

'On the Rise and Fall of Korean Nominalizers', in Maria José López-Couso and Elena Seoane (eds.), *Rethinking Grammaticalization: New Perspectives*, 239-264, (Typological Studies in Language 76) Amsterdam: John Benjamins.

# On the rise and fall of Korean nominalizers\*

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This paper addresses the origin and development of the system of Korean nominalizers from Old to Present-day Korean, paying special attention to their sources, the semantic changes they underwent over time, the competition between various nominalizers for the same functional domain, and the subsequent specialization of some of the forms. The study shows that, in order to avoid functional overlaps, certain nominalizers have become constrained to appear in particular contexts (e.g. *-ki* and *-ci*, restricted to affirmative and negative constructions respectively) or to express different levels of illocutionary force (e.g. *-m*, *-ki*, *-ci* and *-kes* when used as sentential end-markers). The paper also shows how certain nominalizers which overlapped functionally lost their original nominalizing function and acquired new uses in related functional spaces (e.g. the adnominalizers *-n* and *-l*, derived from old nominalizers).

## 1. Introduction

In the history of the Korean language there have been numerous nominalizers, developed from various and sometimes obscure sources. The multiplicity of forms, the diversity of grammatical functions and delicate differences in the morphosyntactic and functional behaviour of these nominalizers have attracted the attention of scholars, who have attempted to present generalizations of these phenomena. However, most authors have addressed these issues from a largely synchronic viewpoint, and as a consequence their studies lack expositions of the emergence of the various nominalizers and the interplay among them. The main objective of the current paper is to fill this gap by tracing the development of these nominalizers. Hence, the paper deals with the rise and fall of Korean nominalizers: how they emerged as grammatical forms, how they were used in historical data, how their meanings changed en route and how some of them stopped functioning as nominalizers. The paper also aims at illustrating the emergence of new grammat-

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\* This research was supported by the Hankuk University of Foreign Studies Research Fund. Special thanks go to Professors Elizabeth Closs Traugott, Hyun Jung Koo, Foong Ha Yap and Marilyn Plumlee for providing me with valuable comments and directing my attention to relevant literature, and to my research assistant Sujin Eom. All remaining errors, however, are mine.

ical functions closely related to nominalization, due to functional overlap among the nominalizers; it discusses additional functions acquired by some of the former nominalizers, specialized functions of nominalization which the present-day nominalizers began to carry and some of the entirely new functions which they obtained as a result of functional extension.

## 2. Nominalizers in history

A brief historical survey of nominalizers in Korean shows that in the Old Korean period, which extends up to the fourteenth century, six nominalizers are attested, namely *-l*, *-m*, *-n*, *-i*, *-ki* and *-ti*. An areal or genetic relationship is evident from the fact that some of these are also attested in other languages, such as Turkish, Mongolian and Manchu. For example, *-m*, *-l* and *-n* are nominalizers in Turkish (Kang 1976) and Mongolian (Poppe 1954), while *-n* is the most common nominalizer in Manchu (Möllendorff 1892) and in Old Mongolian (Poppe 1955). Among these six nominalizers, *-m* was the most widely used formative from Old Korean through Middle Korean (fifteenth and sixteenth centuries), but started to be gradually replaced by *-ki* in the Early Modern Korean period (seventeenth to nineteenth centuries). The nominalizer *-m*, in turn, was challenged by the short-lived *-ti* (and *-ci*, the later variant of *-ti*). Coexistence of these forms led to functional specializations, examples of which are the use of *-ti* and *-ci* in negative constructions and of *-ki* elsewhere (cf. Section 4.3 below). Despite gaining supremacy over *-ti* and *-ci*, the formerly dominant nominalizer *-ki* is again being gradually overridden by the periphrastic construction involving the nominal *kes* 'thing' in Modern Korean (twentieth and twenty-first centuries) (cf. Kwon 1995).

Chronologically, then, nominalizers followed the order [*-m* > *-ki* > *-kes*] as regards productivity. The current predominance of *-kes* is well illustrated by the following two facts: on the one hand, in Modern Korean it is among the most frequently used words (Choi 1994) and, on the other hand, it is one of the most versatile morphemes; in addition to its primary role as a nominalizer, it is used in complementation, clausal connection and sentential ending with diverse tense, aspect and modality functions. The present-day dominant position of *-kes* is the result of a centuries-long competition for supremacy among nominalizers.

The remaining three Old Korean nominalizers, *-l*, *-n* and *-i* disappeared early in the history of the language as productive formatives. Thus, *-l* and *-n* are now used exclusively as adnominalizers,<sup>1</sup> whereas *-i* is an unproductive derivational

1. An adnominalizer is a grammatical category of verbal suffixes which signal that the host verb modifies a noun. Three forms belong to this category in Present-day Korean: anterior adnominalizer (*-n*), prospective adnominalizer (*-l*) and simultaneous adnominalizer (*-nun*), which,

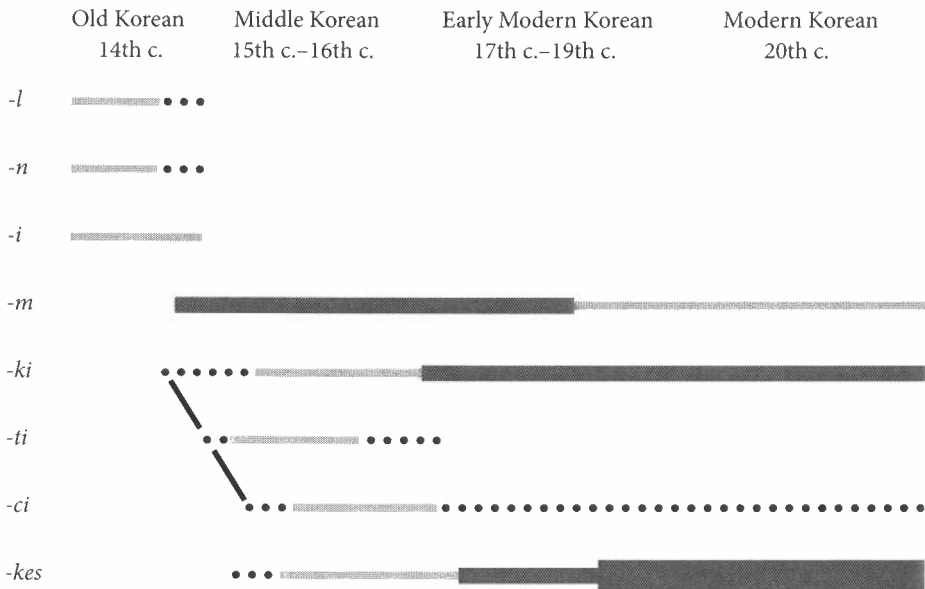


Figure 1. Diachronic development of Korean nominalizers

nominalizer whose final products survive only in fossilized forms in Modern Korean (see Sections 3.2 and 4.1 below for further discussion). The rise and fall of the Korean nominalizers just described is diagrammatically presented in Figure 1.

