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Particle selection in Korean auxiliary formation*

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Emergence of grammatical markers often involves a construction that contains, in addition to the core lexical item, forms that are apparently of lesser importance, such as particles. Grammaticalization research has largely ignored such peripheral forms. This paper, by presenting three major paths of auxiliary development taken by the verb of existence, shows that in the grammaticalization of certain auxiliaries in Korean, particles play a crucial role in determining the paths the construction to take and the resultant grammatical functions. It is therefore necessary to reconsider the dominant trend in grammaticalization research which focuses primarily on the main element, and to pay more attention to the significance of the roles played by these seemingly less important linguistic forms.

1. Introduction

Grammaticalization studies have found numerous crosslinguistic commonalities in language change, a discovery which has engendered many hypotheses concerning the principles and mechanisms operative in grammaticalization processes. Among such commonalities is the fact that similar lexemes give rise to similar grammatical functions. For example, it was pointed out in early grammaticalization studies that demonstratives are a common source for the grammaticalization of gender markers (Greenberg 1978). A similar idea reverberates in Givón's (1973) assertion that the core meaning of a grammatical marker is included in the lexical meaning of the source item. Likewise, Bybee, Perkins and Pagliuca (1994), use a large scale quantitative study to show that words denoting 'finish', 'throw

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away', 'pass by', etc. are common sources of Past markers; and those denoting 'want', 'desire', etc., are likewise common sources of Future markers. Their impressive crosslinguistic data point to the impressive correlation between meanings of source lexemes and grammatical meanings and lead them to propose the source determination hypothesis (Bybee, Perkins, & Pagliuca 1994).

In apparent contradiction to these findings, there have been other claims that make reference to the fact that a single source lexeme can give rise to multiple grammatical markers. This is well illustrated in Craig's (1991) analysis of *bang* 'go' in Rama that developed into multiple domains of grammatical categories through separate paths. She presents the notion of polygrammaticalization to refer to such processes where a single source lexeme develops into diverse grammatical markers in different areas. Likewise, Heine, Claudi and Hünemeyer (1991) present an excellent case that illustrates the development of multiple grammatical markers from a single source lexeme, i.e. multiple functions developing from the Allative case marker in multiple, partially intertwined chains.

This paper begins with a simple question of why Korean developed so many grammatical markers from a single lexical source, i.e. *issta* 'to exist'¹ as shown in (1).

- | | | | |
|-----|----|--------------------------|----------|
| (1) | a. | Resultative | -eiss- |
| | b. | Past/Perfect | -ess- |
| | c. | Pluperfect | -essess- |
| | d. | Progressive/Imperfective | -koiss- |
| | e. | Futurity | -keyss- |

In (1), three different kinds of non-finite connective markers, i.e. *-e*, *-ko*, and *-key*, are involved. Thus, Resultative, Past/Perfect and Pluperfect evolved from a structure containing the particle *-e*; Progressive/Imperfective, the particle *-ko*; and Futurity, the particle *-key*. It is argued here that the selection from the multiple paths of the auxiliary formation is crucially dependent on the selection of the particles involved in the source construction.

Even though such diversity of the grammaticalized functions from a single source lexeme may be extraordinary, it is by no means remarkable from at least one perspective: developments of all those listed functions from existence verbs have been attested in numerous other languages, as lexicons such as Heine et al. (1993) and Heine and Kuteva (2002) show. Its extraordinary nature may lie, rather, in the extensiveness of the development: few languages seem to exhibit such a high number of grammatical forms developed from a single source as Korean.

1. The ending *-ta* in *issta* is merely the infinitive ending and is not an inherent part of the verb. Therefore, the verb may appear as *iss-* in its stem form.

