

Korean Modality - Asymmetries between Possibility and Necessity

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1. Introduction

This paper confronts Korean expressions of possibility with those of necessity. Korean is quite rich in expressions of these modal notions and uses some rather peculiar strategies, although partial parallels exist in Japanese. Since many different ways of analyzing and labeling modal categories have been proposed, we start by defining some of the concepts and terms we use in this paper to study Korean modality in section 2. Several Korean markers and constructions with possibility or necessity functions are presented in section 3. In section 4, we take a closer look at the conditional constructions with modal functions. Section 5 examines some ongoing processes of grammaticalization, which occur predominantly in the field of necessity.

2. Modality: Possibility and necessity and their internal structure

Possibility and necessity have many things in common. Since Aristotle, they have been defined as being interrelated through the equivalences given in (1a) and (1b).

- (1) a. it is possible that x = it is not necessary that not x
- b. it is necessary that x = it is not possible that not x

Many terms have been used to identify subtypes of modality, both in logic and in linguistics. In our opinion, a basic distinction is that between what we will call “situational modality” and the clearly different category of “epistemic modality”. Situational possibility and situational necessity arise from the current conditions, which can be either general circumstances of the situation or, as in (2), a permission or obligation which is posed:

- (2) a. John **may** leave now (situational possibility)
- b. Men **must** take off their hats in church (situational necessity)

A clearly distinct subtype, which has long been recognized as such, is that of epistemic possibility and necessity. Unlike situational modality illustrated in (2), epistemic modality is concerned with the judgment of the speaker as to the likelihood of a state being in effect. *May* stands for epistemic possibility (an uncertain supposition) in (3a), and *must* for epistemic necessity (or probability) in (3b).

- (3) a. She **may** be his sister.
 b. They **must** be related.

Situational and epistemic modality can be conceived of as parallel in a certain sense, as with epistemic possibility and necessity, the evidence allows and compels the speaker to make the claim, respectively. In English, this conceptual parallel is reflected in the expressions: The modals used in epistemic senses ((3a) and (3b)) also have (older) situational functions. In ongoing work based on a sample of 200 languages, we have found that generally identity of situational and epistemic markers (mostly verbs) is characteristic of Europe, whereas languages in other continents tend to use distinct expressions for the two categories. In chapter 3 we will show that in Korean too, the overlap in expression of the two realms is sporadic.

Some languages make further distinctions in the field of what we have called “situational modality”. In this paper, we use the fairly elaborated terminology of van der Auwera & Plungian (1998: 80-83). Four types are distinguished in this model: participant-internal, participant-external, deontic, and epistemic, with deontic being a subtype of participant-external. Participant-internal modality (possibility in (4a) and necessity in (4b)) is the result of an internal condition of the participant concerned, i.e. an ability or a need.

- (4) a. Boris **can** get by with sleeping five hours a night.
 b. Boris **needs to** sleep ten hours every night for him to function properly.

In both cases, the possibility to sleep little or the necessity to sleep a lot exist because of Boris’s biological rhythm, which is internal to him. In contrast, participant-external possibility (5a) and necessity (5b) originate in outside circumstances.

- (5) a. To get to the station, you **can** take bus 66.
 b. To get to the station, you **have to** take bus 66.

In these examples, the possibility or necessity is effected by the city's public transport system, which the participant cannot influence. A special case of participant-external modality, called "deontic modality" by van der Auwera & Plungian (1998: 81), is singled out if the origin of the modality is another person or social conventions. Examples of deontic modality were already given above to illustrate the wider field of situational modality. In (2a), the speaker permits John to leave, i.e. we are dealing with deontic possibility (=permission), and (2b) is an instance of necessity due to a social convention, i.e. deontic necessity. We will return to these distinctions in section 3.2, but can already state that generally the three subtypes of situational modality cannot be clearly related to dedicated expressions in Korean. Therefore we will base the following discussion on the dichotomies (i) possibility versus necessity, and (ii) situational versus epistemic modality (see table 1).