### 3. The grammaticalization of Korean nominalizers

#### 3.1 Sources

Nominalizers in Korean are old grams developed from diverse sources, and the origins of some of them remain unidentified. For example, the early nominalizers *-l* and *-n*, now defunct, do not have identifiable sources. As for the origin of *-i*, there has been considerable controversy. Some scholars, notably Kim (1978), Ryu (1990) and Kang (1993), among others, have advanced the claim that the nominalizer *-i* was derived from the proximal demonstrative *i*, with obvious relation to the demonstrative and personal pronoun *i*, which indexes either a thing or a person. It has also been suggested that this is the source of the nominative case marker *-i*

though distinct from tense markers, are correlated to past, future and present, respectively. See Section 4.4 for further discussion.

and of the copula *i-*. If we accept the assumptions that grammar has a foundation in cognition and that the development of grammatical functions is motivated by conceptual change (Heine 1997), the hypothetically shared origin of these grammatical markers raises the interesting implication that the pronoun, the demonstrative, the nominalizer, the nominative case marker and the copula all have some conceptual relatedness by virtue of sharing a single source, and thus there should be supporting attestations across languages. We shall return to this issue in Section 3.3 below.

Another source, which accounts for the largest number of nominalizers, is the lexeme signifying 'thing' or 'place.' The nominalizers, *-ki*, *-ti*, *-ci* and *kes* all have this source meaning, the first three even sharing the source lexeme itself (i.e. *tA* 'place').

One peculiarity associated with the source lexeme, in terms of its grammatical category, is found in the nominalizer *-m*. Hong (1957) and Kang (1993) suggest the verb *sAm-* 'regard, deem, do, make' as its source, which supposedly underwent a series of phonologically reductive changes: [*sAm* > *zAm* > *Am* > *-m*] (Kang 1993: 49, 65).<sup>2</sup> However, recruiting a verb for the development of a nominalizer seems unusual due to its lack of nominal characteristics.<sup>3</sup>

### 3.2 Uses of nominalizers

The nominalizers *-l* and *-n*, though thought to have been actively used in Old Korean (Lee 1974; Hong 1983a), occur very infrequently in Middle Korean literature and completely disappear in Modern Korean. Examples (1a–b) illustrate the use of *-l* and *-n* in their nominalizing function as attested in Middle Korean.<sup>4</sup>

#### (1) Middle Korean

- a. *olh-i*                      *taA-l*                      *ep-kenAl*  
       this.year-NOM exhaust-NMLZ not.exist-as  
       'as this year doesn't (seem to) end' (1577, *Palsimswuhayngcang* 36)

2. As Marilyn Plumlee points out (personal communication), the change from /s/ to /z/ would imply a fortification rather than a reduction and, therefore, the *reductive process* should be considered as having involved some fluctuation. Likewise, the deletion of /z/ without intermediate stages may seem unnatural. The Old and Middle Korean phoneme /z/, which disappeared completely in Modern Korean, in fact survives either as /s/ or /w/ in Present-day Korean.

3. Verbs, however, seem to serve indirectly as a source of nominalizers. One of the reviewers points out that verbs have been noted as sources of deictics, which, in turn, become sources of nominalizers.

4. The Extended Yale Romanization (Rhee 1996) was used for transliteration of the Korean data.

- b. *alph-Ay hehA-sya-n tai hA-syosye.*  
 front-at allow-HON-NMLZ according.to do-HON.OPT.END  
 'Please do (it) according to the previous permission.' (1463,  
*Pephwakyeng Enhay* 2: 138)

In (1a), the nominalized clausal subject *taAl* 'exhausting, reaching the end' of an embedded causative sentence occurs without a nominative case marker, an omission which is common in Korean. Since the main verb in this clause is unambiguously *ep-* 'not exist,' the nominal status of *taAl* is unequivocal and so is the nominalizer status of *-l*. Likewise, in (1b) the necessity of a nominal host for the prolativ case marker *tai* 'according to' leads to the interpretation of *hehAsyan* as a nominal and, consequently, to the interpretation of *-n* as a nominalizer.<sup>5</sup>

The use of *-i* for nominalizing verbs, adjectives, nouns and even onomatopoeic words was among the most productive derivational processes in Middle Korean (cf. Section 4.1 below). Its application was extensive, used for varied functions. One of these was to designate individuated entities, such as the nomenclature of animals and persons named after the use of their typical sounds or their characteristic shapes, as shown in (2), where the onomatopoeic word is combined with a nominalizer. Other functions of nominalizer *-i* were to derive eventive nominals, as shown in (3a), or propositional nominals, as in (3b) below.

- (2) a. Middle Korean  
*kulyek-i* 'wild goose' (lit. 'one that makes the sound of 'kulyek")  
 b. Middle Korean  
*pwuheng-i* 'owl' (lit. 'one that makes the sound of 'pwuheng")  
 c. Modern Korean  
*ttwungttwung-i* 'a fat person' (lit. 'one that looks 'ttwungttwung")
- (3) Middle Korean  
 a. *seng ssa-ø sal-i-lAl sicakhA-nila.*  
 castle build-NFIN live-NMLZ-ACC begin-END  
 'He built the castle and began a life (there).' (1458, *Welinsekpo* 1: 44)  
 b. *wuli pap mek-i mAch-atun*  
 we meal eat-NMLZ finish-if  
 'when we finish eating' (1517, *Penyek Nokeltay* 1: 55)

5. The prolativ marker *-tai* also originated from *tA* 'place' and, therefore, the nominalizer *-n* could have been (re)analysed as an adnominalizer. The categorical fluctuation between these two grammatical functions may have been affected by context-induced reinterpretation in such situations (Heine et al. 1991).

