

Grammaticalization of Future-Time Reference Markers in Korean and Thai: A Focus on Morphosyntax and Conceptual Motivation

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ABSTRACT

Contemporary Korean and Thai both have a number of forms that denote the future-time reference. The grammatical statuses of these forms are widely variable in terms of their morphosyntax, and thus, there exists some debate about whether some of them can be regarded as future tense markers. By virtue of the dynamic, panchronic nature of grammaticalization theory, there is an advantage in viewing the change, both holistically and microscopically, from the historical source lexeme, if available, to the grammatical forms and functions in the contemporary states of the languages. An investigation into the grammaticalization patterns of the broadly defined future-time references in the two languages reveals a number of interesting features. Future-time references in the two languages developed from very different lexical sources, e.g., TEMPORAL POSTERITY and MODE in Korean as compared with KNOWLEDGE and TEMPORAL PROXIMITY, as well as contextually inferred IMMINENT REALIZATION in Thai. The two languages also exhibit idiosyncrasies reflecting typological features, e.g., argument omissibility and agglutination in Korean and strong pragmatic orientation, verb serialization, and preference for polylexemic units in lexicalization and grammaticalization in Thai. Despite the differences in conceptual sources and developmental paths, Korean and Thai show commonalities in the modal functions of the future-time reference markers, which lends support to the thesis that these modal notions are strongly connected to the notion of futurity across languages. Also notable is that in Thai, reinforcement is often observed, supposedly for boosting perceptual salience and conceptual strengthening in grammaticalization.

Keywords: future; grammaticalization; conceptual motivation; Korean; Thai

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INTRODUCTION

Living in the spatio-temporal dimension, all humans supposedly have linguistic means, whether lexical or grammatical, of expressing future.¹ It is apparent that the future is conceptualized differently from the present and the past, as was famously noted by Lyons (1977, p. 677): “[f]uturity is never a purely temporal concept; it necessarily includes an element of prediction or some related modal notion”. Korean and Thai, two genealogically unrelated (Koreanic vs. Kra-Dai), typologically distinct (agglutinating vs. isolating), and geographically distant (Northeastern vs. Southeastern Asia) languages, are among the languages of which the presence of future tense markers has been debated (e.g., Kim, 2019 and Hong, 2008 for Korean; Dahl, 1985 and Srioutai, 2007 for Thai). The controversy is largely due to the forms carrying modal functions in addition to referring to a future-time. Modals, or modality markers, signal various relationships to reality or truth, including epistemic (possibility, certainty, counterfactuality, unexpected information, etc.), evidential (direct, inferred, conjectural, hearsay, etc.), attitudinal (desirable, undesirable, etc.), and volitional (intentional, tepid, unintended, etc.). The future-time markers tend to be closely associated with conjecture, possibility, intention, ability, evaluation, predestination, determination, prediction, obligation, etc. (see discussion on the functions of Korean future markers below; also see DeLancey, 1997; Elliott, 2000). As some of these modal notions become prominent, overshadowing the function of marking future-time, researchers become increasingly reluctant to label the form as a future/futurity marker. Furthermore, in some cases, the forms behave much like lexical items rather than grammatical formants. For instance, linguistic forms denoting a future time may not belong to a grammatical category but, rather, to a primary category such as nouns (e.g., *tomorrow*, *next year*, etc. in English), in which case the forms may not be regarded as grammatical forms *per se*. However, linguistic categories are gradient, not discrete, thus temporal nouns carrying the adverbial function of indicating a future time (e.g., *I leave tomorrow* in English) may be viewed as having departed the nominal category, and thus be considered, albeit minimally, grammaticalized in terms of their function (cf. ‘decategorialization’ and ‘extension’; Hopper & Traugott, 2003[1993]; Kuteva et al., 2019).² If we acknowledge that a form carrying certain modal notions closely related to futurity in addition to future-time reference does not disqualify it from possessing the grammatical status of a future marker, and that grammar and lexicon are not discrete but, rather, form a continuum, Korean and Thai indeed have a number of markers of the future tense, or more generally, of futurity.³

The process whereby a lexical form or construction acquires the grammatical function of future-time reference is an instance of grammaticalization. Grammaticalization theory, as pioneered by cognitive linguists and historical semanticists, provides a conceptual framework to study how grammatical forms arise in language (Heine et al., 1991; Hopper & Traugott, 2003[1993]). In particular, grammaticalization theory serves as an explanatory parameter for the remarkable crosslinguistic similarities in grammatical inventories, developmental paths, lexical sources, etc., all attributable to common or similar cognitive operations of language users. Among

¹ For instance, Dahl (1985, pp. 108-109) notes that even in languages with no grammatical future tense marker, there are ways of ‘signaling future time reference’.

² For this reason, Heine et al. (1991) place adverbs between lexical forms and adpositions (i.e., prepositions and postpositions), and Jespersen (1924, p. 87) places adverbs in the category ‘particles’ along with other clearly grammatical categories such as prepositions, conjunctions, interjections, etc.

³ Since the term ‘future’ tends to refer to grammatical forms encoding the future tense, we will use ‘futurity’ or ‘markers of future-time reference’ for highly controversial forms in order to avoid confusion.

the tenets underpinning grammaticalization theory are the claims that all grammatical forms emerge from lexical forms (the ‘uniformitarian’ principle), that their developmental paths and the final products are determined by the sources (the ‘source determination’ principle), and that there is a limited set of developmental paths across languages (the ‘universal path’ principle), among others (Heine et al., 1991; Bybee et al., 1994). Given this conceptual and theoretical background, a comparative analysis of grammaticalization processes from unrelated languages will contribute to a better understanding of the validity and limitations of grammaticalization principles. The high potential of theoretical contribution notwithstanding, no studies comparing the developments of the markers of future-time references in Korean and Thai have been attempted to date, hence the rationale of the present study. Studies addressing these two typologically distinct languages, with particular regard to their respective grammaticalization scenarios, are underrepresented in extant research to date. Therefore, the current study aims to fill this gap by comparing the grammaticalization of future-time markers in Korean and Thai, and discussing theoretically significant, relevant issues such as morphosyntactic changes and conceptual motivation.