The development examined here has to do with both claims presented at the beginning of this article: source determination and multiple paths. This paper aims to reconcile these two apparently opposing observations by showing that the existence verb in Korean, which grammaticalized into diverse yet crosslinguistically attested functions, did in fact develop through multiple paths; and that these paths are determined by the functions of the participating particles.²

2. Preliminary issues

2.1 Grammaticalizing forms

In most grammaticalization studies that trace grammaticalization paths, attention has been paid almost exclusively to the lexical item in the source construction. For example, one of the most commonly cited English examples is the development of Future *be going to* or *be gonna* from the full-fledged lexical verb *go*. Such studies typically focus on how the verb of motion became a Future marker, thus invoking metaphor as a major mechanism (Lakoff & Johnson 1980). However, strictly speaking, what grammaticalizes is not only the verb *go*, but the entire construction *be going to*. Therefore, exclusive attention to *go* in *be going to* minimizes the roles played by *be*, *-ing*, and *to*. Hopper and Traugott (2002 [1993]:88–90) argue that the Purposive *to* played a significant role here by inviting the conversational inference of later time, which consequently became semanticized as the construction fully developed into a futurity marker. Similarly, Bybee, Perkins and Pagliuca (1994:11–12) argue that it is the entire construction, and not simply the lexical meaning of the stem, that grammaticalizes. This is of particular importance for an understanding of grammaticalization of auxiliaries in Korean, where constructions with the same stem yield different grammatical markers. Therefore, due attention should be paid to the participating particles in the investigation of their roles in the emergence of grammatical meanings.

2.2 Serial verb constructions

Serial verb constructions are a special feature of the Korean language. A serial verb construction is “the combination of two or more asyndetically juxtaposed verbs with one shared argument in order to express a complex, but unitary action” (Lehmann 1995 [1982]:34). Unlike some languages where two or more verbs are

2. In the absence of detailed information on the source constructions we cannot determine if, and to what extent, other languages listed in the lexicons have analogous situations as the Korean existence verb *issita*.

simply juxtaposed in bare forms without conjunctives, i.e. truly 'asyndetically', Korean uses non-finite connective particles to combine them in the configuration of (2a), as exemplified in (2b), where the connective particle is glossed as a non-finite (NF) marker.

- (2) a. Verb1 + Connective Particle + Verb2+Tense/Aspect/Modality
 b. ccic-e-peli-ess-ta
 tear-NF-discard-Pst-Dec
 '(I) tore (it) and threw (it) away.'

Serial verb constructions are so susceptible to grammaticalization that they are even regarded as the seed of grammaticalization (DeLancey 1991: 15). Indeed, all serial verb languages seem to develop diverse grammatical function verbs out of the serial verb constructions by way of reanalysis (Bynon 1985), or through pragmatic extension, i.e. through interaction between conceptualization of the world events and iconicity in the language (DeLancey 1991; Bruce 1988). Typically it is the finite verb, or more correctly, the construction including the finite verb, i.e. Verb2 in (2a) above, that develops into a certain template and becomes a grammatical marker. This characteristic is shared by many other languages in different language families. Since grammaticalization is a dynamic and inherently diachronic process, a synchronic analysis of grammaticalizing serial verb constructions shows differing degrees of grammaticalization. Since these verbs of hybrid nature display diverse characteristics according to their degree of grammaticalization, there are various terms used to describe them, e.g., serial verbs, auxiliary verbs, verbids (Ansre 1966), catenatives (Brinton 1988), explicators (Nayar 1983), light verbs, etc. In this paper the term 'serial verb' is broadly defined to refer to the finite verbs that form a construction with one or more verbs linked by non-finite markers.

One notable aspect of verb grammaticalization from serial verb constructions is their tendency to develop into aspect markers. Such a phenomenon has been frequently observed. Korean, being a serial verb language, displays no exception to this tendency. Many serial verbs in fact became aspect markers and some even became erstwhile tense markers or modality markers, which is consistent with the general directionality of the development of these grammatical markers (Heine 1993). This paper reports such grammaticalization phenomena in which the existence verb *issta* 'to exist' is grammaticalized in serial verb constructions.

2.3 Particles

There are diverse devices for clausal connection in Korean. In particular, three connective particles, *-e*, *-ko*, and *-key* have been the focus of substantial controversy with respect to their syntactico-semantic functions. They (or their homophonous morphemes) have also been used as sentence-final markers signaling the sentence

type. They (or their homophonous morphemes) were also used as adverbializers transforming verbs and adjectives into adverbials, thus resembling converb markers (Haspelmath 1995). These particles, therefore, are sometimes classified as adverbializers (Choe 1989 [1929]). On the other hand, Kim (1981:37) classifies them as connective particles. Evidently the status of these particles is still controversial. In this paper, without evaluating the validity of such nomenclature, those particles are called simply connective particles or non-finite markers (NF) because they connect two (or more) verbs and make the verb to which they are attached appear normally in non-finite forms. The particles often participate in the grammaticalization of verbs in Korean and I will look at these particles more closely and provide a semantic characterization of each of them.