Table (1): The basic square of modality

	situational	Epistemic
Possibility	To get to the station, you can take bus 66.	She may be his sister.
Necessity	Men must take off their hats in church.	They must be related.

3. Inventory of grammaticalized possibility and necessity markers in Korean¹

In the discussion of Korean possibility and necessity expressions, we mostly follow Wymann (1996) with some modifications and additions from more general descriptions of Korean grammar. What Wymann (1996: 94-127) calls "deontic" modality is re-labeled "situational", in accordance with what we said in chapter 2.

1. Like Wymann (1996: iii), we use the Yale system for consonants and the McCune-Reischauer system for vowels in transcription. Highlighting in the example sentences is ours. We also uniformized the glosses and abbreviations.

3.1. Situational possibility

One construction for expressing situational possibility involves the existential copula combined with the a lexical noun *su* meaning “possibility”, “means”, as in (6).

- (6) halapöci-nün wüncöha-si -I su (-ka) iss -üsi -ta²
 grandpa-TOPdrive -HON-PSP way-NOM exist-HON-FS
 “My grandfather can drive” (Sohn 1994: 348)

This is an instance of participant-internal possibility (in this case the capacity to drive). The same marker can appear in epistemic senses too (see section 3.3.), but we classify it as situational on the basis of the evidence of An *et. al.* (1995), where the 1615 tokens from their school book corpus are listed under “Possibility” (“can”) and not “Expectation” (“might”). In the function of permission (i.e. deontic possibility), a different type of construction is used. It comprises a concessive or conditional clause marked by *-to* “even though” or *-myöñ* “if” and an evaluative clause like *coh-ta* “it is good”. Examples of this conditional type are given in (7)-(10):

- (7) ne-nün ka-to coh -ta
 you-TOP go-although be:good -FS
 “You may go” (Sohn 1994: 348)
- (8) kongwön -ülo ka-myöñ³ coh -kess -süp -ni -kka
 park -LOC go -if be:good -EN -SLS -IND -FS
 “May (I) go to the park?” (Wymann 1996: 101)
- (9) cö kuk kyöng citae-e tülöka-si -myöñ an toe -p -ni -ta
 that state borderzone-LOC enter -HON-if NEG become-SLS-IND-FS
 “(One) may not enter the state border zone there” (Wymann 1996: 101)

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2. Wymann (1996: 111ff.) considers unmodified *su iss-ta* to be exclusively epistemic. However, further instances of its use as a non-epistemic possibility marker are given by Lewin (1970: 211) and Martin (1992, 785: “a possibility, a likelihood” and “ability, capacity”).
3. This suffix is used in plain conditional clauses, whereas *-to* is adversative (“even if”).

- (10) Yongho-nŭn ilccik ca **-to** **kwaenchanh-a**.
 Yongho -TOP early sleep -although be:okay -FS
 “I permit Yogho to go to bed early” (Sohn 1996: 348)

The semantic content is always very similar: “it is okay even if you go”, hence “you may go”. While only two conjunctive suffixes may be used (*-myŏn* “even if”, “although” and *-to* “if”), a variety of items are found in the second part of the expression, from *coh-ta* “be good” to *kwaenchanh-a* in (10) or similar lexical ones like *munje ŏps-ta* “there is no problem” (Chung 1991: 95). The most frequent combination for “Permission” in the count made by An *et al.* (1995) is *-myŏn toe-ta*. For a similar construction with necessity meaning, see 3.2.

3.2. Situational necessity

According to Wymann (1994: 76 and 1996: 106), the central construction is the one with the “modal suffix” *-ya*⁴ as shown in (11).

- (11) i pyŏnci -lŭl ilk **-ŏ -ya ha-n** -ta
 this letter -ACC read -CS -SN do-PRS -FS
 “(He) must read this letter” (Wymann 1996: 106)

The precicate *ha(n)-ta* is interchangeable with *toe-ta* (12) or *kess-ta* (13).

