



Comparatives in Korean: A grammaticalization perspective

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Abstract

Korean has a large number of markers signaling diverse notions involved in comparative constructions. This paper analyzes Korean comparatives from the grammaticalization perspective, thus identifying the source semantics of the comparative markers in contemporary as well as historical data, analyzing the grammaticalization mechanisms behind their development, creating the conceptual and functional networks among the comparative markers, and comparing the grammaticalization sources with those attested in other languages. It is found that the standard markers are small in number, whereas degree markers diverge greatly: superiors, inferiors and superlatives make use of a small number of markers, whereas elatives make use of a large number of intensifying adverbials. We discuss the development of the comparatives with respect to grammaticalization mechanisms, i.e. Desemanticization, Extension, Decategorialization, and Erosion, and conclude that their operation is variable depending on the functional category item as well as the individual lexical form. From a crosslinguistic comparison, we argue that the concepts and schemas found in Korean are largely consonant with those attested in crosslinguistic literature.

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1. INTRODUCTION

Korean has had a large inventory of comparative markers throughout history, each one with a story of rise and fall. This paper addresses them from a grammaticalization perspective based on historical data from the Sejong Corpus and elsewhere. Special attention is placed on the conceptual motivations behind their development and the networks they form across diverse functional categories. This paper also reviews the Korean state of affairs and, further, compares it with those attested in other languages, as listed in lexicons such as Heine and Kuteva (2002), Kuteva et al. (2019) and elsewhere.

Some of the comparative forms, notably *pota* ‘than’ (<*po-* ‘see’ + *taka* TRANS), have been mentioned as early as in Ramstedt (1937 [1939]); in the form of *poda* in his transcription). He places the form under the ‘converbum mutationis’, as a marker ‘‘which is used in comparisons and is to be translated by ‘than’’’ (p. 99) and its semantic source as ‘seeing’ ‘looking at’, ‘compared with’ (p. 99 and p. 156). Even though *pota* is the primary comparative marker in contemporary Korean, there are other forms with the same or nearly the same function. Multiplicity of the forms in a single functional category have attracted the attention of many researchers and a large body of literature is available in the form of journal articles and book chapters (Kim, 1987, 1990, 1991, 1998a, 1998b; Chung, 1996; Ha, 1998,

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1999b, 2003, 2005; Oh, 2004b; Rhee, 2005a, 2005b; Na, 2010, 2011; among others), theses and dissertations (Ha, 1997; Kim, 1993; Oh, 2004a; Na, 2000), and even monographs (Kim, 1998a, 1998b; Ha, 1999a; Oh, 2010). These studies have contributed to a better understanding of the comparatives in Korean from a largely synchronic perspective, either in current or historical times. However, a more dynamic aspect of their diachronic development, i.e. the grammaticalization processes from their lexical sources, and a more extensive analysis of multiple forms that are in an acute functional competition, have not yet been made. The present analysis is an attempt to fill this research gap.

This paper is organized as the following. In Section 2, we will briefly describe Korean from a typological perspective in order to help understand the structural characteristics of Korean; in Section 3, we will describe the comparatives in contemporary Korean, focusing on the various types of comparative constructions, and the markers of the comparee, standard, and degree; and in Section 4, we will analyze the source lexemes, semasiological change, grammaticalization principles, the rise and fall of the comparatives in history, and the networks with neighboring functions and concepts, and then look at the Korean comparatives from a crosslinguistic perspective.

2. KOREAN: A BRIEF INTRODUCTION

The Korean language (ISO 639-3) is spoken by about 77.2 million people (cf. Ethnologue; Simons and Fennig, 2018) in and around the Korean peninsula: South Korea, North Korea, China, Japan, and other Korean communities around the world. It was formerly regarded as an Altaic language since eminent Finnish Altaic linguist Gustaf Ramstedt proposed it in 1939 (Ramstedt, 1997[1939]), but in the modern linguistic research tradition the Altaic hypothesis is contested (see Kim, 1992; Sohn, 1999; Song, 2005, among others, for discussion of the issue). Most recently it is frequently discussed under the geographically motivated classificatory term ‘Transeurasian languages’ (Johanson and Robbeets, 2010), often along with Japanese since the two languages share many structural characteristics (Narrog and Rhee, 2013; Narrog et al., 2018; Rhee, 2020a: 575–576).

Typologically Korean is an agglutinating, head-final, SOV language. In line with the SOV word order characteristics in morphology, it is suffixal and postpositional. Prepositions do not exist and prefixes are relatively unproductive. Therefore, in most grammaticalization scenarios independent lexemes develop into suffixes and postpositions as bound morphemes, a pattern also applicable to the markers of comparee and standard in comparatives. Multiple suffixes and postpositions may occupy slots of a relatively fixed order. Argument NPs are often omitted and NPs may occur without their postpositional particles, especially in speech, and interpretive flexibility thus created often affects grammaticalization. NPs are strictly head-final, thus all nominal modifiers occur before the modified noun. VPs are strictly head-final, as well, thus all degree modifiers in comparatives occur before the verb. Syntactic and thematic functions of NPs are marked with case markers and postpositions. With these role markers NPs may occur rather freely without functional confusion, even though there is a canonical and preferred word order.

Morphological complexity as a result of extensive agglutination of nominal and verbal suffixes that encode diverse grammatical notions can be illustrated in (1), taken from Rhee (2020a: 577)¹:

- (1) a. *ku-nun* *caki* *kyoswu-nim-tul-hanthey-kkaci-to* *mwulyeyha-ta*
 he-TOP Self professor-HON-PL-DAT-LMT-ADD be.rude-DEC
 ‘He is rude even to his professors. (lit. ... rude even to the point of (being rude) to self’s honorable professors.)’
- b. *pelsse* *kanguy-lul* *kkuthna-y-e.peli-si-ess-keyss-ta-te-kwun-yo*
 already lecture-ACC finish-CAUS-PERF-HON-PST-CONJ-COMP-RETRO-EVID-POL
 ‘(I) recall (they told me) that (the professor) must have finished the lecture (by then).’

