the middle:

(48) a. inho-nun koki-lul cektanghan khuki-lo ssel-ci   anh-nun-ta. nemwu khu-key
        Inho-top meat-acc moderate   size-to cut-nml not-impf-dec too   big-into
        ssel-kena nemwu cak-key   sse(l)-n-ta.
        cut-or   too   small-into cut-impf-dec
        'Inho does not cut meat into a moderate size. He cuts it too big or too small.'
     b. namwu-tul-i pothong khuki-lo cala-ci   anh-a. acwu khu-kena cak-key
        tree-pl-nom ordinary size-into grow-nml not-dec very big-or   small-into
        cala-a.
        grow-dec
        'The trees do not grow into an average size. They grow too big or too small.'

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16) The two interpretations can be distinguished by their different intonations and pauses. In the rhetoric interpretation, there is no pause between *com* and the gradable verb and the intonation can conclude with a slightly less high pitch. In the non-rhetoric interpretation, we can put some pause after *com* and the intonation ends with a high rise.

In the examples, *cektanghan* 'moderate' and *pothong* 'ordinary' are focused, and the sentences do not entail sentences with an expression denoting a smaller size. This indicates that the negation of a middle degree does not necessarily mean a lower degree. In these sentences, the size expressions are focused, and they do not have the meaning of 'at least'.

This shows that we cannot assume that a degree expression generally has the meaning of 'at least'. If we assume that *yekan* expresses a middle degree, a negative sentence with *yekan* does not have to mean that the degree is lower than the middle. The degree can be higher than the middle, too. Thus the fact that a negative sentence with *yekan* means that the degree is higher than the middle does not lead to the conclusion that the negation is metalinguistic.

Then the next question is why *yekan* with negation means an upper degree, not a lower degree. The reason comes from the fact that it is a **degree modifier**. To get the idea, consider *pothong*, because the use of *yekan* is too restricted and we cannot compare more than one use. *Pothong* can be used without negation:

(49) a. inho-nun pothong khi-i-ta.
　　　　Inho-top ordinary height-be-dec
　　　　'Inho is of the average height.'
　　b. na-nun pothong sengnung-uy PC-lul sa-ss-ta.
　　　　I-top　ordinary capacity-of　PC-acc buy-pst-dec
　　　　'I bought a computer of an ordinary capacity.'
　　c. na-nun koki-lul　pothong-ulo　ikhi-e　　mek-e.
　　　　I-top　meat-acc ordinary-into cook-and eat-dec
　　　　'I cooked the meat to a medium degree and ate it.'

In these uses, *pothong* is used as a degree expression. Thus the first sentence can be interpreted as follows:

(50) height(inho) is about the value of **standard**(height)(C)
　　　　standard(G)(C) is the standard of the scale for G in the comparison class C

The sentence means that Inho's height is about the standard in the scale of height in the comparison class that Inho belongs to. A comparison class C is a group of people who are considered in calculating the standard of height.

On the other hand, if *pothong* is used as a degree modifier of a gradable verb, it must be negated and it does not simply express the standard of a scale:

(51) a. ??mina-nun pothong   khu-ta.
         Mina-top   ordinarily be.tall-dec
      'Mina is tall to an ordinary degree.'
   b. mina-nun pothong   khu-ci   **an**h-ta.
      Mina-top ordinarily be.tall-nml not.do-dec
      'Mina is not ordinarily tall.' ($\simeq$ Mina is very tall.)

And (51b) does not mean that Mina's height is not about the average height in the comparison class she belongs to. The sentence means that Mina is *very* tall. This implies that *pothong* does not denote the middle degree in the neutral scale of being tall.

To understand what is going on, we need to look at the following two examples:

(52) a. John is 5 feet tall.
   b. John is tall.

In (52.a), the meaning of *tall* is simply a measure function that takes an individual and yields the height of the individual, or a relation between a set of individuals and a set of heights. I will take the latter position. Then (52a) is interpreted as in (53):

(53) $[\![$ tall $]\!]$ = $\lambda x\lambda d$[the height of x = d]
     $[\![$ 5 feet $]\!]$ = $\lambda G\lambda x\exists d[G(d)(x)$ & 5ft $\leq$ d]
                 (G: a variable for meanings of gradable verbs)
     $[\![$ 5 feet tall $]\!]$ = $\lambda x\exists d[$ $[\![$ tall $]\!]$ (d)(x) & 5ft $\leq$ d]
                 = $\lambda x\exists d$[the height of x = d & 5ft $\leq$ d]
     $[\![$ John is 5 feet tall $]\!]$ = $\exists d$[the height of j = d & 5ft $\leq$ d]

The sentence means John's height is 5 feet, which does not entail that John is tall. In this respect, the meaning of *tall* is neutral with respect to whether John is tall.