METHODS

The present research is a conceptual, descriptive analysis of linguistic data, and it involved no experimentation. The data have been collected from diverse sources, including historical and contemporary dictionaries, lexica, online resources, reference grammars, the contemporary and historical corpora, and, importantly, native-speaker intuitions of the authors.

The data of the targeted forms were obtained from corpora by means of concordance programs and were carefully screened to identify functions. The Korean corpus data were mostly from the 15-million-word historical section of the Sejong Corpus (1446-1913) and the 24-million-word Drama and Movies Corpus (1992-2015). The Thai corpus data were taken from the 33.4-million-word Thai National Corpus, an online searchable contemporary corpus (mostly 1988-2017).

It is noteworthy in this context that, unlike the Korean corpus, which provides extensive documentation with different historical depths from the 15th century onward, the Thai National Corpus only provides contemporary data. Thus, historical information on the Thai language is garnered from other sources such as etymology dictionaries and lexica. For this reason, cited excerpts in the present analysis of Thai are not taken from the said corpus. The primary purpose of the use of corpora, both for Korean and Thai, is to examine the functions of the forms concerned in authentic, contextualized usages.

For discussion on Korean historical data, the following periodization has been used: Old Korean (OK) for 1st century to early 10th century CE, Early Middle Korean (EMiK) for early 10th century to mid-15th century, Late Middle Korean (LMiK) for mid-15th century to 16th century, Early Modern Korean (EMoK) for 17th century to 19th century, Modern Korean (MoK) for 20th century to 21st century, and Present-Day Korean (PDK) for the most current version of MoK (of the 21st century). Thai periodization varies among researchers, and for this reason it is not used extensively, but the most widely used system (see Sriyapai 2013) includes Sukhothai Thai (1238-1438 CE), Ayutthaya Thai (1350-1767), Thonburi Thai (1767-1782), Early Rattanakosin (1782-1851), Middle Rattanakosin (1851-1957), Late Rattanakosin (1957- the present), Present-Day Thai (PDK) to designate the variety of Thai (used in the 21st century).

For comparison of the two languages with respect to their grammaticalization patterns, the lexical sources, forms, and functions are compared, and the respective conceptual motivations have been hypothetically created in the form of networks (Narrog & Ito, 2007; Narrog, 2010). While this method is hypothetical in nature, it is characterizable as a ‘from synchrony to diachrony’ approach, and has proved particularly useful in contexts where historical data are scarce (Traugott & Heine, 1991; Givón, 1971, 2015; among others). This approach principally draws on the uniformitarian principle, arguably the most fundamental precept in grammaticalization and historical linguistics more generally.

MARKERS OF FUTURE-TIME REFERENCE IN KOREAN

In Late Middle Korean (LMiK), the notion of future was expressed by several different morphosyntactic devices, such as monosyllabic *-li-* and the periphrastic forms involving the mode converb-marker *-key* (e.g., *-key taoy-*, *-key ha-*, and *-kuy-*). However, these markers did not develop their tense-aspectual scopes, and they either survived in limited usages or completely disappeared in Present-Day Korean (PDK). PDK has several future (and future-related) markers. Historically, these belong to three groups of developmental trajectories, which form layers of different historical depths, i.e., the *-li-* class, the *kes* class, and the *-key* class. Among these, the oldest is the *-li-* class, attested in Old Korean (OK). Conversely, the other two are more recent innovations: the *kes* class developed from the 16th century and the *-key* class developed in the early 19th century (Rhee, 1996). The following is a discussion of these three classes of future markers focusing on their historical development in form and function.

THE *-LI-* CLASS FUTURES

THE FUTURE ADNOMINALIZER *-L*

The future marker *-l* is a future adnominalizer, also known as the ‘prospective adnominalizer’. Its major function is to transform a verbal or clausal constituent into a modifier of a noun phrase. Historically, it was a noun (nominalizer), but in extant data it nearly exclusively functions as an adnominalizer, as illustrated in (1):

- (1) *o-l* *salam*
 come-FUT person
 ‘a person who will come’ (PDK, constructed)

Example (1) shows that *-l* heads a constituent, which modifies the following noun (note that Korean is head-final), i.e., *salam* ‘person’. As shown in the example above, *-l* is not a finite-verb morphology; it is used regardless of the speech time, as in sentences where the main verb is marked by the past tense. This clearly shows that the future *-l* is not a regular future-tense marker, which, by definition, is based on speech time. Instead, *-l* is a prospective marker (Rhee, 2012), one belonging to the ‘relative tenses’ (Dahl, 1985), ‘secondary tenses’ (Lyons, 1977, p. 689), or ‘proximatives’ (König, 1993), in contrast to the absolute tenses anchored in the moment of speech.

THE FUTURE SUFFIX *-li-*

The source of the future marker *-li-* involves *-l* (prospective adnominalizer) addressed above. When *-l* was combined with the defective noun *i*, and the copula *i-*, the new portmanteau form *-li(i)-* emerged. As *-l* had the prospective function, *-li(i)-* naturally inherited this function of marking futurity, as exemplified in the following:⁴

- (2) *CHENSIM-ul ilwu-o-li-la*
providence-ACC accomplish-HON-FUT-DEC
'(I) will fulfill the Providence (Heavens' will).' (LMiK, 1445 *Yongpiechenka* 108)

Example (2) shows that the verbal suffix *-li-* functions as a future marker, followed by other verbal morphologies, e.g., a sentence-ender. Thus, the future marker *-li-* in this configuration occupies a slot known as the penult ender position. In terms of functions, the future *-li-* signals intention or determination. As functional classification largely depends on variable granularity, other functions related to these overarching notions, such as prediction, possibility, ability, obligation, etc., have also been marked by *-li-*.

THE FUTURE SENTENCE-ENDER *-li*

Another future marker is the sentence-ender *-li*, nearly identical in form and function to the previously addressed *-li-* above. Its use is exemplified in the following:

- (3) *YENGWU-z alph-Ay naynay pwuskuli-li*
wise.king-GEN front-at forever be.ashamed-FUT.DEC
'(The unwise king) will be ashamed forever in the face of a wise king.'
(LMiK, 1447 *Yongpiechenka* 16)

This future marker *-li* in example (3) is different from the previously addressed *-li-* in that *-li* is the sentence-ender (i.e., ultimate verbal morphology), whereas *-li-* occurs in the penult verbal morphology slot. Evidently, the development from the verbal suffix *-li-* to the sentence-ender *-li* is due to omission of the sentence-type marker occurring at the sentence-final position.

