Context-induced reinterpretation and (inter)subjectification: the case of grammaticalization of sentence-final particles

Seongha Rhee *

Department of English Linguistics, Hankuk University of Foreign Studies, 270 Imundong, Dongdaemungu, Seoul 130-791, Republic of Korea

ARTICLE INFO

ABSTRACT

This paper analyzes a case of grammaticalization of sentence-final particles (SFPs) that developed from clausal connectives. These newly emerging SFPs carry a wide range of subjectified and intersubjectified meanings. From the syntagmatic point-of-view, this grammaticalization process was triggered by the ellipsis of the main clause. From the pragmatic point of view, ellipsis of the main clause induces the addressee to reconstruct the missing main clause that is compatible with the explicitly presented connective with which the utterance is ended. The relation between the connective-marked prodosis and the reconstructed main clause came to be conventionalized as the meaning of the utterance-final connective, and the connective now functions as a signal of the end of a sentence.

Drawing upon historical data, this paper investigates one such functional change exhibited by *-nikka*. The function of *-nikka* is connecting clauses with a causal relationship. As the cohesion between *-nikka* and its preceding declarative sentence/clause-type marker *-ta* increased, a new particle *-tanikka* was created, which came to carry diverse functions, such as marking contingency, contrast, adversativity, protest, reassertion, and emphasis. It is argued that the driving force of this semantic-functional change is context-induced reinterpretation (CIR) and that subjective and intersubjective pragmatic inferences are used to fill the information gap in elliptical structures. It is notable that the development of the declarative-based SFP triggered a parallel development involving the other sentence-type markers, i.e., imperative, interrogative, and hortative markers. The grammaticalization of SFPs occurred very rapidly, resulting in the creation of a complete sub-paradigm of innovative sentential endings, and the later forms grammaticalized despite that they did not attain the high frequency that typically enables a linguistic form to enter a grammaticalization channel. Based on these observations, this paper argues that grammaticalization processes can be paradigm-based and can be triggered by analogy by virtue of structural similarity among the forms involved.

© 2011 Elsevier Ltd. All rights reserved.

1. Introduction

In their seminal work of grammaticalization, Heine et al. (1991a) presented how seemingly contradictory notions of metaphor and metonymy, both attested in much cross-linguistic literature, can be reconciled in the metonymic-metaphoric model that incorporates microscopic and macroscopic levels of semantic change. The driving force in the microscopic level of change is context-induced reinterpretation (CIR), a metonymic cognitive operation. The role of such metonymic force has also been acknowledged by Traugott and König (1991), who assert that metonymy serves the strengthening of informativeness. Sperber and Wilson (1986, p. 1) point out the significance of context with reference to metonymy and stated that the rise of metonyms is a discourse pragmatic manipulation whereby concepts are subjected to contextual factors in utterance interpretation. The notion of CIR is closely related to, or nearly identical with, such notions as invited inferences (Geis and Zwicky, 1971; Traugott and Dasher, 2002), perspectivization (Taylor, 1989), schematization (Rubba, 1994), prototype extension (Givón, 1989) and pragmatic inference in general (Hopper and Traugott, 2003).

Other important notions in the present analysis are subjectivity and intersubjectivity. One of the earliest references of subjectivity is Lyons (1982), who uses the notion to refer to "the way in which natural languages, in their structure and their normal manner of operation, provide for the locutionary agent's expression of himself and his own attitudes and beliefs" (1982, p. 102, as cited in Traugott, 2003, p. 125). More recently, Traugott and Dasher (2002) and Traugott (2010) use the term to refer to the state of affairs where a linguistic form marks the speaker assessment, attitude, and viewpoint. As for intersubjectivity, Traugott (2003) defines the notion as "the explicit expression of SP/W's attention to the 'self' of AD/R in both an epistemic sense (paying attention to their presumed attitudes to the content of what is said), and in a more social sense (paying attention to their 'face' or 'image needs' associated with social stance and identity)" (Traugott, 2003, p. 128). She further states that intersubjectivity is a general characteristic of all language use and that intersubjective speech situations provide the crucial context for invited inferences.[1]

2. The case of *-nikka*

Korean has numerous instances of grammaticalization of sentence-final particles (SFPs) that developed from clausal connectives. This paper analyzes one such development of *-nikka*, a connective that carries the dual function of the traditional connective and the innovative SFP. A survey of historical data shows that the earlier form of *-nikka* was *-ni*, which is still in use in contemporary Korean with some degree of archaic or literary flavor.[2]

Toward the end of the 19th century *-niska* shows up in the historical data corpus, the earliest being in *Hanpwulcatyen*, a Korean-French dictionary published in 1880, and in many 'Sinsosel' fictions,[3] a genre that flourished between 1906 and 1916, characterized by their pursuit of colloquialism in language and liberalism in theme. There is no disagreement with respect to *-niska* having derived from *-ni* because of their seemingly identical function, to the point of being nearly interchangeable, but the origin of this additive segment *-ska* has not been established. It is only assumed to be an emphatic element that reinforces its host in phonological saliency and consequently in semantic strength. An orthographic variant of *-niska* that became widely used is *-nikka*, which is one of the most frequently used grammatical markers in contemporary Korean.[4]

In Modern Korean, *-nikka* emerges as enriched in form in that its syntagmatic cohesion is strengthened by attracting the markers of sentence/clause types, i.e., *-ta* (declarative), *-la* (imperative and declarative), *-nya* (interrogative), and *-ca* (hortative), resulting in *-tanikka, -lanikka, -nyanikka* and *-canikka*.[5] The emerging forms are also semantically enriched by acquiring such meanings as contingency, contrast, adversative, reassertion, and emphasis. The emergence of these grammatical meanings is largely due to the processes of CIR and (inter)subjectification.

2.1. Functional change at a glance

In its most simplified form of presentation, *-{ta}ni(kka)* may be shown in three stages to characterize its form and meaning, as follows[6]:

---

[1] See Narrog (2010) for a comprehensive overview and discussion of diverse conceptualizations of the notions of subjectivity and intersubjectivity. Cuyckens et al. (2010) and the works in Davidse et al. (2010) are also excellent sources of reference for these notions.

[2] Two corpora are used as data sources. The Korean Historical Corpus is a 15 million word historical corpus largely based on the 21st Century Sejong Corpus, a 200 million word corpus, developed by the Korean Ministry of Culture and Tourism. Even though the corpus used in this research is smaller than the 21st Century Sejong Corpus, it is referred to as the Sejong Corpus for convenience. The data source for Modern Korean is KORTERM Corpus, consisting of 15 million tagged words and 70 million un-tagged words, developed by Korea Advanced Institute of Science and Technology (KAIST).

[3] Sinsosel, literally meaning 'new novel,' refers to the literary genre that bridges the classical novels and modern novels in Korea, and the novels in the genre, numbering about 300, date from 1894 to 1917. The styles characteristic of these novels were influenced by Western literary styles.

[4] Historically *-niska* and *-nikka* came into existence within a very short interval. The more recently emerged form *-nikka* is used to represent *-niska* and *-nikka* (and other orthographic variants) where the distinction is not consequential, because the former had a very short life and the two are pronounced identically.

[5] The declarative sentence/clause is marked by *-ta* and *-la*, the latter being restricted to the copula *i-*. Therefore, *-la* is superficially ambiguous in form between declarative and imperative signals. For the sake of convenience, *-ta* is presented as the representative form for the declarative, in contexts where this allomorphic variation is not relevant.

[6] As indicated earlier, the form *-tanikka* has parallel forms depending on the clause/sentence types: *-tanikka, -lanikka, -canikka* and *-nyanikka*. For simplicity, these forms are collectively represented as *-{ta}nikka* in contexts where the variation is not relevant, because the declarative-based *-tanikka* occurs most frequently among them.

(1)   a. *pi-ka*   *o-**ni***   *chwup-ta*   (From LMK to present)
rain-NOM   come-**CAUS**   be.cold-DEC
'It is cold because it's raining.'

        b. *pi-ka*   *o-**nikka***   *chwup-ta*   (From the late 19th century to present)
rain-NOM   come-**CAUS**   be.cold-DEC
'It is cold because it's raining.'

        c. *ne*   *cengmal*   *wuski-n-**tanikka***   (From the early 20th century to present)
you   really   make.laugh-PRES-**SFP**
'You are really funny/ridiculous!'

The clausal connective *-ni*, as exemplified in (1a), is the oldest in form but is still in use in contemporary Korean. Among its diverse functions, the most prominent function in the historical data seems to be that of marking causality. The connective *-nikka* in (1b) is a variant that recently came into existence, with minimal semantic difference. The common intuition of native speakers as to the differences between *-ni* and *-nikka*, as contrasted in (1a) and (1b), is that *-ni* has more written register nuance or archaism and that *-nikka* carries more emphasis. On the other hand, *-tanikka* in (1c) is a SFP.[7] As briefly indicated earlier, it is a combined form of *-ta* and *-nikka*, where *-ta* signals that the sentence, *ne cengmal wus-ki-n-ta* 'You are really funny,' is of a declarative sentence type. It is widely accepted that *-{ta}nikka* is a very common emphatic SFP in Present-Day Korean (PDK). In this respect, Kwon (1992, pp. 193–194) states that the connective *-nikka* evokes emphasis when it is affixed to a fully completed sentence, i.e., one marked with the sentence-type marker, which, in this case, is *-ta*.

When the historical progression is seen from a macro-perspective, the change can be characterized as one from causal connective to emphatic sentential ending. This change *prima facie* is seemingly abrupt and unmotivated. As we shall see in the following discussion, however, if we look at the data from a more micro-perspective, there unfolds an entirely different picture, which strongly suggests that the change is the cumulative effect of a series of gradual and motivated changes.

2.2. A closer look: Historical data

In order to capture the developmental paths of *-{ta}nikka* it is necessary to look into the historical data that involves its earlier forms *-ni*, and *-nikka*. The earliest attestations of *-ni* are in the LMK period (i.e., from the 15th to 16th century) data, the earliest extant literature in the Korean writing system, Hangeul. Connective *-ni* was the most frequently used clausal connective with diverse meanings that center around its core meaning 'cause' in LMK (Jeon, 1999, p. 119). Example (2) exemplifies the use of *-ni* (which becomes *-uni* with the epenthetic vowel *-u-* when the final syllable of its host noun ends with a consonant) in the 15th century, in which it was used to mark the causality.