2.3.1 Semantics of *-e* and *-ko*

Of numerous particles in Korean, *-e* and *-ko* are among the most frequently used particles, and for clear contrast I shall discuss them together. Both particles share the connective function roughly resembling that of English *and*. When these particles are used as connecting particles they tend to combine non-finite verbs.³ Such a common connecting function is illustrated in the following examples where these non-finite particles are glossed as NF.⁴

- (3) a. pom-i ka-ko yelum-i o-ass-ta
 spring-NOM go-NF summer-NOM come-PST-DEC
 'The spring has gone and the summer {has come. came}.'
- b. ppalli o-e pap mek-ela
 quickly come-NF meal eat-IMP
 'Come quick and eat the meal.'

Despite such superficial similarities, however, the two connective particles have distinct semantics. These semantic distinctions are so notoriously subtle that they have defied attempts to sufficiently distinguish the two particles, a fact reminiscent of König's (1995) characterization of the semantics of converbs. Since the gist of the claim here is that the semantics of the particles are of crucial importance, I will venture to advance an explanation of the differences between the two. In order to do so, I will look into their respective uses and then contrast them to identify the differences.

3. In fact, they show different behavior with respect to this: *-e* does not allow connection of finite clauses, whereas *-ko* does. This has to do with their consolidating vs. isolating functions, to be discussed later.

4. The connective particle *-e* has allomorphs *-a*, and *-ø*. However, for ease of exposition, *-e* is used throughout.

Koo (1987) argues that *-e* unifies two domains of events denoted by the non-finite verb and the finite verb, and *-ko* separates them. Even though this observation is based on contemporary synchronic data, this analysis seems to be based on their early syntactic functions in Middle Korean. In the Middle Korean *Penyek Nokeltay* text dating from circa 1517, the following kinds of verbal connections are attested.

- (4) a. hyangha-e ka b. tol-e o c. kali-e mek
 face(v)-NF go turn-NF come choose-NF eat
 'go toward' 'return' 'eat only certain things'

As shown in the above examples, the clauses combined by the non-finite marker *-e* tend to form a unitary concept of an event. Therefore, in (4a) for example, the 'facing' event and the 'going' event form a single event of 'going toward'. Likewise, in (4b), the 'turning' event and the 'coming' event form a single event of 'returning'; and in (c), the 'choosing' event and 'eating' event form a single event of 'eating only certain things', which became an expression for describing someone who has particular eating habits.

Another important aspect of *-e* connective is that the combined events are sequence-sensitive. It is common for language users to present events in their temporal or logical sequence, even though such an assumed relationship may be countermanded by explicit statements. This is not the case with the expressions combined by the connective particle *-e*. For example, if the order of the verbs is reversed the resulting expressions become uninterpretable. The preceding discussions lead us to the conclusion that *-e* is a particle that connects two sequential events and brings forth an interpretation that the events form a single consolidated event.

On the other hand, in the same historical source of Middle Korean, the following kinds of verbal connections by the non-finite marker *-ko* are also attested (presented in modern orthography, all taken from the *Penyek Nokeltay* text).

- (5) a. ca-ko ka
 sleep-NF go
 'sleep and go'
 b. ssu-ko cek
 spend-NF write
 'spend (money) and record it'
 c. posalphi-ko ca
 secure-NF sleep
 'secure (the doors) and sleep'

As seen in the above examples, the two events denoted by the verbs combined by *-ko* tend to be possibly related but separate or independent of each other. In (5a),

for example, the ‘eating’ event and the ‘going’ event may be adjacent in time but are conceptually too individuated or independent to form a single event. The combined events of ‘spending money’ and ‘recording the expenditure’, and of ‘securing the doors’ and ‘sleeping’ are similarly independent.

The above examples seem to suggest that the two events must be in sequential relationship. However, other examples show that that is not always the case, as shown in the following examples:

- (6) a. ku kang-un nelp-ko kiph-ta
 the river-TOP wide-NF deep-DEC
 ‘The river is wide and deep.’
 b. ku kang-un kiph-ko nelp-ta
 the river-TOP deep-NF wide-DEC
 ‘The river is deep and wide.’