As for the development of the *-ti* class of nominalizers (i.e. *-ti*, *-ki* and *-ci*), there are contradictory claims as to the order of emergence between *-ti* and *-ki* (cf. Lee 1991 vs. Hong 1983a). Scholars generally agree, however, that *-ci* is definitely a later development. The difficulty in establishing the order is attributable to the fact that both *-ti* and *-ki* are attested in Old Korean, albeit infrequently. By Middle Korean they become more widely used and there are many instances in parallel texts which indicate that they are interchangeable in this period (Shim 1990). However, the use of *-ki* became increasingly frequent from Middle Korean, driving out its rival *-ti* and even infringing on the domains occupied by its older and more widely-used competitor *-m*. With *-ki* gaining power, *-ti* gradually changed to *-ci* through a then widespread phonological change of palatalization, which eventually resulted in the total disappearance of *-ti* by Early Modern Korean times. An interesting aspect of this change is that, with the disappearance of *-ti*, *-ki* came into competition with *-ci*, which was relegated to a peripheral role, that of nominalization in negative sentences (cf. Section 4.3 below). In Modern Korean *-ki* is still a very productive nominalizer. Illustrative examples of the nominalizers *-ki*, *-ti* and *-ci* as used in early texts are given in (6a–c).

## (6) a. Middle Korean

*cyemun nah-ay kulsu-ki-wa kal psu-ki-wa pAyho-ni*  
 young age-at write-NMLZ-and sword use-NMLZ-and learn-as  
 'as I learned writing and fencing at a young age' (1481, *Twusienhay*  
 I.7: 15)

## b. Middle Korean

*pephuy-lo kyecip sam-ti hA-si-nila.*  
 religious.joy-with wife regard-NMLZ do-HON-END  
 'He regarded his religious joy as his wife [i.e. thus kept celibacy].'  
 (1575, *Wenkakkyeng* 3: 77)

## c. Early Modern Korean

*tut-ci kAcang saylop-tota.*  
 hear-NMLZ very be.new-EXCLAM  
 'It is truly a new thing to hear.'/'To hear it is very refreshing.' (1632,  
*Twusienhay* II.17: 16)

Finally, the grammaticalization of *kes* has received much attention (cf. notably Yoon 1995; E. Kim 1996; Sohn 1997; Park 1999). Despite its obvious lexical status as a noun, it lacked syntactic autonomy (Wang 1988) and semantic specificity as far back as the earliest extant data, a fact suggesting that it had considerably lost its *syntagmatic variability* (Lehmann 1995) and that its meaning had been generalized as a result. In fact, Middle Korean *kes* is generally classified as a member of a class of defective nouns, which includes a large number of substantives which could not appear by themselves and had to occur obligatorily with a modifier. These defective nouns had bleached meanings, such as 'time,' 'place,' 'person,' 'thing,' 'cause,' and so on, but *kes* gradually expanded its context of use and replaced other defective nouns (Wang 1988; Jung 1991; E. Kim 1996). Among the earliest examples of *kes* are those given under (7a) and (7b) below.

## (7) Middle Korean

- a. *mul-ey-s kes-i-mye mwuth-uy-s kes-i-mye*  
 water-at-GEN thing-COP-and land-at-GEN thing-COP-and  
 'whether it be a thing in the water or a thing on the land [i.e. fish or animal]' (1459, *Welinsekpo* 1: 11)
- b. *thayca-s-pep-un kecusmal-Al ani hA-si-non kes-i-ni*  
 prince-GEN-rule-TOP lie-ACC not do-HON-ADNZ thing-COP-as  
 'since the prince's rule states that princes should not tell a lie' (1447,  
*Sekposangcel* 6: 25)

### 3.3 Semantic change

Given that grammaticalization is a process whereby the grammaticality of a linguistic form increases and that grammaticality involves both meaning and function, semantic change constitutes an important concomitant of grammaticalization and, thus, it is sometimes even equated with grammaticalization. However, as Traugott (personal communication) points out, despite strong correlation, equating semantic change with grammaticalization is erroneous, since there are numerous instances of semantic change which do not involve grammaticalization. In addition, distinguishing between lexical semantic change and grammatical semantic change is useful, the latter being more regular than the former (cf. Lessau 1994: 756). Since it is hypothesized that grammaticalization is actuated by semantic changes (cf. Traugott and Dasher 2002: 283; see also Fleischman 1982; Bybee et al. 1994; Hopper and Traugott 2003), a discussion of the semantic changes occurring in the course of the development of the Korean nominalizers from their known sources is called for.

The first semantic and functional change to be considered is that associated with the development of the nominalizer *-i*, whose emergence, as mentioned in Section 3.1, involved a demonstrative which was also the source of the demonstrative and personal pronoun *i*, the nominative case marker *-i* and the copula *i-*. Let us examine the relatedness of these forms in their semantic and functional aspects from a crosslinguistic viewpoint.

The relation between demonstrative and pronoun seems to have a strong conceptual motivation. In its most primitive form, probably accompanied by a gestural sign, a demonstrative functions as a device to index an entity in the real world. A pronoun, in turn, is a more grammaticalized use of the demonstrative to index an entity according to the paradigmatic organization of means of reference. This is an instance of semantico-pragmatic change of a linguistic form from the *de re* domain to the *de dicto* domain. As a matter of fact, it is common for a proximal demonstrative 'this' and a proximal pronoun signifying 'this person, this thing' to share a source, as evidenced by the demonstrative-pronoun relations in English *this*, French *il* from the demonstrative *ille* in Latin, Pharaonic Egyptian *pw* (Gardiner 1957), Lezgian *a/am* (Haspelmath 1993), Turkish *o* (Lewis 1985) and Early Eastern Australian Pidgin English *dat* (Baker 1995), as discussed in Traugott (1980), Casad (1984), Givón (1984), Heine and Reh (1984), Diessel (1999), Heine and Kuteva (2002) and numerous others.