(2)   *cukcay*   *az-a*   *mek-**uni***   *tokpyeng-i*   *ta*   *tyoh-kenul* ...
immediately   take-NF   eat-**CAUS**   serious.illness-NOM   all   be.good-as ...
'(he) became well altogether because (he) took (the medicine) by force and took it, and so...' (1459 *Welinsekpo* 17:21b)

The form seems to have been quite stable throughout history, but toward the end of the 19th century, a new form *-niska* emerged and began to be used alongside its more conventional form *-ni*. The difference is the emphatic nuance in addition to its basic meaning. The function of marking reason is shown in (3) from a monthly journal published around the beginning of the 20th century. Reason is more indirect than cause in the degree of causality since the former is subject to a mental processing of reasoning, whereas the latter involves physical cause-and-effect relationship.

(3)   *hanAnim-i*   *tow-acyu-m-i-**niska***   *kekcyeng*   *eps-ta*
God-NOM   help-BENE-NOMZ-COP-**RSN**   worry   not.exist-DEC
'(They say) because God is helping (them) there is nothing to worry about.' (1904 *Sinhakwelpo* 4)

Around the same time, *-niska* comes to function as a marker of pragmatic connective, i.e., it marks the ground of the speaker's assertion rather than the causal relationship between the main clause and the subordinate clause, i.e., "Judging from A, I assert B." Such use *-niska* (with an epenthetic vowel *-u-*) is exemplified in (4).

---

[7] Sohn (1992, 2003) discusses the emergence of the reassertion function of the SFP *-nikka* contrasting with its near-synonymous *-ese*. In (1c), the status of *-tanikka* as a SFP may have to do with the presence of the sentence-type marker *-ta* in it. However, the development of the connective *-nikka* into a SFP is an independent process, and *-nikka* alone can carry the SFP function.

(4)	*ipen-ey*	*chongli-ka*	*sto*	*khun*	*sAep*	*hAna-lul*	*hA-yes-**uniska***
	this.time-at	Premier-NOM	again	big	business	one-ACC	do-PST-**GRND**
	ku	*sAep*	*hA-n*	*thek-i-n*	*ke-y-ci*		
	the	business	do-ADN	treat-COP-ADN	thing-COP-SFP		

'As the Premier accomplished a new large-scale project recently, (his wife's throwing a luxurious party) must have been a treat to celebrate it.' (1904 *Tayhanmayilsinpo*)

It is also this time when *-niska* becomes combined with the complementizers *-ta, -la*, and *-ca*, all originating from sentence/clause-type indicators, and generates *-taniska, -laniska*, and *-caniska*, respectively, and an exact parallel pattern occurs with *-nikka*. These complex markers could mark diverse notions, and since they incorporated the complementizers, the primary marker of quotation, they carried the reportative function inherited from the complementizers (for discussion of the emergence of complementizers see Rhee, 2007b, 2008b).[8] The following example illustrates the reason-marking *-taniska* strongly showing the reportative origin.

(5)	*songpyengcyuni-ka*	*pwulwenkan*	*kwikwukhA-n-**taniska***	*ilcinhoywen-tul-un*
	[name]-NOM	before.long	repatriate-PRES-**RSN**	[name.member]-PL-TOP
	huypwulcAsunghA-ya	*ip-i*	*namtaymwun-manchi*	*pel-ecy-es-ta-ci*
	be.ecstatic-CAUS	mouth-NOM	South.Gate-as.much	open-CAUS-PST-DEC-SFP

'(I heard) that the members of Iljinhoy (a pro-Japanese organization) became ecstatic and their mouths were open as wide as the South Gate as they heard that Song Byung Joon (a pro-Japanese leader) is soon returning.' (1904 *Tayhanmayilsinpo*)

Another notable function of *-{ta}nikka* is marking the contingency relation, which can be roughly translated as 'while . . . accidentally'. In this case the original causality relation (i.e., cause and reason) is considerably bleached, as shown in (6).

(6)	*upnAy*	*han*	*keli-lul*	*cina-n-o-**laniska***
	downtown	one	street-ACC	pass-CONT-HUMI-**CNTG**
	han	*khunakhu-n*	*kaka-ey*	
	one	be.very.big-ADN	store-at	

'While (she) was walking along the street downtown, she accidentally found that (there was a poster on the window) of a huge store...' (1912 *Sinsosel, Maninkyey*)

A further semantic extension engenders the weak contrast meaning, as shown in (7a), in which the speaker is uttering a mild, and feigned, protest to the addressee who did not comply with the speaker's request. This is in contrast with (7b), in which *-lanikka* signals magnified contrast, i.e., adversativity.

(7)	a. *eyku*	*acuk*	*kyey*	*nAypelyetwu-si-**laniska***	*kuli*	*hA-si-miska*
	EXLM	yet	there	leave-HON-**CNTR**	so	do-HON-Q

'Oh, my! Are you doing so while I told you to just leave it at that?' (c.1910 *Sinsosel, Welhakain*)

	b. *sonnim-ul*	*mos*	*po-n-tako*	*hA-**laniska***
	visitor-ACC	NEG	see-PRES-COMP	say-**ADVS**
	tulew-a	*syengkasilep-key*	*kwunA-nya*	
	come.in-NF	be.bothersome-ADV	behave-Q	

'(Why) are you here to bother me and announce a visitor despite that I told you I cannot see visitors (because I am not feeling well)?' (1908 *Sinsosel, Hongtohwa*)

The forms under discussion make a seemingly drastic change as they come to be used as SFPs rather than as connectives. Drastic as it may seem, the shift from a connective to a SFP, in fact, involves intermediate stages. The following series of examples represents the progression.

(8)	a. *sileps-un*	*mal*	*hA-yase-n*	*mos*	*hAn-**taniska***
	be.nonsensical-ADN	word	say-RSN-TOP	NEG	do-**ADVS**(SFP?/CONN?)

---

[8] A closer look at the historical progression of the formal change involving *-nikka* suggests that *-tanikka* is in fact a result of a gradual phonological erosion process of [*-ta-ko-ha-nikka* > *-tako-ha-nikka* > *-ta-ha-nikka* > *-tanikka*], where *ha-* is a verb of locution, i.e., 'say'. The form *-tako*, attested in the intervening stage, is a complementizer that grammaticalized around the end of the 18th century.
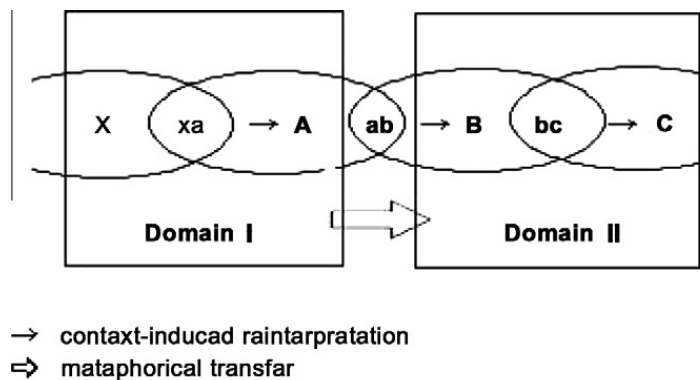
→ contact-inducad raintarpratation
⇨ mataphorical transfar

Fig. 1. The Metonymic-Metaphorical Model (Heine et al., 1991a, p. 114).

(i) '(I) am telling you that you shouldn't talk nonsense.' (SFP)
(ii) 'Even though I'm telling you that you shouldn't talk nonsense... (you are saying such things)' (CONN)   (1911 Sinsosel, *Tongkakhanmay*)

b. *pi-ka*   *o-n-__tanikka__*
rain-NOM   come-**RASS**(SFP)
'It's raining, you know! (How many times should I tell you?/Don't you trust me?/...)' (PDK)

c. *ne*   *cengmal*   *wus-ki-n-__tanikka__*
you   really   laugh-make-PRES-**EMPH**(SFP)
'You are really funny/ridiculous.' (PDK)

The form -*taniska* is utterance-final in (8a), and carries an adversative meaning. However, its status as to connective vs. SFP is unclear. If it is construed as a SFP, as indicated by the first interpretation, its function is to mark the speaker's reassertion in the face of the addressee's non-compliant actions or utterances. On the other hand, the given sentence is amenable to the second interpretation, in which case the utterance is in fact an elliptical structure where the main clause that is expected to follow is withheld for one reason or another. In the source text, in which a man (the speaker) is trying to persuade a girl (the addressee) into giving up her intent of committing suicide, both interpretations are equally available.

In (8b), on the other hand, the status of -*tanikka* is clearly a SFP, because ending a sentence this way is considered perfectly normal. An interesting aspect is that the form still contains a reportative trace in form and meaning. In terms of its form it contains the trace of the complementizer -*tako*, which was derived from the declarative clause/sentence-indicator -*ta*. In terms of its meaning, it has the reportative nuance suggesting that *pi-ka o-n-ta* 'It is raining' is a self quotation, i.e. as if the speaker already said that and is repeating it now. The nuance of irritation in this case comes from the ellipsis. In other words, the ellipsed main clause could have been a protest that the addressee necessitated the repetition of what the speaker already said. Despite its structural origin of ellipsis, the native speaker's common intuition as to the status of -*tanikka* in (8b) is that of a SFP of a well-formed sentence.[9]

Example (8c) also shows the SFP usage of -*tanikka*. One difference, however, is that it is not amenable to the ellipsis interpretation. In other words, it is a full-fledged SFP and does not show the reportative trace any more. For instance, it is perfectly appropriate to say (8c) when the speaker never said anything to that effect. The speaker is simply borrowing the emphatic value of -*tanikka* disregarding its origin of reportative function as associated with the complementizer.

2.3. Context-induced reinterpretation

CIR is a powerful notion that can explain diverse aspects of inferential processes. It can explain how metonymy works in actual negotiation of meaning in discourse contexts. The semantic change model based on CIR is the Metonymic-Metaphorical Model, as shown in Fig. 1.

Modeled after the Metonymic-Metaphorical Model of semantic change, the extension pattern of the -*nikka* forms both in form and meaning as illustrated in the preceding exposition can be diagrammatically presented as in Fig. 2, even though clear-cut boundaries cannot be drawn.

