At the Borderland of Lexis and Grammar: Grammaticalizing Perfective Markers in Korean*

Seongha Rhee

(Hankuk University of Foreign Studies)

Rhee, Seongha. 2008. At the Borderland of Lexis and Grammar: Grammaticalizing Perfective Markers in Korean. *Discourse and Cognition* **15.3, 29-59.** This paper addresses the issues involving grammaticalization processes of periphrastic perfectives in Korean. Describing the developmental processes with reference to thirteen perfective forms derived from nine lexical verbs, the paper shows that the semantic and pragmatic properties acquired by the emerging perfectives are largely due to complex factors such as their differential degrees of grammaticalization, different sources that were recruited, and the different paths along which the grammaticalizing constructions have been traveling. More importantly, the states of affairs displayed by these emerging perfectives are largely in consonance with the principles and hypotheses proposed in the grammaticalization studies. In particular, the diverse semantico-pragmatic functions associated with the perfectives, largely characterizable as results of subjectification are derived from the pragmatic inferencing. Even though there has been a large body of literature that analyzed diverse aspects of the so-called auxiliary verbs, mostly from the synchronic perspective, this paper looks at the issue from a renewed, more holistic viewpoint, paying special attention to the facts that these forms are at the borderland of grammar and lexis, whose distinction is by no means clear-cut, and that they are in flux typically exhibiting indeterminacy of grammatical categories. **(Hankuk University of Foreign Studies)**

Key words: periphrastic perfective, grammaticalization, grammar-lexis distinction, subjectification

1. Introduction

The Korean language has an impressive inventory of perfective markers with diverse and pragmatic properties.[1] The inventory includes a large number of auxiliary verbs that developed from constructions consisting of a connective particle and a lexical verb. Despite much attention to the aspectual markers in Korean, studies on these periphrastic forms, especially from the grammaticalization perspective, are largely under-represented.[2] This is largely due to the relative relegation of 'emerging' grammatical forms as compared to the primary perfective markers among the researchers. This study intends to fill this gap by describing the unique behavior displayed by these grammaticalizing forms that mark tense, aspect, mood, and modality (henceforth, TAM) at varying degrees, and analyzing those observed peculiarities with reference to diverse principles suggested in the grammaticalization framework. The objectives of this research are: (i) to describe uses of the periphrastic perfective auxiliaries, (ii) to describe ongoing grammaticalization of the periphrastic perfective auxiliaries with reference to grammaticalization principles, and (iii) to illustrate that periphrastic perfectives are located at the border of grammar and lexis, and that each perfective is located at different points on the continuum due to the non-uniformness of grammaticalization processes.

This paper is organized in the following manner. Section 2 describes the target forms and their usage data; Section 3 illustrates the grammaticalization processes that were involved in the emergence of these target forms; Section 4 discusses the issues involved in the grammaticalization processes with special reference to grammaticalization principles; and Section 5 summarizes the discussion and concludes the paper.

---

1) As an anonymous reviewer points out there exists confusion on terminology. Following Bybee et al. (1994) 'perfect' (similar to or identical with 'anterior') and 'perfective', as used here, are differentiated in the way that the former is used in relevance to other situations, whereas the latter is independent of its relevance to other situations (Hopper 1982, as cited in Bybee et al. 1994: 54). Perfect, often employed in reporting a sequence of events, is used to show that some action is prior to the others in the narrative (Givón 1982), whereas perfective signals that the situation is viewed as bounded temporally.

2) However, Kim (1995), Rhee (1996), and Ho (2003) are among the major exceptions.

2. Preliminaries: The Scope of Research

Auxiliaries in Korean have received much attention from theoretical linguists and modern grammarians alike from as early as Underwood (1890). Korean auxiliaries constitute an interesting research topic since many of them, being periphrastic in form, have the 'amphibian nature' (Heine 1993) of lexical items and grammatical items. Grammatical markers of TAM in Korean are closely related to auxiliary verbs. However, the inventory varies depending on the researchers. For instance, Lee (1956) lists as few as six, whereas Choe (1937) lists as many as forty-one.[3] This inconsistency among researchers is largely due to different criteria each researcher uses to differentiate auxiliaries from syntactic constructions.

There is, however, a consensus among recent researchers, especially those in functional paradigms, as to what constitutes periphrastic auxiliaries. With minor variations notwithstanding, the forms in (1) are the auxiliaries frequently cited as belonging to the syntactic and functional categories of auxiliary verbs.[4]

(1) Frequently-cited auxiliaries

Category	Forms & Sources		Category	Forms & Sources	
Imperfective	*-e o-*	'come'	Viewpoint	*-e po-*	'see'
	-e ka-	'go'		*-e cwu-*	'give'
	-e tay-	'touch'		*-e ci-*	'fall'
	-e ssah-	'stack up'		*-e kaci-*	'take'
Perfective	*-e iss-*	'exist'		*-e mek-*	'eat'
	-e twu-	'keep'		*-e ceychi-*	'push aside'
	-e noh-	'release'		*-e tteleci-*	'fall'
	-e nay-	'take out'		*-e theci-*	'explode'
	-e na-	'come out'		*-e cwuk-*	'die'
	-e peli-	'throw away'		*-e ppaci-*	'fall into'
				-e chiwu-	'relocate'

It is to be noted, however, that perfective- and imperfective-marking and

---

3) In early analytical studies (and in grammatical descriptions) Underwood (1890) listed 11, Lee (1949) 10, and Jung (1949) 16 items in their lists of auxiliaries.

4) The items listed in (1) is largely consonant with those included in the studies of Kim (1990), Kim (1995) and Son (1996).

viewpoint-marking are not mutually exclusive functions. I.e., the distinction among these functions must be viewed not as clearly delineated categories but as specialization. In fact, some of the viewpoint-marking auxiliaries also carry aspectual functions, and most or many of the perfective and imperfective markers also carry viewpoint-marking functions (Lee 1976, Kim 1990, Rhee 1996, inter alia). This is largely due to the fact that these are relatively young grams with shallow depth of grammaticalization, and thus carry semantic traces of their lexical origin, characterizable as 'persistence' (Hopper 1991), where the surviving traces often involve speaker-internal, subjective, and evaluative judgment about the propositions being presented (cf. 'subjectification' a la Traugott, 1982, 1989), as shall be explicated in the following discussion.

2.1 Target Forms

Since the present research restricts its scope to perfective auxiliaries, it intends to cover the items in the perfective category in (1).[5] However, the scope is further extended due to the fact that some of the forms that are currently emerging as perfective markers are of interest for grammaticalization studies, which pay attention to the dynamic nature of grammar in terms of its formulation. For this reason some of the items that may not be found in traditional research are also included.[6] As shall be seen in the following discussion, their inclusion is justified by the presence of their aspectual function, and by some of the current literature that already made reference to their function as such. The target forms, therefore, are as shown in (2).

---

5) The primary perfective in Korean is −*ess*, a multi-functional gram also used for Past and Perfect (= Anterior) (Yang 1993. Lee, 1964, Lee, 1991, inter alia). For its historical accounts, see Na (1971), Lee (1991), Rhee (1996), and Kim (to appear), among others.
6) As an anonymous reviewer points out selection of the target forms, especially with reference to category inclusion criteria, must be theoretically justified. As is evident in the following discussion, the inclusion is based more on semantics of the periphrasis than on tests on their morpho-syntactic behavior.