Example (1a) shows a number of characteristics of Korean syntax; (i) that a noun can be marked by multiply stacked particles, (ii) that the sentential subject may occur with the topic marker *-nun* instead of a nominative case marker, and (iii) that the main verb of the predicate, i.e., *mwulyeyha-* ‘be rude’, in accordance with structural pattern of the head-final language, takes the sentence-final position. Likewise, example (1b) shows (i) that the main verb *kkuthna-* ‘finish’ can be marked by a series of derivational and inflectional morphemes, and (ii) that the sentential subject ‘I’ is omitted because it is contextually and structurally recoverable from the presence of the retrospective marker *-kwun*, the usage of which is restricted to the first person subject. Nominal and verbal morphologies are sensitive to their relative positions, a discussion of which, however, is beyond our immediate interest.

Nouns in a sentence may occur after a determiner, such as demonstrative, qualifier, or quantifier, and may occur before a particle for case or other functional marking, including the markers of the comparee, standard, etc. of comparatives, as shown in the following exposition.

¹ Transliteration is based on the Extended Yale System (Rhee, 1996). Also note that periphrastic forms are written with a period which indicates the word boundary. When two or more English words in the gloss correspond to a single morpheme in examples, the words are written with a period between them. Following the general convention of Korean historical linguistics, any Chinese characters in the source texts are written in the upper-case in Modern Korean pronunciation.

3. COMPARATIVES IN CONTEMPORARY KOREAN

3.1. Types of comparatives

Comparatives form a set with diverse sub-functions. Heine (1997) presented seven different types, i.e. positive, superior, inferior, equative, superlative, elative and excessive. Of these, as Heine (1997: 109) notes, the positive comparative (e.g. *David is smart*) may be controversial as to whether it belongs to comparative constructions after all, for it never receives any formal marking across languages (Heine, 1997: 109), an issue raised by Ultan (1972: 121) as well, which is also applicable to Korean. For the lack of formal marking, positive comparative is not discussed in the present paper. Korean has constructions to express the other six comparative concepts, even though such means are grammaticalized to varying degrees. The six comparatives are exemplified in (2), with constructed examples:

(2)	a. Superior Comparative ('more than')			
	<i>John-un</i>	<i>Bob-pota</i>	(<i>te</i>)	<i>ttokttokha-ta</i>
	John-TOP	Bob-than	more	be.smart-DEC
	'John is smarter than Bob.'			
	b. Inferior Comparative ('less than')			
	<i>John-un</i>	<i>Bob-pota</i>	<i>tel</i>	<i>ttokttokha-ta</i>
	John- TOP	Bob-than	less	be.smart-DEC
	'John is less smart than Bob.'			
	c. Equative ('as ... as')			
	<i>John-un</i>	<i>Bob-mankhum</i>	<i>ttokttokha-ta</i>	
	John- TOP	Bob-as.much.as	be.smart-DEC	
	'John is as smart as Bob.'			
	d. Superlative ('most')			
	<i>John-un</i>	<i>ku-cwungey(se)</i>	<i>kacang</i>	<i>ttokttokha-ta</i>
	John- TOP	that-among	most	be.smart-DEC
	'John is the smartest of them all.'			
	e. Elative ('very')			
	<i>John-un</i>	<i>maywu</i>	<i>ttokttokha-ta</i>	
	John- TOP	very	be.smart-DEC	
	'John is very smart.'			
	f. Excessive ('too')			
	<i>John-un</i>	<i>nemwu</i>	<i>ttokttokha-ta</i>	
	John- TOP	too.much	be.smart-DEC	
	'John is too smart.'			

As shown in (2), the two polar comparatives, i.e. superior comparative (2a) and inferior comparative (2b), are identical except for the direction-designating adverbs: *te* 'more' for the superior and *tel* 'less' for the inferior. However, the superiority-marking *te* is omissible, whereas the inferiority-marking *tel* is not. Equative comparative (2c) and superlative comparative (2d) require the standard for equation ('as much') for the former and the reference group ('among') for the latter. Superlative comparative further requires the presence of the superlative adverb ('most'). Elative and excessive comparatives can be structurally identical except for the modifying adverbs, i.e. *maywu* 'very' for the elative and *nemwu* 'too much' for the excessive.

3.2. Markers of the comparee and the standard

The comparee in Korean comparatives, when it is the sentential subject, is normally marked with a nominative case, or a topic marker as shown in (2). However, despite that Korean has a relatively free word-order for arguments (note that the main verb needs to occur sentence-finally in all well-formed sentences), when the comparee occurs in non-initial position, it must not be marked by a topic marker but only by a nominative case, unless a strong contrast is intended. This is because of the topic marker's additional contrast-marking function, which becomes prominent in a non-initial position.² This can be illustrated with the superior comparative, in (3):

(3)	a.	John- { <i>un</i> , <i>i</i> }	Bob- <i>pota</i>	(<i>te</i>)
<i>ttokttokha-ta</i>		John- {TOP, NOM}	Bob-than	more
be.smart- DEC				
b.	Bob- <i>pota</i>	John- { [#] <i>un</i> , <i>i</i> }	(<i>te</i>)	
<i>ttokttokha-ta</i>		Bob-than	John-{TOP, NOM}	more
be.smart-DEC				
a/b: ‘John is smarter than Bob.’				

