Typology of NPIs in Korean: Variation and Licensing*

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This paper examines typology of Negative Polarity Items (NPIs) in Korean, focusing on their distributional and licensing properties. This paper first classifies various types of Korean NPIs in terms of their distributional properties, and then discusses licensing environments of each type of NPIs in terms of nonveridicality, extensively discussed in many previous studies (Zwarts 1995, Giannakidou 1998, 2002, 2011a, b, C. Lee 1996, 1999, C. Lee et al. 2000, inter alia). Although licensing environments of each type of NPIs are not uniform, licensing environments of morphologically complex NPIs appear to be more restricted antiveridical, whereas other types of NPIs are widely distributed in nonveridical contexts. This paper further examines a context that does not contain an apparent nonveridical licenser but permit an NPI, and argues that a few types of NPIs secondarily adopt a mechanism of ‘rescuing’ (Giannakidou 2006) that is pragmatically conditioned.

Keywords: typology of NPIs, licensing, nonveridicality, negative implicature

I. Introduction

The terminology NPI has been used to refer to a group of expressions which can only appear when they stand in a certain configuration with some sort of licensing element, the prototypical licenser being a negative element. English any is one of the well-known NPIs:

(1) a. John didn’t want to see any students.
   b. *John wanted to see any students.

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Since Ladusaw (1979)'s seminal work, a substantial number of studies of NPIs have been carried out; these focus predominantly on the question of what licenses NPIs. Although the simplest description of NPIs would be to say that NPIs appear only in negative sentences, as in (1), NPIs also appear in contexts that do not formally contain negation. Consider the following examples:

(2) a. Do you think John could ever trust Mary again?
    b. If you think John could ever trust Mary again, you're a fool.
    c. I love you more than I could ever say.

Ladusaw’s concept of downward entailment convincingly provides a uniform account of an apparently heterogeneous group of NPI licensors, several subsequent studies, but some of the more prominent ones being van der Wouden and Zwarts (1992, 1993), Zwarts (1995), and Giannakidou (1998) show that the notion of downward entailment is not strict enough to capture the distribution of the heterogeneous group of NPIs. The semantic property of NPI licensors has been recently discussed in terms of (non)veridicality (Zwarts 1995, Giannakidou 1998, 2002). The definition of (non)veridicality is given below:

(3) (Non)veridicality for propositional operators (Giannakidou 2002, also Zwarts 1995)
   a. A propositional operator $F$ is veridical iff $Fp$ entails $p$: $Fp \rightarrow p$; otherwise $F$ is nonveridical.
   b. A nonveridical operator $F$ is antiveridical iff $Fp$ entails not $p$: $Fp \rightarrow \neg p$.

   a. antiveridical: sentential negation, without
   b. nonveridical: antecedents of conditionals, questions, modified by a universal quantifier, habitual aspects, modals, before-clause1\)

1) As for before-clause, it is a well-known fact that before, but not after, licenses an NPI, as in (1):

(1) a. Mary arrived before anyone left the party.
Licensing environments of Korean NPIs have been also discussed in terms of nonveridicality by many researchers (C. Lee 1996, 1999, C. Lee et al. 2000, Giannakidou 1998, 2002, J.-H. Lee 2010, Giannakidou and Yoon 2011, inter alia). In particular, *amwu NPIs have attracted considerable attention compared with English any, because *amwu NPIs are not allowed in other nonveridical context; they appear with overt sentential negation, which are defined as antiveridical in (3b).\(^3\)

Although *amwu NPIs have been subject to much debate, Korean also has a wide range of NPIs, and licensing environments of different types of NPIs appear to vary (S. Nam 1994, D. Chung 1993, 1997, K.-W. Sohn 2004, inter alia). How to pin down the exact nature of NPI licensers in Korean is still an ongoing debate, but this paper tries to revisit this matter by discussing typology of Korean NPIs and their distributional properties. First of all, this paper discusses typology of Korean NPIs by reclassifying NPIs in terms of their syntactic categories, and shows that Korean NPIs are licensed by nonveridicality, as claimed in the previous studies, but any NPIs that are combined with the particles to and pakkey need more restricted antiveridical licensers, suggesting that the particles have an active role in NPI formation. Second, this paper discusses some types of NPIs that appear in contexts which are not apparently nonveridical, such as emotive factives and rhetorical question. It has been proposed in Linebarger (1987) (also Giannakidou 1998, C. Lee 1999, K.-W. Sohn 2004) that neg-

\[\begin{align*}
\text{b.} & \text{ *Mary arrived } \textit{after} \text{ anyone left the party.}
\end{align*}\]

Zwarts (1995:298) argues \(p\) before \(q\) does not necessarily imply the truth of \(q\), and therefore before has the nonveridical use. In (2), the truth of the whole sentence does not imply the truth of the before-clause:

\begin{align*}
(2) \text{ Max died before he saw his grandchildren.}
\end{align*}

2) S. Nam (1998) argues that before-clause in Korean is anti-additive. See S. Nam (1998) for more discussion on NPI licensing in before-clause.

3) NPI licensing in Korean is also addressed in terms of anti-morphic function (D. Chung 1993, 1997, S. Nam 1994, J. Hwang 2009). The definition of anti-morphic function is given below:

\begin{align*}
(1) & \text{ Let } <A, \leq> \text{ and } <B, \leq> \text{ be two Boolean algebras.} \\
& \text{ a. } f \in [A \rightarrow B] \text{ is monotone decreasing iff for all } \alpha, \beta \in A, \text{ if } \alpha \leq \beta, \text{ then } f(\beta) \leq f(\alpha). \\
& \text{ b. } f \in [A \rightarrow B] \text{ is anti-additive iff for all } \alpha, \beta \in A, f(\alpha \lor \beta) = f(\alpha) \land f(\beta). \\
& \text{ c. } f \in [A \rightarrow B] \text{ is anti-multiplicative iff for all } \alpha, \beta \in A, f(\alpha \land \beta) = f(\alpha) \lor f(\beta). \\
& \text{ d. } f \in [A \rightarrow B] \text{ is anti-morphism iff } f \text{ is anti-additive and anti-multiplicative. (S. Nam 1994:3)}
\end{align*}
ative implicatures also plays a role to license NPIs, but this paper argues that negative implicature should be a secondary option to license NPIs based on the fact that the NPIs allowed in nonveridical contexts are also subject to licensing by negative implicature, which is dubbed ‘rescuing’ in Giannakidou (2006).