- (12) hankuk sahoe -e ttonŭn sekye sahoe -e naaka
 Korea society -LOC as:well:as world society -LOC make:progress-
 hwaltong ha **-ya toe** -kess -ŭp -ni -ta
 activity do -SN become -EN -SLS -IND -FS
 “(They) must make progress and be active both in the Korean and the world
 society” (Wymann 1996: 108)

4. A marker *-ya* “only as for” (Sohn 1994: 343) is still alive in modern Korean. Martin (1992: 937) derives *-ya* from Middle Korean *-za* “only if it be; if (it be), when it comes to; even, indeed”. That means that this necessity suffix too is of conditional origin. However, synchronically it is clearly different from the conditional constructions listed below due to the absence of negative elements which would make the construction stand for “it won’t do if you don’t...”.

- (13) cõ yeppũ -n kaũl san -ũl
 yonder be:lovely -ADN autumn mountain -ACC
 kũl -yõ po-a -ya -kess -ta⁵
 paint -CS see-CS -SN -EN -FS
 “(I) should try to paint that lovely autumn mountain” (Wymann 1996: 107)

Similar in substance, but of a different origin is the marker *yo*, which is derived from the noun *philyo* “necessity”. In the written language, the full form is used. However, Wymann (1996: 105) records an example of reduction to *yo ha-* “there is necessity, (one) must” :

- (14) kũ kõs -ũn sukko -lũl yo ha -n -ta⁶
 that thing -TOP consideration -ACC SN do -PRS -FS
 “(We) must consider that” (Wymann 1996: 105)

Corresponding to the possibility expression of the type “even if you go, it is okay” described in section 3.1, necessity too can be expressed in Korean by a conditional clause. This involves a negation of appropriateness:

- (15) na -nũn il ha -ci anh -ũmyõn an toe -n -ta
 I -TOP work do -NLR not:be-if NEG become -PRS-FS
 “I must work” (Wymann 1996: 109)

The structure “it is not becoming if I don’t work” is conventionalized here as an expression of situational necessity, i.e. “I must work”. Compared to *-ya-* constructions, this type takes second place, e.g. it does not appear in the non-negated necessity slot alongside with *-ya* in An *et al.* (1995), unlike the conditional-based possibility constructions discussed in section 3.1. Several minor (i.e. less frequent or less expressive) constructions are also available for necessity, all containing an element of negativity or unpleasantness: *an tũrõlssudo õps-* “cannot help but” (Chung 1991: 80), *su bakke õps-* “have no

5. Here, the suffix *-ya* combines with a future/epistemic suffix under deletion of the auxiliary *ha-ta* “do” (Wymann 1996: 107).

6. This example shows reduction of noun *philyo* “necessity” to a modal suffix *-yo* made by “some speakers” (Wymann 1996: 105).

choice but” (literally “there is nothing outside of”, Lewin 1970: 51), *-ya-mal-kkŏl*. “will have to” (literally: “be bound to complete”, Lewin 1970: 114), and – more notably – a combination of the bleached noun *kŏs* “thing” with the copula, as shown in (16).

- (16) *cŏltaelo külae -sŏ -nŭn an toe -l kŏs i -ta*⁷
 absolutely this.way -Sfx-Sfx NEG become -PSP thing COP -FS
 “(One) should not do that” (Wymann 1996: 114)

While it can be argued that Korean makes a distinction between participant-internal possibility (*su iss-ta*, example (6)) and participant-external possibility (the conditional periphrases in (7)-(10)), the functional division is less clear with the expressions of situational necessity. The fact that Martin (1992: 825) equates the conditional construction in (15) with “should, ought to” could be taken to suggest that it stands for participant-external necessity (of the deontic subtype), whereas *-ya* ((12)-(13)) would then convey primarily participant-internal necessity. However, we cannot make such a claim on the basis of the Korean data. Possibly a distinction of strong (*-ya*) versus weak necessity (periphrases) comes into play here as well.