The standard is also morphologically marked by diverse particles depending on the quality/parameter, as exemplified earlier in (1a) through (1d). In Modern Korean (MoK; 1894 ~ present), superiors and inferiors are both marked by the postpositional particle *-pota* ‘than’, even though there were others in history (see Section 4.4 below). The standard for the equatives is marked by the particles denoting ‘as much as’, e.g. *-mankhum*, *-chelem*, *-kathi* or their dialectal and stylistic variants, but there were also a number of others in history (see Section 4.4 below). The standard for the superlatives is marked by the primary locative (inessive/ablative) particle *-eyse* ‘in, from’ or a complex particle *-cwun-gey(se)* ‘among, from the group of’. As is evident, the former is primarily associated with the location (e.g. class, school, world, etc.), whereas the latter, with a group of entities (e.g. students, people, books, etc.).

3.3. Markers of degree

When the standard is not explicitly indicated, e.g. elatives or excessives, the comparative notion is encoded by means of an adverbial. There are numerous adverbs that carry this function, as listed in (4) (see Table 2 in Section 4.1 for the detail of these markers):

- (4)
- a. Degree adverb for superior: *te* ‘more’
 - b. Degree adverb for inferior: *tel* ‘less’
 - c. Degree adverbs for elatives: *nemwu*, *mwuchek*, *acwu*, *manhi*, *maywu*, *mopsi*, *hwelssin*, *cikukhi*, *kukhi*, *emcheng*, *toykey*, *taytanhi*, *koyngcanghi*, *mwuci(hakey)*, etc. (all translatable as ‘very’ ‘very much’)
 - d. Degree adverbs for excessives: *nemwu*, *kwatohi*, *kwahi*, *kwahakey*, *cinachikey*, etc. (all translatable as ‘too much’)

As shown in (4a) and (4b), the superior and inferior markers are specialized by the single adverb, *te* ‘more’ and *tel* ‘less’, respectively. It is also notable from (4c) and (4d), the adverb *nemwu* carries the dual function of marking the elatives and the excessives. Originating from the verb *nem-* ‘go over (the limit), cross, exceed’, it was the primary marker of excessives, which was later extended to elatives through its use in hyperbolic contexts, e.g. ‘You are too beautiful’ for ‘You are very beautiful,’ in order to exaggerate one’s appreciative evaluation (see Sections 4.2.1 and 4.3 below for more discussion). The interpretive distinction can only be made contextually, i.e. relative in positive contexts and excessive in negative contexts.

Since the crucial indicator of the comparative notion in these cases is the intensifying adverbs, and there are numerous markers carrying the function, the paradigm of the degree markers is of low ‘paradigmaticity’ (Lehmann, 2015[1982]). For the semantic affinity, this group of adverbials is a subset of the intensifiers. Thus paradigm-internal cohesion is consequently very low; and the renewal with items with higher expressivity is also frequent (see Section 4.4 for more discussion). For this reason, elatives and excessives can be said to have not undergone grammaticalization processes to the extent of the other markers in comparatives.³

³ For this reason, (3b), when the topic marker *-un* is used to mark the comparee, the sentence can be interpreted as: ‘I’m not sure about others, but at least “John” is smarter than Bob.’

Table 1
Stanadard markers in MoK.

Function	Form	Literal Meaning	Source Component
Superior & Inferior	<i>-pota</i>	after seeing x	<i>po-</i> v. ‘see’; <i>taka</i> CONN (19c.~)
Equative	<i>-kathi</i>	in a manner of being similar to x	<i>kath-</i> v. ‘be like’; <i>-i</i> ADVZ. ‘of manner’ (16c.~)
	<i>-chelem</i>	in the shape of x	<i>theye</i> SK.N. ‘body’; <i>-lo</i> INST ‘with’ (18c.~)
Superlative	<i>-mankhum</i>	each of amount x	<i>ma</i> N. ‘amount’; <i>-s</i> GEN; <i>-kam</i> DERV ‘each’ (16c.~)
	<i>-cwungey(se)</i>	from being at the middle of x	<i>tyung</i> SK.N. ‘middle’; <i>-eyse</i> LOC/ABL (18c.~)
	<i>-eyse</i>	after being at x	<i>-ey</i> LOC; <i>isi-</i> v. ‘exist’; <i>-e</i> CONV ‘and’ ; <i>-eyse</i> LOC/ABL (15c.~)

4. GRAMMATICALIZATION

4.1. Source lexemes and semasiological change

Since grammaticalization is a gradual (and often continuous) process, and the final product of the process is the cumulative effect of these small-step changes, the conceptual relation between the source lexeme and the resultant grammatical function has long been an important part of grammaticalization research. The strong connection is well reflected in ‘the source determination hypothesis’ and ‘the universal path hypothesis’ (Bybee et al., 1994), as well as ‘the persistence principle’ (Hopper, 1991). The source lexemes of the standard markers in comparatives in MoK, and their historical depth, are as listed in Table 1.

As shown in Table 1, the standard in superior and inferior comparatives is marked by *-pota* in MoK, which originated from *potaka* involving the transference marker *-taka*. The transference grammaticalized from the verb *tak-* ‘approach, get near’, and its role is to mark the change of scenes, i.e. the structure involving two events, [E₁-*taka* E₂], means ‘change from the scene E₁ to the scene E₂’. Thus, the comparative standard marker which developed from the verb *po-* ‘see’ literally means ‘after seeing x; shifting from seeing x’. Therefore, the example of the superior comparative (2a), repeated here as (5) for convenience, has the following interpretation.

(5)	(=2a) Superior Comparative (‘more than’)			
	<i>John-un</i>	<i>Bob-pota</i>	(<i>te</i>)	<i>ttoktokha-ta</i>
	John-TOP	Bob-than	more	be.smart-DEC
	‘John is smarter than Bob.’			
	Lit. ‘John, after seeing Bob, is smarter.’			