Section 2 reclassifies types of NPIs and revisits issues on licensing contexts of each type of NPIs discussed in previous literature. Section 3 discusses NPIs in emotive factives and rhetorical questions where negative implicature plays a role in ‘rescuing’ NPIs. Section 4 concludes the paper.

2. NPIs in Korean: Varieties and Distribution

2.1. The Class of NPIs

A range of NPIs in Korean includes various syntactic categories, such as nominal, adverbials, particles, verbs, and idiomatic expressions. K.-W. Sohn (2004), for example, gives a detailed classification of Korean NPIs as follows:

(5) a. indefinites + the particle to: amwu-to ‘anybody’, amwu-kes-to ‘anything’, eti-ese-to ‘anywhere’
   b. XP + the particle pakkey: sakwa-pakkey ‘only apple’, cip-eyse-pakkey ‘only home’
   c. adverbials: cenhye ‘at all’, tocehi ‘at all’ tomwuci ‘at all’
   d. a minimal number: hansalam-to ‘even one person’, hana-to ‘even one thing’, cokunto ‘a bit’, kkomccak ‘an inch’, kkattak ‘an inch’, omccaktalssak ‘an inch’

4) In this paper, the term NPIs refers to a group of expressions which appears in overtly negated predicates. I do not include the discussion of so-called ‘weak’ NPIs, such as NPIs composed of the particle -lato. Lato-NPIs are not licensed in overtly negated environments, but they appear in other nonveridical contexts, such as questions or conditionals, as in (1):

(1) Amwu-lato oa-ss-ni?
   anyone-LATO come-Past-Decl
   ‘Did anyone come?’

The first and the second type of NPI are morphologically complex in that NPIs are composed of a root noun and a particle. Depending on whether a root noun is an indefinite or a common noun, either to or pakkey should be chosen. The indefinite roots need to be combined with the particle to, and the indefinite roots include amwu ‘any’, etten ‘certain’, wh-indefinites, such as enu ‘which’, nwukwu ‘who’, mwues ‘what’, etten ‘certain’, and enu ‘which’ (C. Lee 1999). The particle pakkey, whose meaning is ‘exclusive only’, needs to be combined with a common noun. The third type contains adverbial expressions. The fourth type of NPI expresses minimum quantity or quality. The fifth type of NPI contains slang. Besides these five types of NPIs, K.-W. Sohn (2004: footnote 1) also includes verbal NPIs such as ketulttepota ‘take a good look’.

Some points in (5) need more attention. First, K.-W. Sohn (2004) discusses that kkomccak and kkattak belong to NPIs expressing minimum quantity of quality, but it is not difficult to find examples where kkomccak and kkattak are not polarity sensitive. In (6), kkomccak and kkattak are used as a predicate with the verb hata ‘do’, and then they appear in affirmatives:

    John-Top toe-Acc a bit-do-Past-Decl
    ‘John moved his toes a bit.’

    John-Top head-Acc a bit-do-Past-Decl
    ‘John moved his head a bit.’

Then, we have to consider that these expressions are NPIs only if they are construed as adverbs, which are often exclusively associated with mos ha-ta ‘can’t do’ or an ha-ta ‘not do’.

Secondly, although K.-W. Sohn (2004) includes han-N-to as a part of NPIs expressing minimum quantity or quality, this expression is originated from the combination of the numeral ‘one’, which is the smallest natural number, with the particle to. Notice that cokumto is al-
so morphologically complex in that the adverb *cokum* ‘a bit’, which is not an NPI, is combined with the particle *to*, and finally becomes an NPI. This suggests that the combination of minimum quantity (or the lowest numeral such as ‘one’) with the particle *to* makes it an NPI.

As for the slang NPIs, combined with the particle *–meri* in particular, it appears that *–meri* turns a given expression into an NPI. This is because the meaning of *–meri* does not have any specific meaning but has a function of adding a derogatory expression to a root noun. Another slang expression *kkoppayki* is rarely combined with ordinary case marker, such as the nominative *ka* or the accusative *lul*, but it needs to be combined with the particle *to*. In this case, *kkoppayki* should be regarded as an idiomatic expression exclusively combined with the particle *to* like *amwu-to* or *hana-to*. Lastly, although K.-W. Sohn (2004) reports that the expression *nwunchikhochi* is an NPI, it can also appear in affirmative sentences as follows:

(7) (Ku-nun) *nwunchikhochi* ta a-nun ai-i-ta

He-Top a sense all know-Comp child-be-Decl
‘He is a child who knows everything.’

