

Three Types of NP Modifications in Korean and Japanese

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1. Introduction^{1, 2, 3}

Teramura (1969) argues that there are two types of clausal noun phrase (NP) modifications in Japanese. One type is the case in which a modifying clause contains an NP element identical to the NP in the matrix sentence. Teramura calls this relation between the modifying clause and the modified NP in this construction an “inner relationship.” The examples below are from Teramura (1969:64):

- (1) hitoride sanma-o yak-u otoko (= Teramura’s (1))
alone saury-Acc grill-Pres man
‘the man who grills saury alone’
- (2) tanuki-ga kitune-ni kik-asa-ta hanasi
raccoon.dog-Nom fox-Dat listen-Cause-Past story
‘the story to which the raccoon dog made a fox listen’
(= Teramura’s (2))
- (3) kare-ga Tookyoo-e it-ta tosi (= Teramura’s (3))
he-Nom Tokyo-to go-Past year
‘the year when he went to Tokyo’

The clauses, *hitoride sanma-o yak-u* in (1), *tanuki-ga kitune-ni kik-ase-ta* in (2), and *kare-ga Tookyoo-e it-ta* in (3), modify the NPs, *otoko*, *hanasi*, and *tosi*, respectively. These modifying clauses are generally called relative clauses.

The other type is the case in which a modifying clause does not contain an NP element identical to the NP in the matrix sentence: Teramura terms this an “outer relationship”:

- (4) sanma-o yai-tei-ru nioi (= Teramura’s (4))
 saury-Acc grill-Prog-Pres smell
 ‘[literally] the smell that someone is grilling saury’
- (5) yama-de ki-no eda-ga hajike-ru oto
 mountain-at tree-Poss branch-Nom crack.open-Pres sound
 ‘the sound of a tree branch cracking’ (= Teramura’s (31))
- (6) sore-wa mazui to-iu iken (= Teramura’s (15))
 that-Top bad such that idea
 ‘the idea that it is bad’
- (7) kare-ga koros-are-ta kekka (= Teramura’s (8))
 he-Nom kill-Pass-Past result
 ‘the result that he was killed’
- (8) otoko-ga hitori-de sanma-o yak-u si (= Teramura’s (5))
 man-Nom alone saury-Acc grill-Pres poem
 ‘[literally] the smell that someone is grilling saury’
- (9) tanuki-ga kitune-o bakasi-ta hanasi (= Teramura’s (6))
 raccoon.dog-Nom fox-Acc deceive-Past story
 ‘[literally] the story that the raccoon deceived the fox’

Teramura claims that these two types of modifying clauses, which have either an inner relationship or an outer relationship, are syntactically and semantically different.

Moreover, Teramura divides the outer relationship type into two subcategories. One is the case of conceptualized NP modifications, such as in examples (4) and (5), in which the modifying clauses can be conceptualized as the NP objects with some kinds of perception. This type of modifying clause is called a “pseudo relative clause.”⁴ The other is the one in which the content of the modifying clause can be viewed as an expression of its NP head. The NPs and modifying clauses in (6), (7), (8), and (9), show examples of this. These modifying clauses are treated as “noun complement

clauses” in this paper.

These three types of NP modifications, relative clauses, pseudo relative clauses, and noun complement clauses, are also observed in Korean. The following examples are from Lee (2000:1-2):

(10) an NP with a relative clause

[nay-ka _ mek-un] sakwa (= Lee’s (1a))
I-Nom _ eat-Adn apple
‘the apple I ate’

(11) an NP with a pseudo relative clause

[pap-i tha-nun] naymsay (= Lee’s (1b))
rice-Nom burn-Adn smell
‘the smell of rice burning’

(12) an NP with a noun complement clause

[nay-ka sakwa-lul mek-un]sasil (= Lee’s (1c))
I-Nom apple-Acc eat-Adn fact
‘the fact that I ate an apple’

This paper will examine these three types of NP modifications in Korean and Japanese comparing their syntactic and semantic properties based on the fact that these languages have similar modifying structures. Section 2 will summarize the analysis by Teramura (1969) with respect to these clauses. In Section 3, we will review the argument by Lee (2000) against Cha (1998), and Kim (1998), and Lee, Hyo Snag (1998) along with the Korean data. Section 4 will apply Lee’s analysis to the semantically identical data in Japanese and find out whether or not there are any similarities or differences regarding NP modifications between these two languages. This paper will show that Lee’s analysis (2000) is not quite applicable to these three constructions in Japanese. It will conclude that the three types of modifying clauses in Japanese have to be distinguished both syntactically and semantically, whereas Lee argues that pseudo relative clauses can be treated the same as noun complement clauses in Korean.