The act of comparing is figuratively encoded as an act of ‘seeing’, and the contrast of quality (e.g. intelligence, here) is indicated by the notion of departure or shift encoded by the transference marker *-taka*. Further, considering that the transference *-taka* originated from the verb *tak-* denoting ‘approach’, it can be said that the act of selecting an entity for comparison is also figuratively encoded as an act of approaching. As Stassen (1985) and Heine (1994) show, common source schemas for comparatives across languages are Action, Location, Source, Goal, Polarity, Sequence, Similarity, and Topic. The Sequence schema makes use of ‘then’ or ‘after’, which, in Korean, is indicated by the transference (see Section 4.5 for more discussion).

The standard for equative comparatives can be marked by multiple forms, i.e. *-kathi*, *-chelem*, and *-mankhum*, the semantics of which can be traced back to ‘be like x’, ‘with the body of x’, and ‘of equal amount each’, respectively. The notion of equality is encoded by making reference to similarity (or identicalness, historically), centrality vis-à-vis periphery (i.e. ‘body’ as opposed to appendage), and equal amount (for both entities being compared). The schema being utilized in this grammaticalization is the Similarity schema, as is evident from the semantics of the lexical sources.

³ There is no established method to measure the degree of grammaticalization, but Lehmann’s (2015[1982]) six parameters may serve as a diagnostic in determining relative degrees of grammaticalization, i.e., the degree of attrition (reduction of semantic content and/or phonetic volume), paradigmaticization (decrease of the paradigm size), obligatorification (use increasingly becoming obligatory), condensation (narrowing of structural scope), coalescence (increase of bondedness), and fixation (reduction of syntagmatic variability). The occasional references to ‘greater or weaker degree of grammaticalization’ in this paper are used only in relative terms comprehensively considering these parameters.

Table 2
Degree markers in MoK.

Function	Form	Literal Meaning	Source Components
Superior	<i>te(wuk)</i>	add, more	<i>te(u)-</i> v. 'add', ADV. 'more' (15c.~)
Inferior	<i>tel</i>	subtract, less	<i>tel-</i> v. 'subtract, remove', ADV. 'less' (15c.~)
Superlative	<i>kacang</i>	tip of an edge	<i>kas</i> N. 'boundary, edge'; <i>-ang</i> DIM 'small' (15c.~)
	<i>ceyil(lo)</i>	number one	<i>tyeyil</i> SK.N. 'first'; <i>-lo</i> INST 'with' (19c.~)
	<i>choyko(lo)</i>	the highest	<i>choyko</i> SK.N. 'highest'; <i>-lo</i> INST 'with' (20c.~)
Elative	<i>nemwu</i>	in a manner of going over	<i>nem-</i> v. 'go over'; <i>-wu</i> ADVZ 'of manner' (15c.~)
	<i>manhi</i>	in a manner of being much/many	<i>manha-</i> v. 'be many/much'; <i>-i</i> ADVZ 'of manner' (15c.~)
	<i>maywu</i>	in a manner of being pungent	<i>mayp-</i> ADJ. 'be pungent, severe'; <i>-u</i> ADVZ 'of manner' (18c.~)
	<i>mopsi</i>	in such a way x is not usable	<i>mot</i> ADV. 'not'; <i>psu-</i> v. 'use'; <i>-i</i> ADVZ 'of manner' (15c.~)
	<i>ha</i>	(very) much	<i>ha-</i> v. 'be much/many' (15c.~) [now archaic]
	<i>cikukhi</i>	in a manner of being extreme	<i>cikuk</i> SK.N. 'utter extreme'; <i>ha-</i> v. 'be/do'; <i>-i</i> ADVZ 'of manner' (16c.~)
	<i>kukhi</i>	in a manner of being extreme	<i>kuk</i> SK.N. 'extreme'; <i>ha-</i> v. 'be/do'; <i>-i</i> ADVZ 'of manner' (17c.~)
	<i>toykey</i>	in a manner of being severe	<i>toy-</i> ADJ. 'be severe'; <i>-key</i> ADVZ 'of manner' (17c.~)
	<i>taytanhi</i>	in a manner of being great	<i>taytanha-</i> v. 'be great'; <i>-i</i> ADVZ 'of manner' (17c.~)
	<i>koyngcanghi</i>	in a manner of being big and strong	<i>koyngcang</i> SK.N. 'being big and strong'; <i>ha-</i> v. 'be/do'; <i>-i</i> ADVZ 'of manner' (20c.~)
	<i>mwuci</i> (<i>hakey</i>)	in a manner of being unknowable	<i>mwuci</i> SK N. 'no wisdom'; <i>ha-</i> v. 'be/do'; <i>-key</i> ADVZ. 'of manner'; often used in the reduplicated form <i>mwucimwuci</i> (20c.~)
	<i>simhi</i>	in a manner of being in severity	<i>sim</i> SK N. 'severity'; <i>ha-</i> v. 'be/do'; <i>-i</i> ADVZ 'of manner' (15c.~)
	<i>cham</i>	truthfully	<i>chAm</i> n. 'truth' (15c.~)
	<i>yunanhi</i>	in an unusual manner	<i>yunanha-</i> a. 'be unusual' (possibly <i>yunan</i> SK.N. 'presence of disturbance' (1895); <i>-i</i> ADVZ 'of manner' (19c.~)
	<i>yutalli</i>	in a manner of being a different sort	<i>lyu</i> SK.N. 'sort'; <i>tal-</i> v. 'be different'; <i>-i</i> ADVZ 'of manner' (20c.~)
	<i>namtalli</i>	in a manner of being different from others	<i>nam</i> N. 'others'; <i>tal-</i> v. 'be different'; <i>-i</i> ADVZ 'of manner' (18c.~)(?)
	<i>wenchey</i>	of original body	<i>wen</i> SK.N. 'origin'; <i>chey</i> SK.N. 'body' (20c.~) (mildly archaic)
	<i>hankyel</i>	with one (more) layer	<i>han</i> A. 'one'; <i>kyel</i> N. 'layer' (18c.~)(?)
	<i>hanchung</i>	with one (more) layer	<i>han</i> A. 'one'; <i>chung</i> SK.N. 'layer' (18c.~)
	<i>sangtanghi</i>	in a comparable manner	<i>sangtang</i> SK.N. 'mutual correspondence'; <i>ha-</i> v. 'be/do'; <i>-i</i> ADVZ. 'of manner' (20c.~)
	<i>cengmal</i>	in truthful words	<i>ceng</i> SK.N. 'correctness'; <i>mal</i> N. 'word' (20c.~)
	<i>thukpyelhi</i>	in an extraordinary manner	<i>thukpyel</i> SK.N. 'extraordinariness'; <i>ha-</i> v. 'be/do'; <i>-i</i> ADVZ 'of manner' (16c.~)
	<i>mwuchek</i>	(very (much))	(unknown) (20c.~)