Based on these discussions, I revisit the types of NPIs in Korean as follows:

(8) a. Type I : i) indefinite-*to

*amwu-to* ‘any’, *nwukwu-to* ‘any’, *etten N-to* ‘certain N’,

ii) minimal number-*to

*hana-to* ‘even one’, *cokum-to* ‘a bit’

b. Type II : XP + *pakkey* (exclusive only)

*John-pakkey* ‘only John’, *hakkyo-pakkey* ‘only school’

c. Type III: Adverbs

*cenhey* ‘at all’, *pyello* ‘much’, *celtaylo* ‘never’

d. Type IV: Adverbs expressing minimum measurements

*kkumcccek / kkomcchak / omccwuk / omccaktalssak* ‘an inch’

e. Type V: Verbs

*kayuyhata* ‘concern’, *ketulttepota* ‘take a good look’

*mattukhata* ‘be satisfactory’, *thamthkhata* ‘be sat-
isfactory’

f. Type VI: Idiomatic expression
   cwippuwul ‘a thin dime’, khoppayki ‘appearance’

g. Type VII: Slang (XP-meri)
   chaysin-meri ‘dignity’, cwupyen-meri ‘scissorbill’

The distinction between Type I and Type II lies on which particle the root noun is combined with. Type I is an NPI combined with the particle to. The root noun can be either an indefinite or the expression of the smallest number or the minimum quantity. Type II is where an XP is combined with the particle pakkey. Type III includes adverbial NPIs, but Type IV only includes adverbials expressing minimum quantity/quality. Type V is of a limited number of verbal NPIs that must be negatively conjugated. Type VI and VII are of idiomatic expressions and slang with -meri expressing derogatory meaning. Due to their idiomatic meaning, Type VI and VII are combined with a limited number of verbs, as already mentioned in K.-W. Sohn (2004). For example, cwippwul in Type VI and the NPI-meri in Type VII are mainly combined with eps-ta ‘not have’, which is lexical negation.

2.2. Distributional Properties

Basically, all the NPIs in (8) appear with overtly negated predicates, which are antiveridical, but the distributional properties of each type of NPIs in (8) appear to vary in terms of nonveridicality. This subsection aims to provide more empirical data to show how each type of NPI is narrowly distributed, which has been discussed by many researchers (S. Nam 1994, 1998, D. Chung 1993, 1997, C. Lee 1999, C. Lee et al. 2000, K.-W. Sohn 2004, J. Hwang 2009, J.-H. Lee 2010, inter alia). This section discusses licensing conditions of the NPIs in (8) based on the definition of (non)veridicality given in (3), and concludes that the NPIs in (8) are further divided into two types, depending on whether NPIs require more restricted antiveridical licenser.

2.2.1. Type I and II: to vs. pakkey.

Both Type I and II are only licensed by overtly negated predicate s,5) including lexical negation. Overtly negated predicates are identified
as prototypically antiveridical. Unlike pakkey-NPIs, to-NPIs, however, appear in before-clause:

(9) a. Amwu-to o-ci **anh-ass-ta.** (long-form negation)
    anybody-TO come-Comp Neg-Past-Decl
    ‘Nobody came.’

    b. Amwu-to **eps-ta.** (lexical negation)
    anybody-TO not.exist-Decl
    ‘There is no one.’

    c. (?)Amwu-to o-ki ceney ttena-ca. (before-clause)
    anybody-TO come-Nmz before leave-Decl
    ‘Before anyone comes, let’s leave.’

(10) a. John-pakkey o-ci **anh-ass-ta.**
    John-only come-Comp Neg-Past-Decl
    ‘Except John, nobody came.’

    b. John-pakkey **eps-ta**
    John-only not-exist-Decl
    ‘Except John, there is no one.’

    John-only come-Nmz before leave-Decl
    ‘Before only John comes, let’s leave.’

As extensively discussed in previous studies (S. Nam 1994, D. Chung 1997, C. Lee 1999, C. Lee et al. 2000, S.-Y. Cho and Lee, H.-G. 2001, K.-W. Sohn 2004, J. Hwang 2009, Y. Choi 2011, Giannakidou 2011a, b), Type I and II NPIs are not licensed in typical nonveridical contexts, such as questions or conditionals:

(11) a. *{Amwu-to / John-pakkey} oa-ss-ni?
    any-TO John-only come-Past-Q
    ‘Did {anyone / no one but John} come?’

5) Overtly negated predicates include long-form negation with the negative complementizer –ci and the dummy verb anh-ta, and short-form with the negative an directly combining with a verb. Although I test examples with long-form negation in this paper, the result with short-form negation is the same as that with long-form negation.
b. *{Amwu-to / John-pakkey} o-myen, ttena-ca.
   any-TO John-only come-if leave-Decl
   ‘If anyone / no one but John comes, let’s leave.’

Adversative predicates, such as silh-ta ‘dislike’, thuli-ta ‘far from’, or himtul-ta ‘difficult’ also license to-NPIs, but they only allow them within their complement clauses, as discussed in C. Lee (1996, 1999) and K.-W. Sohn (2004). The complement of adversatives can be defined as nonveridical, since adversative predicates do not entail the truth or falsity of the complement (Aranovich 2007). Consider the following examples:

(12) a. Na-nun amwu-to po-ki silh-ta
    I-Top anyone-TO see-Nom dislike-Decl
    ‘I dislike seeing anyone.’

b. Kenamca-nun amwu-hako-to kyetlonha-ki
   the man-Top anyone- with-TO marry-Nmz
   thuli-ess-e.
   wrong-Past-Decl
   ‘As for that man, he is far from being able to get married to
   anyone.’ (C. Lee 1996:508)

c. *Na-nun amwu-to silh-ta.
   I-Top anyone-TO dislike-Decl
   ‘I dislike anyone.’

Unlike to-NPIs, pakkey-NPIs do not appear with adversatives, either within their complement position or in direct object position:

(13) a. *Na-nun John-pakkey po-ki silh-ta
    I-Top John-only see-Nom dislike-Decl
    ‘I dislike seeing anyone but John.’


6) Although C. Lee (1999) mentions that himtulta ‘difficult’ does not license NPI, the speakers I consult with accept the following example:

(1) a. Na-nun amwu-to po-ki himtul-ta
    I-Top anyone-TO see Nom difficult-Decl
    ‘It is difficult for me to see anyone.’
I-Top   John-only  dislike-Decl
‘I dislike anyone but John.’