2. NP modifications in Japanese

This section will take a close look at some differences in syntactic and semantic properties among the three types of NP modifications in Japanese. As Teramura (1969) and Inoue (1976) point out, a pseudo clause and a noun complement clause cannot be simply treated as relative clauses. They argue that all of them are similar in the way that their clauses are subordinated to NP heads. However, pseudo relative clauses and noun complement clauses differ from relative clauses in the respect that we cannot find identical NPs in their modifying clauses to match with their NP heads. As mentioned previously, regarding relative clauses, Teramura calls the relationship between an NP head and its modifying clause an “inner relationship,” where the NP head is related to an NP inside of its relative clause. For instance, the NPs in (1) to (3) above are generally considered to be derived from the following sentences, respectively:

- (1)' Otoko-ga hitoride sanma-o yak-u. (= Teramura's (1'))
man-Nom alone saury-Acc grill-Pres
'A man grills saury alone.'
- (2)' Tanuki-ga kitune-ni (sono) hanasi-o kik-asa-ta.
raccoon.dog-Nom fox-Dat (the) story-Acc listen-Cause-Past
'A raccoon dog made a fox listen to the story.' (= Teramura's (2'))
- (3)' Sono tosi-ni kare-ga Tookyoo-e it-ta. (= Teramura's (3'))
that year-in he-Nom Tokyo-to go-Past
'He went to Tokyo that year.'

Also, it is important to mention that the case markers, such as the nominative case marker *ga* and the accusative case marker *o*, are deleted after the derivation. From a semantic perspective, the modifying clauses can be viewed as a kind of explanation or predication of the NPs that they modify (Teramura 1969).

Recall that the pseudo relative clause construction and the noun complement clause construction have different syntactic structures from

normal relative clauses. As mentioned previously, the modifying sentence does not contain the same NP as the modified NP underlyingly.

The semantic difference between a pseudo relative clause and a noun complement clause also has to be considered. As mentioned earlier, the modifying clause can be viewed as the object of perception in a pseudo relative clause. NPs appearing in this construction are characterized by a quality associated with physical perception (Teramura 1969). For instance, *nioi* ‘smell’ in (4) and *oto* ‘sound’ in (5) denote physical perceptions produced by the fact of grilling saury in (4) and the event of a tree branch cracking in (5). I repeat examples (4) and (5) below:

- (4) sanma-o yai-tei-ru nioi
 saury-Acc grill-Prog-Pres smell
 ‘[literally] the smell that someone is grilling saury’
- (5) yama-de ki-no eda-ga hajike-ru oto
 mountain-at tree-Poss branch-Nom crack.open-Pres sound
 ‘the sound of a tree branch cracking’

On the other hand, in a noun complement clause the modifying clause can be viewed as an expression of the content of its NP head. According to Teramura, the nouns in noun complement clauses can be semantically categorized into three groups: 1) nouns associated with a fact or an event (e.g., *kekka* ‘result,’ *jijitu* ‘fact,’ *nyusu* ‘news,’ *dekigoto* ‘event,’ *jiken* ‘accident,’ *sawagi* ‘uproar,’ *rekisi* ‘history,’ *kako* ‘past,’ *yume* ‘dream,’ and *kuse* ‘habit’), such as in example in (7); 2) nouns related to some kinds of statements (e.g., *hanasi* ‘story,’ *si* ‘poem,’ *kotoba* ‘words,’ *rakugo* ‘comic storytelling,’ *iitutae* ‘legend,’ *densetu* ‘legend,’ *sirase* ‘news,’ *henji* ‘response,’ *tegami* ‘letter,’ *yakusoku* ‘promise,’ and *monogatari* ‘tale’) as in examples in (8) and (9); 3) nouns connected with some kinds of psychological activities (e.g., *iken* ‘opinion,’ *kangae* ‘idea,’ *shuchoo* ‘opinion,’ *keturon* ‘conclusion,’ *katei* ‘assumption,’ *zentei* ‘presupposition,’ *ki* ‘intention,’ *kimoti* ‘feeling,’

atama ‘idea,’ *kokoro* ‘heart,’ *nozomi* ‘wish,’ *kiboo* ‘hope’) as in example in (6). In addition, the nouns, *koto* ‘thing,’ *mono* ‘thing,’ and *tokoro* ‘place’ can belong to the first group.