(2) Target Forms of Perfective Auxiliaries

Form	Source Lexeme		Form	Source Lexeme	
-e iss-	*iss-*	'exist'	*-e peli-*	*peli-*	'throw away'
-ko iss-	*iss-*	'exist'	*-e chiwu-*	*chiwu-*	'relocate'
-e twu-	*twu-*	'keep'	*-ko mal-*	*mal-*	'stop'
-e noh-	*noh-*	'release'	*-taka mal-*	*mal-*	'stop'
-e na-	*na-*	'come out'	*-e po-*	*po-*	'see'
-ko na-	*na-*	'come out'	*-ko po-*	*po-*	'see'
-e nay-	*nay-*	'take out'			

As tabulated in (2), thirteen different forms mark perfectivity that developed from nine different lexical sources, which, incidentally, are all from the verb category. As is obvious, there are four verbs that served as sources of multiple perfective markers, whose genesis is largely due to their recruiting different particles in the participating constructions.

2.2 Examples of Perfective Usage

The perfective markers in (2) are used in different contexts with diverse semantic cooccurrence restrictions, but all for the grammatical function of marking the notion of perfectivity, i.e., the completion sense of an event being described is highlighted. For the interest of space, the perfective use of the auxiliaries is minimally exemplified.[7]

   (3) *-e iss-; -ko iss* (from *iss-* 'exist')
    a. kkoch-i   hwalccak   phi-e.iss-ta
       flower-Nom   radiantly   bloom-Perf-Dec
       'The flower is in full bloom. (The flower has opened in full.)'

---

7) For glossing, the following abbreviations are used: Acc: accusative; Adn: adnominal; Caus: causative; Conn: connective; Dec: declarative; Nom: nominative; Perf: perfective; Pl: plural; Pres: present; Pst: past; and Top: topic. The current Korean Orthographic Regulations (as revised in 1988) require that a space be placed between the connective particle and the auxiliary verb, also 'allowing' omission of the space. (See 4.7 for more discussion on its theoretical implication.) In data presentation, the spaces are marked with a period for a better visual alignment of the words.

    b. ku-nun   yaha-n   syechu-lul ip-ko.iss-ta
       he-Top   be.loud-Adn shirt-Acc   wear-Perf-Dec
       'He is wearing a colorful shirt.'

As exemplified in (3) the verb of existence *iss-* marks perfectivity in two different forms: *-e iss-* and *-ko iss-*. The semantic differences between these two particles have been among the major challenges for linguists and a major point of controversy, the detail of which is beyond the scope of this research and is not an immediate concern of exploration here (see 4.4 for more discussion, and cf. Choe, 1937, Koo 1987 for discussion).

It is noteworthy, however, that *-ko iss-* is the primary marker of progressive aspect. The puzzle, then, is that how perfective and imperfective (i.e. progressive) formally converged here. This is particularly intriguing since crosslinguistically the developmental paths of these seemingly opposite categories do not intersect (Bybee et al. 1994).[8] The semantic motivation is rather straightforward in that the perfectivity can be marked with *-ko iss-* only when the predicate involved belongs to the *know*-class, *wear*-class, and *contact*-class (Lee 1978, Lee 1991, Rhee 1996, Kim to appear.) In these classes, the predicate makes reference to the result (i.e. perfective) and the resultant state (i.e. imperfective). For instance, *ip-ko.iss-* in (3b) can focus on completion of the process of putting on a clothes as well as the current resulting states of 'his' being in a colorful shirt.[9]

The placement verbs *twu-* 'keep' and *noh-* 'release' also form perfective markers as exemplified in the following.

    (4) *-e twu-;   -e noh-* (from *twu-* 'keep'; *noh-* 'release')
      a. na-nun   piccangi-eykey cal   malha-e.twu-ess-ta
         I-Top   creditor-to   well   talk-Perf-Pst-Dec
         'I talked to my creditor (so that he/she wouldn't bother me).'

---

8) For a counter-claim on this issue, see Kim (to appear).

9) An anonymous reviewer raises a suspicion that the perfective *–ko iss* could be a grammatical form separate from the progressive *-ko iss,* for the former is restricted to certain circumstances only, and progressive and perfective are conceptually very different. This is truly an anomaly from a crosslinguistic perspective. However, the relation is historically transparent (and thus the 'deviation' is prompting an even more periphrastic *-ko issnun cwungi-*), and Kim (to appear) presents data from other languages.

  b. ku-nun   haytap-lul   chac-e.noh-ass-ta
     he-Top   solution-Acc   find-Perf-Pst-Dec
     'He found the solution (for future use).'

The auxiliaries developed from two near-synonymous placement verbs in (4) carry delicate semantic nuances in terms of strength of result maintenance (Kim 1990, Rhee 1996). They share the common function of marking the completion of the event described by the main predicate (see 4.3 for a discussion on differences).

The next category involves the verbs of exit: the intransitive *na-* 'come/go out' and its transitive counterpart *nay-* 'take out', derived through the addition of causative morpheme *-i-* to the former.

  (5) *-e na-*; *-ko na-*; *-e nay-* (from *na-* 'exit'; *nay-* 'take out')
    a. aki-ka   cam-eyse   kkay-e.na-ss-ta
       baby-Nom   sleep-from   awake-Perf-Pst-Dec
       'The baby woke up from sleep.'

    b. han cam   ca-ko.na-ni   sa-l.kes.kath-ta
       one sleep   sleep-Perf-Conn   live-seem-Dec
       'I am completely refreshed after a sound sleep (Lit. I feel like living
        after one good sleep).'

    c. chelswu-ka   kkoch-ul   phiw-e.nay-ss-ta
       [name]-Nom   flower-Acc   make.bloom-Perf-Pst-Dec
       'Chelswu (finally) made the flower bloom (successfully).' (Kim 1990:
       203)

The semantics of the auxiliary *-e na-* is so deeply pervasive into the verbal semantics (cf. 'relevance' a la Bybee 1985, Bybee et al. 1994) it tends to turn the auxiliary constructions into lexical items. In these cases the semantics of the main verb and that of the newly lexicalized verbs (with the auxiliary verb incorporated) are very similar (cf. Kim 1990: 194-195).

The auxiliaries of the next category are built on displacement verbs *peli-* 'throw away' and *chiwu-* 'relocate', as shown in the following examples:

(6) *-e peli-; -e chiwu* (from *peli-* 'throw away'; *chiwu-* 'relocate')
  a. ku-ka   pap-ul   mek.e.peli-ess-ta
     he-Nom meal-Acc   eat-Perf-Pst-Dec
     'He ate up the meal.'

  b. ku-nun swukcey-lul   ha-e.chiwu-ess-ta
     he-Top homework-Acc   do-Perf-Pst-Dec
     'He did his homework.'

It is crosslinguistically common for verbs of displacement to grammaticalize into perfective markers, as, for instance, in Bunts Tulu (Shetty 1985), Malayalam (Nayar 1983, Moag 1989), Diyari (Capell 1979), Palaung (Bybee et al. 1994), Japanese (Ono 1992, Ono and Suzuki. 1992) and many others (cf. the lexicons by Heine et al. 1991 and Heine and Kuteva 2002). The subtle difference between the two displacement verbs in Korean is that *-e peli-*, having been grammaticalized for a greater extent, can be used with diverse semantics as a result of pragmatic inference (Rhee 1996), whereas its relatively young counterpart *-e chiwu-* still has a stricter restriction with the predicates, i.e. the predicates must signify an event that involves fast-paced, non-elaborate actions of execution, such as disposal of human waste, trash, dregs from sewage or an open well.

The next category involves the verb of cessation: *mal-* 'stop', as shown in the examples below.

(7) *-ko mal-, -taka mal-* (from *mal-* 'stop')
  a. akwun-un   cekkwun-eykey cap-hi-ko.mal-ass-ta
     friendly.force-Top   enemy-to/by   capture-Caus-Perf-Pst-Dec
     '(It turns out that) Our soldiers got captured by the enemies.' (Kim
      1990: 242)

  b. kongpwu-lul   ha-taka.mal-ass-ta
     study-Acc   do-Perf-Pst-Dec
     '(I) stopped studying.'