The relation between nominalizer and pronoun is also conceptually motivated in that both are devices which enable speakers to refer to an entity. Horie (1998) and Yap et al. (2004), focussing on the fact that Japanese *-no* as a sentential nominalizer involves events or propositions, suggest that the pronoun involves

reference to first-order entities (i.e. things), whereas the sentential nominalizer involves reference to second-order and third-order entities (i.e. events and propositions, respectively). This relation is also evident in Korean. Thus, for instance, *ku kes* (literally 'that thing'), involving the nominalizer *kes*, is the source of the non-human third person pronoun *kukes*. The change is so minimal, and apparent only in the orthographic representation where deletion of the intervening space between the two morphemes occurs, that some Koreans still write it as two separate words, obviously due to the formal transparency of its phrasal origin in the source construction.

The evolution of the nominative marker *-i* from the demonstrative is also very interesting. In *Hyangga*, an Old Korean literary genre written with Chinese characters, the selection of the Chinese characters for content items was based on their meaning, whereas for functional items, such as case particles and endings, it was based on either their sound or their meaning. In this genre, the nominative marker was often indicated by a Chinese character *si*, meaning 'this,' or by *i*, which has the phonetic value [i]. Therefore, it is reasonable to hypothesize that a reanalysis of the type illustrated in the change from (8a) to (8b) below was involved in the genesis of the nominative marker, which is immediately reminiscent of the development of the subject from the topic (cf. Li and Thompson 1976).

(8) Middle Korean

- a. *seycon i sangtwusan-ay ka-si-a* [...]
 

Buddha this Mt. Sangdu-to go-HON-and  
'Buddha, this went to Mt. Sangdu and [...]
- b. *seycon-i sangtwusan-ay ka-si-a* [...]
 

Buddha-NOM Mt. Sangdu-to go-HON-and  
'Buddha went to Mt. Sangdu and [...]' (1447, *Sekposangcel* 6: 1)

From the viewpoint of reanalysis, through which semantic and functional change comes about, a similar account can explain the development of the copula *i-*, the only difference being that the former pronoun and demonstrative follows the complement, preceding the sentential end-marker, thus lending itself to a reanalysis as the marker of a predicate. The development of a copula from a demonstrative following a topic is also attested in ancient Egyptian (cf. Gardiner 1957 and Koelle 1968, as discussed in Lehmann 1995).

From a semantic point of view, it was indicated in Section 3.1 that most nominalizers developed from nouns denoting 'thing' or 'place,' which suggests that, despite their significant level of abstraction in current use, their relation to the grammatical function is intuitively transparent. This direct relationship between the source semantics and the resultant grammatical function lends support to the source determination hypothesis, which states that the actual meaning of the

grammaticalizing construction uniquely determines the grammaticalization path and the resulting grammatical meaning (cf. Bybee et al. 1994:9). The nominalizers *-ti*, *-ki*, *-ci* and *kes* illustrate this, the first three sharing a common source *ti* ‘thing,’ further traceable to *tA* ‘place’ (Hong 1983a).

As for the source of *kes*, Hong (1983a) suggests that it developed from *kes/kas/kach*, which formerly meant ‘thing, skin, surface.’ In this regard, the form encoding the concept of ‘skin, surface’ of a thing extended its use to refer to the thing itself, a case of synecdoche. Incidentally, Modern Korean has a form *keth* meaning ‘skin, fur, surface, appearance,’ whose pronunciation is identical with that of *kes* in many phonological environments. The semantic change from ‘thing’ to the hard-to-define grammatical meaning of nominalizer did not occur in one fell swoop, but involved many intermediate changes (cf. Park 1999). What we witness first is the change from ‘thing’ primarily referring to entities which are tangible, highly individuated and often generic, as in (9a) and (9b), to any conceptual entities which are intangible and abstract, as in (9c), where *kes* shows phonological reduction into *ke*.

(9) Modern Korean

- a. *mul-ey-s kes*  
water-at-GEN thing  
‘thing(s) in the water/fish’
- b. *mek-ul kes*  
eat-PROSP.ADNZ thing  
‘thing(s) to eat/food’
- c. *insayng-i-la-nun ke-y cham teseyps-ta.*  
life-be-COMP-ADNZ thing-NOM truly be.ephemeral-DECL  
‘The thing which is called “life” is truly ephemeral.’/‘Life is truly ephemeral.’

Further semantic generalization occurs in order to include events, states or activities. It is at this stage that *kes* can be used to nominalize propositional content by virtue of its ability to refer to conceptually complex entities, thus acquiring the status of a full-fledged nominalizer, as illustrated in the following contemporary example:

(10) Modern Korean

- ku-ka ecey cwuk-ess-ta-nun kes-i-pnita.*  
he-NOM yesterday die-PST-COMP-ADNZ thing-COP-END  
‘The thing is that he died yesterday.’/‘He died yesterday.’

The semantic changes associated with *kes*, however, do not stop here. It further loses whatever little semantic content it still retains, to refer to not only almost any-

thing, be it an entity, event or proposition, but also something which cannot be conceptually identified. In other words, the semantic content of *kes* is completely lost, as is shown in the examples under (11) below, where even native speakers cannot identify the referent of *kes* and are unable to distinguish the propositional meaning of (11a) and (11b) from that of their counterparts without nominalization, (11a') and (11b'), except that the former sound more formal and carry a sense of assertiveness on the part of the speaker.

(11) Modern Korean

- a. *palo kuttay cenhwa-ka o-n kes-i-ta.*  
right then phone-NOM come-ANT.ADNZ thing-COP-DECL  
'Right then the phone rang.'
- b. *loma-nun kulehkey myelmangha-n kes-i-ta.*  
Rome-TOP so perish-ANT.ADNZ thing-COP-DECL  
'Rome fell like that.'
- a'. *palo kuttay cenhwa-ka o-ass-ta.*  
right then phone-NOM come-PST-DECL  
'Right then the phone rang.'
- b'. *loma-nun kulehkey myelmangha-ess-ta.*  
Rome-TOP so perish-PST-DECL  
'Rome fell like that.'

The series of semantic changes of *kes* can be characterized as semantic generalization through metaphor, since its referential domain was expanded from a concrete to an abstract domain. However, as we have seen in the last stage of semantic generalization, the semantic content of *kes* is completely lost and only its function survives. It may be for this reason that the nominalizer *kes* has been subject to massive phonological reduction, often resulting in [k]. In other words, *kes* seems to be unable to resist reductive changes due to the loss of its semantic content.<sup>6</sup> On the other hand, the concomitant phonological reduction renders its lexical source opaque and promotes the development of other epistemic functions, marking the speaker's attitudes toward the proposition. We shall return to this issue in Section 4.4 below.