3.3. Epistemic possibility

In section 2.2 we have stated that Korean is a language which on the whole uses separate markers for situational and epistemic modal contexts. However, one exception is the possibility construction *su iss-ta*. Example (6) shows a situational reading of this modal, but epistemic readings as in (17) clearly predominate (Wymann 1996: 111ff.).

- (17) *Kŭle -l su iss -ta*
 so -PSP way exist -FS
 “It may be so.” (Martin 1992: 785)

As with situational modality (sections 3.1 and 3.2), we again find that alternative means exist to encode epistemic modality in Korean. For possibility this

7. The function of this construction is predominantly epistemic (see section 3.4).

includes *kǎs* “thing” combined with a predicate *kath-ta* “it seems” (18), or a clause *ci molǔnta* “I don’t know whether” (19). Note that none of these constructions resemble the periphrases involving conditionals like the ones used for situational modality discussed in 3.1 and 3.2 (of the type “it’s okay if you go” for “you can go” and “it is not becoming if you don’t go” for “you must go”).

(18) pǎsǔ -ka nǔc -ǔl kǎs kath -ta⁸
 bus -NOM be:late-PSP thing seem -FS
 “The bus may be late” (Wymann 1996: 136)

(19) Mince -nǔn kǎki iss -ǔl ci molǔ -n- -ta
 Minca -TOP there stay -PSP whether not:know -PRS -FS
 “Minca might be there.” (lit.: I am not sure whether Minca is there.) (Sohn 1996: 349)⁹

3.4. Epistemic necessity

Example (18) in section 3.3 illustrates that *kǎs* “thing” combined with a predicate *kath-ta* stands for epistemic possibility. The same noun combined with the copula *i-ta*, as in (20), results in an epistemic necessity meaning.

(20) kǔ salam phikonha -l kǎs i -ǎ -yo
 that man tire -PSP thing be -SLS -FS
 “He must be tired” (Wymann 1996: 140)

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8. The noun *kǎs* “thing” is used in several possibility and necessity meanings, which evolved out of something like “the thing is that”: *kǎs ani-ta* (negated, for non-epistemic impossibility), *kǎs kath-ta* (with “seem”, for epistemic possibility), *kǎs i-ta* (with the copula for epistemic necessity, volition or even weak non-epistemic necessity). Obviously the source meaning can be grammaticalized into several slots due to its general meaning of emphasis.
9. There is also an ellipsis of the construction in (19). Martin (1992: 900) gives the example *Kǔ ai ka oy atul in ci pelus i ǎps-ta* “Maybe the boy is an only son, the way he lacks manners”. Martin (1992: 455) glosses *-ci* as “the uncertain fact whether”.

Besides this canonic structure, some expressions involving *kǎs* are found in (spoken) Korean which show effects of morphophonetic erosion. The phrase *kǎs i-ta* “must” can be contracted in spoken Korean to *kǎs-ta*, which can be considered a new modal auxiliary (21). Furthermore, the combination of *kǎs* with a suffix *-ǔl* can appear with a deleted following predicate as a new clause-final suffix *-kǎl* (22).

(21) *nǎ i tongne sal -kǎs-ta*
 you.SG this village live -EN-FS
 “You must live in this village (I assume)” (Wymann 1996: 145)

(22) *kǔ salam -i h -ae -ss -ǔl -kǎl*
 that man -NOM do -CS -PAST -PSP -EN
 “He must have done it” (Wymann 1996: 146)

One more highly grammaticalized marker deserves attention in this context: the marker *-kess* (< *key iss-*). It has been labeled “future”, “dubitative”, “indirect reasoning”, or “presumptive/intentional”. According to Martin (1992: 613) *-kess* marks an indefinite future action or a non-future probability statement; Wymann (1996: 146) analyzes *-kess-* as an epistemic necessity modal with a zero tense morpheme. It is not surprising that linguists hesitate between tense and modality readings. It has often been observed that futurity and epistemic modality are closely related notions (Bybee *et al.* 1994: 280).