Table 2 (continued)

Function	Form	Literal Meaning	Source Components
	<i>wenak(ey)</i>	originally	<i>wen</i> SK.N. ‘origin, basis’; <i>-ak</i> DERIV (?) (19c.~)
	<i>emcheng</i>	(very (much))	(unknown) (19c.~)
	<i>hwelssin</i>	(exceedingly)	(unknown) (20c.~)
	<i>acwu</i>	(very (much))	(unknown) (16c.~)
	<i>ceypep</i>	(very much)	(unknown) (19c.~)
	<i>kkway</i>		(unknown) (20c.~)
	<i>phek</i>		(unknown) (17c.~)
Excessive	<i>nemwu</i>	in a manner of going over	<i>nem-</i> V. ‘go over’; <i>-wu</i> ADVZ ‘of manner’ (15c.~)
	<i>cinachikey</i>	in a manner of passing	<i>tina-</i> V. ‘pass’; <i>-thi-</i> EMPH; <i>-key</i> ADVZ ‘of manner’ (20c.~)
	<i>kwatohi</i>	in a manner of exceeding in degree	<i>kwato</i> SK.N. ‘passing in degree; excess in degree’; <i>-hi</i> ADVZ ‘of manner’ (17c.~)
	<i>kwahi</i>	in a manner of exceeding	<i>kwa</i> SK.N. ‘passing’; <i>-hi</i> ADVZ ‘of manner’ (17c.~)
	<i>kwahakey</i>	in a manner of exceeding	<i>kwa</i> SK.N. ‘passing’; <i>ha-</i> V. ‘be/do’; <i>-key</i> ADVZ ‘of manner’ (20c.~)
	<i>hato</i>	very much	<i>ha-</i> V. ‘be much/many’; <i>-to</i> EMPH (15c.~)

The standard for the superlative comparatives is primarily marked by *-cwungey(se)*, and the other marker *-eyse*, which is a fully grammaticalized particle for inessive ‘at, in’ or ablative ‘from’, is very infrequent, bordering on becoming defunct in MoK. The primary marker *-cwungey(se)* originated from a Sino-Korean noun *tyung* ‘middle’, which later became *cwung* through palatalization. Since superlatives inherently involve three or more entities for comparison, the noun *tyung* ‘middle’, referring to a group of individuals, is a good source lexeme for grammaticalization of the superlative standard marker. Both markers of the standard are instances of a grammaticalization based on the Source schema.

The degree markers are far more diverse as compared to the standard markers described above. The markers for individual comparative constructions, along with their literal meaning, source components, and the time that the form arose, are listed in Table 2.

As shown in Table 2, superior and inferior constructions have a single degree marker, *te* and *tel*, respectively, the former from the verb *te(u)-* ‘add’ and the latter from the verb *tel-* ‘remove, subtract’. The conceptual relatedness between the superior/inferior degree and the source lexemes is straightforward, in that superiority is encoded by increased quantity and the inferiority is encoded by decreased quantity.

The degree markers for superlatives are *kacang*, *ceyil(lo)*, and *choyko(lo)*, among which *kacang* is the oldest gram. As indicated, *kacang* originated from the noun *kas* ‘boundary, edge’ with the diminutive derivational suffix *-ang*, which, in turn, is further traceable to *-aki* ‘baby’. The diminutive *-ang* acts as an intensifier by designating the smallest part of the edge, i.e., the very tip of an object or the ultimate border-line dividing an area (see Rhee, 2020b for discussion of polygrammaticalization of the noun *kas*; and Kang, 1993; Koo, 1999; Rhee, 2001 for discussion of the development of *-ang*, *-ngali*, *-ali*, *-kali* and other related forms). Interestingly, however, the early usage was the elative degree marker, i.e. ‘very’, rather than the superlative degree marker, i.e. ‘the most’ (see Section 4.2.1 for more discussion). The development of the superlative from ‘border, edge’ must have been triggered by the notion of extremity in the semantics of the source. The marker *ceyil(lo)* is derived from a Sino-Korean word *tyeyil*, which was palatalized in the 19th century, of which *tyey* is the marker of ordinal numbers and *il* is the numeral one, thus ‘the first’ together. The development from ‘the first’ to the ‘the most’ is largely due to the conceptualization of lining up the candidates in the order of the degree concerned, and numbering them. Similarly, the marker *choyko(lo)* is derived from a Sino-Korean word *choyko*, a combination of *choy* ‘extreme’ and *ko* ‘high’, thus ‘the highest’. The conceptualization involved in this development is remarkably similar to *ceyil(lo)*, the only difference being arranging the candidates in vertical access to place the one with the best quality on the top of the hierarchy, instead of arranging them in a numerical order.

