Rhee, Seongha. 2006. Grammaticalization of postpositional particles from spatial terms in Korean. *Japanese Korean Linguistics* 14: 139-150. Stanford: CSLI Publications.

The 14th Japanese-Korean Linguistics Conference was held at the University of Arizona, Tucson, AZ, from Nov. 5-7, 2004.

Grammaticalization of Postpositional Particles from Spatial Terms in Korean*

SEONGHA RHEE Hankuk University of Foreign Studies

1. Introduction

Adpositions often grammaticalize from spatial terms as has been widely attested in numerous studies across languages (cf. lexicons by Heine et al. 1993 and Heine & Kuteva 2002). Korean is not an exception in this respect. Certain members of the Korean postpositional system show on-going grammaticalization, which this paper intends to explicate.

The objectives of this paper are to examine eleven primary postpositional particles developed from spatial terms in Korean and to analyze six secondary postpositional particles in Present Day Korean developed from spatial terms that are undergoing grammaticalization processes, which exhibit various characteristics of the incipient grammaticalizing stage.

^{*} This work was supported by a Hankuk University of Foreign Studies Research Fund.

2. Data

Korean has a rich inventory of postpositional grammatical markers, many of which have been developed from spatial terms. Korean makes use of orthographic spacing to set apart words, which comprise a stem and its satellite particles. The spacing convention is very useful in that it reflects writers' perception of the degree of bondedness between linguistic forms. Drawing upon this orthographic convention we differentiate two groups of postpositional particles: the primary postpositions, which must be directly affixed to their host noun without any spaces, and the secondary postpositions, which may be affixed to a noun with a space or those that may have internal morpho-syntactic complexity and contain a space in them.

The primary postpositional particles of spatial origins are listed in Table 1. These are largely old grams and many of them do not have semantically transparent lexical sources. For example, the source meaning of -ey, one of the highest ranking particles in Korean, has not been firmly established, but Kim (2004) claims that it was derived from OK noun *auy* 'middle/center'. There is also another group of secondary postpositions, as listed in Table 2, all of which have in common a genitive -uy 'of' and a locative -ey 'at'.

| Postposition | Meaning | Lexical Source Meaning | |
|-----------------------------------------------------|------------------|------------------------|--|
| -taylo | as/like | place | |
| -pakkey | only | outside | |
| -kkaci | to/until/up.to | edge | |
| -ey | to/at | middle | |
| -hanthey | to | one place | |
| -eykey | to | middle place | |
| -kkey | to [+honorific] | that place | |
| -kkeyse | NOM [+honorific] | that place + exist | |
| -eyse | from/at | middle + exist | |
| -hantheyse | from | one place + exist | |
| -eykeyse | from | middle place + exist | |
| Table 1. Primary Postpositions from Spatial Sources | | | |

| Postposition | Meaning | Lexical Source Meaning | |
|-------------------------------------------------------|---------------|------------------------|--|
| -uy aphey | before | at front of | |
| -uy twiey | behind | at back of | |
| -uy wiey | over/above/on | at top of | |
| -uy alay(ey) | under | at lower region of | |
| -uy mithey | under/beneath | at bottom of | |
| -uy kawuntey(ey) | among/between | at center of | |
| Table 2. Secondary Postpositions from Spatial Sources | | | |

2.1 Grammaticalization of Primary Postpositions

Primary postpositions listed in Table 1 have been developed from various sources, but one noteworthy aspect of the source characteristics is that a large number of them are from the nominal sources denoting 'place' i.e. kuy and tA of OK and MidK (7 out of 11 cases), mostly affixed with a locative marker. The use of 'place' is not at all singular crosslinguistically (Blake 1994 for Finnish, Everbroeck 1958 for Lingala, among others), but the preference of this general term over more specific spatial terms, i.e. those having relational/directional meaning, is worth noting.