4. Possibility and necessity compared

Table (2) is based mainly on the discussion by Wymann (1996) and the selection made by An *et al.* (1995), where the relevant figures (non-negated modal values) are: “Possibility”: *su iss-ta* (1615, connected with the English equivalents “can” and “be able to”), “Permission”: 1. *-myǎn toe-ta* (41) 2. *-ǎ-to toe-ta* (5), 3. *-ǎ-to coh-ta* (3, connected -probably erroneously- with an English equivalent “had better”), “Need”: 1. *-ǎ-ya ha-ta* (1107), 2. *-ǎ-ya toe-ta* (18, “must”, have to), “Expectation”: 1. *-ǔl kǎs-i* (618), 2. *-ǔl thei* (95, “will, may, might”).¹⁰ Table (1) contains what we take to be the prominent expressions of

10. The authors do not distinguish between epistemic possibility and necessity but rather between “Possibility” (which we take to include epistemic uses) and “Expectation”. The latter also covers epistemic necessity.

modality in Korean (in the order given). Conditional-based types are marked with a (c).

Table (2): Central modal constructions of Korean

	situational	epistemic
Possibility	<i>su iss-ta, -myŏn toe-ta</i> (c)	<i>su iss-ta, kŏs kath-ta</i>
Necessity	<i>-ŏ/a-ya ha-ta, -ci anh-ŭmyŏn an toe-ta</i> (c)	<i>kŏs i-ta, -kess-</i>

It becomes clear that the conditional-based type is confined to situational modality, though not all expressions found in the situational fields are conditionals. The clearly transparent non-epistemic necessity modal with a conditional origin (*-ci anh-ŭmyŏn an toe-ta*) contains the conditional construction which encodes situational possibility and double negation. We will examine this further in section 5. Generally, in contrast with the pattern found in European languages, epistemics are distinct from situational modality (with the exception of the ambiguous possibility marker *su iss-ta*). The *kŏs*-constructions (originally expressions of focus) are only used marginally in situational senses.

Typologists disagree on the relationship of the two basic concepts of modality, possibility and necessity. According to Hengeveld (forthcoming), “obligation seems to be encoded by grammatical means more often than permission”. He supports this with the observation that Quechua (spoken mainly in Bolivia and Peru) has a suffix that is combined with the copula to express situational necessity, but no equivalent for possibility. King (1998) takes the opposite view, based on a typological sample of 150 languages. He argues that necessity tends to be most periphrastic when compared to possibility and volition.

We will take up the Korean evidence towards this issue first by comparing the conditional-based constructions for situational possibility and necessity. Wunderlich (1981: 41) and Horn (1991: 97), with a foreboding in Döhmann (1974: 66, 72), have substantiated the claim that languages exploit double negation ((23a)=(1a)) only for expressions of necessity, and not the mirror image in (23b)=(1b) for possibility, which is logically on the same level. Sentence (24) from Bangla (also called “Bengali”, an Indo-European language spoken in Bangladesh and India) illustrates this kind of necessity expression.