The above examples show that the two events or states are not in the relationship of temporal sequence. They are simply in syntactic juxtaposition, and the connective distributes the focus evenly onto each of the combined events or states. This is well illustrated in the following peculiar example.

- (7) mwun tat-ko tul-e o-a
 door close-NF enter-NF come-IMP
 ‘Come in and close the door.’ (Lit. ‘Close the door and come in.’)

The above example should be pragmatically awkward, because in its literal interpretation preceding ‘door-closing’ should preclude the following ‘entering’ event. However, this is a commonly used expression requesting someone at the door to come in and close the door. The speaker is simply demanding two events to come about without reference to their relative sequence. Then it can be assumed that the sequential relationship invoked in the interpretation of (5) is pragmatically motivated because for information processing, enumerating events in the order of temporal sequence, if applicable, is preferred (cf. Gricean maxim of manner). Therefore, *-ko* can be said to be a connective particle that enumerates events in co-ordination without sequential relationship.⁵

The differences between the two connective particles can be better illustrated by substituting the particles for each other. If *-e* in the previous example (4),

5. One of the reviewers suggested that *-ko* can be used both sequentially and nonsequentially (Cho 2004). However, for the reasons presented here and the fact that some expressions with *-ko* where sequentiality is intended are less than acceptable (which can be fixed by using a sequential marker *-se*, instead), the sequential use of *-ko* seems to be pragmatically motivated following the observance of the Gricean maxim of “Be orderly.”

repeated here as (8) for comparison, is substituted for *-ko*, the results are as shown in (9).

- (8) a. hyangha-e ka
face(v)-NF go
'go toward'
- b. tol-e o
turn-NF come
'return'
- c. kali-e mek
choose-NF eat
'eat only certain things'
- (9) a. hyangha-ko ka
face(v)-NF go
'orient oneself and go'
- b. tol-ko o
turn-NF come
'turn and come'
- c. kali-ko mek
choose-NF eat
'put aside and eat'

There are certain differences between these corresponding expressions. One thing in common is that when *-ko* is used instead of *-e*, the interpretation becomes one denoting two separate events rather than one. For example, in (8a), with the particle *-e*, the 'facing' event and 'going' event are so much fused that the two components are no longer perceived as separate. Interestingly, (9a) is largely similar to (8a) and in fact, it is also occasionally used. A subtle difference is that while (8a) suggests that facing toward a certain destination is successful and well-maintained throughout, (9a) seems to suggest that the 'facing' event is incidental, and its successfulness can be brought into question. Therefore, a directional mistake *en route* is more likely to be associated with (9a) than with (8a). This suggests that the two events denoted by (9a) are more compartmentalized.

A similar situation appears in a comparison of (8b) with (9b). Example (8b) refers to the situation when the traveler's route is maintaining the reverse direction of the previously taken journey. On the other hand, (9b) suggests that the traveler is simply coming without reference to his or her previous travel such as after going around something (e.g. a track, a park, etc.). In other words, the traveler in (8b) is required to have been at the destination point before, whereas this is not required in (9b).

A comparison of (8c) with (9c) also shows a similar point: (8c) suggests that choosing and eating are interlaced in a holistic eating event, and (9c) suggests that

choosing something is completed before the person begins to eat. Therefore, (8c) is more likely to describe a person's eating habits, while (9c) is more likely to describe an incidental event, as in a situation when certain alien material is found in the food.

Now, the two particles from the previously given examples in (5) can be substituted to see the result. If the connective particle *-ko* in (5) is substituted for *-e*, all resultant expressions become uninterpretable. In other words, combining events with sequential consolidating connective *-e* is not possible with 'sleep' and 'go'; 'spend' and 'write'; and 'secure' and 'sleep' because the events combined cannot conceptually form a single event, making the use of *-ko* the only viable option.

All these findings in the preceding discussion point to the following generalization: (1) *-e* consolidates the sequentially combined events; and (2) *-ko* isolates the combined non-sequential events distributing equal focus on each event. This characterization should be fruitful in discussing their roles in auxiliary formations.