One of the syntactic differences between a pseudo relative clause and a noun complement clause in Japanese is whether or not the insertion of *to-iu* ‘such that’ or ‘is said’ is obligatory (Teramura 1969). According to Teramura, *to-iu* ‘such that’ cannot be inserted in a pseudo relative clause; however, it can be either optional or obligatory in a noun complement clause. For instance, it is impossible to insert *to-iu* ‘such that’ between the NP heads and their modifying clauses in (4) and (5):

- (4) **sanma-o yai-tei-ru to-iu nioi*
 saury-Acc grill-Prog-Pres such that smell
 ‘[literally] the smell that someone is grilling saury’
- (5) **yama-de ki-no eda-ga hajike-ru to-iu oto*
 mountain-at tree-Poss branch-Nom crack.open-Pres such that sound
 ‘[literally] the sound of a tree branch cracking’

On the other hand, *to-iu* ‘such that’ is obligatory in (6), and the insertion is optional in (7), (8), and (9):

- (6) *sore-wa mazui to-iu iken*
 that-Top bad such that idea
 ‘the idea that it is bad’
- (6) **sore-wa mazui iken*
 that-Top bad idea
 ‘[literally] the idea that it is bad’
- (7) *kare-ga koros-are-ta [to-iu] kekka*
 he-Nom kill-Pass-Past such that result
 ‘[literally] the result that he was killed.’
- (8) *otoko-ga hitori-de sanma-o yak-u [to-iu] si*
 man-Nom alone saury-Acc grill-Pres such that poem
 ‘[literally] the smell that someone is grilling saury’
- (9) *tanuki-ga kitune-o bakasi-ta [to-iu] hanasi*
 raccoon.dog-Nom fox-Acc deceive-Past such that story
 ‘[literally] the story that the raccoon deceived the fox’

Thus, the three types of NP modifications in Japanese are syntactically and semantically different from each other.

3. Analysis in Lee (2000)

Lee (2000) compares the three types of modifying clauses, relative clauses, pseudo relative clauses, and noun complement clauses in Korean. The examples are repeated below:

- (10) [nay-ka _ mek-un] sakwa Relative clause (= Lee's (1a))
 I-Nom _ eat-Adn apple
 'the apple I ate'
- (11) [pap-i tha-nun] naymsay Pseudo relative clause
 rice-Nom burn-Adn smell (= Lee's (1b))
 'the smell of rice burning'
- (12) [nay-ka sakwa-lul mek-un] sasil Noun complement clause
 I-Nom apple-Acc eat-Adn fact (= Lee's (1c))
 'the fact that I ate an apple'

According to Lee, relative clauses in Korean are also distinguished from pseudo relative clauses and noun complement clauses by the existence of a gap in their modifying clauses. She also argues that the difference between pseudo relative clauses and noun complement clauses is based on the relationship between the NP heads and their complement clauses. For instance, in (12), the relationship between the NP *sasil* 'the fact' and its complement clause *nay-ka sakwa-lul mek-un* 'I ate an apple' is appositional; "I ate an apple" is "a fact". In contrast, in (11), the complement clause *pap-i tha-nun* 'the rice is burning' is not appositional; "the rice is burning" is not "a smell." Rather, the complement clause is the source of the NP *naymsay* 'the smell.'

In addition, Lee criticizes the analyses by Cha (1998), Kim (1998), and Lee, Hyo Sang (1998) regarding the three types of NP modifications in Korean. Cha argues that pseudo relative clauses behave differently from

noun complement clauses in some grammatical structures, such as in unbounded dependency constructions, extraction, alternative forms, causative causativization, negation, and concessive expressions. For instance, Cha discusses that both relative clauses and pseudo relative clauses are allowed in an unbounded dependency construction in Korean whereas noun complement clauses are not. The following example illustrates this (Lee 2000):

- (13) [John-i nuc-ess-ta-ko] Susie-ka mit-nun] sasil
 John-Nom late-Past-Dec-Com Susie-Nom believe-Adn fact
 ‘the fact that Susie believes that John was late’ (=Lee’s (2))

Cha’s claim is that *sasil* ‘the fact’ is not about “John’s being late” but rather about “Susie’s believing that John is late.” Regarding this analysis, Lee shows a counterexample. She argues that an unbounded dependency construction is still allowed within a noun complement clause, such as follows:

- (14) [[John-i ton-ul hwumchi-ess-ta-ko] Mary-ka (=Lee’s (3))
 John-Nom money-Acc steal-Past-Dec-Com Mary-Nom
 mit-ci-an-awass-ten [somwun]-i sasil-lo
 believe-not-Past.Imperf rumor-Nom fact-as
 palk-hi-e-ci-ess-ta
 reveal-Cause-Passive-Dec
 ‘the rumor that Mary did not believe that John had stolen money was proved to be true’

Lee also argues that Kim’s data (1998) is irrelevant to his own claim; pseudo relative clauses have to be treated as noun complement clauses rather than relative clauses in Korean. Kim utilizes the pronominal ending, types of NP heads, coordination with *kuliko* ‘and,’ optionality, stacking (coordination of clauses), topic markers, and indirect complement clause to examine the claim. However, Lee says that Kim’s data is not strong enough to support his own claim since many pragmatically biased sentences are found in Kim’s examples.