---

[9] In PDK, -*nikka* and -*tanikka* both function as clausal connectives and SFPs. However, -*nikka* is predominantly used as a connective (63.6%; 4048/6361) and -*tanikka* as a SFP (93.3%; 362/388) according to the KAIST KORTERM Corpus (accessed May 2011). As was indicated earlier, the development of the connective -*nikka* into a SFP is independent of the presence of the sentence-type indicator -*ta*. The development of a reportative (quotative) marker into a sentence-final particle is also attested in colloquial Japanese as discussed by Hayashi (1997).
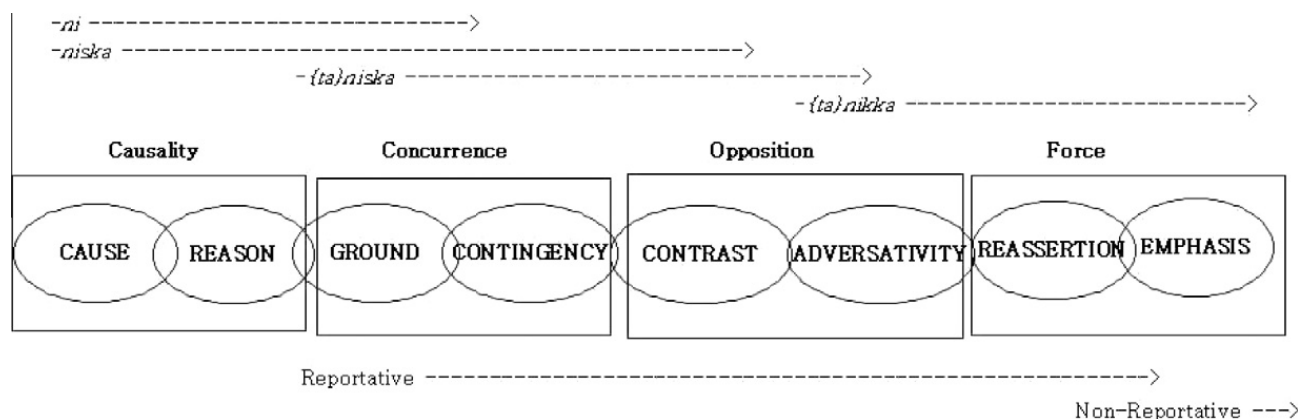
Fig. 2. Semantico–functional extension of -*ni(kka)* and -*{ta}nikka*.

From the viewpoint of microstructure, Fig. 2 shows the relations between neighboring notions, the labels for different functions of -*ni(kka)* and -*{ta}nikka*. The diagram is intended to show that any of the two neighboring notions, like CAUSE and REASON, for example, are metonymically related. Both of them are markers of the presence of some kind of enabling forces. However, CAUSE and REASON may be separable by virtue of their differential degrees of agentivity, i.e., direct and physical agent for the former, and indirect and cognitive (thus, rational and logical) agent for the latter.

Likewise, REASON and GROUND are closely related notions because both refer to the justification of a state or action. Even though both refer to the mental operation, they may be separable by virtue of the fact that REASON involves relatively more direct cognitive force and that GROUND involves more fundamental basis or underlying conditions.

GROUND and CONTINGENCY are metonymically related in the sense that they both refer to the relationship of two juxtaposed events or states. GROUND may provide the other event or state a logical background, whereas CONTINGENCY a mere situational background, devoid of causal relationship.

CONTINGENCY and CONTRAST are also closely related in that, as was the case with GROUND and CONTINGENCY, they both refer to the relationship of two juxtaposed events or states. CONTINGENCY merely refers to casual cooccurrence, whereas CONTRAST highlights the distinctive nature of certain aspects present in the two events or states. It seems to be a human propensity to look for differences between objects or events for discrimination, as evidenced by the grammaticalization path of the English connective *while* that derived the contrastive/concessive meaning from the mere temporal overlap denoted by the source meaning 'at the time that' (see Hopper and Traugott 2003, pp. 91-92 for a discussion of semanticization of surprise into concessivity as associated with *while, as long as*, and *at the same time as*).

CONTRAST and ADVERSATIVITY are clearly related in that they signify the presence of some kinds of oppositional elements between events or states. CONTRAST seems to be relatively neutral in terms of value judgment, thus highlighting mere differences. ADVERSATIVITY, on the other hand, seems to generally focus on one side of two objects, real or conceptual, viewing the other as a potential obstacle to be overcome.

ADVERSATIVITY and REASSERTION are related in the sense that both suggest presence of an obstacle, real or imagined. REASSERTION is a statement that reiterates the previous utterance, which is normally not necessary. Therefore, in case of REASSERTION, the hindrance can be a discursive norm that a statement once uttered may not be repeated, and the reasserted statement can be interpreted as "Even though I said this before, I am saying this again, so you need to take heed of it." This aspect of overcoming an impediment engenders the emphatic nuance.

Finally, REASSERTION and EMPHASIS are closely related to each other, for both of them strengthen the force of what is said. The intensifying effect is derived from a repetition in the case of REASSERTION and from the form itself in the case of EMPHASIS. Since the emphatic function of -*{ta}nikka* is a result of its origin in the reportative marking, it can be said that the function more directly related to its formal origin, i.e., reportative, is bleached, and only the associated force derived from its origin is what now remains.

From the viewpoint of macrostructure, on the other hand, the notions in the microstructure may be grouped into a fewer number of categories or domains. For instance, CAUSE and REASON may be placed under a domain labeled 'Causality', GROUND and CONTINGENCY under 'Concurrence', CONTRAST and ADVERSATIVITY under 'Opposition', REASSERTION and EMPHASIS under 'Force,' etc. Still, this grouping is by no means definitive and an entirely different grouping may be employed. For instance, CAUSE, REASON, and GROUND may be subsumed under 'Causality', highlighting the aspect of 'enabling' associated with GROUND; and CONTINGENCY, CONTRAST, and ADVERSATIVITY under 'Association', disregarding the oppositional aspect associated with CONTRAST and ADVERSATIVITY. This flexibility directly reflects the non-discrete contiguity, a defining characteristic of metonymic relation. In other words, categorization is fluid and is largely a matter of granularity.

The domain names used here are not those ontological super-category labels as used in Heine et al. (1991a), i.e., PERSON, OBJECT, PROCESS, SPACE, TIME and QUALITY. Nevertheless, the progression [CAUSALITY > CONCURRENCE > OPPOSITION > FORCE] intuitively still seems to be metonymically related, and is reminiscent of the semantic extension pattern exhibited by the English preposition *with* as in [OPPOSITION > RECIPROCITY > ASSOCIATION > ACCOMPANIMENT] (Rhee,
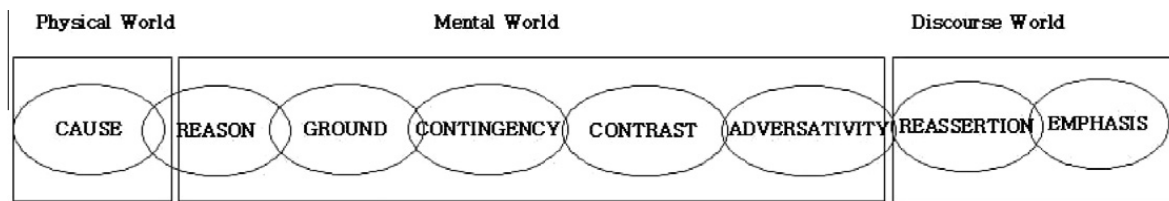
Physical World   **Mental World**   **Discourse World**

CAUSE   REASON   GROUND   CONTINGENCY   CONTRAST   ADVERSATIVITY   REASSERTION   EMPHASIS

Fig. 3. Semantico–functional extension of -*{ta}nikka*.

2004). These category names, however, are sufficiently comprehensive to encompass the microstructure concepts, and at the same time, conceptually distinct enough to be differentiated from each other.

On a more global level, however, the super-categories may be aligned in an entirely different way, which involves three different categories: Physical, Mental, and Discourse. In other words, CAUSE relates to the physical world; REASON, GROUND, CONTINGENCY, CONTRAST and ADVERSATIVITY relate to the mental world, and REASSERTION and EMPHASIS relate to the world of discourse. The reason that many subcategories are subsumed under the mental world is largely due to the fact that these subcategory notions are mostly marked by -*{ta}nikka* rather than -*nikka*, albeit to a lesser extent in the case of REASON. As has been discussed, -*{ta}nikka* contains the complementizer whose major function is to lead in a quotation, and thus the following main clause is almost exclusively a statement that encodes the reaction to the quotation, where the reaction is the result of a mental operation. In this case, the schematic micro- and macro-structure of the extension pattern can be represented as Fig. 3. These three domains are those often invoked in the context of metaphorization processes (see, e.g., Sweetser (1990) for an extensive discussion of semantic-functional change across 'content', 'epistemic', and 'conversational interaction' domains).

It is notable, however, that there is no unitary metaphorical mapping that is applicable to all subcategories. For instance, in the case of CAUSE, the causal force in the physical world may be metaphorically mapped onto the causal force in the mental world (i.e., REASON and GROUND), a clear case of metaphorization. However, this mapping is not applicable to CONTINGENCY, CONTRAST, and ADVERSATIVITY in the mental world. Likewise, the 'overcoming' aspect in the mental world (i.e., ADVERSATIVITY) may be mapped onto the discourse world (i.e., REASSERTION), but cannot be applied to EMPHASIS. This state of affairs suggests that metonymy may in fact be a better enabling mechanism than metaphor in semantic and functional extension, a finding recurrently presented in the research of grammaticalization and semantic change.[10]

2.4. Pragmatic inferences

Korean is a verb final language where the subordinate clause marked with a connective at the end occurs before the main clause. The occurrence of the sentence-final marker at the end of the main clause signals the completion of the sentence, and often that of an utterance. Therefore, the development of a SFP from a clausal connective is tantamount to an occurrence of an utterance that signals non-completion of utterance. At the onset of this development, i.e., when such a grammaticalization process has not sufficiently proceeded, the utterance seems to be an elliptical structure similar to utterances in English that end with such connectives as *and, or*, and *but*.

Grammatical change influenced by this type of ellipsis is attested across languages (cf. Haiman, 1988 'inconsequential clauses' in Hua, Davis, n.d. 'disruption' in Hua and Alabama, Ohori, 1995 'suspended clause' in Japanese, Rhee, 2002; Sohn, 2003 'main clause ellipsis' in Korean, Evans, 2007, 2009 'insubordination' across languages, Heine et al., 2011 'thetical constructions,' and 'insubordinated clause' for German).[11] For instance, subordinate clauses become full-fledged free-standing main clauses that mark requests, suggestions, desideration, questions, exclamation, etc.[12] Recruiting ellipsis to evoke pragmatic inferences is a common discourse strategy that triggered grammaticalization in Korean (Koo and Rhee, 2001; Rhee, 2002, 2008b, 2010). For instance, a large number of connectives are grammaticalized into SFPs as a result of conventionalization of main clause ellipsis (Rhee, 2002). Some of the discourse markers that signal consensus historically originated from discourse segments that end with connectives, thus suggesting that they are of elliptical structures. What has been ellipsed in such cases of back-channel agreement markers is strategically withheld by the speaker to show that it is so obvious that it does not need

---

[10] According to the Metonymic-Metaphorical Model of semantic change (Heine et al., 1991a), for instance, actual change is triggered by the metonymic process of metonymization and the cumulative effect may make the entire process look like metaphorization. The seeming metaphor in this context is the "post hoc metaphor" (Lessau, 1994, p. 672) or "epiphenomenal metaphor." See also Bybee et al. (1994, pp. 24–25) for a discussion of similar situations.