THE *KES* CLASS FUTURES

The second group of future markers consists of two historically related forms, *-l.kes.i-* and *-l.key*; the latter has diverged from the former. The future *-l.kes.i-* developed from the 16th century and is productively used in MoK.

⁴ Some historical data in Korean exhibits mixed script of Chinese characters and the Korean script *hangeul*, and a general practice in the romanization of such texts is to use upper-case for Chinese characters following the modern Korean pronunciation.

THE FUTURE *-L.KE(S).I-*

The future marker *-l.kes-i-* is a periphrasis involving the prospective adnominalizer *-l-*, the formal noun (i.e., semantically vacuous) *kes* ‘thing’, and the copula *i-* ‘be’. This complex construction has become fully unverbated through structural reanalysis and functional reinterpretation. The future *-l.kes.i-* is exemplified in the following:

- (4) *pesu-ka kot o-l.kes.i-ta*
bus-NOM soon come-FUT-DEC
‘The bus will come soon.’ (Lee & Lee, 2010, p. 500)

As the complex periphrasis *-l.kes.i-* becomes ‘unverbated’ (Lehmann, 2015[1982]) into a single grammatical unit signaling future, its function also develops into the conceptual domain marked by the earlier and more strongly entrenched *-li-*. Thus, *-l.kes.i-* marks conjecture, intention, determination, possibility, prediction, obligation, etc. (Kang, 2022), largely depending on the context and the speech situation.

In MoK, *kes* [kʌs] itself has undergone phonological erosion and is often used in the form of *ke* [kʌ] (note that *-l.ke(s).i-* is only one of many other lexical and grammatical forms in which *kes* participates). Thus, the future marker *-l.kes.i-* has its phonologically reduced variant *-l.ke.i-*, from which the copula *i-* may also be eroded due to the V-V sequence, which triggers deletion of one vowel or modification of the vowel quality.

THE FUTURE SENTENCE-ENDER *-L.KEY*

The future *-l.key* originates from the reduced form of the future *-l.kes.i-*, described above. Its source construction is *-l.kes.i.(y)a* [FUT-thing-be-END], whose original function is promissive, but it has recently been reanalyzed as a future marker with the connotation of polite request, leading to the dual function of promissive and future. The future/imperative usage is exemplified below:

- (5) polite command/request
yeki chimtay-ey nwwu-si-l.key-yo
here bed-at lie.down-HON-FUT/IMP-POL
‘Please lie on your back on the bed over here. (lit. ‘You will lie on your back...’)
(Koo & Rhee, 2013, p. 489, modified)

THE *-KEY* FUTURE

In PDK, *-keyss-* is one of the two primary futurity markers (the other being *-l.kes.i-*; see above), which developed in the early 19th century (Rhee, 1996). The source construction involved a number of morphemes, specifically, the mode converb-marker *-key* ‘in such a manner that’, the light verb *ha-* ‘do’, the converb-marker *-e*, and the verb of existence *iss-* ‘exist’. The most significant contributor is the mode converb-marker *-key*, which denotes mode, manner, purpose, etc. The immediate future usage is exemplified in (6):

(6) immediate future

camsi hwu-ey sey si-ka toy-keyss-supnita

moment after-at 3 hour-NOM become-FUT-DFR.DEC

‘It will be 3 o’clock momentarily.’ (Lee & Lee, 2010, p. 67, modified)

The immediate future *-keyss-* can also mark other functions that may be subsumed in those categories to varying degrees, e.g., conjecture, possibility, intention, ability, hypothetical willingness, evaluative, predestination, among others (Rhee, 1996, see also Shin, 2023).

MARKERS OF FUTURE-TIME REFERENCE IN THAI

Thai lacks an inflectional future, as a general characteristic of an isolating language, and instead has a construction involving the auxiliary *cà* with an ensuing verb to indicate future (Dahl, 1985, pp. 173-174; Han, 2022). Notwithstanding the controversy of presence or absence of future markers in Present-Day Thai (PDT; the 21st century), if we adopt a dynamic perspective such as one in grammaticalization theory, Thai indeed has a number of markers that indicate futurity. These include auxiliary verbs such as *càk*, *cà*, *cuan*, *kùap*, *thêep*, and *klây*, as well as polylexemic forms created by means of compounding. Some authors, e.g., Supanvanich (1973), also claim that certain sentence-final particles in Thai function as markers of future-time reference. Although it is difficult to include the sentence-final particles in the regular future markers, the claim merits discussion by virtue of its relevance to future-time reference.

THE *CÀK* CLASS FUTURITY MARKERS

The word *càk* marks futurity in PDT. Evidently, it is the earlier form of *cà* (see below), the primary futurity marker in PDT. Following the tenets of grammaticalization theory that all grammatical forms originate from a lexical source, *càk* is also believed to have a lexical origin. With a regrettably shallow history of documentation, however, there has not been any serious scholarly investigation to date into its origin, and, consequently, there is no consensus regarding its lexical origin.

Despite the paucity of lexical evidence, some clues do exist in language contact. For instance, the Thai lexicon was greatly influenced by Middle Chinese, and a lexicon of Middle Chinese borrowings (SEALANG, n.d.) includes Thai *càk*, a borrowing from the Middle Chinese lexeme denoting ‘recognize’, which references Proto-Southwestern Tai **cak* ‘to recognize, know’, as well as Proto-Southwestern **čak* and Proto-Tai **čak*. The same source lists the Thai verb *riucàk* ‘to recognize, know’ as a borrowing of the Middle Chinese lexeme *sik* ‘to recognize, know, discern, have knowledge, etc.’, citing a number of sources. Based on these comparative-linguistic analyses, it can be hypothesized that the futurity marker *càk* (and its later form *cà*) developed from the Middle Chinese borrowing *càk* denoting ‘know’ (Weera Ostapirat, p.c.). *Càk* has been grammaticalized as a futurity-marking auxiliary. As an auxiliary, first attested in the Sukhothai period (1238-1438 CE), *càk* indicates futurity and/or intention, as exemplified below:

(7) *Càk* futurity/intention

[The lord of the realm does not levy tolls on his subjects for traveling the roads. They are free to lead their cattle or ride their horses to engage in trade.]

khray càk khây kháa cháan kháa khray càk khây kháa máa kháa

who FUT want sell elephant sell who FUT want sell horse sell
kh-ray c̀ak kh-r̀ay kh`aa n̄uan kh`aa th`o`n kh`aa
who FUT want sell silver sell gold sell
'Whoever would want to trade in elephants does so. Whoever would want to trade in horses
does so. Whoever would want to trade in silver or gold does so.'
(1292, King Ramkhamhaeng's free trade law)

Excerpt (7) is taken from a historical text in which *c̀ak* functions as a futurity marker with the main verb *kh-r̀ay* 'want'. While *c̀ak* can mean either futurity or intention (the notion of intention may have arisen from the 'know' meanings associated with the source verb), the presence of the serialized conative verb *kh-r̀ay* 'want' makes the 'intention' interpretation redundant and the 'futurity' interpretation contextually favored.