2.3.2 Semantics of *-key*

The connective particle *-key* was rarely used prior to the twentieth century, and its historical use in Middle Korean was largely restricted to Ingressive and Causative construction (Huh 1992 [1975]; Ko 1987). Comparing historical data between the Middle Korean version and the Modern Korean version of an identical text, Rhee (1996) shows that the function of *-key* as an adverbializer grew remarkably during the period. This adverbializer function is still the most frequent one, marking 'manner', 'mode' or 'purpose', as shown in the following examples:

- (10) a. ku candy-nun masiss-key poi-ess-ta
 the candy-TOP tasty-NF seem-PST-DEC
 'The candy looked tasty.'
- b. ku-ka na-lul aphu-key ttayli-ess-ta
 he-NOM I-ACC ache-NF hit-PST-DEC
 'He hit me painfully.'

In example (10a) above, the literal meaning is 'the candy appears in a manner of being tasty.' Likewise, the literal meaning of example (10b) is 'he hit me in such a manner that I would feel pain.' In these examples, the connective particle *-key* designates the manner of appearance and the manner of hitting, respectively. When the manner is associated with an action it acquires a meaning of 'on purpose'. Whether the purpose is realized, e.g. whether I felt pain indeed, is indeterminable by the particle, but its realization is pragmatically inferred. Based on this fact, I will characterize the particle *-key* as a mode/purpose connective.

3. Auxiliaries from the existence verb *issta*

In the grammaticalization history of Korean it is almost a routine process for verbs to go through a stage of serial verb construction. From this verb serialization with *issta* 'to exist', such grammatical markers as Resultative, Past/Perfect, Progressive, and Future evolved. When grammaticalization occurs, the clausal status of the predicate containing the existence verb becomes lost and the typical biclausals are thereby turned into monoclausals. The existence verb acquired versatile functions along the grammaticalization paths. These paths can be grouped into three major categories: the Past path, the Progressive path, and the Future path. Grouping these three paths coincides with the use of the three connective particles I discussed above, i.e. *-e*, *-ko*, and *-key*, to which I now turn.

3.1 The Past path

Through a verb serialization with the particle *-e*, auxiliaries of Resultative and Perfect/Past were developed. This is consistent with the analysis of Bybee, Perkins and Pagliuca (1994) where such grammatical markers as Persistence of State, Resultative, Anterior, Perfective, and Simple Past form a developmental path in terms of degree of grammaticalization. Further, Korean recruits the Past marker to invent the Pluperfect marker. Some examples of constructions in the Past path are shown in (11).

- (11) a. Resultative (*-eiss-*)
 ceki say-ka cwuk-eiss-ta
 there bird-NOM die-RESUL-DEC
 'There is a dead bird over there.'
- b. Perfect/Past (*-ess-*)
 ku-ka cwuk-ess-ta
 he-NOM die-PST-DEC
 'He died.'
- c. Pluperfect (*-essess-*)
 ku-ka yeki o-essess-ta
 he-NOM here come-PLUP-DEC
 'He had been here before.'

3.2 Diachronic development

The serial verb construction *-e issta* had a wide distribution in early Korean data. In the studies on Middle Korean (notably Huh 1992 [1975]; Ko 1987, *inter alia*, it has been observed that by the fifteenth century this *-e issta* serial verb construction

had already developed to the point that it carried the aspectual meaning of Resultative with a wide range of verbal or adjectival predicates.⁶ Rhee (1996) shows that the cooccurrence pattern of adverbials in the serial verb construction in Middle Korean displays both the disjoint and conjoint nature of the construction, suggesting that the verbs participating in the serial verb constructions had different levels of consolidation. In other words, in disjoint configurations the two verbs are in simple juxtaposition, whereas in the conjoint configurations the two are more unitized.

From the seventeenth century, the digraphemic Resultative aspect marker *-e iss-* developed into the monographemic Perfect/Past marker *-ess-*, initially starting as a variant of the former. Prior to the seventeenth century, Korean did not have a morphological Past tense marker.⁷ The grammatical notion of Past was often indicated by temporal adverbs such as 'yesterday', 'already', etc. Modern Korean does not morphologically distinguish between the Present Perfect and the Past, and *-ess-* is used to express both. Crosslinguistically these two grammatical markers tend to originate from the same sources and undergo the same grammaticalization path, where the Past marker is usually the more developed form. Modern Korean has *-e iss-* for Resultative/State-Persistence marking, and *-ess-* for Perfect/Past marking, both coexisting as the offspring of the same serial verb construction.