[11] Yap et al. (2010, 2011) present similar cases in Mandarin and Malay where the sentential fragments involving 'fear' verbs become grammaticalized into epistemic adverbial SFPs meaning 'probably' through reinterpretation. Unlike English insubordinated parentheticals, e.g. *I think, I guess*, that retain the subject, the subjects in Mandarin counterparts are also elided. An anonymous reviewer also points out that Hayashi (1997) discusses a similar kind of development by -*to* in Japanese.

[12] The functions of inconsequentials in Hua are (i) to mark actions taken in vain, (ii) to mark actions not as yet completed, (iii) to signal a change of speaker in a dialog, and (iv) to mark verbs of perception (Haiman, 1988, p. 53). But these functions do not coincide with those associated with the Korean -*{ta}nikka*. The only function that resembles, though remotely, that of -*{ta}nikka* is that of marking actions taken in vain, where the speaker encodes frustration or irritation over the 'inconsequentiality' of an action, as illustrated by Korean examples of adversativity in (7) and (8) above.

Table 1
Inferring reassertion and emphatic assertion from connective -*{ta}nikka*.

Original Connective Meaning	• cause/reason • contingency • contrast/adversativity
What Addressee Hears	• because A • what (just) occurred, after/while A, is... • even though A
What Usually Follows When -*{tajnikka* is Used as a Connective	• consequence/weak consequence • contingent event • discordant event
What Addressee Constructs	• therefore, B • in the mean time, B • on the contrary, B

What Addressee infers	• [B is the consequence of A]
	current state is the consequence of A;
	current state confirms the validity of A
	  >> Assertion
	
	• [B is after/while A]
	current state must be a particularly meaningful
	event with respect to A
	  >>Assertion
	
	• [B is discordant with A]
	 (i) speaker said/asked something despite that the
	    speaker already said A
	    >> Protest/Reassertion
	(ii) something was done despite that the speaker said
	    A, or that A is self-evident
	    >>Protest>> Strong Assertion

to be explicitly expressed. The high degree of its being obvious warrants its ellipsis and at the same time serves as an endorsement of the truthfulness or firmness of what the previous speaker has just said (Rhee, 2010).

Unlike the cases of discourse markers of agreement, the function of which is largely that of a back-channel, in the case of -*{ta}nikka*, the elided part is exophoric, i.e. situational, and therefore recovering the elided main clause is far less straightforward. The implication is that the reconstruction may be variable depending on the addressees who are reconstructing and the situation in which they are reconstructing. It is also notable that the range of inference patterns is heavily influenced by the original functions associated with -*nikka* and -*{ta}nikka* as a connective, and what usually follows when the form is used as a connective.

For instance, the inference may proceed in the following manner. The addressee hears an utterance ending with a connective marker that encodes cause, reason, contingency, contrast, or adversativity relation, and is obliged to construct the elided part of the original utterance, which supposedly is a consequence, attendant contingency, or discordant event with respect to what has been said, just because a proposition in this kind of relation usually follows a -*nikka*-marked subordinate clause. Now the addressee attributes a pragmatic significance to 'the relation' between the utterance and constructed proposition, paying attention to the fact that the speaker withheld the main clause. In other words, it is as if the addressee is saying, 'why would he or she finish the sentence if it were not self-evident?' The reconstructed proposition itself, however, is not of much importance because it is situationally clear, in fact, to the point that the speaker even decided not to bother to say it. It is in a large part making reference to the current state, including, for instance, what the addressee or speaker did or said that is relevant to the current state. This line of thought can be presented as in Table 1, in which A is the proposition (i.e., the subordinate clause) uttered by the speaker with the connective -*{ta}nikka* affixed to it, and B is the proposition (the putative main clause) reconstructed by the addressee with the view to the ellipsis.

This progression can be exemplified by (10), a hypothetical inference pattern associated with the example (9), where -*tanikka* is first heard as a connective with a trace of the reportative and then as a marker of emphasis in the end.

(9)   salam-i   kule-myen   mos   ssu-n-**tanikka**
                person-NOM do.so-if   NEG   use-PRES-**CONN**
                'A (respectable) person should not do such things!' (Lit. (People) cannot use the person if
                he/she does something like that.)

(10)
        X: [A respectable person should not do such things]-**TANIKKA**

Y:	(i)	I heard [A respectable person should not do such things]-**TANIKKA**('because' 'while' 'despite')
	(ii)	X did not finish the sentence.
	(iii)	If X had completed the sentence it would have been:
		[A respectable person should not do such things]-**TANIKKA**('despite'), [you are doing or did such things.]
	(iv)	I did such things.
	(v)	X thinks that my doing such things is against what X said.
	(vi)	X is protesting against what I did.
	(vii)	X is reiterating what X said before.
	(viii)	X is emphatically restating what X said before.
	(ix)	**-TANIKKA** may not simply mean 'because' 'while' 'even though'; its meaning is more felicitous when interpreted as an emphatic assertion marker.
	(x)	Then, what I heard may be:
		[A respectable person should not do such things] –**TANIKKA** (emphatic assertion)

The putative line of inference, as suggested in (10), can be enriched by establishing more detailed stages or shortened by simplifying them. In other words, the number of stages should be different depending on the granularity of analysis. For example, in step (iii), the reconstruction can go through more fine-grained steps that determine the choice of the direction, such as which meaning the addressee should choose from 'because', 'while' or 'despite' as associated with *-tanikka*, on which the direction of inference crucially depends. As the addressee Y chooses the 'despite'-interpretation in this case, something that contrasts with X's utterance, i.e., Y's doing or having done something, becomes relevant. Thus the contrastive nature of what is being done or was done engenders the emphasis which is attributed to the SFP *-tanikka*.

Also important in this inference pattern is that Y needs to determine if the utterance is ending in *-nikka* or *-tanikka*. If it is *-nikka*, the presence of *-ta-* needs to be separately recognized and thus Y needs to begin with a quotative clause, something similar to "(I) said a person should not do such a thing." The progression may have to be modified to include Y's recognition that it is so, and in this case, the resultant function of SFP *-tanikka* will be reassertion. A Korean idiosyncrasy is that sentential arguments may be omitted with relatively great freedom, and so the quotation in the above case does not have to be a self-quotation but a quotation of common wisdom. Therefore, Speaker X may use the reportative-marked *-tanikka*-clause when X did not in fact say so himself or herself. This possibility of deriving the validity of one's statement from common wisdom seems to have played an important role in the development of emphasis meaning and the bleaching of the reportative meaning.

In sum, the inference is critically based on the addressee's choice on the nature of the relation between the speaker's utterance and the current state of affairs and the relation chosen that way becomes conventionalized as a part of the semantic function of the former connective in the process of its grammaticalization into a SFP.

3. Discussion

3.1. Context-induced reinterpretation and invited inferences

As illustrated in the foregoing discussion, the grammaticalization of connectives into SFPs was syntagmatically triggered by the ellipsis of the main clause. In Korean, many instances are attested where ellipsis played a crucial role in grammaticalization of many grammatical markers (Rhee, 2002, 2009). This seems by no means restricted to Korean, as illustrated by the development of the desiderative function from the English conditional marker *if* in hypothetical conditional sentences, and the request marking function from idiom fragments involving *-te* of a connective function in Japanese benefactive constructions.

(11) a. If only he were here, I would be very happy.
      b. If only he were here!

(12) a. *Tyotto*   *kotti*   *ki-**te**-kudasai/kure/tyoodai*
         a.little(?)   here   come-**TE**-give[BENE]
         'Will you please do the favor of coming here now?'

      b. *Tyotto*   *kotti*   *ki-**te***
         a.little(?)   here   come-**TE**
         'Come here now.' (Adapted from Ohori (1995, p. 205))

From the pragmatic point of view, ellipsis of the main clause induces the addressee to reconstruct the missing main clause that is compatible with the explicitly presented connective with which the utterance ended. On the part of the speaker, ending an utterance with a connective is an effective way to engage the addressee, and therefore, connectives are particularly susceptible to developing into SFPs. Korean connectives, particularly *-a, -key, -ci,* and *-ko,* which have a similar function as the Japanese *-te* above, seem to have been involved in the grammaticalization of SFPs (Kim, 1997, 1998, 2000; Rhee, 2002). However, the grammaticalization of the SFPs from ellipsis is by no means restricted to connectives. For instance, it has been reported that nominalized clauses ending with a nominalizer or an accusative marker are among those that underwent similar processes (Rhee, 2008a, 2011). In this respect, Korean exhibits more widespread ellipsis-based grammaticalization than Japanese, in which a suspended clause is marked by a (pseudo-)logical connective of reason or concession, such as *kara, kedo,* and *noni* (Ohori, 1995, pp. 207–213).

Another notable aspect concerns the progression of the grammaticalization process itself. There are diverse semantic designations of *-{ta}nikka* that emerged in the course of grammaticalization. As was indicated in an earlier discussion, the emphatic SFP *-{ta}nikka* originated from the connective *-nikka,* whose primary function was marking CAUSE/REASON. When these two notions are placed on each side of the pole, CAUSE/REASON at one end and EMPHASIS at the other, such semantic-functional change seems unmotivated. However, when the intermediate stages are compared, each function seems to be well motivated from the previous one through metonymization. Some of the processes involve weakening of various kinds of forces as in [CAUSE > REASON], [REASON > GROUND], and [GROUND > CONTINGENCY], while some of them involve strengthening of forces as in [CONTINGENCY > CONTRAST] and [CONTRAST > ADVERSATIVITY]. Furthermore, the last stages of the development, i.e., those where REASSERTION and EMPHASIS emerged, can be characterized by intersubjectification, to which we will return in the following discussion.