The futurity marker *c̀ak* can form a deontic modal auxiliary with *t`o`n* in the form of *c̀ak-t`o`n* 'must', especially in formal registers such as legal documents. It is noteworthy that 'recycling' a form for use in combination with another form is a common lexicalization-grammaticalization strategy in Thai (Rhee & Khammee, 2022). The participating form *t`o`n* is itself a deontic modal 'must'.

THE C̀A CLASS FUTURITY MARKERS

In PDT, the primary futurity marker is *c̀a*, an eroded form of *c̀ak*, addressed above. The futurity-marking function of *c̀a* is first identified in the Ayutthaya Period (1350-1767). In the earliest record of *c̀a*, the form strongly suggests intention, thus often making the sentence ambiguous between futurity and intention. The following excerpt illustrates *c̀a* used as a futurity/intention marker:

(8) *c̀a* futurity/intention

(in a letter by the Siamese ambassador to France)

c̀a kh`o`k k`e`e th`an h`ay kh`aw thuun k`e`e phr`am`ah`a`k`a`s`at-c`a`w ph`u`u y`a`y [...]
FUT beg to you:HON to enter tell to king who great [...]

l`e`e c̀a `u-s`a`a th`am`h`ay ch`an`a th`u`k`kh`on n`ay kh`wa`am n`o`p`n`o`p n`an
and FUT attempt make win everybody in NOMZ veneration that

'We would (intend to) beg Your Excellency to tell His Majesty [...] and (we) will (intend to) endeavor to surpass everybody else in terms of respect and veneration toward the King.'
(Siamese Documents of the 17th Century, Paris)

Excerpt (8) is taken from a letter dated from the 17th century, in which the Siamese ambassador requests the addressee to convey a message of allegiance and veneration to the French king. As seen in the excerpt, the futurity marker *c̀a*, in addition to being a future-marking auxiliary, has potential as a verb, and is followed by three successive verbs *`u.s`a`a* 'attempt', *th`am`h`ay* 'make', and *ch`an`a* 'win' asyndetically.

The auxiliary *c̀a* denotes, in addition to futurity, diverse future-related modal notions, e.g., intention, promise, necessity, possibility, probability, certainty, indeterminacy, proximation, constancy, etc., either alone or through univerbation with other lexemes. These notions are so closely related that the specific denotation in this particular instance largely depends on the context, and functional designation may not be exclusive. The *c̀a* class futurity markers include a number of compound forms, including *c̀a-t`o`n*, signaling futurity/necessity, as exemplified in (9):

(9) *cà-tôη* futurity/necessity

khun cà-tôη càay khâapràp thîi sathǎanii tamrùat

you FUT pay fine at station police

‘You will (must, have to) pay the fine at the police station.’ (PDT, constructed)

Example (9) above illustrates the usage of *cà-tôη*, the futurity/necessity auxiliary. The unverbated morpheme *tôη* is itself a deontic auxiliary. In this context, the unverbation phenomenon, frequently observed in Thai, warrants a brief exposition. When *cà* forms a unverbated unit with another form (typically a modal), it is possible to treat the two modals in a complex form as operating separately, instead of treating the form as a single unit. This is a perfectly valid approach, but such an analytic approach does not capture the insights of researchers who acknowledge the patterns of common cooccurrence of *cà* and a few other modal elements, and therefore present them as more or less combined forms. For instance, Smyth (2002) and Soithurum (2010), among others, have presented certain combinations as unitized forms, either explicitly or implicitly, e.g., (*cà*) *tôη* ‘must’, *khuan (cà)* ‘should/ought’, *nâa cà* ‘should/ought’, *yàak (cà)* ‘want to, would like to’, etc. (See also Hilpert, 2006 for relevant discussion of auxiliaries attracting certain verbs and forming constructions in Swedish).

The second set involves modals denoting variable degrees of certainty, specifically, *nâa-cà*, *àat-cà*, and *khoy-cà*. The following is an example of *nâa-cà* ‘probably’, involving an auxiliary/adverb *nâa* denoting possibility, a notion inherent in future:

(10) *nâa-cà* futurity/probability (‘probably’)

thúkyàaη nâa-cà còp.loη dùay dii

everything FUT end by good

‘Everything should end well.’ (Soithurum 2010: 79, modified)

Another set of *cà*-derived futurity-marking modals consists of those marking ‘immediate future’ (Smyth, 2002, p. 69; ‘imminent future’ Heine et al., 2017, p. 10), e.g., *kamlaη-cà*, *cuan-cà*, *kùap-cà*, *thêep-cà* and *klây-cà*, all denoting ‘be about to’. The immediate futurity marker *kamlaη-cà* is exemplified below:

(11) *kamlaη-cà* immediate futurity

raw kamlaη-cà kin khâaw

we FUT eat food

‘We are/were about to eat.’ (Smyth, 2002, p. 69, modified)

Example (11) involves the futurity marker denoting that the event being described will occur in the very near future. Coincidentally, this marker can also be used in past-tense or irrealis contexts, as indicated in the translation; this is a general characteristic of Thai futurity markers having dual function marking primary and secondary tenses. This set of immediate futurity markers involves adverbs denoting imminence, e.g., *cuan* ‘almost, nearly, close to’, *kùap* ‘almost, nearly, close to’, *thêep* ‘almost, nearly, barely’, *klây* ‘(be) near, beside’, etc. Just as *cuan*, *kùap*, *thêep*, and *klây* are synonymous, so are the derived futurity modals *cuan-cà*, *kùap-cà*, *thêep-cà*, and *klây-cà*. There is no perceivable difference in the degree of imminence in these immediate future markers.