The grammaticalization journey continued when the Past/Perfect morpheme was recruited to make a grammatical morpheme to mark Past Perfect or Pluperfect (Dahl 1985: 144) by way of reduplication, i.e. *-essess-* from *-ess-*. I cannot find any historical data previous to Modern Korean that show the use of Pluperfect. Its emergence seems to be attributable to the exposure to foreign languages with Pluperfect, which prompted the filling-in of the functional gap by translators in an effort to achieve closer one-to-one correspondence between the source language and Korean. The strategy involved in devising a new grammatical marker from the Past/Perfect seems to be metaphorization: making use of iconicity by increasing the temporal distance, which is done by repeating the use of the Past marker.

3.2.1 Source characteristics

Let us now consider how the change from the serial verb construction to a grammatical marker of Resultative occurred. The change must have involved many

6. Since adjectives were also allowed in the non-finite position, the term 'serial verb construction' may be a misnomer. However, this anomaly is due to the idiosyncrasy of Korean where adjectives behave in a similar way as verbs, and distinction between the two categories is often obscure.

7. Crosslinguistically, this Middle Korean situation is exceptional because zero-marked Past is a very rare phenomenon across languages (Bybee, Perkins, & Pagliuca 1994: 91).

facets of grammar and language use in general, but I will mainly focus on the semantic characteristics attributable to the particle *-e*.

The sequentiality sense of the particle *-e* is critical here. Generally speaking, connective particles used in serial verb constructions imply temporal sequence when the verbs denote actions or events. This holds crosslinguistically because of the iconicity in language use. Among Korean connective particles, *-e* is particularly sensitive to the iconic sequentiality of the combined predicates, as I have discussed in 2.3.1. Therefore, the construction *-e issta* implies a sequence of two events, i.e. one denoted by the non-finite verb and the other the event of existence. The basic sense of Resultative includes the sequentiality between an event and its resulting state. The 'state' sense is directly derivable from the existence verb *issta*, because its meaning is closer to 'to be at' rather than 'to live' or 'to be alive'. This was the case with Middle Korean, too, in which the verb predominantly referred to spatial location. Generally speaking, when the predicate including this verb does not specify spatial location, the meaning of location is also generalized to simply mean a state of being, and the spatiality is generalized to temporality, which is an instance of conceptual expansion (Heine, Claudi, & Hünemeyer 1991) that seems to be responsible for the emergence of tense- and aspect-marking functions.

As noted previously, the precursor of the Past marker was a shortened variant (*-eys-*) of the Resultative marker (*-e iss-*). This functional change accompanied an interesting formal change whereby the connective particle (*-e*) became obscure. With the particle now formally obscure, the form brings forth noteworthy consequences. When a phonological contraction occurs, the effect in orthography is direct. Korean orthography is a combination of syllabic and alphabetical writing systems, where each character is a syllable and each character is composed of two or more phonemic letters. When this contraction occurred, neither the connective particle *-e* nor the existence verb became identifiable because the previous two characters were reduced into one. This change must be more than an orthographic change: it must also entail loss of inter-clausal pause and vowel quality change. It must be noted that the meaning of Resultative is nothing much more than the product of combining the meaning of the connective particle and the meaning of the verb of existence. When both of these forms, which used to provide the grammatical meaning, became opaque, the meaning of the Resultative was jeopardized. The meaning of 'persistence' (i.e. 'be in the state of') and 'sequence' (i.e. 'after [verb1 event]') was affected. After the 'be in the state after' meaning is deducted from 'be in the state after the completion of verb1 event', what is left is 'completion of verb1 event', the essential semantics of Past/Perfect.

In sum, the change from Resultative to Past/Perfect has to do, at least in part, with phonological reduction that led to a corresponding reduction of the combinatorial meaning into a single indivisible concept of 'anteriority'. This new grammatical concept of general 'anteriority' is central to the Past. It seems that

this change was either enabled or facilitated in part by the loss of the connective particle *-e* which formerly provided the sequentiality sense.