One fundamental question with respect to the process is whether, in history, the functions arose in that exact order suggested in Fig. 2 above. What the historical data shows, as was briefly indicated earlier, is that *-ni* was used with diverse meanings but largely centering around causality until the late 19th century, when its phonologically strengthened *-niska/-nikka* occurred also carrying a strong causality meaning. In the early 20th century *-{ta}nikka* came into existence, and since this contains the trace of complementizer it was used in reporting context. The pure emphatic function outside the reporting context is only a recent development. Therefore, CAUSE/REASON of *-nikka* on the one pole and EMPHASIS of *-{ta}nikka* on the other constitute the definite beginning and end of the process of the emergence of *-{ta}nikka.* A question that arises here, then, is whether the functions in the intervening stages occurred in that order. The answer is no for two different reasons. One is that the development occurred in a relatively short time period and therefore the individual functions cannot be uniquely assigned to distinct time periods. The second reason is that semantic change is not discrete, i.e., from one function emerges another one, from which comes another function, but this third function is not uniquely separable from the second, only because older functions do not disappear but persist, thus creating functional polysemy (cf. notions 'overlap' 'ambiguity stage' Heine, 1997a, 1997b; Heine et al., 1991a, 1991b). The extension patterns may be ideally modeled based on the conception of a monolinear development, but this is only for a theoretical convenience and may not be so in an actual progression, which seems to be dynamic not amenable to the analysis of monolinear development.

3.2. Subjectification and Intersubjectification

With respect to meaning change, subjectification and intersubjectification surface as prominent phenomena.[13] As for subjectification, the change in meaning and function discussed in Section 2.3 is directly relevant. For instance, the semantic progression patterns motivated by the speaker's evaluative judgment, e.g. [CONTINGENCY > CONTRAST], [CONTRAST > ADVERSATIVITY], among others, are the instances of subjectification. When Event 1 and Event 2, denoted by the subordinate and main clauses, are in a contingency relation, the two events are compared in the speaker's mind and the differences are given a contrastive value, a decision characteristic of subjectification. Likewise, when the two events are contrasted, the speaker attributes force-dynamic interaction to the differences (cf. Examples (7) and (8) above).

Intersubjectification, on the other hand, is prominent in the development of REASSERTION and EMPHASIS associated with SFPs *-{ta}nikka.* Since they originated from a discourse situation where the ellipsis is strategically used by the speaker, SFPs are necessarily highly interpersonal and intersubjective. They are frequently used in emotive interactions, often with an intonation typical of sentences uttered by irritated speakers. The following is an example of an emotive interaction.

(13) A: *com   coyonghi   ha-lanikka*
            a.little   quietly   do-SFP
            'Please keep quiet!' (Can't you be quiet?)

        B: *al-ass-tanikka*
            know-PST-SFP
            'Alright, alright!' (I say I will, OK?)

---

[13] In this respect, Evans (2009) aptly states that insubordination occurs in situations where a high degree of intersubjective alignment between speaker and hearer can be presupposed.

Further, used in interactive situations, SFPs indicate the speaker's acknowledgment of, and response to, the addressee's attitude/stance. The attitudes in these situations are different from those typically encoded by the modality markers for the speaker's epistemic stance, since they are attitudes toward the addressee (i.e., irritation), rather than toward the proposition. In this sense, these SFPs are markers of the speaker's 'attitudinal stance' (Rhee, 2011).

These characteristics seem to be attributable to the origin of the SFPs. Their use in highly interactional contexts may be due to the complementizer effect, i.e., the reportative function associated with -ta, -la, -nya and -ca, which are the traces of complementizers -tako, -lako, -nyako and -cako, respectively. These traces are barely recognizable to most contemporary speakers of Korean.

It is also worth noting that their common occurrence in highly emotive contexts and the function of marking attitudinal stances may be due to the strategic ellipsis of the main clause. There may be two types of circumstances when the main clause is ellipsed. With respect to the first type, withholding the main clause, thus leaving a sentence incomplete, is a literal instantiation of proverbial situations described as *malul isci moshata* 'to be unable to continue one's speech' or *halmal-ul icta* 'to forget what to say', both referring to frustrating situations, where the speaker, emotionally overwhelmed, cannot complete an utterance and becomes speechless. The other type of circumstance is when the speaker realizes in the middle of an utterance that the remainder is so obvious that it does not have to be explicitly expressed. The results would be the same, i.e., a discontinued utterance, but the implications are different. In the first case the addressee will find it difficult to discern the missing main clause, whereas in the latter, the addressee can easily reconstruct what would have been said. Under certain conditions, the two situations may converge if the speaker is in a highly emotive state and the situation is such that he or she does not feel obliged to complete the utterance. For instance, Speaker A in (13) might have completed it by continuing to say something like "*way ilehkey sikkulewe?*" 'why are you making such a noise?' and Speaker B, by saying something like, "*way solil cille?*" 'why are you raising your voice?' Interestingly, however, in either case, the extent of conventionalization of usage is such that what remains unsaid does not force the addressee to interpret the utterance as an elliptical structure, and instead the syntactically defective sentences are perceived as complete sentences.

Since the -{ta}nikka constructions are used in highly interactive contexts, the nature of their interpersonality and inter-subjectivity is prominent. The functions of -{ta}nikka are largely consonant with the generalizations made by Evans (2007, pp. 368), such as interpersonal coercion, modal framing, and marking discourse contexts. For instance, -{ta}nikka, as shown in the previous discussion, can mark irritated reassertion, adversative reiteration, and contrastive emphasis, among others. Especially in the case of functions derivable from the construction's reportative trace, the claim advanced by Evans (2007) that the construction's modal framing includes "the unattributed evocation of quotation or belief" (2007, p. 368) is in consonance with the Korean data (cf. Example (9) above).

3.3. Consequences in grammar

The development of SFPs from a connective has made an impact on the grammar of Korean. Naturally the connective -nikka came to have a functional split, thus having the same form associated with two different functions. This change brings forth some interesting changes in the aspects of grammar, especially those of extension in form.

3.3.1. Syntagmatic extension

The first type of change is the syntagmatic extension. The form in the new SFP function can now be followed by the politeness marker -yo by virtue of attaining membership of the sentence-final elements which form a constellation where diverse TAM notions are marked.[14] The use of the politeness marker -yo is restricted to the informal register in contrast with -(s)upnita in the formal register. The new SFP cannot be marked with the formal politeness marker -(s)upnita, which is partly due to the syntactic rule that -(s)upnita should directly follow a verb, an adjective, or tense markers -ass- (past) and -kyess-/-ulkesi- (future); or partly due to the history of this innovative form in that it developed from an informal style of language use, i.e., an utterance stopped short midway.

The affixation of the politeness marker -yo, resulting in the creation of -{ta}nikkayo, is a process of intersubjectification since the adoption of a politeness marker is an act of using "the explicit expression of SP/W's attention to the 'self' of AD/R in both an epistemic sense (paying attention to their presumed attitudes to the content of what is said), and in a more social sense (paying attention to their 'face' or 'image needs' associated with social stance and identity)" (Traugott, 2003, p. 128). In Korean this intersubjectification process is an inevitable one to any linguistic form that becomes a SFP because politeness-marking is fully grammaticalized and each sentence must be marked with either the [+polite] or [-polite] feature depending on the speech situation. Indeed, this is applicable to many SFPs that recently grammaticalized from connectives (Rhee, 2008b).

Another type of syntagmatic extension involves the use of a topic marker -nun, thus creating -{ta}nikkanun. The topic marker -nun is a very productively used particle in Korean. A Korean idiosyncrasy is that it allows not only taking phrasal and clausal complements, but also stacking with other particles. The topic marker is indeed the most frequently used additive particle in colloquial variations of connective particles (Rhee, 2007), since it creates the contrastive effect and thus contributes to the strengthening of pragmatic forces. The resultant form -{ta}nikkanun underwent phonological reduction to become -{ta}nikkan. The phonological change of the topic marker -nun into -n is commonly attested, and therefore, the

---

[14] Note, however, that even though the end of a sentence is a typical locus of the politeness marking, its occurrence is not restricted to the end of sentences.
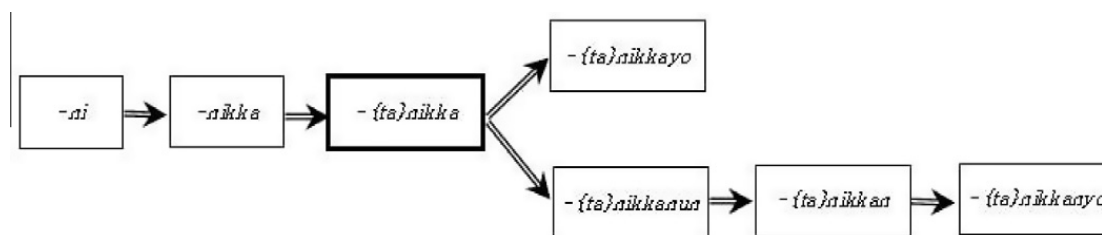
Fig. 4. Syntagmatic extension of *-{ta}nikka*.

change of *-{ta}nikkanun* into *-{ta}nikkan* may be a result of the application of the change associated with *-nun*, or the two instances of change may be independent and coincidental changes. The new form *-{ta}nikkan* can host the politeness particle *-yo* to result in *-{ta}nikkanyo*, by virtue of its being a SFP. It is strange, however, that *yo*-affixation to the fuller form, i.e., *-{ta}nikkanunyo*, whose formation is perfectly reasonable, does not seem to occur in actual use. It is only suspected that this may be due to the fact that the emergence of an SFP from a connective begins in the colloquial register, where the articulation of the fuller form is rather cumbersome.[15] What is notable is that the changes in form are not uniformly reductive and may involve additive processes as well. The change as discussed above can be summarized as shown in Fig. 4.

3.3.2. Paradigmatic extension

The second type of change concerns paradigmatic extension. As shown in the preceding discussion, the connective *-nikka* became *-tanikka, -lanikka, -nyanikka*, and *-canikka* around the turn of the 20th century. These forms are recognized as full-fledged grammatical markers on their own in contemporary dictionaries. A look into the process whereby these forms attained wide circulation and came to be recognized as grammatical markers sheds light on the discussion of grammaticalization of multiple forms in a paradigm.

The first category of paradigmatic extension of the *-nikka* forms, as discussed above, involves the sentence-type indicators, or sentential endings, such as *-ta, -la, -ca*, and *-nya*, for the declarative, imperative, hortative, and interrogative, respectively, as shown in Fig. 5.

An interesting aspect of the pattern of this extension, which has a bearing on the direction of the extension, is that the individual forms show differences in terms of their token frequency at the incipient stage of their grammaticalization, as shown in Table 2.