The verb *mal-* 'stop' developed into auxiliaries of diverse functions such as prohibitive, determinative, completive, and cessative (Rhee 2003). The

functions relevant to the current discussion are determinative (-ko mal-, and -koya mal-), completive (-ko mal-), and cessative (-ta mal- and -taka mal-), all derivable from the lexical meaning of *mal-* (i.e. 'by all means', 'completely', and 'discontinue', respectively for each category).

The final category involves the verb of vision, *po-* 'see', as illustrated in the following examples in (8).

(8) *-e po-; -ko po-* (from *po-* 'see')
   a. yakswutong-ey tochakha-e.po-ni   twu   salam-un   ...
      [name]-at   arrive-Perf-Conn   two   person-Top ...
      hwaka.na-n   phyoceng-tul-i-ess-ta
      be.angry-Adn   facial.look-Pl-be-Pst-Dec
      'When I arrived at Yaksudong, the two seemed to be angry.' (Ho 2003:29)

   b. kunye-ka yeyppu-ko.po-ni   manhun namca-tul-i   cohaha-n-ta
      she-Nom   be.pretty-Perf-Conn many   man-Pl-Nom like-Pres-Dec
      'Since she is pretty (as a result of her being pretty) many guys like her.' (Ho 2003:35)

The verb of vision *po-* 'see' is the source of extraordinarily diverse semantic extension including grammatical functions (Sohn 2004). The auxiliaries *-e po-* and *-ko po-* are the primary markers of trial but when they are used with a causal connective *-ni,* their function shifts to that of marking contingency, often carrying 'mirativity' (DeLancey 1997, 2001)[10]. It is in this context where the perfectivity meaning arises: the statement in the main clause is qualified in the eventive frame specified by the mirative-marked subordinate clause. Since the eventive frame projects a causal relationship, the event denoted by the subordinate clause takes on the completion sense, hence the 'perfectivity', or in Ho's (2003) term, the 'result'.[11]
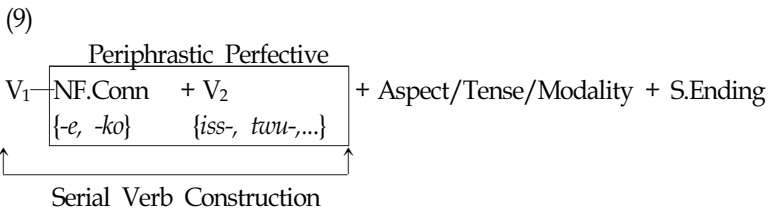
───────────────────────────

10) As shall be discussed in the following, connective particles play an important role in auxiliary formation (Choe 1937, Kwon 1986, Kim 1992, Min 1993 inter alia). A comprehensive discussion is found in Ryu (1994) and Ho (2003). As for the auxiliaries involving verb *po-* 'see', there is an intricate interaction between volition, action, and tense (Ho 2003).

3. Grammaticalization

A detailed description of grammaticalization processes involved in the genesis of each of the perfective markers from the lexical sources as indicated above should be implausible due to space limitations. However, a brief description of the processes focusing on the morphosyntactic and semantico-pragmatic aspects of our immediate interest is in order.

3.1 Source Construction

From the syntagmatic point of view, periphrastic perfectives (and most auxiliaries in general) originated from verb serialization. The general syntagma from which perfectives emerge can be schematically presented as in (9).

(9)

<u>Periphrastic Perfective</u>

V_1 — NF.Conn + V_2 + Aspect/Tense/Modality + S.Ending

{*-e, -ko*}   {*iss-, twu-,...*}

Serial Verb Construction

As shown in the structure (9), the perfective is a part of a serial verb construction (SVC). from which V_1 is eliminated. This elimination is quite reasonable, considering that V_1, being the main verb of the predicate, has almost infinite intra-paradigmatic variability, i.e. almost any verb can occur in the position, whereas V_2, being dependent on its preceding V_1, tends to

---

11) An anonymous reviewer suggests that the emergence of the perfectivity sense from the periphrases may be attributable to the particle *-e* rather than to V_2. Another reviewer suggests that the perfectivity sense may have arisen from the particle *-ni.* As will be discussed in 4.4, particles play a central role in the evolution of this new grammatical function, but considering the fact that there are numerous constructions involving *-e,* which have not taken this grammaticalization path, the process must be viewed as a result of the semantic interaction between the particle and V_2, rather than just one of them in isolation. As for *-ni,* it indeed plays an important role, because it contributes to building a background which sets the foreground event apart, and thus helping the language users conceptualize the event in the subordinate clause as a bounded one.

be conceived of as a peripheral element. This is widely attested across languages. For instance, the SVC is regarded as the seed of grammaticalization (DeLancey 1991: 15). Rhee (1996: 14) notes that all serial verb languages seem to develop grammatical function verbs (or auxiliary verbs) out of this SVC by way of reanalysis (Bynon 1985), or of pragmatics, i.e. interaction between conceptualization of the world events and iconicity in the language (DeLancey 1991, Bruce 1988).

From the point of morphologization or 'compacting' (Hopper and Traugott 2003[1993]: 140), the source constructions undergo reanalysis where [NF connective and V$_2$] is reanalyzed as an aspectual, i.e. a marker of perfectivity.

It is quite interesting to note that the periphrastic perfective may be followed by another erstwhile aspectual marker as suggested by the configuration in (9). This is where the 'peripheral' nature of grammaticality and 'lexical' nature of the periphrasis are evident. In this configuration, when the following aspectual is another perfective, the perfectivity is reinforced, and when it is an imperfective, a contradictory syntagmatic combination, V$_2$ of SVC is construed as a fully verbal element rather than as a part of the periphrastic perfective. In other words, the periphrastic perfective is still the secondary means of encoding perfectivity and the more fully grammaticalized morphological aspectual carries the primacy in this functional domain.

3.2 The Verb of Existence (*iss-* 'exist')

Grammaticalization of periphrastic perfectives heavily relies on semantico-pragmatic processes. The pragmatic inferencing leading to conceptual change (and thus grammatical change) can be illustrated as in the following.

(10) (=(3a))
      kkoch-i   hwalccak   phi-e.iss-ta
      flower-Nom   radiantly   bloom-<u>and.exist</u>-Dec   (SVC)
                                   bloom-<u>Perf</u>-Dec   (Aspectual)
      'The flower is in full bloom.'

(11) a. "The flower fully opens and exists."   (SVC)
     b.   >> "The flower fully opened and exists."
                                          (Temporal Realignment)
     c.   >> "The flower is in the state of having completed its
              blooming."   (Perfective)

It is evident from (10) and (11) that the development of perfective
aspectual sense heavily relies on the literal meaning (i.e. reference to
existence) and pragmatic inferencing. For instance, the tense-adjustment in
(11b) is triggered by the sequentiality meaning that is inherently present in
the NF marker -e.[12] In other words, for a flower to "open and (then) exist"
the opening event must be complete when the event/state of the (current)
'existence' commences. This line of pragmatic reasoning can be presented as
in (12).

(12) General semantic motivation
     X does Y and exists >> X completed Y >> Y occurred completely

3.3 The Verbs of Placement (*twu-* 'keep'; *noh-* 'release')

The decisive role of pragmatic inferencing based on the literal meaning of
the source verb is also evident in the grammaticalization involving the verbs
of placement. The development parallels the one with the existence verb, as
shown in (13)-(15).