There is another, *sui generis* futurity marker, i.e., the habitual futurity *mák-cà*. This is a compound modal involving the degree adverb *mák* ‘frequently, often’. By virtue of the involvement of the full-fledged futurity marker *cà*, the compound modal *mák-cà* marks futurity, and by virtue of the frequency adverb *mák*, also indicates a high frequency of repeated occurrence, hence a habitual future. Thus, the event being described is thought to have occurred before, occurs at the present time, and will occur in the future, with regularity. This seems to be due to the fact that the speaker’s assessment that some events will occur in the future with regularity is often based on the same events having happened regularly in both the past and the present.

ADVERBIALS AS MARKERS OF FUTURE-TIME REFERENCE

There are other, less productive and less entrenched (and thus debatable), futurity markers (Supanvanich, 1973), i.e., immediate futurity markers originating from ‘almost, close, nearly’, such as *cuan*, *kàap*, *thêep*, and *klây*. The usage of *cuan* is exemplified below:

(12) *cuan* immediate futurity

fǒn cuan tòk léew klàp bâan kan

rain FUT fall PFV return home PTCL.HORT

‘It’s going to (almost started to) rain. Let’s go back home.’ (PDT, constructed)

The four lexemes categorized as futurity markers in this set are those that form compound modals for immediate future (see above). In other words, these futurity markers differ from the previously addressed *cuan-cà*, *kàap-cà*, *thêep-cà*, and *klây-cà* only in that they do not involve the primary futurity marker *cà*; the futurity is marked solely by the proximity markers denoting ‘almost, nearly, close’. Treating temporal adverbials as futurity markers, as Supanvanich (1973) does, raises an important issue that warrants mention. The issue of whether or not the degree-markers may be regarded as future markers is debatable. Two points are relevant to this context: (i) the Mandarin Chinese temporal lexeme *yào* ‘immediately’ (as well as ‘want’) functions as a ‘lexical futurity’ marker (Li & Thompson, 1989, p. 175), and (ii) the markers of the general notion of futurity may include temporal adverbials, which are lexical, as well as proximative and prospective adverbials, which are often at the boundary of lexis and grammar. In this light, our position is that the adverbials that denote temporal proximity addressed here are not grammatical markers but may well be regarded, at least, as ‘peripheral’ markers of futurity. It is possible that they are at the incipient stage of grammaticalization into future markers.

PARTICLES AS MARKERS OF FUTURE-TIME REFERENCE

Another group of debatable linguistic forms has been identified as futurity markers in Thai. For instance, Supanvanich (1973) has claimed that certain sentence-ending particles, e.g., *lá*, *ná*, and *lá-ná*, can mark futurity. These alleged futurity markers are subject to controversy and, even if qualified as such, are undoubtedly marginal forms. Such uses are exemplified in the following:

(13) *lá*, *ná*, *lá-ná* (immediate) futurity

chǎn nɔɔn lá/ná/lá-ná

I sleep FUT/PTCL

‘I (will) sleep now.’ (Supanvanich, 1973, modified)

Example (13) involves the sentence-ending particles *lá*, *ná*, and *lá-ná*. These particles, when used in any sentence, carry the function of signaling that the speaker is ‘informing’ the addressee. In other words, their primary function is to draw the addressee’s attention to the information being provided and indicate this information as noteworthy. The notion of futurity associated with these forms seems to be only pragmatically inferred, i.e., not yet grammaticalized. In other words, when the example sentence (13) is spoken, and the speaker is not yet in bed, the addressee, noticing the discrepancy, reconciles it by inferring that the proposition (*Chǎn nǎon* ‘I sleep’), presented as a piece of ‘noteworthy’ information (as indicated by *lá/ná/lá-ná*), is describing a situation ‘as good as the present’, hence the immediate futurity. The motivation behind describing a future event as one that is presently occurring is conceptually straightforward, and is characterizable as an instance of hyperbole (cf. ‘That does it! I’m leaving’ Quirk et al., 1985, p. 215). This pragmatic inference seems to have triggered the functional reanalysis of the sentence-ending particles as immediate futurity markers, or at least as forms with a future connotation. Conceding that these sentence-final particles are not among the ‘true’ future markers, they also deserve attention by virtue of their relevance to inferring future-time reference from linguistic forms.

DISCUSSION

In the preceding section, we saw how various future/futurity markers can be categorized in a number of groups in Korean and Thai. Now we turn to a discussion of morphosyntactic motivation and conceptual motivation.

MORPHOSYNTACTIC MOTIVATION

KOREAN

There are a number of prominent factors in the development of the future in terms of morphosyntactic motivation in Korean. Important factors include the omissibility of arguments, and agglutinating morphology.

As part of Korean syntactic idiosyncrasy, the sentential subject is often implicit, and its absence invites the interpretation of having ‘the current situation’ as the implicit subject. This process was likely facilitated by the fact that the equated entity in the copular construction (note that *-li-*, *-li*, *-l.kes.i-*, *-l.ke(s).i-*, and *-l.key* are copular constructions) was referred to by nominals that are either completely devoid of meaning (the nominal *i*) or substantially bleached of meaning (the nominal *ke(s)*). Similarly, the future *-keyss-*, as briefly indicated above, developed from the string, *-key-ha-e-iss-* [MODE-do-and-exist], which developed into [CAUS-PERF] (note that the string ‘MODE-do’ is grammaticalized into a causative and the string ‘and exist’ is grammaticalized into a perfective; see Rhee, 1996, pp. 109-130 for details). As was the case with *-l.kes.i-*, the absence of the sentential subject and the invisibility of the main verb (due to contraction and erosion) triggered the reanalysis of the structure and reinterpretation of the functions.

Also significant is the typological characteristic of agglutinating morphology because agglutination and fusion obliterate the morphemic boundary, make the exponent’s grammatical status ambiguous, and consequently promote functional reinterpretation and structural reanalysis. This is evident in substantial erosion of forms, e.g., *-l.key* from *-l.kes.i.(y)a* [FUT-thing-be-END] and *-keyss-* from *-key.ha.e-iss-* [MODE-do-and-exist] (see above).