As shown in Table 2, at the turn of the 20th century, the declarative-based forms account for 60% of all *-{ta}nikka* forms, whereas all others are either very low in both relative and absolute frequencies or not attested altogether in a data corpus of 376,887 words. This state of affairs stands in sharp contrast to the current situation in PDK where all of these forms are recognized as full-fledged grammatical markers and are very productively used.

One issue that arises immediately is that of the role of use frequency which is widely acknowledged as an important parameter of grammaticalization, even to the point of considering it a necessary condition for a linguistic form to grammaticalize. As Narrog and Heine (2011, pp. 2–3) point out, in some of the definitions of grammaticalization "frequency is portrayed as one of the driving forces, or *the* driving force of grammaticalization" (emphasis original) (e.g. Bybee and Hopper, 2001 and works therein, Krug, 2001; Bybee, 2003, 2007, 2011,Torres Cacoullos and Walker; 2011). Undoubtedly, frequency as a result of repetition is an important mechanism because it brings forth habituation and automatization. However, some studies suggest that grammaticalization may not result from high frequency of the linguistic form concerned (e.g. Hundt, 2001; Hoffmann, 2005).

The grammaticalization process of the *-tanikka* (with its allomorphic variant *-lanikka* in the case of the copula) derived from the declarative sentential ending *-ta* seems to have been triggered by high frequency, whereas the grammaticalization processes of the others, i.e., the imperative-based *-lanikka*, the hortative-based *-canikka*, and the interrogative-based *-nyanikka*, clearly do not. It is simply that their respective frequencies were either very low or even zero when the declarative-based forms were actively undergoing grammaticalization, and the frequencies of these later forms did not go through a notable increase even in the following years. These forms, however, become full-fledged grammatical forms in entirely novel functions in a very short time period. This suggests that the declarative-based forms underwent the grammaticalization process first and other forms followed the process by virtue of their structural similarity (i.e., [sentence-type marker + *-nikka*] and shared membership of a grammatical category (i.e., the sentence-type marker). In other words, the process was analogy-driven (rather than reanalysis-driven) and paradigm-based (rather than typical exemplar-based).[16]

---

[15] Most dictionaries and corpora, to some varying extents, recognize the status of these extended forms as separate grammatical markers (cf. Donga Say Kwukesacen, 1990; Wulimal Khunsacen, 1992; Lee and Lee, 2001; National Institute of the Korean Language, 2002, and The KAIST KORTERM Corpus, 1999). None of these references lists *-{ta}nikkanunyo*. Interestingly, however, a web document search by Google (accessed March 25, 2011) turns up 17 instances of *-tanikkanunyo* (declarative-based), 28 instances of *-lanikkanunyo* (declarative/imperative-based), 1 instance of *-nyanikkanunyo* (interrogative-based) as SFPs. No instances of *-canikkanunyo* (hortative-based) are found.

[16] An anonymous reviewer points out that Lehmann (2004) also argues for the role of analogy in grammaticalization. Another anonymous reviewer comments some of the workshop presentations at the 20th International Conference on Historical Linguistics in Osaka, Japan in 2011 address similar issues. The presentations by De Smet (2011) and Heltoft (2011) address the role of analogy in innovative change in English and paradigmatic restructuring in Danish, respectively.
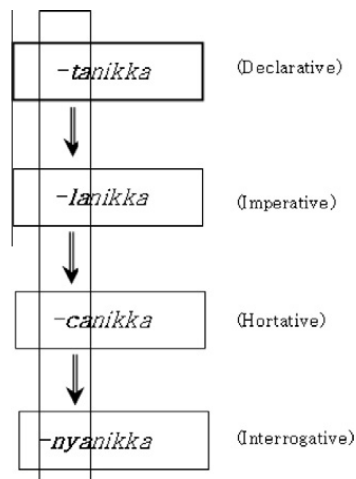
Fig. 5. Paradigmatic extension of *-{ta}nikka*.

Table 2
Token frequency of *-{ta}nikka* in the Sejong Corpus between 1890 and 1920.

Clause-type	Form	Frequency	
Declarative	*-tanikka* & *-lanikka*	42	(60.8%)
Imperative	*-lanikka*	16	(23.2%)
Hortative	*-canikka*	11	(16.0%)
Interrogative	*-nyanikka*	0	
Total		69	(100%)

Similar states of affairs have been observed with respect to the complementizers (Rhee, 2008c), conditional connectives (Koo and Rhee, 2008; Koo, 2009), and other SFPs of diverse semantics (Rhee, 2008d). For instance, Rhee (2008c) shows that the development of complementizers, in much parallelism with the *-nikka*-forms under present discussion, brought new grammatical forms into Korean, *-tako, -lako, -nyako* and *-cako*. These forms were nearly non-existent until the turn of the 19th century. Until the end of the 18th century, with very few exceptions, only the source constructions of these forms, i.e., *-ta hako, -la hako, -nya hako* and *-ca hako*, each bearing the sentence-type indicators, were attested, with the declarative-based forms in large number while the others were far less common.[17] However, at the turn of the 19th century, the usage of fully-grammaticalized complementizers exploded, again the declarative-based forms in extremely high frequency and all others at a considerably lower frequency.[18] Based on the fact that grammaticalization of complementizers proceeded at a remarkable speed within a short period of a few decades, Rhee (2008c) claims that the grammaticalization process involved the creation of a new paradigm rather than individual gram change and that the less frequently used members simply followed the frequently used member by virtue of their category membership, which in this case is the category of sentence-type indicators. In other words, this type of grammaticalization process is not exemplar-based but paradigm-based, in the sense that the form representing the paradigm spearheads the grammaticalization and all others in the paradigm follow the trodden path.

This calls into question the widely held view that, unlike reanalysis, which can create new grammatical structures, analogy does not create new grammatical structures but rather contributes to the spread of an innovated rule, i.e. generalization of an already innovated rule (Hopper and Traugott, 2003, pp. 63–69). However, the grammaticalization process under the present discussion involves the development of multiple grammatical forms in diverse functions and the creation of a new paradigm that bears structural similarity among individual source constructions. It has been widely accepted that analogy is an important cognitive strategy in language use. Fischer (2011, pp. 39–40), for instance, argues that analogical reasoning keeps playing a role in language evolution, language learning, and language change. The development of *-{ta}nikka* presents a case where such analogical reasoning can in fact trigger the emergence of multiple grammatical forms bearing structural similarity and eventually create a sub-paradigm.

---

[17] For instance, the declarative-based *-ta/la hako* forms occurred about 684 times, the imperative-based *-la hako* about 78 times, the interrogative-based *-nya hako* about 46 times, and the hortative-based *-ca hako* about 26 times per million words in the 19th century data of the Sejong Corpus. As indicated earlier, *-la hako* is ambiguous between declarative and imperative uses, and the ratio of these two uses is about 83:17 in the Corpus.

[18] For instance, the declarative-based *-tako/-lako* forms occurred about 2080 times, the imperative-based *-lako* about 281 times, the hortative-based *-cako* about 58 times, and the interrogative-based *-nyako* about 16 times per million words in the 19th century data of the Sejong Corpus. The ratio of the declarative vs. imperative uses of *-lako* is about 75: 25 in the Corpus.

3.3.3. Syntactic upgrading

An immediate consequence of the development of an erstwhile subordinator into a SFP is syntactic upgrading, whereby the subordinate clauses are reanalyzed as main clauses (cf. Heine et al. 1991b, pp. 169–170, for examples in Teso; and Rhee, 2011 for examples in Korean). Such a process can be gradual and the forms undergoing it may be ambiguous as to their structural status. It is indeed true that main clauses and complement clauses form a continuum (Brandt et al., 2010, pp. 585–586). The process often involves ellipsis of the main clause (Ohori, 1995; Iguchi, 1998; Higashiizumi, 2006; Rhee, 2002, 2008b; Sohn, 2003; Evans, 2007, 2009; Heine et al., 2011, among others).

Giving the name 'insubordination'[19] to the constructions of the kind discussed here, Evans (2007) highlights the 'non-finiteness' of the insubordinated clauses, even though he acknowledges that formal manifestations of insubordination are not restricted to the non-finite constructions (Evans, 2007, p. 368). The case of *-{ta}nikka* did not undergo the change from nonfiniteness to finiteness via insubordination. Since many clausal linkers that allow finite as well as nonfinite marking were grammaticalized into SFPs in Korean (Rhee, 2002), these are instances of insubordination without changes of their statuses as to finiteness.

Incidentally, however, a related aspect is that the clausal conjunction *-ni* in Late Middle Korean, the source form of *-nikka* and *-{ta}nikka*, was predominantly used in clauses that are not marked for tense, aspect, and modality (TAM), the grammatical trappings typical of sentence final verbal inflection. The only exceptional verbal morphologies that occasionally occurred are the markers of honorification (*-si-*) and retrospection (*-te-*), the latter serving as a past tense marker before *-ess-* came into existence as an erstwhile past tense marker from a serial verb construction in the 17th century.[20] At this stage, the grammatical notions of TAM in interpreting the subordinate clauses are inherited from the main clause. The usage of the later form *-nikka* expanded, though very slowly, to the fully TAM-inflected clauses, beginning from the late 19th century. With the grammaticalization of *-nikka* into SFP the usage context is further expanded to the fully TAM-inflected sentences, and such expansion is culminated with the grammaticalization of *-{ta}nikka* into SFP, the usage of which is restricted to the fully TAM-inflected sentences. This suggests that in Korean the insubordination process occurred in tandem with the expansion of the usage contexts in terms of finiteness.

3.3.4. Thetical constructions

Another related aspect is the relative autonomy of these ellipsis-based constructions. Heine et al. (2010, 2011) analyze a particular type of elliptical construction from the viewpoint of 'thetical grammar.' Thetical constructions, or theticals in short, originate from a construction type [main clause–subordinate clause] and enter the plane of thetical grammar, where the matrix clause is implied but not formally expressed. In other words, a linguistic unit that belongs to sentence grammar is 'coopted' to become a thetical element. According to Heine et al. (2011) the functions of these theticals are determined by various variables of thetical grammar, such as the utterance, source of information, attitudes of the speaker, speaker-hearer interaction, situation of discourse, and world knowledge (2011, p. 7). These theticals, by virtue of lying outside sentence grammar where sentence organization is determined by morphosyntactic principles, are independent of their syntagmatic environment.