The semantic change undergone by the nominalizer *-m*, whose alleged origin is the verb *sAm-* 'regard, consider' (cf. Kang 1993; also Section 3.1 above), shows an interesting aspect of human conceptualization. The nominalizer *-m* can func-

6. There are grammatical markers which once involved *kes* in their source constructions, from which *kes* disappeared due to extensive reduction. For instance, the topic marker *-lan* developed from *-lako hanun kesun*, which literally means 'as for the thing that people call x.' See Rhee (2004b) for a discussion of extensive paradigmatic change in grammar due to this type of extreme formal reduction.

tion with a wide variety of syntactically complex forms, but when it is used with a simple verb, the derived nominals often refer to concrete entities, as shown in the examples listed in (12).

(12) Modern Korean

- a. *cwi*- 'grasp' > *cwum* 'fist'
- b. *ssawu*- 'struggle' > *ssawum* 'fight'
- c. *el*- 'freeze' > *elum* 'ice'
- d. *kuli*- 'draw' > *kulim* 'picture'

These examples show that the verb–noun relationship mediated by the nominalizer *-m* is construed as one where the effected entity (the noun) is regarded as integral to its effecting event (the verb). Thus, for example, in (12a) above, the noun 'fist' is an effected entity of the action of 'grasping.'

#### 4. Specialization of nominalizers in Modern Korean

We have seen in the preceding sections that several nominalizers have existed in the history of the Korean language, each experiencing its own rise and fall. Most of them have survived up to Modern Korean, at least in form, therefore constituting an extreme form of layering (Hopper 1991; Hopper and Traugott 2003); in other words, the old forms and the new forms exist side by side carrying the same or similar functions. Multiple forms coexist and compete for primacy of use in the function concerned, leading to a situation where a small number of forms are predominantly used, whereas all others are relegated to secondary options, usually chosen for genre or register-specific sub-functions. This is exactly the state of affairs in Korean nominalization. As mentioned in Section 2 above, the nominalizer *kes* is most frequently used in Modern Korean. All other forms are less common and less productive than *kes*, and each of them has its own specialization, resulting in meaning differences or different levels of illocutionary force when used as sentential ending functions. We now turn to a discussion of differences among the nominalizers available in the language in Present-day Korean.

##### 4.1 Differential levels of abstraction

The nominalizer *-i* has the sole function of naming entities derived from onomatopoeic words (see Section 3.2 above). A large lexical set of names of fish, insects and birds has been formed through this process. Moreover, in child language many land-animals and inanimate entities have such names. Some examples of this phenomenon in child language are given in (13).

## (13) Modern Korean

*ttallang-i* 'rattle' (lit. 'one that makes the sound "ttallang"')*kkwulkkwul-i* 'pig' (lit. 'one that makes the sound "kkwulkkwul"')*ppangppang-i* 'car' (lit. 'one that makes the sound "ppangppang"')

For verbs and adjectives, the nominalizers show distinct patterns of nominalization in order to derive names of concrete or abstract entities. Their division of labour in Modern Korean is such that, of the three competing nominalizers, *-i*, *-m* and *-ki*, only one is allowed for each word in the process of deriving a fully-fledged noun, whereas either one or both of the other two are allowed for gerundival-nominalization. This is illustrated in Table 1, which shows that *-i* is the least productive and is never utilized to derive a gerund. Table 1 further shows that *-m* and *-ki* are both very productive in deriving fully-fledged nouns and gerunds. Considering how productive *-i* is reported to have been in lexicalization until Middle Korean, when it was applicable to verbs, adjectives, nouns, onomatopoeia, personal names, etc. (cf. Song 1992; Section 3.2 above), we conclude that its function has considerably weakened over time.

Table 1. Entity-name derivation by nominalizers in Modern Korean

STEM	<i>-i</i>	<i>-m</i>	<i>-ki</i>
<i>ket-</i> 'walk'		<i>kelum</i> 'pace'	Gerund
<i>mwut-</i> 'ask'		<i>mwulum</i> 'question'	Gerund
<i>wus-</i> 'laugh'		<i>wusum</i> 'laughter'	Gerund
<i>mek-</i> 'eat'	<i>meki</i> 'food'	Gerund	Gerund
<i>pel-</i> 'earn'	<i>pelu</i> 'income'	Gerund	Gerund
<i>phwul-</i> 'solve'	<i>phwuli</i> 'solution'	Gerund	Gerund
<i>talli-</i> 'run'		Gerund	<i>talliki</i> 'running'
<i>tenci-</i> 'throw'		Gerund	<i>tenciki</i> 'throwing'
<i>teha-</i> 'add'		Gerund	<i>tehaki</i> 'addition'
<i>twulyep-</i> 'be afraid'		<i>twulyewum</i> 'fear'	Gerund
<i>kippu-</i> 'be glad'		<i>kippum</i> 'joy'	Gerund
<i>sulphu-</i> 'be sad'		<i>sulphum</i> 'sorrow'	Gerund
<i>kwut-</i> 'be hard'		Gerund	<i>kwutki</i> 'hardness'
<i>kwulk-</i> 'be thick'		Gerund	<i>kwulki</i> 'thickness'
<i>sey-</i> 'be strong'		Gerund	<i>seyki</i> 'strength'
<i>noph-</i> 'be high'	<i>nophi</i> 'height'	Gerund	Gerund
<i>kil-</i> 'be long'	<i>kili</i> 'length'	Gerund	Gerund
<i>kiph-</i> 'be deep'	<i>kiphi</i> 'depth'	Gerund	Gerund

On the other hand, the nominalizer *kes* exhibits an interesting pattern of behaviour. In terms of its categorical status, *kes* is still a noun and is syntactically treated as such. Therefore, it requires an adnominal form preceding it, examples of which are *-l* for prospective, *-nun* for simultaneous or *-n* for anterior with respect

to reference time,<sup>7</sup> as shown in (14), where *kes* shows ambiguity between a noun-reading and a nominalizer-reading.