On the other hand, (52.b) means that John is positively tall. To get this meaning, it is generally assumed, following Cresswell (1977), von Stechow (1984), that there is a null element $\varnothing_{pos}$ the meaning of which is defined, following Kennedy and McNally (2005), as follows:

(54) $⟦ \varnothing_{pos} ⟧ = \lambda G\lambda x \exists d[G(d)(x) \ \& \ \textbf{st(a)nd-(ou)t}(d)]$, where
$\textbf{stndt}(d) \Leftrightarrow$ i) $d = \textbf{standard}(G)(C)$, if G is an open scale;
ii) $d >$ the minimum value of the G-scale, if G is a lower closed scale;
iii) $d =$ the maximum value of the G-scale, if G is an upper closed scale.

(55) a typology of scale structures
    a. totally open scale: tall/short, deep/shallow
    b. lower closed scale: bent/straight, loud/quiet, famous/unknown
    c. upper closed scale: certain/uncertain, pure/impure, safe/dangerous
    d. totally closed scale: visible/invisible, full/empty, open/closed

The verb *khu* 'be tall' denotes an open scale. If someone is in the positive degree in his or her height, it means that his or her height is larger than the standard, or average, height determined in the comparison class.
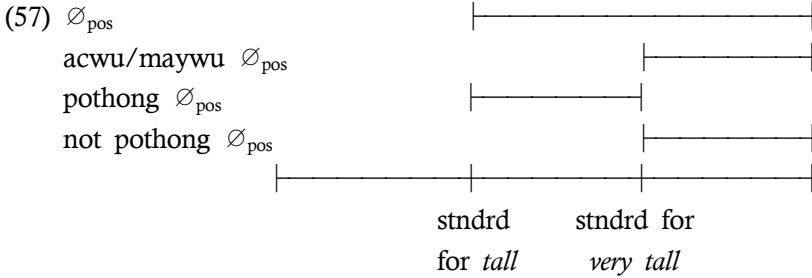
An intensifier like *very* changes the standard of comparison. The standard of comparison for *very tall* is higher than that of $\varnothing_{pos}$ *tall*. Following Wheeler (1972), Kennedy and McNally (2005) argue that the standard of comparison for *very tall* is determined in the comparison class of <u>tall people</u>, which is represented as $\lambda y[⟦ \varnothing_{pos} \text{ tall} ⟧(y)]$ below:

(56) $⟦ \text{very } \varnothing_{pos} \text{ tall} ⟧ = \lambda x \exists d[⟦ \text{tall} ⟧(d)(x) \ \& \ \textbf{standard}(⟦ \text{tall} ⟧)(\lambda y[⟦ \varnothing\underline{\text{pos\_tall}} ⟧(y)]) \leq d]$

If someone is very tall, it roughly means that he or she is taller than the average height of tall people.

Let's get back to (51). In (51.b), *pothong* is focused because the negation negates only the degree modifier. This makes (51.b) mean that Mina is very tall. That is, *pothong* combines with "$\varnothing_{pos}$ khu", with the meaning of 'not very'. If it simply combined with "khu", without $\varnothing_{pos}$, it would simply mean that Mina falls in the midpoint of the scale of height, not

that she is very tall. This indicates that *pothong* $\varnothing_{pos}$ *khu* ranges between the standard for *tall* and that for *very tall*, and its negation becomes the same as *very* $\varnothing_{pos}$ *tall*.

(57) $\varnothing_{pos}$

    acwu/maywu $\varnothing_{pos}$

    pothong $\varnothing_{pos}$

    not pothong $\varnothing_{pos}$

<div style="margin-left:6em">
stndrd   stndrd for
for *tall*   *very tall*
</div>

If *pothong* belongs to the same kind of degree modifiers like *very*, it is expected that they combine with the same type of gradable verbs. Normally absolute stative verbs do not occur with *very*. Similarly, they do not occur with *pothong*, either:

(58) a. ??The bottle is very empty.
    b. ??It is very useless.'