Summarizing, the licensing contexts of Type I and II are as follows:

(14) a. Type I: overtly negated predicates (including lexical negation), before-clause, adversatives only if Type I appears within the complement of adversatives
b. Type II: overtly negated predicates (including lexical negation)

2.2.2. Type III: Adverbials
The licensing environments of adverbial NPIs are discussed in D. Chung (1993, 1997) (also J. Hwang 2009). First, celtaylo/kyelkho ‘absolutely’ and cenhye / pyello ‘much’ are only licensed in antiveridical contexts:

(15) a. Negated verb
John-un {celtaylo / kyelkhocenhye / pyello} chayk-ul
John-Top {absolutely / ever} book-Acc
ilk-ci anh-nun-ta.
read-Comp Neg-Pres-Decl
‘John never reads a book.’

b. Lexical negation
Him-i {celtaylo / kyelkho / cenhye / pyello} eps-ta.
strength-Nom {absolutely / ever} not.exist-Decl
‘I don’t have strength at all.’

7) D. Chung (1997) discusses that cenhye/pyello can appear in before-clause, but to my observation, the following sentence are ungrammatical or marginally acceptable:

(1) Before-clause
??I os-un {cenhye / pyello} ipepo-ki-to ceney sayk-i
this clothes-Top {at.all / much} try.on-Nmz-even before color-Nom
pyenhay-ss-ta.
change-Past-Decl
‘The color of these clothes has changed even before I put them on at all/much.’
(D. Chung 1997)

In the example above, without to in ipepo-ki-to, the sentence sounds ungrammatical. It follows then that the availability of Type I in before-clause salvages the grammaticality of the sentence.
Other nonveridical contexts do not allow \textit{celtalo/keylkho}:

(16) a. Conditional
\begin{quote}
\text{\texttt{\textbackslash{Celtaylo} / Kyelkho / Cenhye / Pyello}} \textit{kelu-myen}
\{absolutely / ever\} \textit{walk-if}
\text{kenkang-ey an coh-ta.}
\text{health-to Neg good-Decl}
\end{quote}
\text{‘If you walk absolutely, it will be harmful to your health.’}

b. Question
\begin{quote}
\text{\texttt{Ku-ka \textbackslash{celtaylo} / kyelkho / cenhye / pyello}} oa-ss-ni?
\text{He-Nom \{absolutely / ever\} \textit{come-Past-Q}}
\end{quote}
\text{‘Did he absolutely come?’}

On the contrary, \textit{te isang} appears not only in \textit{before}-clause but also in a broad range of nonveridical contexts:\footnote{One might think that the grammaticality of (17) comes from the fact that the negative implicature is provided in each example. Nevertheless, the grammaticality of \textit{teisang} in nonveridical contexts still makes a sharp contrast in the ungrammaticality of \textit{cenhey} or \textit{celtaylo} given in (16).}

(17) a. \textit{Before}-clause
\begin{quote}
\text{\textit{Te isang} mom-i nappaci-ki \textit{ceney}}
\text{any.more body-Nom get.worse-Nmz before}
\text{pyengwon-eykapo-ala.}
\text{hospital-Loc go-Imp}
\end{quote}
\text{‘Go to a hospital before your body gets any worse.’}

b. Comparative
\begin{quote}
\text{\textit{Te isang} kitali-nun kes-pota}
\text{any.more wait-Adn thing-than go.off-And}
\text{chwulpalha-nun kes-i nas-ta.}
\text{thing-Nom better-Decl}
\end{quote}
\text{‘It is better to go off than wait any more.’}

c. Conditional
\begin{quote}
\text{\textit{Te isang} \textit{kelu-myen} mom-ey haylop-ta.}
\text{any.more walk-if body-Loc do.harm-Decl}
\end{quote}
\text{‘If you walk any more, it will be harmful to your body.’}
d. Modified by a universal quantifier\(^9\)

\(\text{Te isang cicheyha-n salam-un motwu kicha-lul any.more delay-Adn man-Top all train-Acc nohchi-ess-ta.} \)

‘Everyone who delayed any more missed the train.’

(D. Chung 1997:102)

e. Question\(^{10}\)

\(\text{Ku-ka te isang Mary-eykey kwanshim-iss-ni?} \)

‘Is he interested in Mary anymore?’

The licensing environments of Type III can be summarized as follows:

(18) Type III

a. \text{celtaylo / kyelkho / cenhye / pyello: overtly negated predicates}

b. \text{te isang: overtly negated predicates, before-clause, nonveridical contexts} 

2.2.3. Type IV: Adverbials - Expressing Minimum Measurements

Type IV NPIs are adverbials, but they express minimum measurements. These adverbials only appear in antiveridical contexts, including lexical negations such as \text{mal-ta ‘not do’, anh-ta ‘not be’, or mos ha-ta ‘can’t do’}:


John-Top hand-and feet-Acc a bit not do-Past-Decl ‘John couldn’t move his hands and feet a bit.’


John-Top one hour during a bit not do-Past-Decl John didn’t move a bit during an hour

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\(^9\) One reviewer points out that (17d) becomes marginally acceptable or ungrammatical when the nominative case marker \(-i\) is combined with \text{salam} instead of the topic marker \(-un\). I agree with his/her judgment, but unfortunately, I have no appropriate answer for that right now.

\(^{10}\) In contrast to (17e), C. Lee (1999) notes that \text{te isang} is not licensed by interrogatives.
Type IV is allowed to appear in nonveridical contexts, including before-clause, as in (20a-c):

(20) a. Conditional

John-i pal-ul \textit{kkattak} wumciki-myen uysa-lul
John-Nom arm-Acc a bit move-if doctor-Acc
pwul-le.
call-Decl
‘Call a doctor if John moves his arm a bit.’

b. Question

John-i kokay-lul \textit{kkattak} swukye-ss-ni?
John-Nom head-Acc a bit bend-Past-Q
‘Did John bend his head a bit?’

c. Comparative

John-i son-ul \textit{kkattak} wumciki-nun kes-pota
John-Nom hand-Acc a bit move-And thing-than
nay-ka wumciki-nun kes-i naskeyss-ta.
I-Nom move-And thing-Nom better-Decl
‘It’s easier for me to move than to ask John to move.’

d. Before-clause

Aki-ka kho-lul \textit{omccak} wumciki-ki ceney
baby-Nom nose-Acc a bit move-Nmz before
hyuci-lul kacey-wa.
tissue-Acc bring-Decl
‘Before a baby moves her nose a bit, bring a piece of tissue.