(13) (=(4a))
   na-nun piccangi-eykey cal   malha-e.twu-ess-ta
   I-Top   creditor-to   well   talk-and.keep-Pst-Dec   (SVC)
                                  talk-Perf-Pst-Dec   (Aspectual)
   'I talked to my creditor (so that he/she wouldn't bother me).'

---

12) It is to be noted that in SVCs the main verb V_1 typically occurs in non-finite form and
    inherits TAM features from V_2.

(14) a. "I talked to my creditor well and kept (it)."   (SVC)
   b.   >> "I had talked to my creditor well and kept (it)."
                                        (Temporal Realignment)
   c.   >> "I kept the result of having talked to my creditor."
                                                  (Perfective)

(15) General semantic motivation
   X did Y and keeps it >> X completed Y >> Y occurred completely

3.4 All Other Source Verbs

The pragmatic inferencing patterns in the grammaticalization of periphrastic perfectives from other source verbs shows such a striking parallelism with those of previously presented cases with the verbs of existence and placement that a further description would be unnecessary. Those of other sources, as summarized in (16), seem to follow suit as in (17).

(16) a. Egression: *na-* 'exit'; *nay-* 'take out'
   b. Displacement: *peli-* 'throw away'; *chiwu-* 'relocate'
   c. Cessation: *mal-* 'stop'
   d. Vision: *po-* 'see'

(17) a. X does Y and {exits from it, throws it away, stops it, sees it} (SVC)
   b.   >> X completed Y   (Temporal Realignment)
   c.   >> Y occurred completely   (Perfective)

4. Discussion

In the preceding sections the target forms were introduced and their grammaticalization processes were briefly described. With these descriptions in the background we now turn to a discussion of some of the issues that bear special significance in the theory of grammaticalization, and more generally, the theory of grammar. The issues chosen are layering phenomena, the source determination and universal path hypotheses, functional specialization, roles of particles, subjectification, and, more fundamentally, the grammar-lexis distinction.

4.1 Layering

As is obvious from the previous illustration, the grammatical function of perfectivity marking is carried by multiple forms. In view of the transparency principle as espoused by the proponents of 'natural grammar' (Jakobson 1962), this multiplicity in form is a puzzle. The puzzle is that despite the alleged 'naturalness' of one-form-one-meaning isomorphism, periphrastic perfective markers emerge while the more grammaticalized counterpart (i.e. morphological perfective) is already fully functional in the grammar. Furthermore, even the emerging periphrastic perfective is not singular in number but multiple. All these periphrastic perfectives in Korean have a common function of grammatically marking perfectivity, but they emerged at different points of history. They form multiple layers in Modern Korean as shown in (18).[13]

(18) Emergence of Perfectives

```
           15c   16c   17c   18c   19c   20c   21c
-e is(s)-  ------------------------------------------
-e na-     ------------------------------------------
-ko na-    ------------------------------------------
-e nay-    ------------------------------------------
-e peli-   ------------------------------------------
-ko mal-   ------------------------------------------
-e twu-                  -------------------------------
-ko po-                  -------------------------------
-ko is(s)-                     -------------------------
-e po-                         -------------------------
-e noh-                        -------------------------
-taka mal-                     -------------------------
-e chiwu-                              ------------
```
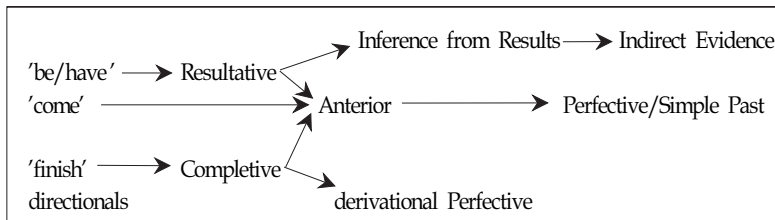
13) Identifying the point in time when a periphrastic perfective emerged as a grammatical category from historical corpora can always be controversial. The difficulty is that the first occurrence of the formally identical form in the data corpus cannot be identified as the point of emergence of the grammatical form, especially because, in the context of periphrastic perfectives, it has to be separated from the instances of pure SVC. Here, drawing upon the 21st Century Sejong Historical Corpus, the occurrences were individually checked and the token that cannot be literally interpreted or that is more felicitous with the aspectual interpretation was taken as indicating the emergence of the grammatical form. This process, admittedly, often involves a subjective decision, but the plotting on the time line can be taken as an approximation and the overall pattern should be valid.

4.2 The Source Determination Hypothesis & The Universal Path Hypothesis

According to the source determination hypothesis proposed by Bybee et al. (1994) the source constructions of a grammaticalizing structure determine the path and the result of grammaticalization. Furthermore, since grammatical markers are a limited set across languages and the lexical sources and the paths are determined by the semantics of the lexemes, the paths traveled by the grammaticalizing forms are supposedly universal, and the sources constitute a limited set across languages. (thus, the universal path hypothesis). Based on a crosslinguistic data samples, they proposed that dynamic verbs are common sources of perfectives; the lexemes denoting 'finish' are a common source for completives, anteriors, and perfectives; and that statives (BE, HAVE) plus participles are common sources for resultative, anterior, past, and perfective (Bybee et al. 1994: 51-53).

With these respects, Korean complies with these hypotheses. In terms of the source determination, as shown in the preceding discussion, Korean developed perfectives recruiting the lexemes from both dynamic and stative categories. In terms of the paths, according to Bybee et al. (1994: 105), the perfectives supposedly take the following developmental paths:

(19) Paths of development leading to simple past and perfective grams

```
'be/have' ──→ Resultative ╲          ╱──→ Inference from Results ──→ Indirect Evidence
                           ╲        ╱
'come'     ──────────────────→ Anterior ──────────────→ Perfective/Simple Past
                           ╱        ╲
'finish'   ──→ Completive ╱          ╲──→ derivational Perfective
directionals
```

Since the periphrastic perfectives in Korean did not travel to the terminal stages, the entire paths cannot be confirmed. However, to the extent that is relevant, they seem to follow the universal pattern: -e iss- (in the 'be/have' source type) goes to resultative; those from the displacement and placement, e.g. -e peli-, -e chiwu-, -e twu- and -e noh- (in the 'finish' source type) travel to completive. It is noteworthy that -e iss- takes the path from resultative to anterior (-ess-) and perfective/simple past (-ess-), even though this bifurcation has not been discussed here as it falls outside the periphrastic

category (for detailed discussion see Huh 1992[1975], Ko 1987, Lee 1981, Rhee 1996, inter alia).

Even though the universal path hypothesis is intended to characterize the semantico-pragmatic developmental patterns leading to gradually more grammaticalized functions, there is a universal feature of syntagmatic development as well. For instance, as illustrated in detail above, perfective auxiliaries develop out of serial verb constructions, a pattern widely attested across languages (DeLancey 1991, Bynon 1985, Bruce 1988).

4.3 Specialization

Layering of multiple forms in a single functional domain is among the common features of a grammar. This violates the form-function isomorphism but there is a countering factor that reconciles the disrupted correlation in a more local domain: specialization. Those multiple forms that seemingly overcrowd the grammatical category of the periphrastic perfectives are engaged in the division of labor. In other words, each of them has different specialization. This is particularly true (and seems necessitated) when the forms emerged from a single source or from two sources that are sufficiently similar to be qualified as being in the near-synonymy relation.