- (23) a. it is necessary that x = it is not possible that not x
 b. it is possible that x = it is not necessary that not x

- (24) o *na hese parlo na*
 he NEG laughing could not
 “He had to laugh” (lit.: “He couldn’t not laugh”, Dasgupta 1980: 114)

Japanese has conditional-based modal constructions of the Korean type, and Akatsuka (1992: 3) has interpreted these as possibility-based.¹¹ As in Japanese, the Korean necessity construction contains double negation ((26)=(15)), the possibility counterpart ((25)=(9)) does not.¹²

- (25) cõ kuk kyõng citae-e tũlõka-si **-myõn an toe** -p -ni -ta
 that state borderzone-LOC enter -HON-if NEG become-SLS-IND-FS
 “(One) may not enter the state border zone there” (Wymann 1996: 101)

- (26) na -nũn il ha **-ci anh -ũmyõn an toe** -n -ta
 I -TOP work do -NLR not:be-if NEG become -PRS-FS
 “I must work” (Wymann 1996: 109)

Akatsuka (1992: 9, footnote 4) noted that Korean too has a possibility-based system. Are Akatsuka’s claim that necessity is modeled on possibility and the well-known Aristotelian equivalence (“necessary-x” equals “not-possible not-x”) one and the same claim? In other words, is the Korean case identical to the Bangla strategy of (24)?

In both Bangla and Korean, the necessity construction comprise the material used to express possibility and two negators. But there is a difference: The Bangla example in (24) contains a straightforward modal *parlo* “could”. Korean does not have such a one-word modal. Instead, in a Korean sentence like (26)

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11. She uses the terms “permission” and “obligation”, which in our view are subtypes of possibility and necessity respectively.
 12. The negative marker in (25) affects the whole proposition; the result is denied permission (i.e. “must not enter”, Wymann’s “may not”). The absence of a non-negated example of *-myõn toe-ta* for “may” in the literature (e.g. in the description by Martin 1992: 325) is conspicuous. However, we cannot conclude that only *coh-ta* “be good” and not *toe-ta* “become” can be used in this expression as Wymann (1996: 101) does list *-myõn toe-ta* as a combination that occurs in the function of situational possibility.

the double negation is applied to a structure which is conventionalized as a possibility expression (25), but contains something which was originally different, viz. a statement that “it is okay (even) if” the action is performed. The morphemes *-myōn* “if” and *toe-ta* “become” are still productive in their original functions. So in (26) necessity is not expressed by a combination of double negation with a simple possibility marker, but instead a complex conditional structure which functions as one expression of possibility in Korean is involved. That is not exactly the same as the Aristotelean equivalence “necessary x = not-possible not-x”. What other reasoning could be involved in the Korean necessity expression then? In our opinion, the explanation can resort to what logicians call *modus tollens*, as in (27), with a pragmatic inference illustrated in (28).

- (27) 1. if not-x then not-y
 2. y
 3. hence x (negation of not-x)
- (28) 1. if you don't do x, it is not good
 2. you want what is good
 3. hence you (must) do x

Thus it is not simply a logical notion of possibility from which the Korean expression of necessity is derived. An alternative explanation of the Korean necessity structure exists: *modus tollens* with a pragmatic inference (29). Therefore, Korean is not like Bangla, where necessity is expressed by a combination of possibility and double negation (24). However, it is also true that the Korean necessity periphrasis is bulkier than the possibility equivalent as it contains two negators, which can be taken as support for the “relative periphrasis” hypothesis concerning necessity made by King (1998).

5. Instances of ongoing grammaticalization

In a second step of comparing possibility to necessity, we will try to establish which of these domains is subject to more grammaticalization in Korean. Beginning with the situational subtype, i.e. the central markers *su iss-ta* and *-myōn toe-ta* (possibility) compared to *-ō/a-ya ha-ta* and *-ci anh-ūmyōn an toe-ta* (necessity): What can be observed is that the most frequent possibility marker *su* can still function as a lexical noun meaning “way”. The necessity marker *-ya*, on the other hand, is a suffix and it automatically triggers a certain

connective suffix (-*ǒ/a-*) to which it is attached, with variation only as to the auxiliary. Both semantic as well as morphosyntactic criteria point to a higher degree of grammaticalization in the necessity field. Furthermore, a particular combination (-*ya* with the future/epistemic necessity marker *-kess* plus an auxiliary *ha-ta*) is often shortened in such a way that the predicate *ha-* is elided (-*ya-kess-ta*, Wymann 1996: 107).