Another important aspect is that there is a high degree of nonisomorphism, i.e., there are multiple terms to encode the grammatical concept of allative/dative 'to', and ablative 'from'. There exists a division of labor among them, based on fine-grained semantic and pragmatic distinctions of the goals such as spatiality, animacy, colloquiality, humanness, and honorification. For example, the allative/dative function is carried by multiple terms with a division of labor as a result of different 'specialization' (Hopper 1991) as shown in (1).

| (1) | -kkaci 'to/until/up.to' | [+terminative] |
|-----|-------------------------|---------------------------------|
| | <i>-ey</i> 'to/at' | [-animate], normally [+spatial] |
| | <i>-eykey</i> 'to' | [+animate] |
| | -hanthey 'to' | [+human], largely [+colloquial] |
| | -kkey 'to' | [+human] [+honorific] |

The functional differentiation indicated in (1) is a schematic generalization glossing over an enormous amount of subtleties. This generalization, however, suggests that linguistic forms that come into acute competition for survival and try to acquire primacy in carrying a grammatical function may divide up the function in a number of subcategories with various semantic properties and settle the conflict of interest with a seemingly peaceful arrangement by distributing the subcategorized functions among them. An analogous specialization phenomenon is also attested with the ablatives.

The next issue involves the relationship between honorific forms and distal demonstratives. In Table 1 we have two forms that are inherently marked with honorification, which recruit the distal demonstrative form as shown in (2).

(2) a. -*kkey* 'to' [+honorific]

(<that place) [-s GEN + kungekuy 'that place']
b. -kkeyse NOM [+honorific]</pre>

(<that place) [-s GEN + kungekuy 'that place' + se 'from']

There are two sources that have been generally acknowledged as sources of -kkeyse: one is the one presented above; and the other is involving an existence verb kyesita 'to exist', which does not concern us here. According to the current analysis, lexical expressions of distal deixis are used to refer to an honorable person. This is an example of metonymization, i.e., referring to honorable persons by their associated location. This is a strategy to avoid pin-pointing honorable persons, whereby direct mention or direct pointing of honorable persons is avoided, which is still obvious in that people never say the names of their parents or other honorable persons in direct full forms. On the other hand, this same use of distal demonstrative for honorification is an instance of metaphorization, i.e., respect maintained by distancing (cf. 'negative face') is encoded by linguistic expression of distance. Encoding discourse participant's face relates to intersubjectification (Traugott 1982, Traugott and König 1991, Traugott and Dasher 2002, Traugott 2003). In the cases of -kkey and -kkeyse, encoding intersubjectification is realized by way of metaphorization.

2.2 Grammaticalization of Secondary Postpositions

Grammaticalization of secondary postpositions, as is evident in its label 'secondary', shows lesser degree of grammaticalization in certain aspects. These morphologically complex constructions exhibit on-going grammaticalizing phenomena in reductions at the morpho-syntactic and phonological levels, orthographic changes, functional and semantic specialization, among others.

The first issue addresses their formal reduction. The reduction in their phonological and/or morpho-syntactic shapes is common. This reductive process can be diagrammatically represented as in (3), where RN stands for a relational noun.

(3) [-uy GEN + RN + -ey 'at'] >> [RN]

As is evident in (4), the particles -uy and -ey are often deleted from the source construction. This common type of reduction is exemplified in the following:

| (4) | X-uy aph-ey >> | X-aph |
|-----|---------------------|-----------------|
| | X-Gen front-at | X-front |
| | 'at the front of X' | 'in front of X' |

The derivational pattern illustrated in (4) is uniformly, yet optionally, applied to all cases. One aspect relevant to this process is that the formation of the final product resembles compounding, and in fact, there is no theoretically sound way of separating these two processes, because the resultant form from the above process is composed of two nouns in juxtaposition, and they can be used as full-fledged nouns instead of prepositional phrases. It is possible that compounding and grammaticalization converge in these instances.

As has been often pointed out, discourse is the locus of grammaticalization (Hopper & Traugott 2003[1993]), and signs of grammaticalization of linguistic forms first surface in colloquial data. Thus, we can reasonably expect that the reduced forms should be common in spoken data. This is definitely true, but the reductive process is so prominent across genres and registers, though it is relatively less so in written data, the use of reductive forms is very common even in balanced corpora. This is well illustrated in Table 3, where the more conservative forms, i.e. the non-reductive forms, and the more innovative forms, i.e. the reductive forms, are contrasted in terms of their token frequency.