THAI

The morphosyntactic motivation behind the development of futurity markers in Thai comprises two primary factors, one typological, and the other idiosyncratic. The typological factor relates to pragmatic orientation and verb serialization, and the idiosyncratic factor relates to the preference of creating polylexemic units in lexicalization and grammaticalization.

Most functionalists hold that languages differ in terms of the degree of utilizing pragmatic factors in their linguistic representation. Thai lacks many grammatical forms that are found in many languages, notably linking words. Thus, the semantic and syntactic relationships between constituents are often identified from the linguistic and situational contexts. This pragmatic orientation is related to the proliferation of verb serialization, in which verbs are strung together asyndetically. The serial verb construction is so susceptible to grammaticalization that it is often regarded as the ‘seed’ of grammaticalization (cf. DeLancey, 1991, pp. 15-16). With the prevalence of verb serialization, Thai exhibits numerous instances of grammaticalization from serialized verbs (Diller, 2006; see also Park, 2011). Obviously, the development of the primary futurity marker *cà* (and its older *càk*), which originated from a verb, occurred in verb serialization. The source construction of the futurity marker is, for example, [I + know + return + home], from which the reinterpreted construction [I + will + return + home] emerged. (Note that Thai is a head-initial language and the auxiliary precedes the verb.)

Secondly, Thai has a strong idiosyncratic preference for creating polylexemic or polysyllabic units in lexicalization and grammaticalization. In other words, Thai often resorts to recycling a single lexeme to create similar or slightly modulated meanings by reduplicating the base form, reinforcing form and meaning by means of juxtaposing synonyms, and/or recruiting additional forms, such as particles, adverbs, etc. (cf. ‘polysemy strategy’ Khammee & Rhee, 2022; Rhee & Khammee, 2022). The preference for creating polylexemic units by means of the above-mentioned strategies is responsible for the creation of diverse *cà*-derived futurity markers, e.g., *cà-tôη*, *khuan-cà*, *nâa-cà*, *àat-cà*, etc. When multiple modals occur in a single sentence, they tend to occur beside each other in the pre-verbal slot, and thus their positional closeness, as well as the general tendency to create polylexemic units, is likely to strengthen the bond between them (hence, *cà-tôη* ‘will’ (< ‘will-must’)). Similarly, adverbials often occur beside the futurity marker. In general, there is a small group of adverbials that occur sentence-finally (but before sentence ending particles), while others are more positionally flexible and often occur at the pre-auxiliary position. Hence, the habitual futurity *mák-cà* ‘will’ (< ‘frequently-will’), the immediate futurity *cuan-cà* ‘be about to, will’ (< ‘almost-will’), etc.

Apart from the two primary factors elaborated above, a remark is in order with respect to the immediate futurity markers that are heterosemous with degree adverbs, specifically, *cuan*, *kûap*, *thêep*, and *klây*, all denoting ‘almost, nearly’. These futurity markers are less established, as evident in the fact that few researchers include them in the Thai future inventory (e.g., Supanvanich, 1973). The syntagmatic position of degree adverbials is flexible, but the pre-verbal position is favored, because they are modifiers of the verb or verb phrase. Thus, in this configuration, degree adverbials occupy the same position as the auxiliaries, including futurity markers such as *cà*, which, coupled with conceptual motivation (see below), seems to have triggered the functional reinterpretation and structural reanalysis of the degree adverbials into the markers of futurity.

KOREAN AND THAI COMPARED

As shown in the preceding exposition, grammaticalization scenarios of future/futurity in Korean and Thai provide a number of meaningful contrasts in terms of morphosyntactic realizations. In particular, they exhibit typological influence as well as lexicalization-grammaticalization strategies favored by the two languages.

The influence of typological and idiosyncratic features in morphosyntax is evident in the grammaticalization patterns of a language. For instance, the typological characteristics of argument omissibility and agglutination in Korean triggered, or at least facilitated, structural reanalysis and functional reinterpretation, whereas the strong pragmatic orientation and verb serialization in Thai seem to have played an important role for such processes.

Furthermore, the propensity for forming polylexemic forms recruiting (near-)synonyms in Thai seems to be responsible for proliferation of compound modals involving the primary futurity marker *cà*. This is particularly noteworthy since formal erosion is largely co-extensive with grammaticalization. Although further research is required to establish a general consensus, Thai seems to favor semantic and phonological reinforcement to increase perceptual salience, especially as a grammaticalizing form becomes semantically weak or loses novelty through frequent use (see Rhee & Khammee, 2022; Khammee & Rhee, 2022 for more examples). Thus, expansive grammaticalization in Thai sharply contrasts with reductive grammaticalization in Korean.⁵

CONCEPTUAL MOTIVATION

KOREAN

In crosslinguistic studies, the future is known to develop from diverse conceptual sources. For instance, the lexicon by Kuteva et al. (2019) lists Change-of-state, ‘come to’, ‘go to’, ‘love’, B-Necessity, D-Necessity, H-Possessive, ‘take’, ‘then’, ‘tomorrow’, Venitive, and ‘want’, as the commonly attested sources of future markers. In their seminal work, Bybee et al. (1994, pp. 251-280) showed that, across languages, lexemes related to desire (‘want’, ‘like’), ability (‘be able to’), obligation (‘owe’), possession (‘have’, ‘get’, ‘obtain’, ‘catch’), movement verbs (‘come’, ‘go’), and temporal adverbs (‘then’, ‘thereafter’, ‘afterward’, ‘just now’, ‘soon’), as well as other semantically general verbs (e.g., ‘be’, ‘become’, ‘try to’, ‘need’, ‘owe’, ‘get’, ‘do’, ‘make’, ‘look for’, ‘intend’), etc. develop into the future.