(14) Modern Korean

- a. *ku-ka mek-ul kes*  
 he-NOM eat-PROSP.ADNZ thing/NMLZ  
 'thing that he will eat'/'that he will eat'
- b. *ku-ka mek-nun kes*  
 he-NOM eat-SIM.ADNZ thing/NMLZ  
 'thing that he eats'/'that he eats'
- c. *ku-ka mek-un kes*  
 he-NOM eat-ANT.ADNZ thing/NMLZ  
 'thing that he ate'/'that he ate'

In view of the fact that *-i*, though unproductive, largely participates in lexicalization, and that *kes* shows the highest level of productivity, even turning a propositional sentence into a nominal, the level of conceptual abstraction is lowest with the *-i*-nominalization and highest with the *kes*-nominalization. As for the relative degrees of abstraction with *-m* and *-ki*, there seems to be some variation. However, the examples in (15) below suggest that the *-m*-nominalization has a relatively lower degree of abstraction than the *-ki*-nominalization, in the sense that the meaning of the latter tends to be more procedural than that of the former.<sup>8</sup>

(15) Modern Korean

<i>sal-</i>	'live'	<i>cwuk-</i>	'die'	<i>wus-</i>	'laugh'
<i>salm</i>	'life'	<i>cwukum</i>	'death'	<i>wusum</i>	'laughter'
<i>salki</i>	'living'	<i>cwukki</i>	'dying'	<i>wuski</i>	'laughing'
<i>sanun kes</i>	'to live'	<i>cwuknun kes</i>	'to die'	<i>wusun kes</i>	'to laugh'

#### 4.2 Differential levels of morphosyntactic bondedness

Differing specialization among the nominalizers entails differences in syntagma. The three nominalizers at issue have considerable freedom in selecting syntactic constituents as objects for nominalizing processes. For instance, *-ki* and *-m* can

7. Note, however, that these adnominal markers may accompany an epenthetic vowel /u/.

8. The notion of the relative degree of abstraction is a tricky issue, and the situation here may be more relevant to quantification, as pointed out by Yap (personal communication). The two nominalizers indeed show different behaviour as to quantification; for example, the quantifier is more compatible with *-m*-nominalization than with *-ki*-nominalization. This difference itself seems to be due to different levels of abstraction of reified events and of perception of 'nouniness' of the resultant nominals.

take finite clauses marked with the past tense for nominalization, which, in the case of *kes*, is done by selecting an anterior adnominalizer, as shown in (16).

(16) Modern Korean

*ku-ka hakkyo-ey* {*ka-ss*-{*ki*, *m*}, *ka-n-kes*}  
 he-NOM school-to {go-PST-{NMLZ} go-ANT.ADNZ-NMLZ}  
 'that he went to school'

However, despite their apparent freedom, there are differences between them regarding morphosyntactic bondedness. For example, the three competing nominalizers show different levels of acceptability depending on the morphosyntactic complexity of the nominalized constituents. The examples in (17) below show that *-ki* is the least compatible and *kes* is the most compatible with clausal nominalization, with *-m* occupying a middle level of compatibility.

(17) Modern Korean

- a. *ku-ka phathi-ey ka*-{\**ki*, ?*m*, √*nun kes*}-*ul al-a?*  
 he-NOM party-to go-{NMLZ}-ACC know-Q.END  
 'Do you know about his going to the party?'
- b. *ku-ka keki-ey ka*-{\**ki*, ?*m*, √*nun kes*}-*un isangha-ta*.  
 he-NOM there-at go-{NOMZ}-TOP be.strange-DECL  
 'His going there is strange.'

### 4.3 Affirmative vs. negative specialization

One of the interesting phenomena in the division of labour among nominalizers is that *-ki* and *-ci*, both originating from the same lexical source (cf. Lee 1991; Kang 1993; also Section 3.1), exhibit specialization in terms of the affirmative vs. negative distinction of the proposition being nominalized. In their historical forms *-ki* and *-ti*, these two formatives were interchangeable as nominalizer/complementizer until Middle Korean (cf. Song 1973, 1977), when the specialization gradually took place, with *-ti* increasingly occurring with syntactic negation constructions, as in (18b), or lexical negation constructions, as in (18c).<sup>9</sup>

(18) Modern Korean

- a. *na-nun hakkyo-ey ka-ki caymiiss-ta*.  
 I-TOP school-to go-NMLZ be.interesting-DECL  
 'I like going to school.'/'For me it is fun to go to school.'
- b. *ku-nun hakkyo-ey ka-ci anh-ass-ta*.  
 he-TOP school-to go-NMLZ be.not-PST-DECL  
 'He didn't go to school.'

9. In both (18b) and (18c) *-ci* is the palatalized modern counterpart of *-ti*.

- c. *ku-ka hakkyo-ey ka-l-ci molu-n-ta.*  
 he-NOM school-to go-PROSP-NMLZ not.know-PRES-DECL  
 'I don't know if he will go to school.'

Rhee (2004a) suggests that *-ci* began as a simple nominalizer and then extended its function to a complementizer in Modern Korean. The implication of this extension is that the nominalizer *-ki*, which was formerly unable to take future-marked finite clauses for nominalization, can now take any type of finite clause as complement with the aid of the anterior adnominalizer *-n*, the simultaneous adnominalizer *-nun* and the prospective adnominalizer *-l*.

#### 4.4 Adnominalizer vs. nominalizer specialization

In an exploration of the paths of development of nominalizers in the history of Korean, the most intriguing phenomenon is the one displayed by the former nominalizers *-l* and *-n*. Despite their use in the nominalizer function in Middle Korean, they are used exclusively as adnominalizers in Modern Korean, *-l* being a prospective adnominalizer and *-n* functioning as an anterior adnominalizer. This functional change from nominalizer to adnominalizer is interesting in that the two functions, though obviously related,<sup>10</sup> belong to two distinct grammatical categories, one an adjective (i.e. modifier), the other a noun (i.e. modified). Some of the early examples of *-l* and *-n* nominalization are given in (19a–b).