| RN | | RN-ey | RN-ø | |
|----------|----------|--------|--------|---|
| aph | 'front' | 14,211 | 2,531 | |
| twi | 'back' | 9,824 | 11,066 | |
| wi | 'top' | 15,837 | 24,400 | |
| alay | 'below' | 1,114 | 5,216 | |
| mith | 'bottom' | 2,936 | 452 | |
| kawuntey | 'middle' | 476 | 17,123 | |
| Total | | 44,398 | 60,788 | |
| | | | | - |

Table 3. -ey Deletion (based on the KAIST KORTERM Corpus)

The statistics given in Table 3 is suggestive of a number of interesting aspects. One of them is the fact that there is a subtle pattern with the deletion of the particle *-ey*. I.e., in the cases of the relational nouns ending in an open syllable, such as *twi* 'back', *wi* 'top', *alay* 'below' and *kawuntey* 'middle', the final locative particle *-ey* is more commonly omitted. This seems to be attributable to the common tendency that language users delete a segment from a string of successive vowels to economize the articulatory gestures.

Another relevant issue is that the morphological/phonological reduction is applicable not only to the particles but also to their stems. The reductive process operated on some of the relational nouns as *aph* 'front', *twi* 'back', and *wi* 'top'. In historical data the modern *aph* had its predecessors *alp* and *alph* from which a lateral liquid or aspirational feature was deleted, respectively. A similar process is replicated with *twi* whose historical form is *twih*. A slightly different picture emerges with the case of *wi* 'top'. The Middle Korean counterpart of *wi* /wi/ [wi] was *wuh* /uh/ [ut] by itself or /uh/ [uh] when followed by a vowel. Therefore, the reductive process occurred in such a direction that the final consonant was dropped and the remaining vowel was compensated by way of diphthongization. Despite the fact that this process is not grammaticalization-specific but of more general process in Korean historical phonology, it is true that the stem forms under current consideration have undergone phonological reduction.

Still another issue concerns Korean orthography, according to which, as mentioned earlier, spacing is used to separate words. Deletion of spaces between word groups reflects that the language users perceive the two or more adjacent forms as forming a single unit. When this orthographic space deletion is coupled with particle deletion, the outcome can be strikingly different from the source structure as illustrated in (5):

| (5) | san-uy <space> alay-ey >></space> | > san-alay |
|-----|-----------------------------------------|----------------------|
| | mountain-Gen bottom-at | mountain-bottom |
| | 'at the bottom of a mountain' | 'below the mountain' |

This type of space deletion is characterizable as an example of 'univerbation' (Lehmann 1995 [1982]), a process whereby multiple linguistic forms begin to behave as a single unit.

Functional specialization merits our discussion as well. A very interesting aspect surfaces because these secondary postpositions come into competition with their Sino-Korean counterparts, i.e. those of Chinese origin. Therefore, this comparison relates to inter-systemic specialization, i.e. functional competition between two different systems over a set of identical grammatical functions. These competitors are as listed in Table 4.

| Concept | Native Korean | Sino-Korean |
|------------------------------------------------------|-------------------|---------------|
| BEFORE | -uy aphey | -(uy) ceney |
| AFTER | -uy twiey | -(uy) hwuey |
| ON | -uy wiey | -(uy) sangey |
| UNDER | -uy alayey/mithey | -(uy) haey |
| AMONG | -uy kawunteyey | -(uy) cwungey |
| Table 4. Native Korean and Sino-Korean Postpositions | | |

One peculiarity with the Sino-Korean system, as compared with the native Korean system, is that unlike the latter, where the formal variations occur between the full forms and those without the possessive -uy, the forms in the Sino-Korean system have a very strong tendency for use without the possessive -uy, thus resembling compounding. That cognitive mechanisms in-

volved in compounding may be operative in this process is supported by the facts that these Sino-Korean forms prefer the occurrence with Sino-Korean nominals, and that these forms tend to be written without a space in between. Considering that the core elements of the Sino-Korean postpositions are categorically nouns; that Korean compounding exhibits strong preference for native-native or borrowed-borrowed combinations except for a handful of rare exceptional cases; and that borrowed-borrowed combinations (typically Sino-Korean combinations) are normally written without spaces, the use of Sino-Korean postpositions seems to be strongly influenced by nominal compounding.