The degree markers for elatives are numerous, since they are largely intensifiers or boosters. The known lexical sources can be categorized as the following:

- (6)
- a. Surpassing: ‘go over, cross’
 - b. Multiplicity: ‘many/much’
 - c. Magnitude: ‘great’, ‘severe’, ‘big and strong’, ‘big’, ‘utter extreme’, ‘extreme’, ‘excellence’
 - d. Excessivity: ‘pungent’, ‘be unusable’, ‘be unknowable’
 - e. Unusualness: ‘different’, ‘unusual’, ‘extraordinary’
 - f. Exactness: ‘origin’ ‘body’

The conceptual motivation behind the development of elative degree markers from the lexical sources in (6) is straightforward. The Excessivity is an interesting category in that the gustatorily painful sensation (‘be pungent’), the inordinateness of something to the point of being unusable, and the severity of some quality being beyond human understanding are all mapped to the notion of notable intensity, i.e. elative, through semantic generalization from the source domain. The Unusualness highlights the unusual, distinctive quality of a referenced entity, either positively or negatively. The Exactness signals that the quality being described exactly corresponds to the origin or the body (vis-à-vis extremity), analogous to the English expression ‘the heart of the subject’, in which ‘the heart’ encodes the centrality.

There are also multiple degree markers for excessives. Except for *hato* that developed from the verb *ha-* ‘be much/many’, they developed from a single concept, i.e. ‘moving beyond’, but from two linguistic sources, native Korean verbs and Sino-Korean nouns, as shown in (7):

- (7)
- a. Surpassing: Native Korean: ‘pass’ ‘go over’; Sino-Korean: ‘passing’
 - b. Multiplicity: ‘be much/many’

The conceptual motivation for recruiting ‘surpassing’ to mark the grammatical concept of ‘excessive’ is plainly visible, in that excessivity implies the presence of a limit and the violation thereof, and ‘going over’ and ‘passing’ denote movement beyond the set point. The two Korean verbs, *nem-* ‘go over’ and *cinachi-* ‘pass’, that serve as the source lexeme of the excessive degree marker, are slightly different in terms of the mode of ‘passing’ conceptualization. The notion of ‘passing’ from *nem-* ‘go over’ is based on the conceptualization of the movement along a vertical axis, e.g. ‘going over a wall, mountain, etc.’, whereas the notion of ‘passing’ from *cinachi-* ‘pass’ is based on the conceptualization of the movement along a horizontal axis, e.g. ‘pass the building, stop-light, etc. In either case, the notion of passing is based on the motion event in a physical world, which is generalized en route to grammaticalization into diverse dimensions including more abstract and subjective worlds such as quality. The case of *hato* is a little different. It simply meant ‘very much’, especially in the form of non-emphatic *ha* ‘much’, but it gradually acquired the negative meaning of excessiveness, a process further prompted by the emphatic particle *-to*. Thus, there is a ‘divergence’ phenomenon (Hopper, 1991), though not strictly exclusive, with *ha* for marking elatives and *hato* for marking excessives.

Also significant in the semasiological change is that it involves subjectification (Traugott, 1982, 1995; Traugott and König, 1991), which is evident in the change from the lexical meaning to the grammatical meaning of the standard and degree in comparatives. For instance, in the change from ‘edge’ to ‘most’ or ‘very’, from ‘go over, pass’ to ‘very’, from ‘big and strong’ to ‘very’, from ‘pungent’ to ‘very’, from ‘body’ to ‘like’, etc., the lexical meanings of the source involve objective, concrete entities, whereas the grammatical meanings of the target refer to more abstract, evaluative, and subjective notions.

4.2. Grammaticalization principles

Since Lehmann’s (2015[1982]) pioneering work on grammaticalization, a number of principles, hypotheses, and parameters of grammaticalization have been proposed, notably Hopper (1991), Heine et al. (1991), Hopper and Traugott (2003[1993]), Bybee et al. (1994), Heine and Kuteva (2002, 2007), among others. Among those proposed, we adopt the mechanisms presented in Heine and Kuteva (2002: 2) and Kuteva et al. (2019: 3), i.e. desemanticization, extension, decategorialization, and erosion (for general exposition of each parameter, see Heine and Kuteva, 2007: 35–44).

4.2.1. Desemanticization

Also commonly called ‘semantic bleaching’ in figurative terms, desemanticization refers to the loss in lexical meaning content. We have seen in the preceding discussion that many of the source lexemes have undergone semantic generalization. For instance, we noted that the degree adverb *nemwu* ‘very’ and ‘too much’ originated from the verb *nem-* ‘go over’. In this development, the physical motion of going over a landmark, e.g. a fence, bank, mountain, national boundary, etc., in the source semantics has been lost en route to the grammaticalization into a degree marker of excessives to denote ‘go over the limit’, physical or abstract, a clear instance of metaphorical extension. The notion of going over the limit was associated with transgression or violation, and thus it was used as the primary marker of the excessives, until the latter half of the 20th century. Then it came to be used in a more generalized form as it was associated with ‘going over the expectation’, thus in a form of exaggeration, e.g. saying literally ‘too beautiful’ to express

‘very beautiful’, or saying ‘too happy’ to express ‘very happy’, etc., as briefly alluded to in Section 3.3. Thus, a series of desemantization that *nem-* ‘go over’ has undergone can be presented as in (8):