- (19) a. Middle Korean  
*nolay-lAl nooy-ya sulphu-l-s eps-i*  
 song-ACC repeat-and be.sad-NMLZ-GEN not.exist-ADVR  
*pulu-nAni [...]*  
 sing-and  
 'repeat the song and sing it without being sad [sadness] and [...]'  
 (1481, *Twusienhay* I.25: 53)
- b. Early Modern Korean  
*tek-i-ye pok-i-la ho-n-Al naA-la*  
 virtue-COP-and happiness-COP-COMP do-NMLZ-ACC advance-PURP  
*o-soita.*  
 come-HON.HORT  
 'Please come to offer the gifts named 'Virtue' and 'Happiness'.' (1610, Tongtong; *Akhakkweypem* II 5: 8)

10. Cf. Nishi (2005) and Yap and Matthews (this volume) for Japanese *-no*; Shin (2005) for Mandarin *de*; Noonan (1997, this volume) for Bodic languages; DeLancey (1986), Noonan (1997) and references therein for Tibeto-Burman.

In the above examples, *-l* and *-n* are unequivocally nominalizers by virtue of their hosting a case marker (genitive and accusative, respectively). What is interesting is that in Middle Korean there were numerous adnominalizers which depended on such modal notions as indicative, subjunctive and purposive as well as tense–aspect distinctions (cf. Lee 1992: 276–282). These adnominalizers invariably contain *-n* for past or anterior and *-l* for future, prospective or undetermined tense. This implies that the Modern Korean adnominalizers date back to Middle Korean, and that Middle Korean adnominalizers had nominalizer functions (Lee 1967; Kim 1975). An examination of the attestations of Middle and Early Modern Korean data where *-l* and *-n* carry the nominalizer function, as (19a–b) above, reveals that they indeed carry the semantic properties with respect to these tense–aspect distinctions.<sup>11</sup> In view of the fact that *-l* and *-n* were among the oldest nominalizers in Korean, as in other typologically related languages, it can reasonably be hypothesized that they were nominalizers with tense–aspect distinctions from the beginning, which, with the other competing nominalizers emerging as a new layer in the nominalizer domain, diverted their paths onto the adnominalizers. The ultimate specialization of these former nominalizers was, therefore, semantically motivated under the pressure of their emerging competitors which had freedom with respect to tense–aspect distinctions.

There has been some controversy as to the developmental direction between adnominalizers in relative clauses and nominalizers (cf. DeLancey 1989; Genetti 1992, 1994; Noonan 1997; Hennesy and Givón 2002, among others). The direction of the development between these two functions in *-l* and *-n* in Korean is by no means conclusive because of the lack of extensive data showing their original functions prior to Middle Korean. For the same reason, neither can we determine whether the development is related to the availability of appositive interpretation of relative clauses, as suggested by DeLancey (1986).<sup>12</sup>

11. Traugott (personal communication) points out that nominalizers are not often tense–aspect markers. However, some recent work on Guaraní and aboriginal languages suggests that nominals can also be marked for tense or aspect. Modern Korean nominalizers allow co-occurrence of tense–aspect markers, though they do not mark tense and aspect by themselves, in clear contrast with the Old and Middle Korean nominalizers *-l* and *-n*. As suggested by Traugott, this issue merits further research.

12. Yap (personal communication) points out that the adnominalization function typically involves embedding, which is a more conservative context (Bybee et al. 1994), and may be exposed to a lesser degree of reductive processes of grammaticalization. It is thus possible to hypothesize that there has been no directional change and that the adnominalizer function had been the original function of *-l* and *-n* which persisted over a long time. What we know from the limited data available is that both *-l* and *-n* were formerly fully-fledged nominalizers and are now exclusively adnominalizers.

#### 4.5 Sentential end-marking functions

It is common for linguistic forms to acquire new functions in related domains in the course of grammaticalization. In the grammaticalization of Korean nominalizers, there arose other diverse functions which are intricately interrelated, those of complementizer, adverbializer, clausal connector and sentential end-marker, whose boundaries are often not discrete (cf. Rhee 2004a). In the process of the emergence of these functions, different semantic, syntactic and pragmatic mechanisms operate, largely triggered by the functional and conceptual similarities among them. Of special importance here is their sentential end-marking function with special illocutionary and modal forces.

The nominalizer *-m* can be used to mark the end of a sentence, a function almost restricted to posted prohibitive orders, either by explicitly expressing prohibition, as in (20a), by far the most common structure, or by presenting a factual statement which induces prohibitive interpretation, as in (20b).

(20) Modern Korean

- a. *cinipha-ci mos ha-m.*  
enter-COMP NEG do-END  
'Do not enter.'/'No entering.'
- b. *ilpangthonghayng-i-m.*  
one.way.thoroughfare-COP-END  
'This road is one-way.'

On the other hand, *-ki* rarely functions as a sentential end-marker, its use being restricted to those oral contexts where the suggestions are not assertive but only suggestive. This is often used by children in casual play situations, as shown in (21).

- (21) *nolli-ki eps-ki*  
ridicule-NMLZ not.exist-END  
'Don't ridicule me!'/ 'No ridiculing.'

The lack of assertive force of *-ki*-ending sentences contrasts starkly with its derived form *-ci* in its sentential ending function. While *-ci* in its nominalizer/complementizer function is restricted to negative contexts in embedded clauses (cf. Section 4.3 above), in its sentential end-marking function it has no restriction as to negative vs. positive distinctions, as shown in the following examples.

(22) Modern Korean

- a. *nay mal an tut-ko mos payki-ci.*  
my word NEG listen-and NEG bear-END  
'You cannot endure without following my instruction.'/'You cannot help obeying me.'

- b. *ku salam cham coh-un salam-i-ci*  
 the person very good-ADNZ person-COP-END  
 'He is a nice person indeed!'
- c. *ese cip-ey ka-ci*  
 quick house-to go-END  
 'Why don't you go home right away!'

The sentential end-marker *-ci* in the above examples encodes the speaker's emotion, belief or determinative attitude to the proposition (cf. Rhee 2004a).<sup>13</sup> This semantic characteristic seems to have been inherited from its complementizer function. However, there has been a long drawn-out controversy as to the semantic features of *-ci*, often leading to contradictory characterizations of the marker. For example, Martin (1992:453) labels the sentence end-marker *-ci* as *suspect*, thus claiming absence of assertive force by virtue of its being low on the scale of epistemic certainty. By contrast, Jang (1973), Ko (1976), Suh (1984) and many others, while agreeing that it encodes supposition, maintain that its meaning relates to promises, agreement-seeking, proposal and so on, all involving a certain degree of speaker's conviction. The apparent lack of confidence in sentences marked with *-ci* seems to be attributable to the use of the suppositive morpheme *-keyss* which often co-occurs with it.