Since the given relational concepts are encoded by two different sets of postpositional systems, their respective use frequency should reveal their relative supremacy in carrying the grammatical functions concerned here. A relative token frequency of these forms is taken from the *KAIST KORTERM Corpus*. Since this Corpus is flawed with inconsistent tagging, the frequency figures are given in rounded form from retrieved data in the Corpus.

| Concept | Native Korean | Sino-Korean |
|-------------------------------------------------------|---------------|-------------|
| BEFORE | 17,000 | 25,000 |
| AFTER | 21,000 | 11,000 |
| ON | 40,000 | 600 |
| UNDER | 10,000 | 400 |
| AMONG | 18,000 | 8,000 |
| Total | 106,000 | 45,000 |
| Table 5. Approximate Token Frequency of Postpositions | | |

As is evident in the statistics, with an exception of the BEFORE-words, native Korean forms are more frequently used than the Sino-Korean counterparts, thus exhibiting primacy in use.

A similarly related specialization phenomenon relates to semantic specialization, i.e. division of labor between the native and Sino-Korean systems depending on their semantics. The general semantics of the two systems can be tabulated as in Table 6. The primary meanings of these forms have been determined on the basis of the use frequency in the *KAIST KORTERM Corpus*.

| Concept | Native Korean | Sino-Korean |
|---------|-------------------------------|-----------------------|
| BEFORE | spatial anteriority | temporal anteriority |
| AFTER | spatial/temporal posteriority | temporal posteriority |
| ON | spatial superiority | abstract relation |
| UNDER | spatial inferiority | abstract relation |
| AMONG | spatial/abstract inclusion | abstract inclusion |

Table 6. Semantic Specialization

A look at the semantic comparison of the two systems reveals an intriguing phenomenon. Sino-Korean words were primarily referring to spatial location in Chinese, and the speakers of Chinese typically associate these forms with spatial meanings as their primary semantic designation (Y. J. Kim, p.c.). This association is very robust, even though it is less so with *cwungey* 'among', which is almost equally associated with the abstract meaning. Therefore, it is reasonable to suggest that the Sino-Korean forms were, or have been, primarily designating spatial concepts in the source language. When they were brought into Korean, their specialization is predominantly on encoding temporal and/or abstract (i.e., non-spatial) relations. This is interesting because according to the widely accepted idea of semantic change, space terms are metaphorically used for spatial or quality terms, usually accompanying grammaticalization, not vice versa. In other words, the grams encoding temporal relations can be said to be more grammaticalized than the grams encoding spatial relations. However, in Table 6 we see that the borrowed terms are encoding more grammaticalized notions. We shall return to this issue in the following discussion.

3. Discussions

3.1 Source Lexemes and Grammaticalization

We have seen the grammaticalization of the postpositions with reference to their semantic characteristics. These postpositions develop into grammatical markers that designate relationships between the referenced entity (normally encoded as the host NP; the 'Ground') and the entity in question (normally encoded as the external argument; the 'Figure'). Of particular interest with reference to the semantics of the postpositions is the fact that their relationships are largely static, such as LIKE, AT, TO, FROM, BEFORE, AFTER, BEHIND, ON, UNDER, BELOW, AMONG, etc. Except for TO and FROM, they lack dynamicity in their semantics. Even these TO and FROM may be said to be relatively weak in their dynamism in that they simply encode directionality instead of making direct relevance to motions. On the other hand, postpositions developed from verbal sources encode highly dynamic concepts beyond designating simple topographic or relational contour, and often encode the speaker's attitude (Rhee 2002). What this phenomenon suggests is that the semantics of the source lexemes determines the dynamicity of the grammaticalized marker. This is in consonance with such principles as 'persistence' (Hopper 1991) and 'source determination' (Bybee et al. 1994) that effectively say that the meaning of the source lexemes has bearing on the grammaticalization paths and resultant semantics.

3.2 Source Construction and Grammaticalization

In the preceding discussion we have seen that the postpositions of spatial origins make use of relational nouns. These relational nouns often recruit a possessive marker -uy as a connecter between the host nominal and the relational nouns. This possessive connecter has a strong tendency to resist assimilating into the host noun (with a rare exception of na-uy 'I-GEN' that changed into nay 'my'). When the possessive marker is eroded or deleted, it rarely causes any change in the adjacent forms. Consequently, the nominalderived postpositions tend to maintain formal transparency. This is in contrast with the postpositions developed from verbal sources. Grammaticalization from verbal sources inevitably involves non-finite markers which often obscure formal transparency and promote conceptual relatedness, a process which consequently paves the way to a greater range of semantic change; whereas nominal source lexemes tend to maintain formal transparency and keep their semantics relatively stable, because the nominal source lexeme remains intact in form. This may have to do with the preceding discussion about the relative static nature of the semantics of the postpositions developed from spatial nominals.