(21) Type IV: overtly negated predicates (including lexical negation), before-clause, nonveridicals

2.2.4. Type V: Verbal NPIs

Verbal NPIs, such as \textit{kayuyhata} ‘care/concern’, \textit{ketulttepota} ‘take a good look’, \textit{mattukhata} ‘be satisfactory’, and \textit{thamthkhata} ‘be satisfactory’ need to be negatively conjugated, and in this case only long-form negation is allowed. In other words, verbal NPIs are not used as short-form negation:
English has also a list of verbal NPIs, such as can stand or care if, and they can appear in nonveridical contexts, as follows (Sailer 2009):

(23) a. **Scope of few, not many**
   i) **Not many** students care if they miss two lectures.
   ii) Democracy loses out in Putin’s Russia, but few seem to care if the money’s right.

b. **Complement clause to adversative predicate.**
   i) I **doubt** she cares if we change our jobs. (complement clause to a non-factive adversative predicate) (Sailer 2009)

Compared to English verbal NPIs, verbal NPIs in Korean are allowed in complement to adversative predicate such as silh-ta ‘hate’, but not in other nonveridical contexts:

(24) a. **Na-nun Mary-lul ketulttepo-ki silh-ta**
   I-Top Mary-Acc take.a.good.look-Nmz dislike-Decl
   ‘I dislike taking a good look at Mary.’

b. **Conditional**
   *Ney-ka koyangi-ul ketulttepo-myen pinan-pat-ul You-Nom cat-Acc take.a.good.look-if blame-receive-Acc kes-i-ta will-be-Decl
   Intended: ‘If you don’t care your cat, you will be blamed.’
c. Question

??Ney-ka koyangi-ul ketulttepo-ni?
You-Nom cat.Acc take.a.good.look -Q
‘Do you take a good look at your cat?’

Accordingly, Type VI appears if sentential negation is expressed on verbal NPIs, or it is allowed as the complement to adversative predicate.

2.2.5. Type VI and Type VII: Idiomatic and Slang NPIs

Idiomatic expression is exclusively combined with a limited number of lexical negation. For example, cwippwul ‘a thin dime’ or khoppayki ‘appearance’ is exclusively combined with the verbs eps-ta ‘not have’ or po-i-ta / nay bichi-ta ‘show’, respectively. As previously mentioned, Type VI idiomatic expressions are rarely combined with ordinary case markers, but with the particle –to. Then, the licensing condition of Type VI is the same as those of Type I, as illustrated below:

(25) a. Negated Verb

John-to thin dime-TO leave-Comp Neg-Past-Decl
‘There is no thin dime left to John.’

b. Lexical negation

John-eykey cwippwul-to eps-ta
John-to thin dime-TO leave-Comp not.be-Decl
‘There is no thin dime left to John.’

c. Before-clause

?Cwippwul-to nam-ki ceney, motwu chiwepelye-la.
thin dime-TO leave-Nmz before all remove-Imp
‘Before there is a thin dime, terminate all of them.’

d. Conditional

*John-i cwippwul-to issu-myen, Mary-wa
John-Nom thin dime-TO have-Decl-if Mary-with

11) I have to admit that the grammaticality judgment on (24c) and (25g) is shaky. Both (24c) and (25g) are marginally acceptable to me, but some speakers that I consult do not accept them as ungrammatical. I thank a reviewer for pointing out this matter.
kyohonha-I thentey.
marry-will Decl
‘If John has a thin dime, he will marry Mary.’

e. Question
??John-eykey cwuppwuI-to nama-ss-ni?
John-to thin.dime-TO leave-Past-Q
‘Was there anything left to John?’

Unlike Type VI, the slang NPIs appear in various nonveridical contexts:

(26) a. Lexical negation
John-un cwupyenmerI-ka **eps-ta.**
John-Top sense-Nom not.have-Decl
‘John doesn’t have any sense.’

b. Before-clause
John-i chaysinmerI-lul seywU-ki-**ceney,**
John-Nom dignity-Acc have-Nom-before
sanghwang-un te isang-hayci-ess-ta.
situation-Top more strange-become-Past-Decl
‘Before John had dignity, the situation became strange.’

c. Comparative
Ku-nun cwupyenmerI-ka iss-ki-**pota** sengpwum-i
He-Top sense-Nom have-Nmz-than personality-Nom
chak-ha-ta.
good-do-Decl
Intended: ‘His personality is better than his sense.’

d. Conditional
John-i cwupyenmerI-ka iss-ta-**myen,** ku chayk-ul
John-Top sense-Nom have-Decl-before that book-Acc
tollyecwuI theyntey
return-will Decl
‘If John has sense, he will return that book.’

e. Question
Ku-ka cwupyenmerI-ka com iss-ni?
He-Nom sense-Nom a bit have-Past-Q
‘Does he have a bit of sense?’
The licensing conditions of Type VI and VII are summarized as below:

(27) a. Type VI Idiomatic expression exclusively combined with the particle \(-to\): overtly negated predicates (including lexical negation), before-clause

b. Type VII slang (including NP-\(-meri\)): overtly negated predicates (including lexical negation), before-clause, nonveridical contexts

2.2.6. Interim Summary
The data given in Section 2 reveal some important facts regarding the descriptive facts about Korean NPIs. First, Korean NPIs are either monomorphemic or morphologically complex, and as for the latter case, the particles – to and pakkey – comprising NPIs play a crucial role in the NPI formation despite of the fact that -to needs to be combined with indefinites or minimal numbers (the numeral one han) in order to be construed as NPIs. Then, the idea that to and pakkey are analyzed as NPI particles is on the right track. Secondly, the fact that Type I and Type II display more restricted licensing environments than the others strongly suggests that they may belong to n-words, which have been recently discussed as another distinguished class of polarity sensitive items (selected references are Y. Kim 2001, Watanabe 2004, Zeijlstra 2004, 2008, 2012, J. Hwang 2010, Haegeman and

12) D. Chung (2012:555) points out that amwu-N still retains the NPI reading without the particle –to:

(1) John-eykey amwu calmos-i eps-ta
   John-Dat any fault-Nom not.exist-Decl
   ‘John has no fault.’