> (20) The verb of existence
>   *-e iss-:*   completion of intransitive telic action
>   *-ko iss-:* completion of transitive telic action

The two forms from the existence verb *iss-* have different specialization in terms of their cooccurrence patterns: *-e iss-* occurring with verbs of intransitive telic action such as *phi-* 'bloom', *anc-* 'sit', *nwup-* 'lie down', *pwuth-* 'adhere', etc.;[14] whereas *-ko iss-* occurring with the verbs of transitive

---

14) An anonymous reviewer proposes a discussion on incompatible categories in addition to specialization in this context. Even though specialization is a widely-attested phenomenon across languages, the specific reasons why specialization occurs are not clear. There is a large body of literature addressing, for instance, why *-e iss-* cooccurs with verbs of intransitive telic action but not with the verbs of transitive telic action (e.g. *cis-* 'build') (Kim 1990: 166-177; Son 1996: 158-166; Lee 1978; Im 1975, and many others), but an

telic action such as *ip-* 'put on', *sin-* 'put on footwear', *may-* 'tie', *tha-* 'ride', *an-* 'embrace', *ci-* 'carry on the back', etc. (Lee 1978, Lee 1991).

As indicated earlier, *-ko iss-* is the primary marker of progressive, a function in the imperfective category. This anomaly is due to the double interpretability of a predicate between the concluding of the main event (perfective) and the current state (imperfective). The conceptual cross-over is evident in case of the so-called *know*-class verbs. For instance, *al-* 'know' can be used in *al-ko.iss-* 'be in the state of having the knowledge about', where the understanding takes place instantaneously (perfective) and the resultant state persists (imperfective).

In case of placement verbs, the near-synonyms *twu-* 'keep, put' and *noh-* 'release, put' developed periphrastic perfectives. These forms, however, have differential, albeit subtle, semantic nuances as in (21).

(21) The verbs of placement
   -e twu-: active maintenance of result
   -e noh-: non-committed retention of result

The differences between the two forms are subtle, and since in the real world situation the act of maintenance can be scalar from physically holding on to the resultant state or effected entity to the act using only the minimal effort suggesting near abandonment, there may not be sentences that show differential and exclusive cooccurrence restrictions. However, the differences are identifiable. For instance, *-e twu-* takes such predicates as *cis-* 'build', *pel-* 'earn', etc. which, in the real world, the agent typically commits himself/herself to the maintenance of the result. On the other hand, the predicates such as *ccic-* 'tear', *pwuswu-* 'break', *mangkattuli-* 'destroy', *phokphaha-* 'blow away', etc., which signifies that the agent, in the real world, typically is not committed to the retention of the result.

The displacement verbs also show delicate nuances with their perfectives as illustrated in (22).

(22) The verbs of displacement
   -e peli-: completion of removal/consumption
   -e chiwu-: completion of non-elaborate displacement

in-depth exploration into the issue is not pursued here.

The auxiliary from the displacement verb *peli-* 'throw away' specializes in marking the completion of removal or consumption. This development is due to the semantics of the verb *peli-* which simply denotes displacement of an object from a location. It cooccurs with such verbs as *mek-* 'eat', *cwuki-* 'kill', etc. On the other hand, *-e chiwu-*, derived from the source verb *chiwu-* 'relocate, displace', cooccurs with the verbs that signify non-elaborate displacement actions (Kim 1990). This is well illustrated in the historical survey in Rhee (1996: 68) that shows that early in history the verb *chiwu-* was predominantly used with taking the human waste to the field for use as fertilizer, removal of dregs or other refuse into a dump, an event that normally lacks elaborate actions.[15]

The verbs of exit and extraction form three perfectives, *-e na-*, *-ko na-*, and *-e nay-*. They also have differential specialization as summarized in (23).

(23) The verbs of exit and extraction
    -e na-:   completion of exit (unproductive)
    -ko na-: completion of exit, transitive/intransitive
    -e nay-: overcoming difficulties, transitive

As shown in (23) *-e na-* and *-ko na-* both mark completion of exit, physical or abstract. Since *na-* 'exit' is a telic verb and the two forms have connectives participating in the source construction, the emergence of perfective meaning can be understood straightforwardly from combinatory meanings already available. Even though both of them have similar functions, *-e na-* is rather unproductive, whose occurrence is often in the lexicalized verbs such as *phiena-* 'bloom', *ilena-* 'rise', *kkayena-* 'wake', etc. On the other hand, *-ko na-* is very productive since it can occur with either transitive or intransitive verbs. However, this form occurs typically with a connective, rather than as the finite verb in the main predicate (e.g. it commonly occurs with the causality-marking connective *-ni,* or sequentiality-marking *-se,* conditionality-marking *-myen,* etc.)

The other perfective, *-e nay-*, is a transitive counterpart of *-e na-*. Since the lexical meaning of *nay-* 'extract' suggests some friction in the extracting

---

15) Kim (1990: 228) notes that *sa-* 'purchase' cannot cooccur with the *-e chiwu-* while *phal-* 'sell' can. This reflects the fact that selling can often occur without much deliberation (as in giving up the commodity) while purchasing involves more consideration.

process, the perfective typically signifies overcoming of difficulties, as in the events of rescuing (*kwuchwulha-*) and saving life (*salli-*).

The verb of cessation, *mal-* 'stop', also shows differential specialization as shown in (24).

(24) The verb of cessation
 -ko mal-:   deviational completion
 -taka mal-: disruptive completion

The two diverged forms, *-ko mal-* and *-ta(ka) mal-*, also show delicate semantic differences. Because of the particle *-ko* in the source construction, which signifies completion of the action denoted by the first predicate, *-ko mal-* tends to denote an event which stopped on its course after completion of the first event. Therefore, this perfective involves completion of an action that is off the normal course. For instance, when it is combined with the verb *cwuk-* 'die', the perfective predicate *cwuk-ko mal-* signifies that the state of affairs continued until someone died and then the new state was deviating from the original state. On the other hand, *-taka mal-*, derived from the transferentive particle *-taka* and the cessation verb *mal-*, signifies disruptive completion. What is disrupted is not the general state but the event denoted by the first event. In other words, *cwuk-ta(ka) mal-*, derived from combination with *cwuk-* 'die', signifies that the agent did not finish the dying event, i.e. that he/she is living.

Finally, the verb of vision *po-* 'see' serves as the source lexeme of two grammaticalizing perfectives.

(25) The verb of vision
 -e po-:   result-focused; consolidated events
 -ko po-: result-focused; isolated events

The difference between the two forms is due to the use of two different connectives. The meanings of these two connectives are so similar that they cannot be effectively differentiated. However, they do have different functions that can be separately labeled as 'consolidation' and 'isolation' (Koo 1987, Rhee 1996). Therefore, in case of *mek-* 'eat', *mek-e po-,* making use of consolidating connective, makes reference to the experience, in which the

agent exploring the consequence (result) is still in the act of eating or at least so in the mind of the conceptualizer. On the other hand, *mek-ko po-*, making use of the isolating connective, makes reference to the experience, in which the agent exploring the consequence (result) has completed the eating action, thus the two events (eating and exploring) can be two sub-events within the holistically combined event of eating and exploring.

The discussion in the foregoing can be summarized as in (26).

(26)

Form	Functional Specialization	Source Lexeme	
-e iss-	intransitive completion	*iss-*	'exist'
-ko iss-	transitive completion	*iss-*	'exist'
-e twu-	committed maintenance of result	*twu-*	'keep'
-e noh-	non-committed retention of result	*noh-*	'release'
-e na-	completion of exit	*na-*	'come out'
-ko na-	completion of exit	*na-*	'come out'
-e nay-	overcome of difficulties	*nay-*	'take out'
-e peli-	completion of removal	*peli-*	'throw away'
-e chiwu-	completion of displacement	*chiwu-*	'relocate'
-ko mal-	deviational completion	*mal-*	'stop'
-taka mal-	disruptive completion	*mal-*	'stop'
-e po-	result-focused completion (consolidating)	*po-*	'see'
-ko po-	result-focused completion (isolating)	*po-*	'see'

4.4 Contributions by Particles

As shall be obvious in the illustrations in the preceding sections, the role of particles is of particular significance. In literature, it has been pointed out that what participates in grammaticalization is not a single lexeme but a construction (Bybee et al. 1994. Hopper & Traugott 2003[1993]). Since the source constructions include particles, we need to explore their contribution. Rhee (2007) presents a claim that particles, which have been often relegated to peripheral categories in grammar, in fact, play significant roles in determining the resultant categories and semantics of grammaticalized markers.