Furthermore, Lee (2000) attacks Lee, Hyo Sang’s observation (1998)

that noun complement clauses are the same as relative clauses based on the finiteness of the clauses. First, Lee, Hyo Sang (1998) demonstrates that neither a relative clause nor a pseudo relative clause can be a finite clause. However, along with the following counterexamples, Lee (2000) explains that it is not the case that non-finite sentences are not possible in either relative clauses nor pseudo relative clauses although the meanings of the finite sentences and non-finite sentences can be distinguished (Lee 2000:14-15):

- (15) Relative clause
 [haksayng-tul-i cohaha-n-ta]-nun chayk (=Lee's (29a))
 student-Pl-Nom like-Pres-Dec-Adn book
 'the book that the students like'
- (16) Pseudo relative clause
 [pap-i tha-n-ta]-nun naymsay-nun alkoponi (=Lee's (30a))
 rice-Nom burn-Pres-Dec-Adn smell-Top after.checking
 ttek-i tha-nun naymsay-i-ess-ta.
 rice.cake-Nom burn-Adn smell-Nom-Past-Dec
 'the smell of burning rice is proved to be the smell of
 burning the rice cake.'

Second, Lee (2000) provides her analyses to support her argument that pseudo relative clauses can be analyzed as noun complement clauses rather than relative clauses. Lee utilizes gaps, resumptive pronouns, pseudo-cleft sentences, quantifier scope ambiguity, and negative polarity items as evidence.

Since both Korean and Japanese have similar constructions regarding the three types of NP modifications, the next section will compare Lee's data in Korean with semantically identical data in Japanese. We will discuss whether or not Lee's analysis is applicable to the Japanese data and whether it is possible to see the same syntactic and semantic behaviors in these two languages.

4. Application of Lee's (2000) analysis to Japanese data

In this section, we will apply Lee's analysis (2000) regarding the three constructions to Japanese data and examine whether the Japanese data shows the same behaviors as the Korean data in Lee's analysis such that pseudo relative clauses are actually noun complement clauses rather than relative clauses.

4.1 Gaps

Lee argues that the existence of a gap clearly distinguishes relative clauses from the other two types, pseudo relative clauses and noun complement clauses. She explains that the NP heads of relative clauses are regarded as the same arguments that can fill the gaps in their pronominal clauses. On the other hand, the NP heads in pseudo relative clauses or in noun complement clauses cannot be arguments in their pronominal clauses (Lee 2000:16):

(17) a. Relative clause

[John-i __ sa-n] chayk (=Lee's (31a))
John-Nom __ buy-Adn book
'the book that John bought'

b. Pseudo relative clause

[sayngsen-i tha-num] naymsay (=Lee's (31b))
fish-Nom burn-Adn smell
'the smell of fish burning'

c. Noun complement clause

[John-i sayngsen-ul tha-i.wu-n] sasil (=Lee's (31c))
John-Nom finish-Acc burn-Cause-Adn fact
'the fact that John burned the fish'

When we compare the Korean examples with the semantically identical Japanese data, we have the same result:

(18) a. Relative clause

[John-ga ___ kat-ta] hon
John-Nom ___ buy-Past book
'the book that John bought'

b. Pseudo relative clause

[sakana-o yak-u] nioi
fish-Acc grill-Pre smell
'the smell of grilling fish'

c. Noun complement clause

[John-ga sakana-o kogasi-ta] jijitu
John-Nom finish-Acc burn-Past fact
'the fact that John burned the fish'

In (18b) and (18c), neither of the NP heads, *nioi* 'smell' nor *jijitu* 'fact' can be arguments in the modifying clauses, *sakana-o yak-u* 'grilling fish' or *John-ga sakana-o kogasi-ta* 'John burned the fish,' respectively.