3.3 Semantics and Formal Transparency

The relation between the semantics of a grammatical form and its formal transparency has been often pointed out in literature. It is widely accepted that semantic generalization and formal reduction occur in parallel (the parallel reduction hypothesis; Bybee et al. 1994). It has been also pointed out that there exists the effect of the formal transparency/opacity in grammaticalization. With reference to the spatial postpositions discussed in the present study, we see that most non-relational nominal sources have high level of opacity (-taylo, -kkaci, -ey, -eykey, -kkey, -kkeyse, -eyse, -eykeyse) and that all relational nominal sources have high level of transparency (-uv aphev, uv twiev, -uv wiev, -uv alavev, -uv mithey, -uv kawuntey). The postpositions from the non-relational nominal source group with highest level of opacity are those that have the highest use frequency in general; those with lower level of opacity are those that belong to the next group in terms of use frequency; and the postpositions from the relational nominals are used with the lowest frequency. This supports the hypothesis that semantic generality, formal transparency and use frequency are closely related in grammaticalization. In other words, formal transparency contributes to semantic persistence because formal transparency makes visible the semantics associated with the source lexeme.

3.4 Specialization and Grammaticalization

It has been pointed out that there is a large amount of non-isomorphism between form and meaning among the postpositions discussed here. For example, there are multiple forms for allative/dative and ablative. Each of the forms carries specialized subcategorical functions, and this division of labor, as previously indicated, resorts to various semantic distinctions and other pragmatic and textual notions.

Our interest lies in the specialization of the two competing systems within the same grammatical domain of marking the spatio-temporal notions, i.e. the division of labor between the native and Sino-Korean postpositional systems. We have noted that in general the native Korean postpositions are more frequently used than the Sino-Korean postpositions. The primacy of the native Korean postpositions over the Sino-Korean counterparts is expected because, except for a small number of exceptions across languages, the native forms are more commonly used when native forms and the forms of foreign origin come into competition. However, the BEFORE-words in the two systems show the opposite, i.e., the notion of BEFORE is expressed more frequently by the Sino-Korean -(uy) ceney than the native Korean -uyaphey. This is peculiar for the reason stated above. One thing we may suspect is that the physical vs. non-physical dichotomy between the native Korean aphey and the Sino-Korean ceney is more strict than other pairs (cf. twiey and hwuey, both of which can express non-physical relationship), and in real-life language use, reference to non-physical relationship (i.e. 'before') is more common than the physical relationship (i.e. 'in front of'). This claim, however, needs to be empirically tested for validation.

Another issue with respect to the specialization of native Korean vs. Sino-Korean systems involves the universal pattern of semantic change attested in grammaticalization. In their seminal work, Heine et al. (1991: 55) proposed a direction of metaphorization along the ontological continuum as follows:

(6) PERSON > OBJECT > PROCESS > SPACE > TIME > QUALITY

The above continuum shows the direction of metaphorical transfer, i.e. unidirectionally from left to right. This directionality seems to have crosslinguistic validity. The directionality can be interpreted that if a grammatical form carries the spatial meaning while another carries the temporal meaning, the latter can be reasonably assumed to have undergone more grammaticalization process. This general directionality is well illustrated with English preposition *before* and *in front of*. Historically *before* had the source construction of something like 'by the fore of', where *fore* meant 'front'. When this construction underwent a univerbation process with grammaticalization, its meaning became more abstract. As a result, a new periphrastic form *in front of* came into existence to designate physical spatial location. Coexistence of these two forms show that the older gram has the function of marking the more abstract concept, whereas the newer gram has the function of marking the less abstract concept.