The *-{ta}nikka* constructions show interesting aspects with this regard. Since *-{ta}nikka* can function as a SFP, it hosts a regular sentential element except for the signal of the sentential end. For this reason, *-{ta}nikka*-marked sentences are subject to the rules of sentence grammar, i.e., they have not yet attained autonomy.

On the other hand, since *-{ta}nikka* marks highly intersubjective and interactive meanings, some of the *-{ta}nikka*-marked sentences tend to stand alone.[21] These are those *-{ta}nikka*-marked sentences that are frequently used, carry highly emotive meanings, and are short enough to give language users the impression of their being independent theticals, i.e., interjections. For instance, a survey of PDK corpora shows that following expressions may qualify for interjectional theticals:

(14)　　a. *kulehtanikka!*　　　　'That's right!'
　　　　b. *anilanikka!*　　　　'That's not so!'
　　　　c. *silhtanikka!*　　　　'I don't want it!'
　　　　d. *alasstanikka!*　　　　'All right, all right!'
　　　　e. *moluntanikka!*　　　　'I don't know!'
　　　　f. *kwaynchanhtanikka!*　　'I'm OK, all right?'
　　　　g. *wuskintanikka!*　　　　'It's ridiculous!'
　　　　h. *hwangtanghatanikka!*　　'It's embarrassing!'
　　　　i. *ke polanikka!*　　　　'See, I told you!'
　　　　j. *celehtanikka!*　　　　'Look what's going on!'
　　　　k. *twaysstanikka!*　　　　'That's OK!'
　　　　(Note that all these expressions carry the overtone of the speaker's irritation.)

---

[19] Evans uses the term 'insubordination' to refer to "the conventionalized main clause use of what, on prima facie grounds, appear to be formally subordinate clauses" (Evans, 2007, p. 367).

[20] For discussion on the development of the past tense marker, see Han, 1986; Huh, 1979; Lee, 1981; Rhee, 1996, among others.

[21] Needlessly, *-{ta}nikka*-marked sentences can be subordinated to function as complements of matrix clauses.

As is noted parenthetically, all examples in (14) signal the speaker's irritation and this nuance may be better represented if 'Stop asking me! Isn't it already clear?' is added to the more lexically-based translations given above.

These interjectional -*{ta}nikka*-marked sentences may have differential degrees of content-based cohesion. For instance, examples (14a)–(14f) are likely to be uttered with reference to the discourse partner's previous utterance, whereas (14g)–(14k) are much less dependent on the previous utterance and are more strongly tied to the discourse situation that evokes such sentiments. The latter group tends to participate in organizing the discourse by marking the speaker's emotive stance, rather than contribute to the construction of text-based sentential meanings. As a matter of fact, (14j) *celehtanikka!* and (14k) *twaysstanikka!* are perceived as full-fledged discourse markers signaling contempt (14i) and put-down (14j). The former carries the nuance of disappointment or contempt that may be present in the sarcastic English expressions 'I knew it!' 'Why am I not surprised!' etc. The latter also carries the speaker's disappointment and suggests the attitude to brush off pending problems or to talk down to the addressee, as in the English expressions like 'Stop bothering me!' 'Why should I worry!' 'I've seen enough!' 'Enough is enough!', etc.

Even though the status of these forms as to their theticalness warrants further research, it is noteworthy that they are highly unitized expressions whose functions are closely tied to attitudes of speaker, speaker-hearer interaction, and discourse situation, the elements that are claimed to be variables in determining the functions of theticals in Heine et al. (2011). With respect to this issue, Bernd Heine (p.c.) comments that cooptation appears to be involved in the development of these SFP constructions. The point is based on a number of observations about the development: that the development of SFP-constructions took place in a remarkably short period of time; that the type of functional shift as illustrated in the previous discussion involving pragmatic inferences is the one recurrently found when information units are moved from sentence grammar to thetical grammar; and that these examples concern the situation of discourse rather than the logical relations, the typical relations marked by the sentential constituents in sentence grammar (Heine et al., 2010, 2011).

4. Conclusion

This paper illustrated the historical development of a multifunctional conjunction -*ni* into SFPs. These newly emerging SFPs show different levels of grammaticalization, but they all carry highly subjectified and intersubjectified meanings in PDK. It is argued that the grammaticalization of connectives into SFPs was syntagmatically triggered by the ellipsis of the main clause, as has been shown in many instances in Korean where ellipsis played a crucial role in grammaticalization. From the pragmatic point of view, ellipsis of the main clause induces the addressee to reconstruct the missing main clause that is compatible with the explicit connective with which the utterance ended as well as the speech situation.

The function of -*nikka* is connecting clauses with a causal relationship e.g. REASON, CAUSE, and GROUND. When it became combined with the former declarative sentential ending -*ta* and became -*tanikka*, it came to be used to signal diverse interclausal relationships, and when, in particular, it is used for marking the end of a sentence, its primary functions are marking REASSERTION or EMPHASIS. A simple comparison of causality in the source stage and emphasis in the target stage suggests prima facie a drastic semantic-functional change. It is argued, however, that this functional shift did not occur abruptly but gradually along the conceptual continuum of related categories. It is also argued that the driving force of the progression along this continuum has been context-induced reinterpretation and (inter-)subjective pragmatic inferences that are used to fill the information gap in elliptical structures that eventually have become conventionalized.

It further argued that such a seemingly minor change can bring forth a rather significant change in the grammatical system whereby a sub-paradigm of connective-turned SFPs is created and the forms undergo syntagmatic extension. This grammaticalization process is spearheaded by the most frequently used member of the sentence-type marker paradigm and the other members in the paradigm follow its path through structural and categorial analogy. This is an instance of paradigm-based grammaticalization contra exemplar-based grammaticalization.

With reference to theticals, it is argued that some of the -*{ta}nikka*-marked sentences that are high in frequency, carry emotiveness, and are of short length may have been coopted to the plane of thetical grammar and have undergone grammaticalization processes into discourse markers. Establishing their status, however, as to sentence grammar vs. thetical grammar should await future research.

Acknowledgments

References

Brandt, Silke, Elena, Lieven, Michael, Tomasello, 2010. Development of word order in German complement-clause constructions: effects of input frequencies, lexical items, and discourse function. Language 86 (3), 583–610.

Bybee, Joan L., 2003. Mechanisms of change in grammaticalization. In: Janda, Richard, Brian, Joseph (Eds.), Handbook of Historical Linguistics. Blackwell, Oxford, pp. 602–623.

Bybee, Joan L., 2007. Frequency of Use and the Organization of Language. Oxford University Press, Oxford.

Bybee, Joan L., 2011. Usage-based theory and grammaticalization. In: Narrog, Heiko, Bernd, Heine (Eds.), The Oxford Handbook of Grammaticalization. Oxford University Press, Oxford, pp. 69–78.

Bybee, Joan L., Hopper, Paul J. (Eds.), 2001. Frequency and the Emergence of Linguistic Structure. John Benjamins, Amsterdam.

Bybee, Joan L., Revere, Perkins, William, Pagliuca, 1994. The Evolution of Grammar: Tense, Aspect, and Modality in the Languages of the World. The University of Chicago Press, Chicago.

Cuyckens, Hubert, Davidse, Kristin, Vandelanotte, Lieven, 2010. Introduction. In: Davidse, Kristin, Vandelanotte, Lieven, Cuyckens, Hubert (Eds.), Subjectification, Intersubjectification and Grammaticalization. Mouton De Gruyter, Berlin, pp. p 1–26.

Davidse, Kristin, Vandelanotte, Lieven, Cuyckens, Hubert (Eds.), 2010. Subjectification, Intersubjectification and Grammaticalization. Mouton De Gruyter, Berlin.

Davis, Philip, W. n.d. The semantics of syntactic complexity. <http://www.owlnet.rice.edu/~pwd/sosc.html>.

De Smet, Hendrik, 2011. Does innovation need reanalysis? In: Workshop presentation at the 20th International Conference on Historical Linguistics, Osaka, Japan, July 25–30, 2011.

Donga Say Kwukesacen [Donga New Korean Dictionary] 1990. Donga Publishing, Seoul.

Evans, Nicholas, 2007. Insubordination and its uses. In: Nikolaeva, Irina (Ed.), Finiteness: Theoretical and Empirical Foundations. Oxford University Press, Oxford, pp. 366–431.

Evans, Nicholas, 2009. Insubordination and the grammaticalisation of interactive presuppositions. Paper presented at Methodologies in Determining Morphosyntactic Change Conference, Museum of Ethnography, Osaka, March 2009.

Fischer, Olga, 2011. Grammaticalization as analogically driven change? In: Narrog, Heiko, Heine, Bernd (Eds.), The Oxford Handbook of Grammaticalization. Oxford University Press, Oxford, pp. 31–42.

Geis, Michael, Zwicky, Arnold M., 1971. On invited inferences. Linguistic Inquiry 2, 561–565.

Givón, Talmy, 1989. Mind, Code and Context: Essays in Pragmatics. Erlbaum, Hillsdale, NJ.

Haiman, John, 1988. Inconsequential clauses in Hua and the typology of clauses. In: Haiman, John, Thompson, Sandra (Eds.), Clause Combining in Grammar and Discourse. John Benjamins, Amsterdam, pp. 49–71.

Han, Tong-wan, 1986. A diachronic study on the Korean past tense *-ess*. Journal of Korean Linguistics 15, 217–248.

Hayashi, Makoto, 1997. An exploration of sentence-final uses of the quotative particle in Japanese spoken discourse. Japanese/Korean Linguistics 6, 565–581.

Heine, Bernd, 1997a. Possession: Sources, Forces, and Grammaticalization. Cambridge University Press, Cambridge.

Heine, Bernd, 1997b. Cognitive Foundations of Grammar. Oxford University Press, Oxford.

Heine, Bernd, Claudi, Ulrike, Hünnemeyer, Friederike, 1991a. Grammaticalization: A Conceptual Framework. The University of Chicago Press, Chicago.

Heine, Bernd, Claudi, Ulrike, Hünnemeyer, Friederike, 1991b. From cognition to grammar – evidence from African languages. In: Traugott, Elizabeth C., Heine, Bernd (Eds.), Approaches to Grammaticalization, 2 vols.. John Benjamins, Amsterdam, pp. 149–187.

Heine, Bernd., Kaltenböck, Gunther., Kuteva, Tania., 2010. On thetical grammar. Typescript.

Heine, Bernd., Kaltenböck, Gunther., Kuteva, Tania., 2011. Accounting for insubordinated clauses. Typescript.

Heltoft, Lars, 2011, Grammaticalisation between usage and structure: the role of paradigmatic organization. In: Workshop Presentation at the 20th International Conference on Historical Linguistics, Osaka, Japan, July 25–30, 2011.