This is evident in the fact that, especially with reference to periphrastic

perfectives, the completion sense, essential in perfectives, comes from semantics of the verbs AND particles. In other words, the telicity sense is derived from the verb and the sequentiality sense from the particle. Furthermore, even the semantic differences, which eventually result in functional differences, are due to the different connectives being recruited. The non-finite particles have the sequentiality marking function in common: the difference being that *-e* indicates consolidation of event$_1$ and event$_2$; *-ko* indicates isolation of event$_1$ and event$_2$ (Koo 1987, Rhee 1996, 2007).

In the same fashion, as explicated with reference to *-ko mal-* and *-taka mal-*, the transferentive sense (i.e. changing the focus from one to another) from the particle *-taka* is crucial in the differential development of *-taka mal-* and *-ko mal-*.

4.5 Subjectification

In recent studies of grammaticalization, the tendencies of semantic and pragmatic change have received much attention. In her pioneering studies, Traugott (1982, 1987) proposes such tendencies that can be captured in grammaticalization as well as in lexical change (see also Traugott & König 1991, Traugott & Dasher 2002). The tendencies show directionality of semantic shift from objective to subjective meanings. In the same fashion, perfectives develop subjective meanings en route.

Of particular importance is that many perfectives mark the speaker's viewpoints. The development of viewpoints is closely linked to pragmatic inference. In earlier studies, Lee (1976) showed that auxiliaries in Korean mark evaluative viewpoints. Rhee (1996) showed the pragmatic inferencing involved in the development of such evaluative viewpoints. For instance, Rhee (1996: 55-60) shows how *-e peli-,* derived from the verb *peli-* 'throw away', came to acquire the evaluative viewpoints leading from completion to irretrievability, to undesirability and to malefactivity, as summarized in (27).

(27) Inferences involving *-e peli-*
   a. X did Y, or Y occurred, where Y is telic event reinforced by co-occurring telic verb
         ≫ Y is done completely

b. X did Y completely, Y occurred completely
>> Y is irretrievable

c. X did Y completely and irretrievably, Y occurred completely and irretrievably
>> Y is undesirable

d. X did Y completely irretrievably where Y was undesirable
>> X intended malefaction

A similar process can be shown as in (28), in which inferences lead to semanticization (or conventionalization) of viewpoints.

(28)

Form	Source Meaning	Viewpoints/ Subjective Meaning	Inference Pattern
-e twu-	'keep'	strong purposefulness, preparation for future..	[If A stores B, it is purposeful; it is for the future.]
-e noh-	'release'	weak purposefulness, helplessness...	[If A releases B, it is purposeful; B departs from A's active control.]
-e nay-	'take out'	effortfulness	[If A took out B, there must have been some resistance.]
-e peli-	'throw away'	undesirability, malefactivity	[If A throws away B, B is undesirable; A intends to effect undesirability.]
-e chiwu-	'relocate'	undesirability, crudeness	[If A relocated B, B is undesirable; B is crudely handled.]
-ko mal-	'stop'	determinative, helplessness	[If A stops after performing B, A wouldn't stop until completing B; A is determined to complete B.] [If B happened and stopped, B could not have been prevented.]
-taka mal-	'stop'	cessative	[If A stops while performing B, A's intention was unintentionally aborted.]
-e po-	'see'	experimental	[If A looks at B while performing B, A is experimenting with B]
-ko po-	'see'	retrospective	[If A looks at B after performing B, A is exploring the meaning of B.]

4.6 Grammar-Lexis Distinction

The traditional conceptualization of the human's language faculty is that it is composed of two separate modules of grammar and lexis. However, recent studies show that the distinction between grammar and lexis is by no means straightforwardly clear-cut. This position is well presented in the notion of emergent grammar (Hopper 1987), and more recently that of emergent lexicon (Bybee 2007). The fuzziness of grammar (and likewise, the lexis) is particularly prominent in the present research involving periphrastic perfectives.

The first state of affairs to note is that there exists categorial indeterminacy in grammar. This is well illustrated by the fact that the periphrastic perfectives are presented in different inventory sizes and members, entirely depending on the researcher who employ different sets of criteria. Furthermore, researchers present different functional characterization as a result of different weight in functions. The indeterminacy is also reflected in the diversity in nomenclature. For instance, to refer to the same/similar syntactic construction, Anderson (2006) uses AVC (auxiliary verb construction), and Ansre (1966) uses verbid. Other nomenclatures include catenative (Brinton 1988), explicator (Nayar 1983), clause chain construction (Longacre 1985), etc.

The periphrastic perfectives display strong grammatical characteristics. For instance, they show structural fixation. This suggests the loss of syntagmatic and paradigmatic variability (Lehmann 1995[1982]). In other words, the forms do not enjoy the freedom of occurrence either within the paradigm or across paradigms. This is well illustrated by such examples as *-e po-, -ko po-* and *-ko na-,* which, when used in perfective function, are extensively used in subordinate clauses as connectives (*-e poni, -ko poni, -ko nani*). According to a survey in the historical and contemporary corpora, *-ko po-* in main clause is mostly in the hortative sentence, i.e. in the form of *-ko poca.*

They also show a high level of resistance to particle insertion, adverbial insertion, argument insertion, etc. This type of resistance to insertion is typical of grammatical forms, which tend to be highly fused with the syntagmatically adjacent items, thus often forming rigid collocations. As a matter of fact, this characteristic is often used as an indicator of grammatical status of linguistic forms.

Another factor bearing significance in the current discussion is that the source lexemes tend to lose the lexical meaning or often have bleached lexical meaning. When considering the fact that semantic bleaching was often (erroneously) identified with grammaticalization, the extent of semantic bleaching is often (though not always) indicative of the form's grammatical status.

Still another aspect that indicates grammatical nature of the periphrastic perfectives is the deletion of inter-lexemic spacing by language users. Korean is a unique language in the region in that the spacing is required to separate a word from a neighboring word, a practice that first began in 1896 in Korea's first daily newspaper *The Independent; Toknipsinmwun*, and was officially enforced in 1933 in The First Hangul Orthographic Regulations. According to this regulation the periphrastic perfectives require a space between the non-finite connective and the auxiliary verb. The fact that language users tend to write the periphrasis as a single entity reflects their conceptualization that the whole construction is a single grammatical entity. When the word boundary is obscured by the deletion of the inter-lexical space, the auxiliary verb is considered not an independent lexical item but a dependent grammatical marker.

More importantly, the notion of TAM is fundamentally grammatical. Though each language may have different linguistic manifestations, TAM is widely exploited in human language (Hopper 1982),[16] and is supposed to be an essential element considering that it is among the features newly created in the make-shift pidgin to an erstwhile language, creole. For this reason, periphrastic perfectives as a linguistic category unambiguously constitute a grammatical category, rather than a lexical category.

In addition to the grammatical nature of the periphrastic perfectives, there are also features in the perfectives that are typically associated with the lexical items.

The first aspect in point is their (semi-)transparent lexical origin and semantic traces. For instance, the thirteen forms under discussion, derived from nine different lexical sources, all include a verb that carries the lexical meaning in contemporary Korean. As indicated in the preceding discussion,

---

16) In Bybee (1985) about 50 percent of the languages in her sample had inflectional tense, and 74 percent had inflectional aspect. Even languages believed to be tenseless (such as Chinese) tend to use other aspectuals and means of past time references.

the strength of the lexical meaning (or its abstractness) of the verb "within" the periphrases may be of varying degrees. However, the verb itself may have fully lexical uses (characterizable as 'divergence' a la Hopper 1991).