In the conditional periphrasis of possibility, both *-myǒn* “if” and *toe-ta* “become” can be replaced by competing morphemes; with necessity on the other hand, the competitors of *-ci anh-ǔmyǒn an toe-ta* are more expressive than a simple “must”. There is thus greater syntactic fixation (i.e. grammaticalization) with the necessity periphrasis. Among the other, less frequent markers of situational possibility and necessity, it is noteworthy that the noun *philyo* “need” is being grammaticalized to a new suffix *-yo* in spoken Korean (Wymann 1996: 105), again in the realm of necessity.

Findings are parallel with the epistemic subtype. For necessity, we find an affix *-kess*¹³ as a central marker, whereas in the possibility field, the morphemes *su* “hand, way” and *kath-ta* “seem” have lexical status.

As to the (mostly epistemic) constructions with *kǒs* “thing”, we again find that the necessity item *kǒs i-ta* undergoes more grammaticalization than *kǒs kath-ta* (epistemic possibility). Of the phonetically and syntactically reduced forms of *kǒs i-ta*, Lewin (1970: 114-122) lists both *kǒs-ta* and *-kǒl*, but equates the first only with the emphatic reading as in “it is a fact”. Additionally he lists a form *ke ta < kǒs i-ta*, which he labels “umgangssprachlich” ([“colloquial”], Lewin 1970: 94). It is probably safe to say that various reduced forms of *kǒs i-ta* – also in the function of epistemic necessity – have arisen in spoken Korean, and that these are gaining ground in the written language as well. There are no indications of parallel processes affecting *kǒs kath-ta* “may”.

Unlike the observation that with conditional periphrases used in modal functions it is the expression of necessity which is more complex (see chapter 4), the evidence of ongoing grammaticalization processes supports Hengeveld (forthcoming): They tend to render the necessity marker more grammaticalized than the possibility counterparts.

13. It should be mentioned once again, though, that the analysis of this affix as an epistemic modal rather than a future tense is not adopted by all authorities.

6. Conclusion

In this paper we have surveyed modal constructions in Korean and classified them using the parameters “possibility” versus “necessity” and “situational” versus “epistemic” (chapter 3). We then examined whether the Korean data support King’s claim that necessity tends to be encoded in a more periphrastic and less grammatical way (King 1998) or whether the opposite is true, as argued by Hengeveld (to appear).

With regard to this, we first compared a particular type of modal constructions: conditional periphrases of the type “it is okay even if...” for “can” and “it won’t do if not...” for “must” (chapter 4). The necessity expression is the more complex one as it involves double negation. However, it is not a simple word meaning “can” or “may” that is involved here, so the Korean necessity periphrasis may not represent a straightforward double negation of possibility. We think that *modus tollens* with a pragmatic component is involved: “it won’t be good if not...” , “but you want to...”, hence “you must”.

In chapter 5, we showed that processes of grammaticalization affect situational necessity markers much more than expressions of situational possibility. This phenomenon is not limited to cases of conditional periphrasis, where the necessity expressions are longer in substance and can therefore be seen as a more likely target of reduction. Furthermore, grammaticalization of necessity in Korean is also greater with the epistemic subtype.

All things considered, Korean cannot be cited as a very clear case of higher grammaticalization of possibility or necessity. While in the case of the peculiar conditional periphrasis the necessity expression is more complex and bulkier in substance, the larger number of grammaticalization processes occur in the necessity field.

Abbreviations

ACC- accusative, ADN- adnominalizer, CS- connecting suffix, EN- epistemic necessity, FS- final suffix, HON- honorific, IND- indicative, LOC- locative, NLR- nominalizer, NOM- nominative, NEG- negator, PSP- prospective, PRS- present, Sfx- suffix, SG-singular, SLS- speech level suffix, SN- situational necessity, TOP- topic-contrast

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