- | | | |
|-----|-------------------------|--|
| (8) | a. Stage 1 (Source): | physically go over (e.g. wall, mountain, etc.) |
| | b. Stage 2 (Excessive): | violate (e.g. standard, limit, etc.) |
| | c. Stage 3 (Elative): | exceed (e.g. average, expectation, etc.) |

Even though there are other instances that fit the desemantization process, such as ‘be pungent’ to ‘very’, ‘be unusable’ to ‘very’, ‘utter extreme’ to ‘very’, etc., many of the source lexemes still retain their original semantics even when they are used as comparatives, e.g. ‘number one’ for ‘most’, ‘be many/much’ for ‘very’, ‘excess in degree’ to ‘too much’, etc., a clear case of ‘persistence’ (Hopper, 1991). The presence of the semantically conservative degree markers suggests that these forms obviously have not undergone much grammaticalization (which is expected since adverbs are an only weakly grammaticalized category, Heine et al., 1991) and that the notions of ‘very’ for elatives and ‘too much’ for excessives are not very high in the grammaticality hierarchy, as compared, for example, with the highly grammatical notions such as tense, aspect, agreement, etc., which are likely to occur as an inflectional form rather than a lexical form and as a bound form rather than an independent form (cf. Bybee, 1985; Bybee et al., 1994).

Another interesting case in semantic change is *kacang*, the marker of superlative, whose lexical origin goes back to *kas* ‘edge, boundary’, as briefly mentioned in Section 4.1. It was originally a derived noun with the diminutive to denote ‘the very tip of an edge’ or ‘the boundary line’, which changed to the degree marker of elative to mean ‘very’ (as in (9a)) and also superlative ‘the most’ in certain contexts (as in (9b)) in the earliest extant data, i.e., Middle Korean (MK; 918 ~ 1598). However, from around the 19th century, it comes to be only used as the superlative (as in (9c)) (note the use of its variant *kacang* in historical texts)⁴:

- | | | | | | | |
|-----|--|--|---|------------------------------------|--|---|
| (9) | a. <i>ku</i>
that
<i>stah-i</i>
earth-NOM | <i>phul-ul</i>
grass-ACC
<i>kacang</i>
very | <i>patcAv-nal</i>
give-HON-CONN
<i>tulechi-te-la</i>
shake-RETRO-DEC | <i>POSAL-i</i>
Boddhisatva | <i>pat-ataka</i>
receive-TRANS | <i>skal-asi-ni</i>
put.down-HON-CONN |
| | ‘As (the Lord Sakra) offered the (beautiful) grass to Boddhisatva, Boddhisatva received it and spread it (under his seat), so the earth shook very violently.’ (1447 <i>Sekposangcel</i> 3:43a) | | | | | |
| | b. <i>muli-n-tay</i>
be.irritated-ADN-place | <i>talk-uy</i>
chicken-GEN | <i>phi</i>
blood | <i>pal-lom-i</i>
apply-NOMZ-NOM | <i>kacang</i>
very/most | <i>tyoh-Anila</i> |
| | ‘For irritated skin applying chicken’s blood is very/most effective.’ (1489 <i>Kwukupkanipang</i> 6:73b) | | | | | |
| | c. <i>susung-a</i>
teacher-VOC | <i>kyeng</i>
scripture | <i>anh-uy</i>
inside-GEN | <i>ena</i>
which | <i>kyeymyeng-i</i>
commandment-NOM | <i>kacang</i>
most

<i>khu-niisko</i>
big-Q |
| | ‘Master, which commandment is the greatest among (all) from the Scriptures?’ (1892 <i>Sengkyengcikhay</i> 7:12b) | | | | | |

In MoK *kacang* is not used as an elative degree marker any more, and is specialized as a superlative degree marker. The course of semantic change of *kacang*, from its primary source *kas* ‘edge’ to the marker of superlative, can be summarized as (10):

- | | | | |
|------|----------|---------------|-------------------------------|
| (10) | Stage 1: | <i>kas</i> | n. ‘edge, boundary’ |
| | Stage 2: | <i>kacang</i> | n. ‘the very tip of an edge’ |
| | Stage 3: | <i>kacang</i> | adv. ‘very (much)’ [relative] |
| | Stage 4: | <i>kacang</i> | adv. ‘the most’ [superlative] |

This change does not fit in the semantic bleaching model because the meaning seems to have undergone intensification (by means of the derivation with a diminutive marker), generalization (from physical domain to more abstract domain of degree), and narrowing (from general excellence to the extremity). In terms of scalarity, the change is an instance of strengthening rather than weakening. This shows that semantic change of a linguistic form, when the form is not a marker of strong grammatical concepts (such as degree adverbials), may fluctuate, not always proceeding unidirectionally

⁴ The source document is a Korean-Chinese bilingual text. In the Chinese parallel text of the source, *kacang* corresponds to the Chinese lexeme *SIM* (甚), whose meaning is ‘very’. This means that the context with the possibility of superlative interpretation was the ‘bridging context’ (Heine, 2002) which enabled the development of the form’s superlative function.

from a specific to general meanings, i.e. desemanticization, as is often widely assumed in grammaticalization literature, e.g., ‘semantic weakening’ (Guillaume, 1964), ‘semantic bleaching’ (Givón, 1975; Lord, 1976), ‘attrition’, ‘semantic depletion’ (Lehmann, 2015[1982]), ‘desemanticization’ (Heine and Reh, 1982), ‘semantic reduction’ (Bybee et al., 1994), ‘abstraction’ (Heine et al., 1993), among others).