Furthermore, the lexical characteristic is apparent when the transitive/intransitive distintion of the cooccurring predicate is in exact tandem with the transitive/intransitive distinction of the verbs. For instance, the intransitivity associated with *na-* 'come out' and the transitivity with *nay-* 'take out' are paralleled by their respective uses in intransitive and transitive predicates (as in *phi-* 'bloom' and *phiwu-* 'make bloom'). This is a good exemplar of 'persistence' (Hopper 1991), which suggests that the semantics of the source lexeme affects the use of its grammaticalized forms in terms of selectional restrictions.

The abstractness of meaning does not necessarily correlate with grammaticalization. The boundary between grammar and lexis cannot be determined solely on the basis of semantic abstraction. This is so because even the non-grammatical uses may have considerably abstract meaning due to metaphorical extension. Even though it is true that grammar may have metaphorical basis (Claudi and Heine 1986), and that metaphorical extension contributes to semantic generalization of a lexeme, thus expanding the use scope and, ultimately, creating an optimal context for grammaticalization, there are innumerable instances of metaphorical (thus, abstract) uses of a lexeme, which, nevertheless, do not qualify as instances of grammatical forms.

The language-users' violation of the inter-lexemic spacing regulation as referred to in the previous discussion in support of the perfectives' grammatical status also suggests the lexical nature of the auxiliary verb, once the focus is placed on the requirement by orthographic regulations. In other words, the fact that there exists such a spacing requirement indicates that at the prescriptive level the auxiliary verb is treated as a lexical item.

As shown in the preceding discussion, the periphrastic perfectives are an exemplar par excellence of the forms that are located at the borderland of grammar and lexis. Even within this borderland these individual forms may be plotted along the continuum of grammar and lexis depending on their differential degrees of 'grammaticalness' or 'lexicalness'.[17] This is by no

---

17) As an anonymous reviewer aptly points out, the 'fuzzy category' view of grammar may

means surprising, when we consider that grammar is in constant flux and lexis is not a domain in which items of primary categories are neatly and systematically arranged without any disturbances. The periphrastic perfectives proceed along the grammaticalization paths either independently or in interaction with their 'heterosemous' (Lichtenberk 1991) counterparts that share the same lexical source. The unidirectional progression toward erstwhile grammatical status, since the progression is continuous, strongly suggests non-existence of an *a priori* grammar.

5. Conclusion

This paper explored the grammaticalization processes of certain SVCs that have grammaticalized or are in the process of grammaticalization into periphrastic perfectives. Among notable observations in the explorations are that the development of SVCs into periphrastic perfectives is largely due to the semantics of V_2's and the particles, an observation in consonance with the general patterns in other languages as suggested by the universal path hypothesis (Bybee et al. 1994); recruiting the verbs of stative ('be') and dynamic ('finish') semantics (and others of similar semantics) supports the source determination hypothesis (Bybee et al. 1994); and that the periphrastic perfectives form different layers (cf. 'layering'; Hopper 1991) in the same functional domain, each undergoing divergence from their lexical sources.

It has been also pointed out that the particles participating in the construction are critical contributors that determine the paths and resultant grammatical functions; that there exists a fine division of labor ('specialization' Hopper 1991, Hopper & Traugott 2003[1993]) among the perfective markers; and that the perfective markers often carry speaker's subjective evaluative viewpoints on the proposition they modify ('subjectification'; Traugott 1987, Traugott & König 1991, Traugott & Dasher 2002). It has been shown that the emergence of such viewpoints is largely

---

seem too revolutionary to apply to certain well-established categories considering the fact that the rationale and the advantage of categorization disappear. It is true, however, that the concept of grammatical category is not a priori notion but itself a theoretical artifact. In any category its members have differential degree of categoriality ('the iconicity of lexical categories principle': Hopper and Thompson 1985, Hopper 1991).

attributable to pragmatic inferencing from selective focus on specific aspects of an event denoted by the source lexeme.

Finally, the paper claims that the perfectives show differential levels of entrenchment in the grammatical system, thus showing at varying degrees the behavior of lexical items as well as that of grammatical items, a point that suggests that the lexis-grammar distinction is by no means clear-cut (cf. the emergent grammar: Hopper 1987, the emergent lexicon: Bybee 2007).

References

Anderson, Gregory D. S. 2006. Auxiliary verb constructions (Oxford Studies in Typology and Linguistic Theory) Oxford: Oxford University Press.

Ansre, Gilbert. 1966. The verbid--a caveat to serial verbs. The Journal of West African Languages 3:1, 29-32.

Brinton, Laurel. 1988. The development of English aspectual systems: aspectualizers and post-verbal particles. Cambridge: Cambridge University Press.

Bruce, Les. 1988. Serialization: from syntax to lexicon. Studies in Language 12:1, 19-49.

Bybee, Joan L. 1985. Morphology: a study of the relation between meaning and form. Amsterdam and Philadelphia: John Benjamins.

_____. 2007. Frequency of use and the organization of language. Oxford: Oxford University Press.

Bybee, Joan L., Revere Perkins, and William Pagliuca. 1994. The evolution of grammar: tense, aspect, and modality in the languages of the world. Chicago: The University of Chicago Press.

Bynon, Theodora. 1985. Serial verbs and grammaticalization. Studia Linguistica Diachronica et Synchronica, ed. by Ursula Pieper and Gerhard Stickel, 105-121. Berlin: Mouton de Gruyter.

Capell, Arthur. 1979. Classification of verb in Australian languages. Australian linguistic studies. Pacific linguistics, Series C. no. 54, ed. by Stephen A. Wurm, 299-322, Canberra: The Australian National University.

Choe, Hyun Bae. 1937. Wulimalpon [Korean grammar] (Reprinted in 1986, Min-Soo Kim, Dong-Ho Ha, and Yong-Kun Ko (eds.) 1-47.)

Claudi, Ulrike, and Bernd Heine. 1986. On the metaphorical base of grammar. Studies in Language 10, 297-335.

DeLancey, Scott. 1991. The origins of verb serialization in modern Tibetan. Studies in Language 15:1, 1-23.

_____. 1997. Mirativity: the grammatical marking of unexpected information. Linguistic Typology 1, 33-52.

_____. 2001. The mirative and evidentiality. Journal of Pragmatics, 33, 369-382.

Givón, Talmy. 1982. Tense-Aspect-Modality: the creole proto-type and beyond. Tense-aspect: between semantics and pragmatics, ed. by Paul J. Hopper. 115-163. Amsterdam and Philadelphia: John Benjamins.

Heine, Bernd. 1993. Auxiliaries: Cognitive forces and grammaticalization. Oxford: Oxford University Press.

Heine, Bernd, Ulrike Claudi, and Friederike Hünnemeyer. 1991. Grammaticalization: A conceptual framework. Chicago and London: The University of Chicago Press.

Heine, Bernd, and Tania Kuteva. 2002. World lexicon of grammaticalization. Cambridge: Cambridge University Press.

Heine, Bernd, Tom Güldemann, Christa Kilian-Hatz, Donald A. Lessau, Heinz Roberg, Mathias Schladt, and Thomas Stolz. 1993. Conceptual shift: a lexicon of grammaticalization processes in African languages. AAP 34/35. Universität zu Köln.

Ho, Kwang Soo. 2003. Kwuke pocoyongen kwuseng yenkwu [A study of Korean auxiliaries]. Seoul: Youkrack Publishing.