(59) a. ??kukes-un pothong   pie.iss-ci   anh-ta.
       it-top   ordinarily empty-nml not-dec
     'It is not ordinarily empty.'
    b. ??kukes-un pothong   ssulmo.eps-ci anh-ta.
       it-top   ordinarily useless-nml   not-dec
     'It is not ordinarily useless.'

Empty, *useless*, *pie.iss* 'be empty' and *ssulmo.eps* 'be useless' belong to gradable predicates that denote a closed scale, and they are incompatible with *very* or *pothong*.

   Yekan is like *pothong* as a degree modifier in every respect:

1. It is focused.
2. It needs to be negated as a degree modifier.

3. If it is negated, the negative sentence expresses a strong degree that can be expressed with *very*.

4. It does not combine with absolute stative verbs.

Thus we can assume that it also combines with "$\varnothing_{pos}$ A", and that *yekan* roughly means 'not very', just like *pothong*. Thus a negative sentence with *yekan* expresses the degree expressed by *very*.

The fact that degree modifiers like *yekan*, *pothong*, etc. take a gradable verb preceded by $\varnothing_{pos}$ can be captured by saying that they trigger the presupposition that the subject has the positive degree of property denoted by the predicate that comes with them. Then "NOT ϕ [yekan/pothong A]", the negation of a sentence ϕ containing "yekan/pothong A", also presupposes that $\phi[\varnothing_{pos}$ A]. That is, (51.b) presupposes that Mina is tall. A degree modifier does not make sense if A is neutral as to whether the degree is positive or negative. If A is neutral, A is just a measure function from a set of individuals to a set of measures in terms of the property denoted by A. Degree modifiers like *very*, *yekan*, *pothong*, *yakkan*, etc. are directional, and their uses are acceptable only when the minimum degree is defined. When the minimum degree is not inherently determined, the standard of comparison plays the role of the minimum degree. This can be well observed in the interpretation of a degree modifier like *cokum* 'a little', *yakkan* 'slightly', etc.

Consider the following example:

(60) mina-nun {cokum, yakkan} yeypp(u)-ci anh-a.
　　　Mina-top {a little, slightly} pretty-nml　not.do-dec
　　　'Mina is not slightly pretty.' ($\simeq$ Mina is quite/fairly pretty.)

This does not mean that Mina is not a little pretty (= Mina is not pretty at all), but that Mina is fairly/quite pretty. This has to be accounted for. I will explain why.

It has been observed that *cokum/yakkan* 'slightly' combines with an expression with a lower closed scale, not with an upper closed scale:

(61) a. maktayki-ka {cokum, yakkan} whwuy-ess-ta. (lower closed)
   rod-nom   {a little, slightly} be.bent-pst-dec
   'The rod is {a little, slightly} bent.'
  b. ??pang-i   {cokum, yakkan} kkaykkusha-ta. (upper closed)
    room-nom {a little, slightly} be.clean-dec
    'The room is {a little, slightly} clean.'

For a gradable predicate with a lower closed scale, the minimum degree is well defined, and the meaning of *yakkan/cokum* can exploit it as follows:[17)]

(62) ⟦cokum/yakkan⟧ = $\lambda G \lambda x \exists d[G(d)(x)$ & small(diff(d)(**min**(G)(C)))]
  diff(a)(b) = the difference between a and b = (a − b)
  min(G)(C): the minimum value in the scale of G in the comparison class C

Here G is the meaning of an adjective that combines with *cokum/yakkan*, and C is the comparison class determined in the context by considering the logical subject x. When the minimum value is defined, *yakkan/cokum* expresses that the degree of something is only a little higher than the minimum value. Applying this to (61.a), we get the following interpretation:

(63) ⟦maktayki-ka yakkan whwuy-ess-ta⟧ =
  $\exists!x \exists d[rod(x)$ & bent(d)(x) & small(diff(d)(**min**(bend)(C)))]

Here, diff(d)(**min**(bend)(C)) is the difference between the degree of the rod being bent and the minimum value of the bend scale in the comparison class C, which is a set of rods determined in the context, and the minimum value corresponds to (almost) the state of being straight with the precision that is required with respect to the set of rods.