In this case, the idea that –to is an NPI particle seems to get weaken, since the NPI reading does not come from the particle itself. However, the NPI reading without –to is only maintained when amwu-N occurs with negative predicates. When amwu-N appears in affirmatives, amwu-N is no longer interpreted as an NPI but as a free choice any corresponding amwu-N-ina:

(2) John-eykey amwu cip-i kwaynchanh-ta.
   John-Dat any fault-Nom be.fine-Decl
   Intended: ‘Any house would be fine with John.’

Although it is conjectured that pragmatic licensing needs to be considered, as D. Chung (2012) argues, NPI licensing related to ellipsis is beyond the scope of this paper. See D. Chung (2012) for further discussion on ellipsis and NPI licensing.
Lohndal 2010). Although I do not discuss several issues related to n-words here, the idea that there is a correlation between licensing conditions and NPI formation is worth of further research.

3. Indirect Licensing: Rescuing and Negative Implicature

Although the notion of nonveridicality nicely captures the licensing conditions of various types of Korean NPIs, some types of NPIs still appears in contexts that cannot be defined in terms of nonveridicality, and emotive factives and rhetorical questions are known as such contexts (C. Lee 1999, K.-W. Sohn 2004, Giannakidou 2006).13)14) This section discusses types of NPIs which are subject to ‘indirect licensing’ in emotive factives and rhetorical questions, and that how ‘indirect licensing’ can work without an overt nonveridical licenser.

3.1. Emotive Factive

A few types of NPIs –Type IV, V, VI and VII - appear with emotive factives, such as tahayng-i-ta ‘lucky,’ nollapta ‘surprise’, or hwuhoy-hata ‘regret’:

(28) a. Type I and II16)
   *John-i {amwu-to / Mary-pakkey} manna tahayng-i-ta
   John-Nom any-TO / Mary-only meet lucky-be-Decl
   ‘It is lucky that John met {anyone / only Mary}.’

   b. Type III
   *John-i {kyelkho / te isang} kitalye tahayng-i-ta.

13) C. Lee (1999) focuses on the discussion about lato-type NPIs in emotive factives. Lato-type NPIs are also subject to much debate, and this paper does not have enough space to discuss this issue, unfortunately. See C. Lee (1999), C. Lee et al. (2000), J.-H. Lee (2010), and Giannakidou and Yoon (2011) for relevant discussion.

14) Although K.-W. Sohn (2004) discusses NPI licensing by adversatives, such as silh-ta ‘dislike’ or hintul-ta ‘be difficult’ separately, we can recall that the complement of adversatives can be defined as nonveridical, as discussed in (12).


16) One reviewer mentions that (28-c-e) are ungrammatical sentences. S/he also points outs that (28e) becomes grammatical when the particle –lato is attached to cwuppyennmeri.
c. Type IV
John-i sohn-ul *omcak umcikye tahanyng-i-ta.
John-Nom hand-Acc a bit move lucky-be-Decl
‘It is lucky that he moved his hand a bit.’

d. Type V
John-i koyangi-lul hilkkus ketulttepoa nollass-ta
John-i cat-Acc a bit pay.attention surprising-Decl
‘It is surprising that John takes a good look at his cat.’

e. Type VI
John-i *koppayki-lul poye tahanyng-i-ta.
John-Nom appearance-Acc show lucky-be-Decl
‘It is lucky that John showed up himself.’

f. Type VII
John-i *cwupyenmeri-ka isse tahanyng-i-ta.
John-Nom appearance-Nom have lucky-be-Decl
‘It is lucky that John had a sense.’

NPIs in emotive factives can be considered as counterexamples to nonveridicality, since emotive factives take sentential complements denoting facts (Kiparsky and Kiparksy 1970), and therefore emotive factives are regarded as veridical. Notice, however, that Type IV-VII are all accepted with emotive factives, and this fact cannot be explained in terms of nonveridicality.

3.2. Rhetorical Questions

It is not the case that all types of NPIs allow their grammaticality in rhetorical question either. As already discussed in K.-W. Sohn (2004), Type I, II, and III are not acceptable in rhetorical question:

(29) a. Type I
*Amwu-to oa-ss-ni?
any-to come-Past-Q
‘Did anyone come?’ (Intended: ‘No one came.’)
b. Type II\(^{17}\)

*John-pakkey* *oa-ss-ni?  
John-only come-Past-Q  
‘Did only John come?’ (Intended: ‘Except John, no one came.’)

c. Type III

*John-i* *cenhye* *Mary-lul* *manna-ni?  
John-Nom ever *Mary-Acc* meet-Q  
‘Does John ever meet Mary?’  
(Intended: ‘John doesn’t meet Mary anymore.’)