4.2 Resumptive pronouns

Lee shows that the gaps in the relative clauses can be filled with resumptive pronouns whereas we cannot fill the pseudo relative clauses or the noun complement clauses with resumptive pronouns since there are not missing elements in the pseudo relative clauses or the noun complement clauses (2000:16):

(19) Relative clause

[John-i **kukes-ulo** sakwa-lul kkak-un] khal (=Lee's (32))
John-Nom with-that apple-Nom peel-Adn knife
'[literally] the knife with which John is peeling the apple **with it**'

Regarding this analysis, Japanese seems to work in the same way:

(20) Relative clause

[John-ga **sore-de/o-tukatte** ringo-o mui-ta] naihu
John-Nom that-with apple-Nom peel-Past knife
'[literally] the knife with which John is peeling the apple **with it**'

With respect to this analysis, we need to look at the data closely. The relative clause with the resumptive pronoun in (20) is grammatical. However, it is not always the case that all of the gaps can be filled with resumptive pronouns in Japanese:

- (21) a. ?? [sono hito [kare]]-ga hitori-de sannma-o yak-u otoko
 that man [he]-Nom alone saury-Acc grill-Pres man
 ‘the man who (**the man [he]**) grills saury alone (= ill-formed in English)’
- b. ?[tanuki-ga sore-o kitune-ni kik-ase-ta] hanasi
 raccoon.dog-Nom that-Acc fox-Dat listen-Cause-Past story
 ‘the story to which the raccoon dog made a fox listen (**to it**)
 (= ill-formed in English)’
- c. ?? [sono tosi-ni kare-ga Tokyoo-ni i-tta] tosi
 the year-in he-Nom Tokyo-Dat go-Past year
 ‘the year when he went to Tokyo (**in the year**) (= ill-formed in English)’

As shown in (21), the relative clauses are marginally grammatical. Therefore, it might not be reliable to adopt this analysis to distinguish relative clauses from the other two types.⁵

4.3 Pseudo-cleft sentences

Lee (2000) argues that relative clauses are distinguished from the other types, pseudo relative clauses and noun complement clauses, in terms of pseudo-cleft sentences in Korean. Lee claims that pseudo-cleft sentences are derived from relative clauses, but not from pseudo relative clauses or noun complement clauses as shown below (Lee 2000:16):

- (22) a. Relative clause
 [[John-i Mary-eykey cwun-n] kes-un] sakwa-ita.
 John-Nom Mary-Dat given-Adn thing-Adn apple-be.Dec
 ‘It is an apple that John gave to Mary.’ (=Lee’s (33a))

b. Pseudo relative clause

*[[Mary-ka kwup-nun] kes-un] naymsay-ita (=Lee's (33b))
Mary-Nom grill-Adn thing-Adn smell-be.Dec
'[literally] It is the smell that Mary is grilling.'

c. Noun complement clause

*[[Mary-ka cha-lul sa-n] kes-un] sosik-ita
Mary-Nom Car-Acc buy-Adn thing-Adn news-be.Dec
'[literally] It is the news that Mary bought a car.'
(=Lee's (33c))

The closest expression in Japanese to *kes-un ~ ita* in Korean may be *no-wa ~ da* 'it is ~ such that.' The Japanese data with '*no-wa ~ da*' in pseudo-cleft sentences would be as follows:

(23) a. Relative clause

[[John-ga Mary-ni age-ta] no-wa] ringo-da.
John-Nom Mary-Dat give-Past such that apple-Particle
'It is an apple that John gave to Mary.'

b. Pseudo relative clause

*[[Mary-ga sakana-o yak-u] no-wa] nioi-da
Mary-Nom fish-Acc grill-Pres such that smell-Particle
'[literally] It is the smell that Mary is grilling fish.'

c. Noun complement clause

[[Mary-ga kuruma-o kat-ta] no-wa] jijitu-da
Mary-Nom car-Acc buy-Past such that fact-Particle
'It is a fact that Mary bought a car.'

As we can see, concerning the grammaticality of the sentences above, both (23a) and (23c) are well-formed whereas (23b) is not. Thus, it seems that the construction with *no-wa ~ da* in Japanese distinguishes pseudo relative clauses from relative clauses and noun complement clauses, rather than distinguishing relative clauses from pseudo relative clauses and noun complement clauses. Hence, this diagnosis with pseudo-cleft sentences is not a dependable test for proving that relative clauses differ from pseudo relative clauses and noun complement clauses in Japanese.