Higashiizumi, Yuko., 2006. From a Subordinate Clause to an Independent Clause. Hituzi Syobo Publishing, Tokyo.

Hoffmann, Sebastian., 2005. Grammaticalization and English Complex Prepositions: A Corpus-Based Study. Routledge, London.

Hopper, Paul J., Traugott, Elizabeth C., 2003. Grammaticalization, second ed. Cambridge University Press, Cambridge.

Huh, Woong., 1979. 17seyki kwuke ttaymaykimpep yenkwu [A study on the tense system in the 17th century Korean]. Hankul 164, 3–59.

Hundt, Marianne, 2001. What corpora tell us about the grammaticization of voice in *get* -constructions. Studies in Language 25, 49–88.

Iguchi, (Higashiizumi) Yuko, 1998. Functional variety in the Japanese conjunctive particle *kara* 'because'. In: Ohori, Toshio (Ed.), Studies in Japanese Grammaticalization: Cognitive and Discourse Perspectives. Kurosio Publishers, Tokyo, pp. 99–128.

Jeon, Byung-yong, 1999. Cwungseykwuke-uy Emi *-ni* -ey Tayhan Yenkwu [A Study on the ending *-ni* in Middle Korean]. Cheongtongkewul Publishing, Seoul.

The KAIST KORTERM Corpus, 1999. A Web-based Concordance Program Developed by the Korea Advanced Institute of Science and Technology. <http://semanticweb.kaist.ac.kr/research/kcp/>.

Kim, Tae Yeop, 1997. Kwuke congkyelemiuy hyengthayloncek yuhyeng [On morphological typology of Korean sentence-final particles]. Emwunhak 60, 61–82.

Kim, Tae Yeop, 1998. Kwuke picongkyelemiuy congkyelemihwaey tayhaye [The functional shift of functional shift of endings from nonfinal to final]. Enehak 22, 171–189.

Kim, Tae Yeop, 2000. Kwuke congkeylemihwauy mwunpephwa yangsang [On grammaticalization of Korean sentence-final particles]. Emwunyenkwu 33, 47–68.

Koo, Hyun Jung, 2009. Fused paradigms: Grammaticalization in extension of conditional markers. Paper presented at the Grammaticalization in East Asia Workshop, International Conference on Historical Linguistics 19, Radboud University, Nijmegen, The Netherlands, August 10–14, 2009.

Koo, Hyun Jung, Rhee, Seongha, 2001. Grammaticalization of sentence end marker from a conditional marker. Discourse and Cognition 8 (1), 1–19.

Koo, Hyun Jung, Rhee, Seongha, 2008. Manipulated hypotheticality in conditionals: A journey in search of strength and diversity. Paper presented at New Reflections on Grammaticalization IV Conference, Catholic University of Leuven, July 16–19, 2008.

Krug, Manfred, 2001. Frequency, iconicity, categorization: evidence from emerging modals. In: Bybee, Joan, Hopper, Paul (Eds.), Frequency and the Emergence of Linguistic Structure. John Benjamins, Amsterdam, pp. 309–336.

Kwon, Jae-il, 1992. Hankwuke Thongsalon [Korean Syntax]. Minumsa, Seoul.

Lee, Kee-Kap, 1981. 15seyki kwukeuy sangthay cisoksangkwa ku pyenchen [State durative aspect in the 15th century Korean and its historical development]. Hankul 173–174, 401–421.

Lee, Heeja, Lee, Jong Hee, 2001. Emi Cosa Sacen [Dictionary of Particles]. Hankook Publisher, Seoul.

Lehmann, Christian, 2004. Theory and method in grammaticalization. Zeitschrift für Germanistische Linguistik 32 (2), 152–187.

Lessau, Donald A., 1994. A Dictionary of Grammaticalization, vol. 3. Universitätsverlag Dr. N. Brockmeyer, Bochum.

Lyons, John., 1982. Deixis and subjectivity: Loquor, ergo sum? In: Jarvella, Robert J., Klein, Wolfgang (Eds.), Speech, Place, and Action: Studies in Deixis and Related Topics. Wiley, New York, pp. 101–124.

Narrog, Heiko, 2010. Modality and speaker-orientation. Invited lecture at the Conference on Grammaticalization and (Inter)Subjectification (GRAMIS), Brussels, Belgium, November 11–13, 2010.

Narrog, Heiko, Heine, Bernd (Eds.), 2011. The Oxford Handbook of Grammaticalization. Oxford University Press, Oxford, pp. 69–78.

The National Institute of the Korean Language, 2002. Hyentay Kwuke Sayong Pinto Cosa [A Use Frequency Survey of Modern Korean]. Seoul.

Ohori, Toshio, 1995. Remarks on suspended clauses: a contribution to Japanese phraseology. In: Shibatani, Masayoshi, Thompson, Sandra A. (Eds.), Essays in Semantics and Pragmatics in Honor of Charles J. Fillmore, Amsterdam. John Benjamins, Amsterdam, pp. 201–218.

Rhee, Seongha, 1996. Semantics of Verbs and Grammaticalization: The Development in Korean from a Cross-linguistic Perspective. Ph.D. dissertation. The University of Texas at Austin.

Rhee, Seongha, 2002. From silence to grammar: grammaticalization of ellipsis in Korean. Paper Presented at the New Reflections on Grammaticalization II Conference, University of Amsterdam, The Netherlands, April 3–6, 2002.

Rhee, Seongha, 2004. From opposition to cooperation: semantic change of with. Korean Journal of English Language and Linguistics 4 (2), 151–174.

Rhee, Seongha, 2007. Back home with a new face: subjectification and functional shift. Paper presented at the 2007 Annual Research Forum of the Linguistic Society of Hong Kong. December 8–9, 2007.

Rhee, Seongha, 2008a. On the rise and fall of Korean nominalizers. In: López-Couso, María José, Seoane, Elena (Eds.), Rethinking Grammaticalization: New Perspectives. John Benjamins, Amsterdam, pp. 239–264.

Rhee, Seongha, 2008b. Ellipsis and functional shift. The Studies in Modern Grammar 52, 169–194.

Rhee, Seongha, 2008c. At the borderland of grammaticalization and lexicalization: a case in Korean. Paper presented at Southern Conference on Linguistics LXXV. University of Tennessee at Knoxville, TN, April 3–5, 2008.

Rhee, Seongha, 2008d. The ground in the mind: subjectification and intersubjectification in grammaticalization of Korean the 'ground'. Paper presented at New Reflections on Grammaticalization IV. Catholic University of Leuven, July 16–19, 2008.

Rhee, Seongha, 2009. Consequences of invisibility: Paradigm creation from eroded light verb. Paper presented at the Grammaticalization in East Asia Workshop, The 19th International Conference on Historical Linguistics. Radboud University, Nijmegan, Netherlands, August 10–14, 2009.

Rhee, Seongha, 2010. On emergence of discourse markers of agreement: Unity-formation through ellipsis. Paper presented at the Pre-Conference Workshop on Pragmatic Markers in Asian Languages at the 4th Conference on Language, Discourse and Cognition. National Taiwan University, April 30–May 2, 2010.

Rhee, Seongha, 2011. Nominalization and stance marking in Korean. In: Yap, Foong Ha, Grunow-Hårsta, Karen, Wrona, Janick (Eds.), Nominalization in Asian Languages: Diachronic and Typological Perspectives, Korean, Japanese, and Austronesian Languages. John Benjamins, Amsterdam, pp. 391–422.

Rubba, Jo, 1994. Grammaticization as semantic change: a case study of preposition development. In: Pagliuca, William (Ed.), Perspectives on Grammaticalization. John Benjamins, Amsterdam, pp. 81–101.

Sohn, Sung-Ock S., 1992. Speaker-oriented and event-oriented causals: a comparative analysis of *nikka* and *ese*. Korean Linguistics 7, 73–83.

Sohn, Sung-Ock S., 2003. On the emergence of intersubjectivity: an analysis of the sentence-final *nikka* in Korean. Japanese/Korean Linguistics 12, 52–63.

Sperber, Dan, Wilson, Deirdre, 1986. Relevance: Communication and Cognition. Harvard University Press, Cambridge.

Sweetser, Eve E., 1990. From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure. Cambridge University Press, Cambridge.

Taylor, John R., 1989. Linguistic Categorization: Prototypes in Linguistic Theory. Clarendon Press, Oxford.

Torres Cacoullos, Rena, Walker, James, 2011. Collocations in grammaticalization and variation. In: Narrog, Heiko, Heine, Bernd (Eds.), The Oxford Handbook of Grammaticalization. Oxford University Press, Oxford, pp. 225–238.

Traugott, Elizabeth Closs, 2003. From subjectification to intersubjectification. In: Hickey, Hickey (Ed.), Motives for Language Change. Cambridge University Press, Cambridge, pp. 124–139.

Traugott, Elizabeth Closs, 2010. (Inter)subjectivity and (inter)subjectification: A reassessment. In: Davidse, Kristin, Vandelanotte, Lieven, Cuyckens, Hubert (Eds.), Subjectification, Intersubjectification and Grammaticalization. Mouton De Gruyter, Berlin, pp. 29–71.

Traugott, Elizabeth Closs, Dasher, Richard B., 2002. Regularity in Semantic Change. Cambridge University Press, Cambridge.

Traugott, Elizabeth Closs, König, Ekkehard, 1991. The semantics-pragmatics of grammaticalization revisited. In: Traugott, Elizabeth C., Heine, Bernd (Eds.), Approaches to Grammaticalization, 2 vols.. John Benjamins, Amsterdam, pp. 189–218.

Wulimal Khunsacen [The Comprehensive Korean Dictionary], 1992. Emwunkak, Seoul.

Yap, Foong Ha, Wang, Jiao, Chor, Winnie Oi-Wan, 2010. From lexical verb 'fear' to epistemic adverbial 'perhaps, maybe, possibly': on the grammaticalization of Malay *kut* (<*takut* 'fear'), Mandarin *kong3 pa4* and Cantonese *tai2 pa3*. Paper presented at the 2010 Annual Research Forum of the Linguistic Society of Hong Kong. Chinese University of Hong Kong, December 4, 2010.

Yap, Foong Ha, Chor, Winnie Oi-Wan, Wang, Jiao, 2011. On the grammaticalization of 'fear' verbs in Chinese. Paper presented at the 19th International Association of Chinese Linguistics (IACL-19). Nankai University, Tianjin, China, June 11–13, 2011.