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17) Kennedy and Levin (2008) define the meaning of *slightly* as follows:

 i. $\lambda G \lambda d \lambda x \lambda e[small(G) \leq G(x)(e) <$ **min**(G)]

 They assume that G(x) denotes the value of degree of x being involved in an event e in the scale of G. Still the formulation is not well defined. The variable d is vacuously abstracted over, and the minimum value is larger than another value in the same scale.

The modifier *yakkan/cokum* is supposed to occur with an adjective with a lower closed scale. But if *cokum/yakkan* is used with a relative gradable predicate, the sentence can sound a little odd. But it can be forced to combine with a relative gradable verb:

(64) a. Yuna-nun acwu ppalu-ciman mina-nun yakkan nuli-ta.
    Yuna-top very fast-but.   Mina-top slightly slow-dec
    'Yuna is very fast, but Mina is slightly slow.'
  b. mina-nun yakkan nuli-n   phyen-i-ta.
    Mina-top slightly slow-adn side-be-dec
    'Mina belongs to a group of slow people.'

The verbs *ppalu/nuli* are normally of a totally open scale, but in (64a), *yakkan* 'slightly' is contrasted with *acwu* 'very', and in (64b), the expression *phyen* forces *yakkan* to take a positive value of degree. That is, the verb *nuli* requires the minimum value of degree determined in the set of slow people, and the standard of comparison, which is represented as $\mathbf{min}(G)(\lambda y[\varnothing_{pos}](G)(y)])$ in (below), plays the role of the minimum degree. Thus the meaning of *cokum/yakkan* can be modified as follows:

(65) ⟦ cokum/yakkan ⟧ = $\lambda G \lambda x \exists d[G(d)(x)$ & $\mathrm{small}(\mathrm{diff}(d)(\mathbf{stndt}(d))]$
    $\mathbf{stndt}(d)$ = i) $\mathbf{min}(G)(C),$ if G is of a lower closed scale;
          ii) standard(G)(C), if G is of a totally open scale.

The degree of an individual's property G is slightly larger than the minimum degree from the comparison class, and the comparison class consists of individuals whose degrees are larger than the standard of comparison. If this applies to (60), the negative sentence means that Mina is pretty but the degree of beauty is small, not that Mina is not pretty. This is because the minimum degree is calculated only from the class of pretty people. Thus we can utter the following sentence with no problem:

(66) mina-ka   yeppu-ki-nun yeppu-ntey cokum-pakkey an yeppu-ta.
     Mina-nom pretty-nml-top pretty-but   slightly-except not pretty-dec
     'Mina is pretty, but only slightly pretty.'

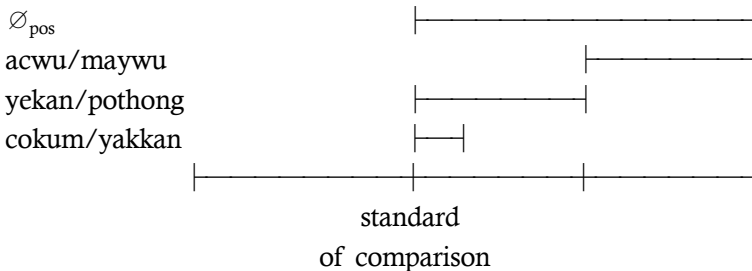This shows that the state of being a.little/slightly pretty is counted as the state of being pretty.

Degrees denoted by *cokum*, *yakkan*, *pothong*, *yekan*, and *maywu* are defined based on the minimum value. If a gradable predicate is neutral as to whether the grade is positive or negative, no minimum value is defined and their degrees are not properly defined. The only acceptable way to get an interpretation is to take the positive side with the standard of comparison as the minimum value. Because of this, the negation of a sentence with a degree modifier does not really get the meaning of a negative sentence.