4.4 Negative polarity items

Next, Lee utilizes negative polarity items to distinguish relative clauses from the other two types of NP modifications in Korean (Lee 2000:17-18). Lee says that the grammaticality of the sentences is different when negative polarity items, such as *amwuto* ‘anyone’ and *amwukesto* ‘anything,’ do not have their licensing negative words, such as *an(h)-* or *mos-* ‘not,’ in the same clauses in Korean:

(24) Relative clause

- a. *Na-nun [**amwuto** coaha-nun] yenghwa-lul po-ci **anh**-nunta.
I-Top anyone like-Adn movie-Acc watch not-Dec
‘[literally] I do not watch any movies nobody likes.’
(=Lee’s (34a))
- b. *[**Amwukesto** mek-nun] John-un yakha-ci **anh**-ta.
anything eat-Adn John-Top be.weak not-Dec
‘[literally] John, who eats anything, is not weak.’ (=Lee’s (34b))

(25) Pseudo relative clause

- a. Na-nun [**amwukesto** cinaka-n] huncek-ul palkyenha-l
I-Top anything pass-Adn trace-Acc find
swu eps-ess-ta.
cannot-Past-Dec
‘I could not find any trace of anything having passed by.’
(=Lee’s (35a))
- b. Na-nun [**amwukesto** tha-nun] naymsay-lul
I-Top anything burn-Adn smell-Acc
math-**ci mos** hay-ss-ta.
smell cannot-Past-Dec
‘I could not smell anything burning.’ (=Lee’s (35b))

(26) a. Noun complement clause

- Na-nun [**amwuto** kekiey ka-nun] sasil-ul yongnapha-l
I-Top anyone there go-Adn fact-Acc accept
swu eps-ta.
cannot-Dec
‘I cannot accept the fact that nobody is going there.’
(=Lee’s (36a))

- b. Na-nun [Mary-ka **amwuto** salangha-yss-ten] kyenghem-i
 I-Top Mary-Nom anybody love-Past-Adn expeience
epki-lul palan-ta.
 not.be-Acc with-Dec
 ‘I wish Mary had not had any experience of loving anybody.’
 (=Lee’s (36b))

However, this diagnosis is not applicable to the Japanese data. If we construct the three types of modifying clauses with the negative polarity items, such as *nanimo* ‘(not) anything’ and *daremo* ‘(not) anyone’ in Japanese, we cannot see the difference between relative clauses and the other two types:

(27) Relative clause

- a. *Watasi-wa [**daremo** sukina] eiga-wa mi-**na-i**.
 I-Top anyone like movie-Top watch-not-Pres
 ‘[literally] I do not watch any movies nobody likes.’
- a’. Watasi-wa [**daremo** suki-de-wa-**na-i**] eiga-wa
 I-Top anyone like-Copula-Top-not-Pres movie-Top
mi-na-i****.
 watch-not-Pres
 ‘I do not watch any movies nobody likes.’
- b. ***[Nanimo** tabe-tei-ru] John-wa yowaku-**na-i**.
 anything eat-Prog-Pre John-Top weak-not-Pres
 ‘[literally] John, who eats anything, is not weak.’
- b’. ?**[Nanimo** tabe-tei-na-i] John-wa yowaku-**na-i**.
 anything eat-Prog-not-Pres John-Top weak-not-Pres
 ‘John, who does not eat anything, is not weak.’

(28) Pseudo relative clause

- a. Watasi-wa [**[nanimo/dokomo** toor-u] miti]-o
 I-top anything/any.place pass-Pres trace-Acc
 mituker-are-**na-katta**.
 find-can-not-Past
 ‘I could find any trace of anything having passed by.’
- b. Watasi-wa [**nanimo/dokomo** koge-ru] nioi]-o
 I-Top anything burn-Pres smell-Acc
 kag-e-**na-katta**.
 smell-can-not-Past
 ‘I could not smell anything burning.’

(29) a. Noun complement clause

*Watasi-wa [**daremo** soko-ni ik-u] jijitu]o
I-Top anyone there-to go-Pres fact-Acc
ukeire-rare-**na-i**.
accept-can-not-Pres

‘[literally] I cannot accept the fact that nobody is going there.’

a’. Watasi-wa [[**daremo** soko-ni ika-**na-i**] (to iu) jijitu] o
I-Top anyone there-to go-not-Pres (such that) fact-Acc
ukeire-rare-**na-i**.
accept-can-not-Pres

‘I cannot accept the fact that nobody is going there.’

The negative polarity items are licensed by the negative words in (28a) and (28b), but not in (27a), (27b), and (29a). It seems that the scopes in negative polarity items between Korean and Japanese are different. As shown in the Japanese data above, only the sentences with pseudo relative clauses are well-formed. Thus, we can see that pseudo relative clauses are distinguished from the other two types with respect to the negative polarity items.