Hopper, Paul J. 1982. Tense-aspect: between semantics and pragmatics. Amsterdam and Philadelphia: John Benjamins.

_____. 1987. Emergent grammar. BLS 13, 139-157.

_____. 1991. On some principles of grammaticalization. Approaches to grammaticalization, ed. by Elizabeth C. Traugott and Bernd Heine. 2 vols. Vol. 1, 17-35. Amsterdam: John Benjamins.

Hopper, Paul J., and Sandra Thompson. 1985. The iconicity of the universal categories 'noun' and 'verbs'. Iconicity in syntax, ed. by John Haiman. 151-183. Amsterdam: John Benjamins.

Hopper, Paul J., and Elizabeth C. Traugott. 2003[1993]. Grammaticalization. (2nd ed.) Cambridge: Cambridge University Press.

Huh, Wung. 1992[1975]. Wuli yeysmalpon [Grammar of Old Korean]. Seoul: Saem Publishing.

Im, Hong-pin. 1975. Pwucengpep 'e'-wa sangthaycinswuluy 'ko' [On infinitival -e and state-descriptive -ko]. The Journal of Kookmin University 8, 13-34.

Jakobson, Roman. 1962. Selected writings. The Hague: Mouton.

Jung, In Seung. 1949. Phyocwun cwungtung malpon [Standard Korean grammar for secondary schools] (Reprinted in 1986, Min-Soo Kim, Dong-Ho Ha, and Yong-Kun Ko (eds.) 1-79.)

Kim, Minju. to appear. The intersection of the perfective and imperfective domains: a corpus-based study of the grammaticalization of Korean aspectual markers. Studies in Language.

Kim, Mi-Yeong. 1995. A diachronic study on cliticization of verbs in Korean language. Ph.D. dissertation, Dong-A University, Korea. [In Korean with an abstract in English]

Kim, Suk Deuk. 1992. Wulimal hyengthaylon--Malponlon [Korean morphology: a

grammatical description] Seoul: Tower Publishing.

Kim, Sung Hwa. 1990. A Study of aspect of Present-Day Korean language. Seoul: Hanshin Publishing.

Ko, Yong-Kun. 1987. Cwungsey kwukeuy sisangkwa sepep [Tense-aspect and mood in Middle Korean] (2nd ed.) Seoul: Tower Press.

Koo, Hyun Jung. 1987. Ssikkuth {-a, -key, -ci, -ko}-uy ssuimkwa uymi [The usage and semantics of suffixes, *-a, -key, -ci,* and *-ko*]. Konkuk Journal of Language and Literature 11:12, 167-188.

Kwon, Jae Il. 1986. Uyconmyengsauy mwunpepcek sengkyek [On grammatical nature of defective nouns]. Hangul 194, 97-120.

Lee, Hee Seung. 1949. Chokup kwukemwunpep [Korean grammar for elementary schools] (Reprinted in 1986, Min-Soo Kim, Dong-Ho Ha, and Yong-Kun Ko (eds.) 1-85)

Lee, Hyo Sang. 1991. Tense, aspect, and modality: a discourse-pragmatic analysis of verbal suffixes in Korean from a typological perspective. Ph.D. dissertation, University of California, Los Angeles.

Lee, Kee-dong. 1976. Auxiliary verbs and evaluative viewpoints. Language 1:2, 47-69.

_____. 1978. On the semantic nature of the auxiliary *iss-ta.* Essays in commemorating the 60th birthday of Nunmoe Huh Wung. ed. by P. U. Chong. 359-387.

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

Lee, Sung Nyong. 1956. Say mwunpep cheykyeyuy thaytolon [On revised grammar] (Reprinted in 1986, Min-Soo Kim, Dong-Ho Ha, and Yong-Kun Ko (eds.) 1-91).

Lehmann, Christian. 1995[1982]. Thoughts on grammaticalization. (LINCOM Studies in Theoretical Linguistics 01). München and Newcastle: LINCOM Europa.

Lichtenberk, Fransitek. 1991. Semantic change and heterosemy in grammaticalization. Language 67:3, 475-509.

Longacre, Robert. 1985. Sentences as combinations of clauses. Language typology and syntactic description: complex constructions, ed. by Timothy Shopen, 235-286. Cambridge: Cambridge University Press.

Min, Hyun Sik. 1993. Hyentaykwuke pocoyongen cheliuy caykemtho [Revisiting auxiliaries in Modern Korean]. Sook Myung Woman's University Emwunloncip 3, 53-97.

Moag, Rodney. 1989. Compound verb vs. auxiliary in Malayalam: a knotty problem in analyzing complex predicates. Paper presented at SALA XI, June 2-4, 1989, University of Wisconsin, Madison.

Na, Jin-Seok. 1971. Wulimaluy ttaymaykim yenkwu [A study of the tense system in Korean]. Seoul: Kwahaksa Publishing.

Nayar, Devi. 1983. Verb sequences in Malayalam. Ph.D. dissertation, Jawaharlal Nehru University, New Dehli.

Ono, Tsuyoshi. 1992. The grammaticalization of the Japanese verbs *oku* and *shimau.* Cognitive Linguistics 3:4, 367-390.

Ono, Tsuyoshi, and Ryoko Suzuki. 1992. The development of a marker of speaker's attitude: the pragmatic use of the Japanese grammaticalized verb *shimau* in conversation. BLS 18, 204-213.

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. Seoul: Hankuk Publisher.

_____. 2003. When stop goes further: from *malta* 'stop' to auxiliary verbs in Korean. Korean Language Research 13, 309-339.

_____. 2007. Particle selection in Korean auxiliary formation. Split auxiliary systems (Typological Studies in Language 69), ed. by Raúl Aranovich, 237-254. Amsterdam and Philadelphia: John Benjamins.

Ryu, Si Jong. 1994. Hankwuke pocoyongen pemcwu yenkwu [A study of the auxiliary category in Korean]. Ph.D. dissertation, Seoul National University.

Shetty, Ramakrishna T. 1985. Auxiliary verbs in Bunts Tulu. International Journal of Dravidian Linguistics 14:1, 92-98.

Sohn, Ho-Min. 2004. A grammar of *pota* 'to see': a panchronic perspective. Keynote presentation at the 14th Japanese/Korean Linguistics Conference, November 5-7, 2004, The University of Arizona, Tucson, AZ.

Son, Semodol. 1996. Kwuke pocoyongen yenkwu [A study of Korean auxiliaries] Seoul: Hankuk Publisher.

Traugott, Elizabeth C. 1982. From propositional to textual and expressive meanings: some semantic-pragmatic aspects of grammaticalization. Perspectives on Historical Linguistics, ed. by Winfred P. Lehmann and Yakov Malkiel, 245-271. Amsterdam: John Benjamins.

_____. 1989. On the rise of epistemic meaning in English: an example of subjectification in semantic change. Language 57, 33-65.

Traugott, Elizabeth C., and Richard Dasher. 2002. Regularity in semantic change. Cambridge: Cambridge University Press.

Traugott, Elizabeth C., and Ekkehard König. 1991. Semantics-pragmatics of grammaticalization revisited. Approaches to grammaticalization, ed. by Elizabeth C. Traugott and Bernd Heine, 2 vols. vol. 1, 189-218.

Underwood, Horace G. 1890. An introduction to the Korean spoken language. Yokohama: L. U.

Yang, In-Seok. 1993. Linguistic explorations: syntax, semantics, pragmatics. Seoul: Hanshin Publishing.

Seongha Rhee
Department of English Linguistics
Hankuk University of Foreign Studies
270 Imun-dong Dongdaemun-gu
Seoul 130-791 Korea
Phone: +82-2-2173-3171
E-mail: srhee@hufs.ac.kr