In contrast, the other types of NPIs, *te isang* ‘any more’ in Type III, the NPIs in Type IV, V, VI, and VII are all acceptable in rhetorical questions, as follows:

(30) a. *te isang*

Ku-ka *te isang* *Mary-ekey* kwanshim-iss-ni?  
He-Nom any.more *Mary-Dat* interested-be-Q  
‘Is he interested in Mary anymore?’ (Intended: He isn’t interested in Mary anymore.)

b. Type IV

John-i *kkwumccek-ul* hay-ss-ni?  
John-Nom a bit-Acc do-Past-Q  
‘Did John budge an inch?’ (Intended: ‘He didn’t move a bit.’)

c. Type V

John-i *Mary-lul* *ketultteypo-ss-ni?  
John-Nom *Mary-Acc* take.a.good.look-Past-Q  
‘Did John take a good look at Mary?’

---

\(^{17}\) Unlike (29b), C. Lee (1999) discusses that Type II also appears in a rhetorical question:

(1) Ne-pakkey *nwu-ka* ku kes-ul hal swu iss-kess-ni?  
you except who-Nom that thing-Acc do can would -Q  
‘Who else than you can do it?’

However, in (1) the phrase *ne-pakkey nwu-ka* is interpreted as a single constituent, and the focus is on *nwu-ka*, not *ne-pakkey*. When Type I, which is not allowed in rhetorical questions, as in (29a), appears in the same contexts, the grammaticality also improves:

(2) ?Amwu-to *nwu-ka* ku kes-ul ha-l su iss-kess-ni?  
Anyone-TO who-Nom that thing-Acc do can would -Q  
‘Who else can do it?’
(Intended: ‘John didn’t take a good look at Mary.’)

d. Type VI and VII

John-i \{cwuippul / chaysin\}-i iss-ni?
John-Nom thin.dime dignity-Nom have-Q
‘Did John have \{a thin dime / dignity\}?’
(Intended: ‘He didn’t have any money / dignity.’)

3.3. Negative Implicature and Rescuing

Based on the examples in (28-30), it is observed that most of the NPIs – except te isang – which appear in emotive factives also occur in rhetorical questions. Since nonveridicality cannot define emotive factives and rhetorical questions as NPI licensers, previous studies pursue the idea that negative implicature is also responsible for licensing NPIs (Linebarger 1987, C. Lee 1999, K.-W. Sohn 2004, Giannakidou 2006, inter alia).

As well known, Linebarger (1987) argues that NPI licensing relies on the presence of negative implicatures. Consider the following example:

(31) a. I didn’t help him because I have any sympathy for urban guerillas.
   b. NOT CAUSE([Ex (I have x)], I helped him), where x = sympathy for urban guerillas
   c. Whatever the reason was for my helping him, it wasn’t that I sympathize with urban guerillas; I don’t sympathize with them.
   d. #I didn’t help him because I have any sympathy for urban guerillas, although I do sympathize with urban guerillas.
   (Linebarger 1987:344)

When the NPI any occurs in the negative because-clause, as in (31), the licensing of any could be problematic because the representation in (31b) would be subject to the Immediate Scope Constraint (Linebarger 1987), which does not allow any logical element to intervene between an NPI and its licenser. Therefore, the possible reading for (31a) needs to correspond to (31c), where the negation also holds for the because-clause. Then, when the negative implicatures of the be-
cause-clause is explicated denied by the although-clause, as in (31d), the sentence becomes unacceptable. Linebarger (1987) therefore argues that negative implicature is responsible of the licensing of NPIs.

Giannakidou (2006, 2011a, also 1998) develops the idea of NPI licensing by implicatures into the idea of ‘rescuing’:\textsuperscript{18}

(32) Rescuing by nonveridicality

A Polarity Item \(\alpha\) can be rescued in the scope of a veridical expression \(\beta\) in a sentence \(S\), if (a) the global context \(C\) of \(S\) makes a proposition \(S'\) available which contains a nonveridical expression \(\beta\); and (b) \(\alpha\) can be associated with \(\beta\) in \(S'\).

(Giannakidou 2006:596)

Giannakidou proposes that the global context \(C\) of a sentence \(S\) is not only limited to logical entailment; the global contexts \(C\) could be entailments, presupposition, or implicatures. Giannakidou also argues that ‘rescuing’ needs to be considered as a secondary option to approve only a subset of NPIs.

Back to (28), negative implicature works to address NPIs with emotive factives. For example, in (28e), it is implied that the speaker expected a possible negative result that John would not show up, although he turned out to show up. Then, the speaker in (28e) implies John’s unexpected appearance, yielding negative implicature.

Negative implicature is more explicitly implied in rhetorical questions. It has been argued that the function of rhetorical questions is to make a statement rather than to get an answer. Sadock (1971) claims that rhetorical questions – what he dubs ‘queclaratives’ - represent “the value of the corresponding assertions of opposite polarity.” (Sadock 1971:227) Therefore, a positive rhetorical question has the illocutionary force of a negative assertion, whereas a negative rhetorical question has that of a positive assertion. Consider the following examples:

(33) a. Who understands English? = No one understands English
    b. Who doesn’t understand English? = Everyone understands English. (Sadock 1971)

\textsuperscript{18} The idea of ‘rescuing’ is formally dubbed as ‘indirect licensing’ in Giannakidou (1998).
Sadock (1971) further discusses that when NPIs such as *a damn thing* or *a red cent* appear in a rhetorical question, the sentences unambiguously have the illocutionary force of a negative assertion (Sadock 1971:224-225):

\[(34)\]
\[
\begin{align*}
\text{a. Do phonemes have a damn thing to do with language?} \\
\text{b. Halle doubts that phonemes have a damn thing to do with language.}
\end{align*}
\]

Compare (34) to (35) which is unambiguously interrogative:

\[(35)\] Don’t phonemes have a damn thing to do with language?

Concerning the nature of rhetorical questions, it is not surprising to see that NPIs are able to appear in rhetorical question since rhetorical questions implies semantically negative environment. If (34a) is semantically equivalent to ‘phonemes don’t have a damn thing to do with language’, the antiveridicality of NPI licensing is guaranteed. In the same line of reasoning, it is obvious to see why (35) is unambiguously interrogative: if (35) was interpreted as a negative rhetorical question, (35) would be equivalent to positive assertion, and then the NPI *a damn thing* could not be licensed.