4.5 Quantifier scope ambiguity

Finally, Lee (2000) uses quantifier scope ambiguity to show the difference between the three types of modifying clauses in Korean (2000:19):

(30) Relative clause

Motun haksayng-tul-un [**etten** kyoswunim-i sa-si-n]
every student-PI-Top a professor-Nom buy-Hon-Adn
say cha-lul tha-poko-siph-ehayss-ta. (=Lee’s (37))
new car-Acc get.in-want-Past-Dec
‘Every student wanted to get in the new car that the professor bought.’

(31) Pseudo relative clause

Motun haksayng-tul-un [**etten** kyoswunim-i kanguiha-si-num]
every student-PI-Top a professor-Nom teach-Hon-Adn
mosup-ul hwungnaynay-ess-ta (=Lee’s (38))

gesture-Acc mimic-Past-Dec
 ‘Every student mimicked a/the professor’s teaching gesture.’

(32) Noun complement clause

Motun haksayng-tul-un [**etten** kyoswunim-i cha-lul sa-sin]
 every student-PI-Top a professor-Nom car-Acc buy-Hon
 sosik-ul tul-ess-ta. (=Lee’s (39))
 news-Acc hear-Past-Dec
 ‘Every student heard the news that a/the professor bought a car.’

Lee argues that only one reading is possible in (30) while two readings are possible in both (31) and (32). The two readings in (31) are; (i) there is a particular professor whose teaching gesture every student mimicked; and (ii) every student has his or her own professor whose way of teaching he or she mimicked. The two readings for (32) are; (i) there is a particular professor who bought a car and every student heard the news; and (ii) every student heard the news that a professor bought a car but they may not have heard this news of the same professor.

Comparing this case with the Japanese data, we cannot see a clear difference between relative clauses and the other two types.

(33) Relative clause

- a. Gakusei minna-ga [aru sensei-ga kat-ta] atarasii kuruma-ni
 student every-nom a teacher-Nom buy-Past new car-Dat
 nori-tagat-ta.
 get.in-want-Past
 ‘Every student wanted to get in the new car that a professor had bought.’
- b. Minna-ga [dareka-ga kat-ta] atarasii kuruma-ni
 everyone-nom someone-Nom buy-Past new car-Dat
 nori-tagat-ta.
 get.in-want-Past
 ‘Everyone wanted to get in the new car that someone had bought.’

In (33a), only one reading is possible; there is a particular teacher who bought a car and everyone desired to get in his/her car; the NP *aru sensei-ga* ‘a professor’ scopes over the other NP *gakusei minna-ga* ‘every student.’

On the other hand, two readings are possible in (33b). One is that there is a particular person who bought a car and everyone desired to get in his/her car; the NP *dareka-ga* ‘someone’ scopes over the other NP *minna-ga* ‘everyone.’ The other reading is that everyone wanted to get in any new car, no matter who had bought it; the NP *minna-ga* ‘everyone’ scopes over the other NP *dareka-ga* ‘someone.’

Second, it can be assumed that the one reading is more natural than the other reading although there are two possible readings in the following pseudo relative clauses:

(34) Pseudo relative clause

- a. Gakusei minna-ga [aru sensei-ga osie-ru] mane-o
 student every-Nom a professor-Nom teach-Pres mimicry-Acc
 si-ta.
 do-Past
 ‘Every student mimicked a/the professor’s teaching gesture.’
- b. Minna-ga [dareka-ga hanas-u] mane-o si-ta.
 everyone-Nom someone-Nom talk-Pres mimicry-Acc do-Past
 ‘Every student mimicked someone’s teaching gesture.’

In (34a), two readings are possible. One is that there is a particular teacher and everyone tried to mimic his/her teaching gesture; the NP *aru sensei-ga* ‘a professor’ scopes over the other NP *gakusei minna-ga* ‘every student.’ However, it is more natural to have the other reading that every student has his or her own teacher whose way of teaching he or she mimicked; the NP *gakusei minna-ga* ‘every student’ scopes over the other NP *aru sensei-ga* ‘a professor.’ Also, in (34b), the following reading is more natural; everyone knows someone whose way of talking he or she mimicked; the NP *minna-ga* ‘everyone’ scopes over the other NP *dareka-ga* ‘someone’.