It is interesting, however, that the general semantic distinction between the native Korean and Sino-Korean postpositional systems is such that the native Korean system predominantly specializes in spatial concepts whereas the Sino-Korean system largely specializes in temporal concepts. This is an anomaly, because we can reasonably suppose that the native Korean terms should have a longer history of grammaticalization as compared to the borrowed terms from Chinese. In other words, the situation is that the grams having older grammaticalization history are carrying the less developed semantic notions while the grams having shorter grammaticalization history are carrying the more developed semantic notions.

This anomaly does not seem to be easily explained. Such situations have not been addressed in grammaticalization literature, and thus there are no empirically reliable sources of explanation or of analogy. However, what this situation suggests is that when a new competing system is imported for a certain grammatical paradigm, the extant system may not have to be pushed up to encode more abstract grammatical notions (cf. 'push-chain' change). Instead, the extant system may specialize in its robust function, giving a new domain to the new system, regardless of the relative degree of the abstraction the semantics of the new domain may have. In other words, there may be no strict rule of division of labor in terms of the level of abstraction, when linguistic forms come into competition and the competitors choose their functions for their specialization.

4. Conclusion

This paper has explored a special group of postpositions in Korean, i.e. those that developed from spatial sources. It has been noted that the primary postpositions have semantic generality and relative formal opacity, whereas the secondary postpositions were derived from relational nouns. Various aspects of the secondary postpositions and the competing Sino-Korean system have been compared and certain issues that may have theoretical implications have been presented. A comparison of the grammaticalization processes of those that involve nominal sources with those that involve verbal sources brought to a conclusion that there exists a close relationship among semantic generality, formal opacity, and use frequency. Further, it has been shown that the Sino-Korean postpositional system exhibits an

anomaly as to the direction of metaphorization, which suggests that the notion of push-chain in grammaticalization is not supported.

References

Blake, B. J. 1994. Case. Cambridge: Cambridge University Press.

- Bybee, J. L., W. Pagliuca, and R. Perkins 1994. *The Evolution of Grammar: Tense, Aspect, and Modality in the Languages of the World.* Chicago and London: The University of Chicago Press.
- Everbroeck, R. v. 1958. *Grammarire et Exercises Lingala*. Anvers-Leopoldville: Standaard-Boekhandel S. A.
- Heine, B., U. Claudi, and F. Hünnemeyer 1991. Grammaticalization: A Conceptual Framework. Chicago and London: The University of Chicago Press.
- Heine, B., T. Güldermann, C. Kilian-Hatz, D. A. Lessau, H. Roberg, M. Schladt, and T. Stolz 1993. Conceptual Shift: A Lexicon of Grammaticalization Processes in African Languages. AAP 34/35. Universität zu Köln.
- Heine, B. & T. Kuteva 2002. *World Lexicon of Grammaticalization*. Cambridge: Cambridge University Press.
- Hopper, P. J. 1991. On some principles of grammaticalization. *Approaches to Grammaticalization*, eds. E. C. Traugott and B. Heine, Vol. 1: 17-35. Amsterdam and Philadelphia: John Benjamins.
- Hopper, P. J. and E. C. Traugott 2003[1993]. *Grammaticalization*. 2nd ed. Cambridge: Cambridge University Press.
- KAIST KORTERM Corpus, (n.d.) http://morph.kaist.ac.kr/kcp/.
- Kim, S. G. 2004. *Kwuke thossi ewenkwa yongpep* [Etymology and Usage of Korean Particles]. Seoul: Yuklak Publishing. (In Korean)
- Lehmann, C. 1995 [1982] *Thoughts on Grammaticalization*. München and Newcastle: Lincom Europa.
- Rhee, S. 2002. Grammaticalization of postposition from movement verbs in Korean. Paper presented at the International Conference on Adpositions of Movement, January 14-16, 2002, Catholic University of Leuven, Belgium.
- Traugott, E. C. 1982. From propositional to textual and expressive meanings: some semantic-pragmatic aspects of grammaticalization. *Perspectives in Historical Linguistics*, ed. In W. P. Lehmann and Y. Malkiel, 245-271. Amsterdam: John Benjamins.
- Traugott, E. C. 2003. From subjectification to intersubjectification. *Motives for Language Change*, ed. R. Hickey, 124-142. Cambridge: Cambridge University Press.
- Traugott, E. C. and R. Dasher 2002. *Regularity in Semantic Change*. Cambridge: Cambridge University Press.