With reference to the emergence of Pluperfect, it is again notable that such recruitment of the extant form *-ess-* to create a new grammatical marker *-essess-* was not barred by the sequentiality sense of the particle *-e*, which was originally in the source construction but became invisible through phonological reduction at the time of Past/Perfect formation.

3.3 The progressive path

The second path taken by the existence verb *issta* is the Progressive path. Grammatical markers developed along this path are Progressive and Imperfective. These two markers are homophonous in Korean and, therefore, the interpretation of some sentences is ambiguous. The following is an example of such a case, where (12a) is the Progressive interpretation, while (12b) is the Imperfective interpretation.

- (12) ku-nun yak-ul mek-koiss-ta
 he-TOP medicine-ACC eat-PROG/IMPERF-DEC
 a. 'He is taking medicine (at this moment).'
 b. 'He is under medication (these days).'

3.3.1 Diachronic development

The aspectual *-koiss-* is a very frequently-used grammatical marker in Modern Korean. However, this marker is rarely found in historical data. The development of *-koiss-* seems to have begun in earnest in the late 19th century and the early 20th century (Huh 1987; Rhee 1996). A data survey suggests that when it first emerged as the Progressive marker, it seems to have been used with eventive accomplishment predicates (e.g. 'build a house' and 'run'), then spread to habitual and semelfactive predicates (e.g. 'smoke' and 'knock'), further to eventive achievement predicates (e.g., 'arrive' and 'melt'), and then finally resultative predicates (e.g. 'wear' and 'know'). From this final stage, the Progressive marker assumes the role of Imperfective marker and, perhaps in a remedial effort, a new, more periphrastic Progressive marker *-koissnuncwungi-* 'be in the middle of' is introduced to mark true Progressives.

The development from the Progressive *-koiss-* to the Imperfective is a very recent development. The Progressive and Imperfective aspects are not mutually exclusive, but the latter has a wider scope of denotation and subsumes the former, and the developmental direction from Progressive to Imperfective is frequently at-

tested across languages.⁸ The cognitive force behind this development seems to be a transfer of the notion of unboundedness from an event to a general state of affairs, including statives. Progressives often lend themselves to a Habitual interpretation. In the Habitual aspect, the sense of duration required to constitute the Progressive/Imperfective aspect is naturally obtained from the real-life temporal duration which is occupied by the habitual event concerned.

3.3.2 Source characteristics

The development of the Progressive makes use of the particle *-ko* together with the existence verb *issta*. Since *-ko* is an isolating connective, the use of this particle to express something like ‘someone is in the middle of doing something’, in which the agent’s existence and his or her on-going activity seem to be blended, is somewhat puzzling. For this reason, the use of consolidating connective *-e* would seem to be more appropriate. However, a closer look reveals that the choice is a fully justifiable one because the particle *-e* has an inherent semantics of sequentiality, and its use would be problematic in that the on-going activity is not in a temporally sequential relationship with the event/state of existence. Strictly speaking, the two events are separate events occupying a certain segment of a time-line at the same time. The particle *-ko* invokes distributed attention to the coordinated events, i.e. the on-going event and the event/state of existence, and this effect seems to be crucial in the formation of the Progressive sense. Therefore, in the development of this Progressive marker, the particle *-ko* seems to have been employed for three obvious reasons: its lack of sequentiality, its isolating effect, and its focus-distributing property.

3.4 The future path

The last grammaticalization path taken by the existence verb is the Future path. The grammatical forms along this path are various subcategories of Futurity, such as Conjectural, Intentional, Hypothetical Willingness, Current State as Futuristic Mode, Ability, Possibility, Evaluative, and Predestination (Rhee 1996).⁹ The Korean Futurity marker *-keyss-* was developed from the existence verb *issta* in the serial verb construction in which the particle *-key* is used. The use of *-keyss-* is illustrated in the following examples.

8. The possibility of using English Progressive for Habitual led Bybee and Dahl (1989) to speculate that English Progressive represents an intermediate stage in the development of Progressive into Imperfective, a widely attested change across languages.

9. Some of the uses of *-keyss-*, such as Conjectural and Evaluative, do not make temporal reference. These are later developments from the Future marker, but their new functions became considerably remote from the original temporal sense.