Third, let us look at the quantifier scope ambiguity in noun complement clauses:

(35) Noun complement clause

- a. Gakusei minn-ga [aru sensei-ga kuruma-o kat-ta] nyuusu-o
 student every-Nom a eacher-Nom car-Acc buy-Past news-Acc
 kii-ta.
 hear-Past
 ‘Every student heard the news that the professor had bought a car.’
- b. Minna-ga [dareka-ga kuruma-o kat-ta] nyusu-o kii-ta.
 every-Nom someone-Nom car-Acc buy-Past news-Acc hear-Past
 ‘Everyone heard the news that someone had bought a car.’

The interpretation of the sentence in (35a) is not ambiguous. There is a particular teacher who bought a car and every student heard the news; the NP *aru-sensei-ga* ‘a professor’ scopes over the other NP *gakusei-minna-ga* ‘every student.’ On the other hand, the readings of (35b) can be ambiguous where it is more natural to have the reading “there is a particular person who bought a car and everyone heard the news” (the NP *dareka-ga* ‘someone’ scopes over the other NP *minna-ga* ‘everyone’) than the other reading “everyone heard the news that someone had bought a car but they may not all have the news about the same person” (the NP *minna-ga* ‘everyone’ scopes over the other NP *dareka-ga* ‘someone’).

The following chart shows the summary of this section:

	Korean			Japanese		
	Relative clauses	Pseudo relative clauses	Noun complement clauses	Relative clauses	Pseudo relative clauses	Noun complement clauses
Gaps	yes	no	no	yes	no	no
Resumptive pronouns	yes	no	no	yes/no	no	no
Pseudo cleft sentences	yes	no	no	yes	no	yes
Negative polarity items	no	yes	yes	no	yes	no
Quantifier scope ambiguity	no	yes	yes	yes/no	yes	yes/no

Thus, although Lee (2000) shows a close relationship between pseudo relative clauses and noun complement clauses in Korean by adopting the five diagnoses above, we cannot obtain all the same results in Japanese. Based on Lee's diagnoses, the three types of modifying clauses in Japanese are distinct from each other.

5. Conclusion

This paper has examined the three types of NP modifications-relative clauses, pseudo relative clauses, and noun complement clauses in both Korean and Japanese. It has compared data between the two languages based on Lee's analysis (2000). This paper concludes that the three types of NP modifications in Korean behave differently from those in Japanese. Whereas Lee claims that pseudo relative clauses can be treated as noun complement clauses in Korean, these two types of NP modifications are different in Japanese.

Notes

1. I am grateful to Dr. John Haig at the University of Hawaii at Manoa for giving me many important comments for this paper. Moreover, I thank Professor Paul Crane at the Nagoya University of Foreign Studies for his editorial help with this paper. Needless to say, all the mistakes and shortcomings in this paper are mine.
2. The following shows the list of abbreviations.

Nom = nominative case marker	Acc = accusative case marker
Dat = dative case marker	Poss = possessive case marker
Top = topic marker	
Adn = adnominal	Dec = declarative
Com = complementizer	Hon = honorific
Pl = plural marker	
Pres = present tense	Past = past tense
Prog = progressive form	Imperf = imperfect
Pass = passive form	Cause = causative form
3. Both Teramura (1969) and Lee (2000) utilize the term "noun" to discuss the

elements which are modified by clauses in the three types of constructions. However, this paper adopts the term “NP” instead of “noun” since the expression “NP” is syntactically more relevant when we consider the structures. In addition, I adjusted some of the English translations of the data in Lee for this paper.

4. Besides noun phrases involving perceptual events, Teramura (1969) and Inoue (1976) discuss other types of NP heads in pseudo relative clauses. The heads show some positions, such as *soba* ‘by/near,’ *mukoo* ‘over there,’ *ue* ‘top/above,’ and *sita* ‘under.’ Examples are shown below:

- (1) Gakusei-ga demo-o si-tei-ru soba-o keikan-ga
 student-Nom demonstration-Acc do-Prog-Pres by-Acc policeman-Nom
 toot-ta.
 pass-Past
 ‘The policemen passed the place where students were having a demonstra-
 tion.’
 (Inoue 1976:193)
- (2) Hon-ga ni-san satu tun-dea-ru ue-ni shorui-ga
 book-Nom two-three Counter pile-State-Pres top-on document-Nom
 not-tei-ta.
 be-Prog-Past
 ‘Documents are on a pile of two or three books.’
 (Inoue: 1976:193)

5. John Haig (personal communication) points out that the equivalent Korean may be marginal. Some consideration needs to be given to why resumptive pronouns can be used in (20). He adds that the resumptive pronoun argument and the gap argument could be really one. If there is no gap, obviously there is no place to put a resumptive pronoun.

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