Back to Korean NPIs, we have seen that some of NPIs are able to appear in rhetorical questions. Notice, however, that NPIs which are able to appear in rhetorical questions also occur in interrogatives, although Type V and VI are marginally acceptable in interrogatives, as in (24c) and (25g). If both interrogatives and rhetorical questions are able to provide NPIs with licensing contexts, we have to figure out how to separate negative assertion provided by rhetorical question from interrogatives, which is what Giannakidou (1998:148) calls ‘the locus of question to assertion shift’. It appears that the question of which contexts – between interrogatives and rhetorical questions - will be picked up for NPI licensing is purely dependent on pragmatics. Consider (30a), which is repeated in (36):

\[(36)\]
\[
\begin{align*}
\text{a. Ku-ka te isang Mary-eykey kwanshim-iss-ni? (=30a)} \\
\text{he-Nom any.more Mary-Dat interested-be-Q} \\
\text{‘Is he interested in Mary anymore?’}
\end{align*}
\]
b. Ani-ya, (caknyen-ey-nun kwanshim-iss-ess-nuntey no-Decl last.year-Loc-Top interested-be-Past-but cikum-un) ku-nun te isang kwanshim-eps-e. right.now-Top he-Top any.more interested-not.be-Decl (interrogative)
‘No. Last year, he was interested in Mary, but right now, he isn’t.’

c. Mwullon, ku-nun te isang Mary-eykey kwanshim-eps-e. (rhetorical question)
of.course he-Top any.more Mary-Dat interested-not.be-Q ‘Of course, he isn’t interested in Mary anymore.’

The short answers to (36a) become different depending on the way (36a) is interpreted. (36b) is an answer to when (36a) is interpreted as an interrogative, whereas (36c) is an answer to when (36a) is interpreted as a rhetorical question. Notice that the only difference between (36b) and (36c) is the short yes-no answers: the proposition ‘he is not interested in Mary anymore’ is not contradictory with the short yes-no answers in both (36b) and (36c), and the results come out grammatical. Consider the further examples given in (37-38):

(37) a. Nwu-ka te isang Mary-eykey kwanshim-iss-ni? (wh-interrogative)
who-Nom any.more Mary-Dat interested-be-Q ‘Who is interested in Mary anymore?’

b. John-i kwanshim-iss-e.
John-Nom interested-be-Decl ‘It is John who is interested in.’

c. Amwu-to kwanshim-eps-e.
anyone-TO interested-not.be-Decl ‘There is no one who is interested in.’

d. #John-i kwanshim-eps-e.
John-i interested-not.be-Decl ‘It is John who is not interested in.’

(38) a. Nwu-ka te isang Mary-eykey kwanshim-iss-ni? (rhetorical question)

Ah
who-Nom any.more Mary-Dat interested-be-Q
‘Who is interested in Mary anymore?’
Intended: ‘There is no one who is interested in Mary.’

b. Mwullon, amwu-to kwanshim-eps-e.
of.course, anyone-TO interested-not.be-Decl
‘Of course, there is no one who is interested in.’

c. #Mwullon, John-i kwanshim-eps-e.
of.course John-Nom interested-not.be-Decl
‘Of course, it is John who is not interested in.’

(37a) is also interpreted as a wh-interrogative or as a rhetorical question, as in (38a). In (37b-d), (37b-c) are acceptable as the answer to (37a), because the speaker asks who is interested in Mary any more. In contrast, (38a), which is a rhetorical question, asserts that there is no one who is interested in Mary, and therefore (38b), but not (38c) is an acceptable answer.\(^{19}\)

Summarizing, NPIs in rhetorical questions are ‘rescued’ by nonveridicality, and negative implicature plays a role in rescuing. There are two ways to interpret a form of questions, – interrogatives and rhetorical questions –, and both provide licensing environments for NPIs. Therefore, the question of which environment will be chosen needs to be pragmatically determined. On one hand, if a question is interpreted as an interrogative, nonveridicality ‘licenses’ NPIs. On the other hand, if a question is interpreted as a rhetorical question, negative assertion, which is pragmatically implied, ‘rescues’ NPIs. Considering speakers who only accept NPIs in rhetorical questions, but not in questions, they seem to use ‘rescuing’ as a secondary option to allow NPIs in questions.

4. Conclusion

This paper discusses licensing contexts of several types of Korean NPIs, which exhibit sensitivity to overtly negated predicates. It ap-\(^{19}\) Cho and Lee (2001) also argue that licensing NPIs - adverbial NPIs, in particular - in rhetorical question depend on the specification of the relevant information in each lexical item, which is pragmatically inferred.
pears that morphologically complex nominal NPIs comprised of NPI particles require more restricted ‘antiveridical’ licensers, whereas other types of NPIs are licensed in a wide range of nonveridical contexts. This paper also discusses a group of NPIs which are allowed in contexts which are not defined as nonveridical. It appears that there are two ways to allow NPIs, licensing by nonveridicality and ‘rescuing’ (Giannakidou 2006) by negative implicature, and rescuing needs to be considered as a secondary option to allow NPIs only if contexts provide appropriate negative implicatures.

References


-------------- (2011b). Non-emphatic NPIs, EVEN-morphology weakened, and non-exhaustification: the view from Greek and Korean.
Handout. Presentation at the Linguistics Colloquium, Seoul National University, Seoul, Korea.


toral Dissertation. University of Texas, Austin.
_________. (2008). Negative concord is syntactic agreement. Ms., University of Amsterdam. (http://ling.auf.net/lingbuzz/000645)
_________. (2012). There is only one way to Agree. The Linguistic Review 29.3, 491-539.

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