Of particular importance to the development of the sentential end-marking function among the nominalizers is that of *kes*, which, as seen in Section 2 above, is one of the most versatile morphemes in Modern Korean, forming diverse grammatical markers, with varying degrees of morphosyntactic transparency. Since it is still a noun in terms of grammatical categorization (cf. Sections 3.2 and 4.1), it requires all the morphosyntactic trappings needed by regular nouns in order to function properly. Thus, when it develops into a sentential end-marker, it recruits a copula and a sentence-type indicator. Since the construction in which *kes* participates needs the sentence-final morphemes, the construction is, strictly speaking, a constellation of penultimate sentence-final morphemes rather than the sentence end-marker per se. One of the most commonly used grammatical markers involving the nominalizer *kes* is *-lkesi-*, whose function is to serve as the marker of the future tense. In turn, the sentential end-markers *-lkei-*, *-nkei-* and *-nunkei-*, in which *kes* occurs in the eroded form *ke*, express the speaker's attitude and conviction about the proposition (cf. Yap et al. 2005 for Chinese; Yap and Matthews, this volume). This development seems to be attributable to the calquing of the English construction 'the thing is that . . .' (Choi 1994) through extensive language

13. The determinative force associated with the ending *-ci* is prominent in the construction *x-ci y-ka anita* 'it is x, not y.'

contact.<sup>14</sup> In addition to the most conservative form *-lkesi-*, there exist diverse variant forms, such as *-lkei*, *-kke*, *-kel*, *-key*, *-lkeya*, *-lkkeya*, *-lkkel* and *-lkkey*, among others (and *-nkyo*, *-kki*, *-kkelo*, etc. in dialectal varieties; Kim 1990). The use of *kes*-forms in sentential ending is illustrated in the following examples.

(23) Modern Korean

- a. *nayil-un pi-ka o-lkesi-ta.*  
tomorrow-TOP rain-NOM come-FUT-DECL  
'It will rain tomorrow.'
- b. *ta cwuki-epeli-lkei-a.*  
all kill-PFV-END-END  
'I will kill you all!'
- c. *kuttay ku-ka o-nkei-a.*  
then he-NOM come-END-END  
'Right then he came.'

Another set of endings developed from *kes* is that comprising *-nkel*, *-nunkel* and *-lkel*, which often mark the speaker's subjective feeling of helplessness about a past event, a current state of affairs or a future event, respectively. When a sentence with one of these endings is uttered with a slight rising intonation, it carries a protest overtone to the addressee. A closely related development is that of the sentence ending with a prospective adnominalizer. For instance, one of the functions of *-lkel* is to mark the speaker's regret about a past event. The final element in these endings, *-l*, is an accusative marker which indicates that the sentence is an elliptical structure, and the entire construction is, in fact, an accusative-marked nominalized clause. Development of sentential endings from ellipsis is a common phenomenon in Korean (cf. Rhee 2002), and the meanings associated with the elided elements come to be associated with the meanings of the non-elided element through pragmatic inference. Therefore, the meanings of the original non-elided counterparts of the examples in (24) below are something akin to 'What should I do with the fact that I ate all the food?' or 'I did not study then despite the fact that I should have studied harder.'

(24) Modern Korean

- a. *pap-ul ta meku-nkel.*  
food-ACC all eat-END  
'I ate it all! [What can I do since there is nothing left?]'

14. Marilyn Plumlee (personal communication) raises a question as to this calquing effect, primarily because the construction 'the thing is that ...' in English belongs to a formal register, and thus shows low frequency of use. This issue certainly deserves further investigation.

- b. *kuttay kongpwu-lul yelsimhi ha-lkel.*  
 then study-ACC diligently do-END  
 'Oh, I should have studied harder then.'

Another sentential ending which developed from *kes* is *-lkey*, which carries a promissive function, thus being restricted to first person subject, declarative sentences, as in (25a–b).

(25) Modern Korean

- a. *nay-ka sathang sa-cwu-lkey.*  
 I-NOM candy buy-give-END  
 'I will get you some candies.'
- b. *nay-ka kkok o-lkey.*  
 I-NOM exactly come-END  
 'I promise I will come.'

As was the case with other nominalizers (see above), *kes* also has a sentential ending function in the form *-lkes*, as illustrated in the following examples, which are commonly found in posted signs of prohibition or instructions.

(26) Modern Korean

- a. *tuleo-ci ma-lkes.*  
 enter-COMP stop-END  
 'Don't enter!'
- b. *oyncok-ulo tol-lkes.*  
 left-to turn-END  
 'Turn left.'

## 5. Conclusion

This paper has aimed to show the different kinds of nominalizers which have been used in Korean throughout history, their origins and the way in which they coped with the cramped situation in the functional domain of nominalization. We have seen that, over the period of approximately 1,500 years for which attestations exist, there have been numerous nominalizers in use in Korean. Their origins can be traced to lexemes with such meanings as 'place,' 'thing,' 'this' or 'regard.' In the course of time, under pressure from other competitors, some nominalizers reverted to specialization in a function which had previously been only partially associated with them, as shown by the fact that the *-n* and *-l* nominalizers developed into adnominalizers. On the other hand, the nominalizer *-i*, succumbing to paradigmatic pressure, lost productivity and survives only in some fossilized forms.

While most nominalizers still available in Modern Korean have a wide variety of uses with relative syntagmatic freedom, the nominalizers involving *kes* surpass all others, ranging from a nominalizing use to a sentential ending function with diverse subjectified meanings encoding the speaker’s stance. The development of *kes* into other grammatical domains seems to be triggered by its formal opacity due to reductive phonological changes.

Abbreviations

ACC	accusative	NEG	negation
ADNZ	adnominalizer	NFIN	non-finite
ADVR	adverbializer	NMLZ	nominalizer
ANT	anterior	NOM	nominative
COMP	complementizer	OPT	optative
COP	copula	PFV	perfective
DECL	declarative	PROSP	prospective
END	sentential ending	PRS	present
EXCLAM	exclamative	PST	past
FUT	future	PURP	purposive
GEN	genitive	Q	question marker
HON	honorific	SIM	simultaneous
HORT	hortative	TOP	topic

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