The Korean paths, however, are difficult to reconcile with these known crosslinguistic patterns. While the Korean verb *ha-* ‘do’ may be close to the general verbs in the inventory, and the copula *i-* ‘be’ is listed in it as well, we noted in the above discussion that they do not make a notable contribution to the development. They are similar to syntactic placeholders rather than semantic contributors. Far more important contributors are the prospective adnominalizer *-l*, which is already inherently futuristic by virtue of indexing a later point in time, and the mode converb-marker *-key*, which inherently signals effect- or goal-orientation (Rhee, 1996). As noted in the preceding exposition, the converb suffix *-key* marks ‘manner’, ‘mode’ or ‘purpose’. The manner/mode of a situation and the purpose of an action directly imply the future because they link one situation to its future situation, or link one action to its future result. For this reason, the future signaled by *-keyss-*, as compared to *-l.kes.i-* or *-li-*, is close to the present time, hence, it is

⁵ For more discussion on expansive and reductive grammaticalization, see Rhee (2021) for adpositions across languages and Rhee & Khammee (2022) for Thai allative prepositions, among others.

the immediate future. The future-purpose relation implied by *-key* in Korean is so prominent that Ramstedt (1997[1939], p. 91) has called the verbs connected by the morpheme *-key* the ‘converbum futuri’, a position tantamount to classifying *-key* as a full-fledged future marker.

The conceptual contributors to the development of Korean future markers have been diagrammed in Figure 1 below, which is necessarily terse. The three shaded boxes denote the primary domains of grammaticalized concepts; the upper-case labels are grammatical concepts; the lower-case labels within quotation marks are lexical meanings; and the arrows indicate the direction of conceptual linking or extension.

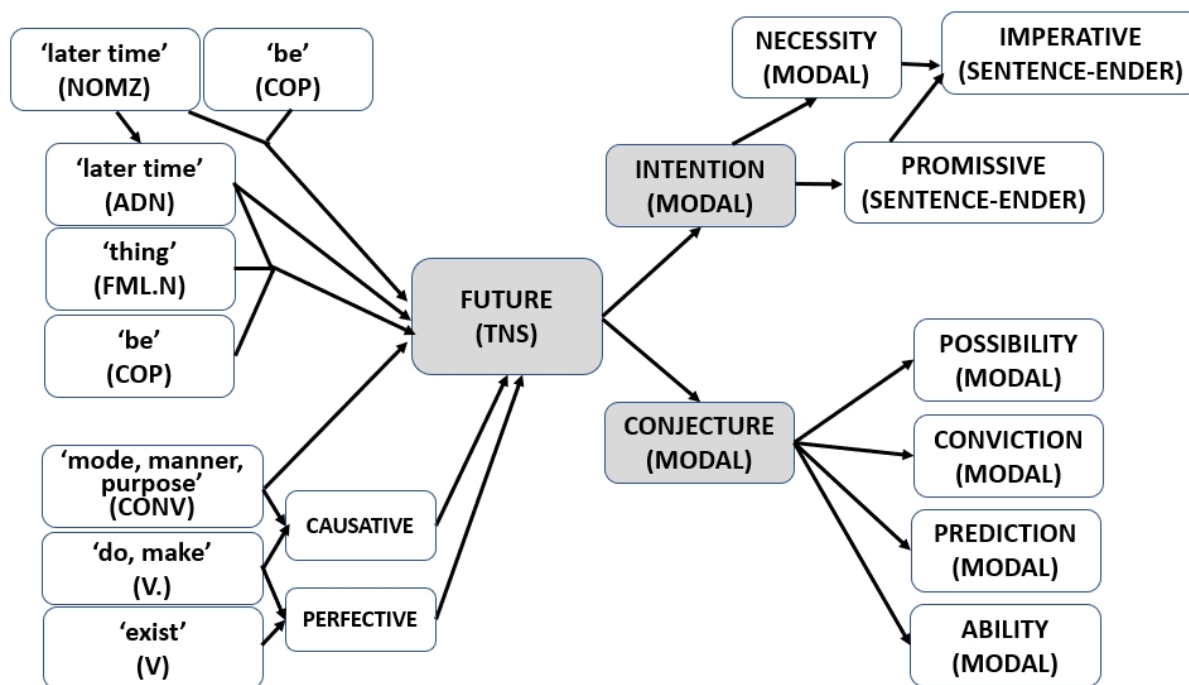


FIGURE 1. Conceptual contributors to Korean future markers

THAI

Regarding the future-time reference markers in Thai, we have noted that the source lexeme of the Thai primary futurity marker *cà* is likely the Sino-Thai verb *càk* ‘to know, recognize’, and that around the time when it became grammaticalized into an auxiliary of future-time reference in the Sukhothai period (1238-1347 CE), its meaning became ‘to intend’. In view of crosslinguistic research (Kuteva et al., 2019), since B-Necessity denotes ‘intention’, the lexical source of the Thai path conforms to the crosslinguistic pattern (also the path proposed by Bybee et al., 1994). Furthermore, the lexical source ‘know’ is known to develop into PI-Possibility (Ability) and further to Habitual or Permission, or to Evidential or Experiential (Kuteva et al. 2019; cf. Mandarin Chinese *hui* ‘know’ and Medieval Chinese *jie* ‘know’ developing into futurity or ability markers). The Thai futurity marker *cà* marks Possibility (E-Possibility), closely related to PI-Possibility (Ability), as well as Necessity (i.e., E-Necessity, for Probability; D-Necessity, for Obligation; and B-Necessity, for Intention), often with the help of cooccurring forms. The states of affairs in Thai are largely consonant with the observed crosslinguistic patterns.

The adverbials of proximity denoting ‘almost, nearly’, either alone or with the primary futurity marker *cà*, have developed into futurity markers. The development must have been enabled by the general proximity (typically spatial and degree) metaphorically projected to temporal imminence. The original semantics persist in the grammaticalized markers in that these adverbials are immediate futurity markers (rather than remote future or general future) and that their functions are largely restricted to marking immediate future, not extended to other modal meanings.

We also noted that some sentence-final particles have developed, or so it has been claimed, into markers of future-time reference, albeit marginally. Considering that the primary function of these markers is to signal that the speaker is ‘informing’ the addressee by providing noteworthy information, we have argued that the addressee’s attempt to fill the gap between information and reality is responsible for the emergence of the function of marking futurity, in particular, immediate futurity.

These conceptual considerations and their interrelatedness are outlined in Figure 2. The notions that extend from the future/futurity markers are the modal functions closely related to future/futurity. They mostly belong to the epistemic domain but also include instances belonging to the domains of volition, intention, and constancy.