- (13) a. na-nun nayil yehayng-ul ka-keyss-ta
 I-TOP tomorrow travel-ACC go-FUT-DEC
 'I will go on a trip tomorrow.'
- b. nayil pi-ka o-keyss-ta
 tomorrow rain-NOM come-FUT-DEC
 'It will rain tomorrow.'

3.4.1 Diachronic development

There is a controversy as to the historical origin of the Future marker *-keyss-* depending on its source composition. However, historical data show, at least, that Modern Korean *-keyss-* appears from the late Early Modern Korean period, i.e. at the turn of the 19th century. The studies by Na (1953) and Huh (1982a, 1982b), based on four different versions of a book entitled *Hantjunglok*, dating from 1795, 1801, 1802, and 1805, show that certain earlier forms of *-keyss-* were used interchangeably in corresponding texts, and that the interchangeability ceased by the end of the 19th century, when the use of *-keyss-* became established.

During the past one hundred years or so, the Future marker acquired various senses through diverse mechanisms. These developments are not only varied in kind but also interlaced in causal chains, and therefore, how those senses came into being cannot be presented with certainty. However, I can analogize, though over-simplified, the emergence patterns of each sense. The core semantics of the marker was 'current state as a futuristic mode' as a result of the combination of mode/purpose connective particle *-key* and the existence verb *issta*. This core sense branched out into two: 'intention with respect to the future event' and 'evaluation of current situation with respect to the future event'. From these interpretations emerged various senses such as Intentional, Hypothetical Willingness, Conjectural, etc.

3.4.2 Source characteristics

There is a controversy as to the historical origin of Future marker *-keyss-*. Ramstedt (1949) and others consider it a development from the particle *-key* and the existence verb *issta*. Na (1953), Huh (1982a, 1982b) and others, however, consider the origin to be the particle *-key* combined with the light verb *hata* 'to do' and the existence verb *issta*. Both theories are largely compatible and acknowledge in common the participation of the particle *-key* and the existence verb *issta*.

It has been shown in the above that the main function of the particle *-key* is to designate manner/purpose. The manner/purpose of a situation and the purpose of an action have direct implications for the future because purpose is an inherently future-oriented notion and manner/mode is the bridge between one situation and its future situation or between one action and its future resultant situation. There-

fore, a construction composed of Verb1, connective *-key*, and the existence verb signifies that the sentential subject exists in such a manner that Verb1 would be realized. When this construction is construed as a serial verb construction, the focus would be on the finite verb, i.e. 'to exist' because it is the final verb in serialization. When the conversational implicature invites attention to the non-finite verb to which the manner/purpose marker *-key* is attached, by virtue of the future-indexing ability of the particle *-key*, this verb would be reanalyzed as the main verb, a process analogous to the development of Future *be going to* from one where *go* was the main verb to the one where the verb following the Purposive *to* became the main verb. This type of grammaticalization process in Korean should have been possible largely due to the semantics of the particle *-key* that contained an implication of futurity.

4. Conclusion

Grammaticalization is a multi-faceted phenomenon, where a linguistic form is subjected to diverse forces at various levels from as low and local as its sound, to as high and holistic as the discourse it is situated in. However, since all grammaticalization phenomena are reducible to a change involving linguistic forms, the question of what participates in the process should be of primary importance. In most studies, however, the research focus tends to be on the main lexical item, often regrettably ignoring other seemingly peripheral forms such as particles. It has been shown that in the formation of some auxiliaries such apparently insignificant particles play a decisive role in determining the final products of the process, by determining the path a construction will take. Also shown are the examples utilizing the verb of existence, *issta* 'to exist', which underwent three separate paths of polygrammaticalization: the Past path, the Progressive path, and the Future path. Selection of these paths was determined by the sequential, consolidating connective *-e*, the isolating, focus-distributing connective *-ko*, and the manner/purpose connective *-key*.

Since Korean has a rich particle system and many particles, themselves the result of grammaticalization, participate in the grammaticalization of other markers, identifying the limits and the precise natures of the roles of the particles should contribute to a better understanding of grammaticalization processes in language.

Abbreviations

ACC: accusative; DEC: declarative; FUT: future; IMP: imperative; IMPERF: imperfective; NF: non-finite; NOM: nominative; PLUP: pluperfect; PROG: progressive; PST: past; RESULT: resultative; and TOP: topic.

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