4.2. Contributiveness of a degree modifier

I have shown how a negative sentence with *yekan* is interpreted. One last issue I need to explain is why *yekan* requires negation, semantically or pragmatically.
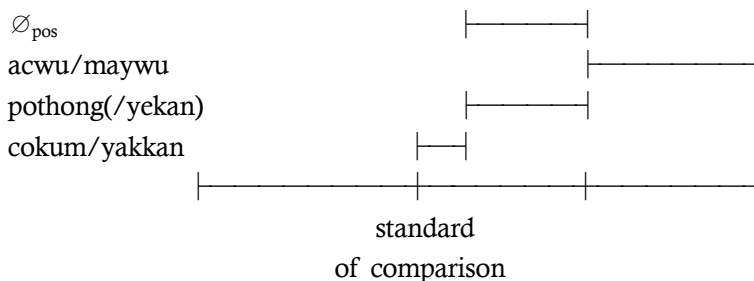
I have discussed the following degree modifiers, arguing that their semantic denotations of degrees are specified as given:

(67) semantic meanings of degree modifiers:

$\varnothing_{pos}$
acwu/maywu
yekan/pothong
cokum/yakkan

standard
of comparison

Here *acwu/maywu* 'very' and *cokum/yakkan* 'slightly' are marked, in contrast to unmarked degree modifiers like *yekan/pothong* and $\varnothing_{pos}$. Then an affirmative sentence with the use of $\varnothing_{pos}$ or *yekan* is adjusted pragmatically, excluding the degrees expressed by the marked degree modifiers:

(68) meanings of degree modifiers <u>with implicatures</u> in an affirmative sentence:

$\varnothing_{pos}$ ├————┤

acwu/maywu   ├————┤

pothong(/yekan)   ├————┤

cokum/yakkan   ├——┤

├————————┼————————┼————————┤

standard
of comparison

That is, when you say that Inho is $\varnothing_{pos}$ tall, it is implicated that John is not very tall, nor slightly/a.little tall. We would be able to say the same thing about an affirmative sentence with *pothong/yekan*. Then *pothong/yekan* would be completely redundant because the same pragmatic meaning can be expressed with the null degree modifier $\varnothing_{pos}$.

To exclude the possibility that *pothong/yekan* is used in an affirmative clause, we can posit the following constraint, which is proposed in Yeom (2015):[18]

(69) **Contributiveness principle**

An expression in an utterance makes a non-empty meaning contribution to the meaning of the utterance.

The meaning contribution can be semantic or pragmatic. In an affirmative sentence with no negative implicature, *yekan* is not contributive at all. This is why an affirmative sentence with *yekan* is not acceptable. If an affirmative sentence with *yekan* implicates the negation of that sentence, then the sentence is saved, as shown in (5) and (6).

In a negative sentence, $\varnothing_{pos}$ and *yekan* lead to different meanings, and *yekan* is not redundant:

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18) The principle is quite general and it allows us to explain many pragmatic inferences: free choice effects, some local scalar implicatures. See Yeom (2013) for free choice effects.

(70) a. mina-nun yeyppu-ci   anh-ta.
          Mina-top   be.pretty-nml not.do-dec
          'Mina is not pretty.'
     b. mina-nun yekan   yeyppu-ci   anh-ta.
          Mina-top   ordinarily be.pretty-nml not.do-dec
          'Mina is very pretty.'

Thus the use of *yekan* does not yield a pragmatic inference, and the meaning of *yekan* is not adjusted pragmatically. The negative sentence with *yekan* gets the same meaning as the corresponding affirmative sentence with *very*. If the meaning of *yekan* were adjusted by pragmatic implicatures as given in (68), the negation of the sentence with *yekan* would mean that either the corresponding affirmative sentence with *very* or the corresponding affirmative sentence with *slightly* holds. The resulting meaning would be weaker than the one we can get from the semantic meaning of *yekan*. Pragmatic inferences do not arise unless they strengthen the semantic meaning of a sentence.

5. Conclusion

In this paper, I showed that when *yekan* lies in the scope of negation, the negation has to be a long form. This is because *yekan* is focused. This is supported by the evidence that the association of the negation with *yekan* shows restrictions that are generally observed in focus phenomena. I also showed that the negation that occurs with *yekan* is not metalinguistic. *Yekan* has to be negated or associated with a negative predicate so that it can make a stronger meaning contribution. But behind this claim lies the fact that *yekan* is a degree modifier that presupposes that it only ranges in the positive value and that in an affirmative sentence it makes no meaning contribution, due to pragmatic inferences. But in a negative sentence *yekan* can make a stronger meaning contribution by yielding no pragmatic inferences.

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