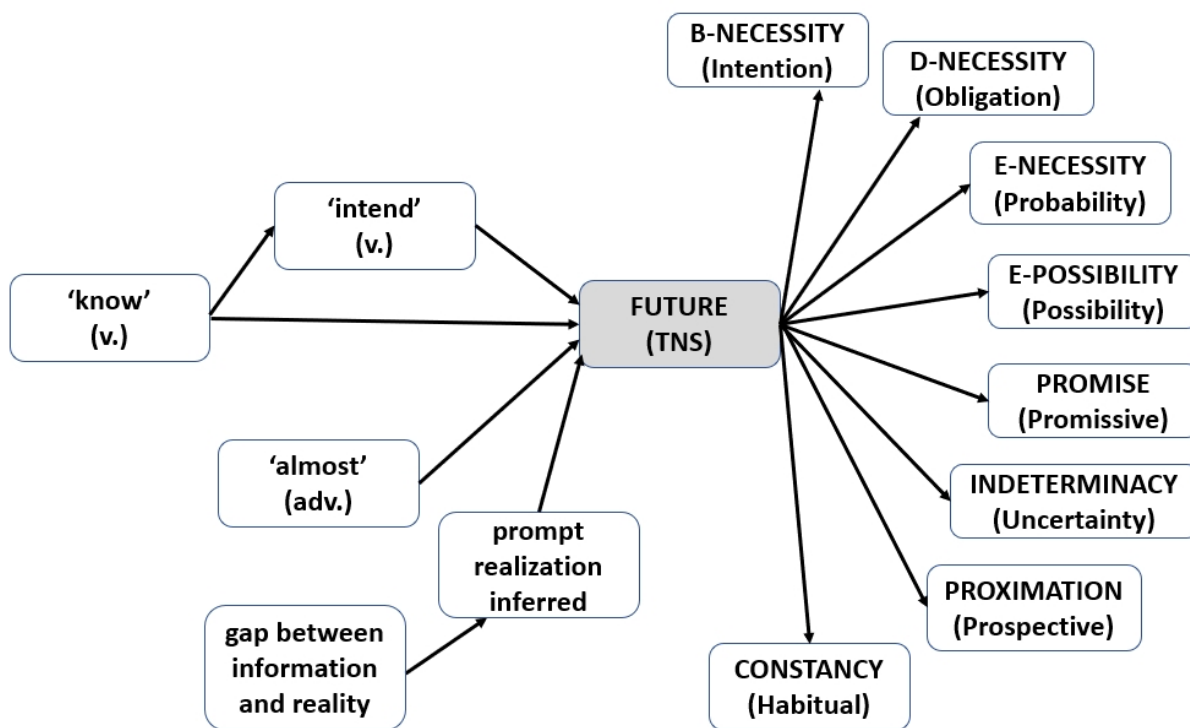


FIGURE 2. Conceptual network of Thai futurity markers

KOREAN AND THAI COMPARED

As shown above, conceptual motivations behind grammaticalization of future/futurity markers in Korean and Thai exhibit some notable commonalities and differences. Figures 1 and 2 show the widely different conceptual sources in the two languages. Those of Korean do not fit in the

crosslinguistic patterns, whereas those of Thai generally are concordant with them. Conceding that the present study involves only one grammatical concept in as few as two languages, the implication of this difference is that the source determination hypothesis and universal path hypothesis (Bybee et al., 1994) need to be interpreted with some degree of leniency. Grammaticalization sources for certain functions and their developmental paths may be more diverse than previously thought.

There is a notable commonality as well. When a form acquires the grammatical notion of future/futurity, it seems to be directly connected with modal notions of necessity and possibility, either boulomaic, deontic, or epistemic. This is evident in the fact that the modal notions associated with Korean future markers and Thai futurity markers are remarkably similar, which echoes remarks by Lyons (1977, p. 677), who observed that futurity necessarily includes an element of prediction or some related modal notion. The commonalities observed in the two typologically distinct languages strongly suggest the central role of the semantics of linguistic forms undergoing grammaticalization, the similarities among cognitive operations behind conceptual extension, and crosslinguistic similarity of the inventories of grammatical notions, among others.

SUMMARY AND CONCLUSION

This paper has addressed the grammaticalization of the markers of future-time reference in Korean and Thai. Contemporary Korean has three groups of future markers: the *-li-* class (based on prospective adnominalizer *-l*), the *kes* class (based on the defective noun *kes* ‘thing’), and the *-key* class (based on the mode-marking converb marker *-key*). Similarly, Contemporary Thai has a number of forms that mark futurity. In addition to the primary marker *cà* and its older form *càk*, there are two secondary markers of futurity: proximity adverbials denoting ‘almost’, which are used either alone or in combination with other forms, and sentence-ending particles signaling informative noteworthiness.

Grammaticalization of future/futurity in Korean and Thai seems to be greatly influenced by typological and idiosyncratic features in morphosyntax, e.g., argument omissibility and agglutination in Korean and the strong pragmatic orientation and verb serialization in Thai. These features seem to have played an important role for either triggering or facilitating structural reanalysis and functional reinterpretation of certain forms as markers of future-time reference.

In terms of conceptual sources, the future markers in Korean exhibit significant difference from other crosslinguistically attested sources. The development of Korean futures is largely due to two grammatical formants that inherently involve futurity: suffixes indicating ‘(at) a later time’ (*-l*) and ‘mode, manner, purpose’ (*-key*). On the other hand, the sources of the futurity markers in Thai (e.g., ‘know’, ‘intend’, temporal lexemes, etc.) are largely consonant with the crosslinguistic patterns. Despite the differences in sources, the grammaticalized forms are closely tied to the modal notions of necessity and possibility, either boulomaic, deontic, or epistemic.

One noteworthy aspect of the grammaticalization patterns observed from the comparison of Korean and Thai is that Korean grammaticalization seems to be largely reductive, whereas Thai grammaticalization seems to be largely expansive. Thai seems to favor semantic and phonological reinforcement by means of forming compound auxiliaries in order to increase salience, especially as a grammaticalizing form becomes semantically weak or loses novelty through frequent use.

ABBREVIATIONS

ACC: accusative; DEC: declarative; DFR: deferential; END: sentence-ender; FUT: future/futurity; GEN: genitive; HON: honorific; HORT: hortative; IMP: imperative; LMiK: Late Middle Korean; MoK: Modern Korean; NOM: nominative; NOMZ: nominalizer; PDK: Present-Day Korean; PDT: Present-Day Thai; POL: polite; PTCL: particle

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