4.2.2. Extension

Also known as context generalization and expansion, extension refers to the use of a form in new contexts. Expansion can be viewed from a few different perspectives. Himmelmann (2004: 32–33) details three different types of expansion, i.e., host-class expansion, syntactic context expansion, and semantic-pragmatic context expansion. Most instances of extension observed in the grammaticalization of comparatives in Korean involve semantic-pragmatic expansion, but some forms that have undergone grammaticalization to a greater extent also exhibit host-class and syntactic context extension. For instance, when the standard marker *-pota* ‘than’ was used lexically to mean ‘see’, it occurred with its complement, mostly a simple NP, e.g., ‘tree’, ‘person’, etc.⁵ In the course of its development into the standard marker, it could also be used with nominalized constituents, e.g., ‘being smart’, ‘your going to school’, ‘that she comes’, etc. (see Section 4.5 and Fig. 2 for more discussion on analogy-based extension of equatives).

When the semantic-pragmatic context is considered, extension is closely tied to desemanticization, since it is natural that as the meaning of a linguistic form becomes increasingly general, its usage context becomes increasingly wider. For instance, the adjective *mayp-* ‘be pungent’ could be used only with reference to gustatory experience, such as tasting pepper, when it was used as a regular adjective. But when it was grammaticalized as an adverbial of marking the elative degree, its usage could be extended to far wider contexts, such as cold weather, difficult exam, kind person, pricy dress, beautiful flowers, etc., in addition to spicy food (note that it can now be used in positive contexts). Similarly, when the verb *cinachi-* ‘pass’ (and its historical form *tinathi-*) was used as a regular verb, it could be used only with reference to the physical locomotion of passing a landmark (often with a negative connotation of inadvertency of failing to notice something in the course of passing it). However, when its adverbialized form *cinachikey* came to be used as an adverbial of excessive degree marker, it came to be used in a much wider context, not restricted to the event of physical locomotion.

However, just as noted in the preceding discussion, many markers of superlative, elative, and excessive degree markers do not exhibit extensive semantic change, and thus such forms do not exhibit noticeable extension of usage contexts. Especially, the Sino-Korean lexemes denoting extremity, i.e. *kuk* and *cikuk*, and those denoting excessiveness in degree, i.e. *kwa* and *kwato*, each developing into elative degree markers and excessive degree markers, do not show extension of usage contexts, since the grammatical concepts of elative and excessive are not different from the semantics of the source lexemes.

4.2.3. Decategorialization

Decategorialization refers to the loss in morphosyntactic properties characteristic of lexical or other less grammaticalized forms. Forms developing from verbs tend to lose verbal properties, such as being qualified by an adverb, being modified by the markers of tense, aspect, and modality, being modulated with respect to honorification, politeness, etc., among others. Forms developing from nouns tend to lose nominal properties, such as being modified by an adjective, a plural marker, or an article, among others. Grammaticalization scenarios involved in the development of comparative markers in Korean exhibit decategorialization. The most obvious cases are those that developed into the standard markers. Since these markers are largely bound morphemes, they do not display much morphosyntactic flexibility. This is well illustrated by the following examples with the superior/inferior standard marker *-pota* (*ka*) (< ‘see’ ‘approach’), which does not allow any of such modification or modulation:

- | | | | | | | |
|------|----|-----------------------------|-------------------------|----------------------|----------------------|----------------------|
| (11) | a. | <i>Bob-i</i> | <i>John-pota</i> | <i>ttokttokha-ta</i> | | |
| | | Bob-NOM | John-than[after seeing] | be.smart-DEC | | |
| | | ‘Bob is smarter than John.’ | | | | |
| | b. | * <i>Bob-i</i> | <i>John</i> | <i>caseyhi</i> | <i>pota</i> | <i>ttokttokha-ta</i> |
| | | | | carefully | [after.seeing] | |
| | c. | * <i>Bob-i</i> | <i>John</i> | <i>po-ass-ta</i> | <i>ttokttokha-ta</i> | |
| | | | | see-PST-TRANS | | |
| | d. | * <i>Bob-i</i> | <i>John</i> | <i>po-si-ta</i> | <i>ttokttokha-ta</i> | |
| | | | | see-HON-TRANS | | |

The examples (11) show that the verb of seeing (*po-* ‘see’) that developed into a marker of the standard (as in (11a)) does not allow an adverbial modifier (as in (11b) for ‘carefully see’), or a tense-modulation (as in (11c) for ‘saw’), or an honorification-modulation (as in (11d) for ‘honorably see’ when Bob is a social superior to the speaker), etc. The inability

⁵ An anonymous reviewer points out that the lexical verb *po-* could be used not only with NPs but also nominalized constituents. A search of a 15th century data set returns about 4455 hits of the verb *po-*, 59% of which are used with a NP complement, 30% without any explicit complement, 6% as a compound verb, 3% as an auxiliary verb, and 1.4% with a nominalized constituent with such nominalizer as *cwul* as its complement.

of such modification is due to the complete loss of visual perception meaning and its acquisition of morphosyntactic bondedness.⁶

Similarly, the noun *kacang* ‘boundary, edge’, which is the source of the superlative degree marker, has lost the features of the nominal category, such as the modification by an adjective, as exemplified in (12):

(12)	a.	<i>Bob-i</i> Bob-NOM ‘Bob is the smartest.’	<i>kacang</i> most	<i>ttokttokha-ta</i> be.smart-DEC
	b.	* <i>Bob-i</i>	<i>mayn</i> utter	<i>kacang</i> [edge] be.smart-DEC
	c.	* <i>Bob-i</i>	<i>ku</i> that	<i>kacang</i> [edge] be.smart-DEC

As shown in (12), *kacang* cannot be modified by the adjective (as in (12b) for ‘the very edge’), or by a demonstrative (as in (12c) for ‘that edge’), etc. This inability has to do primarily with the source lexeme’s categorial change from noun to adverb, and thus such modifiers are morphosyntactically ill-fit. Incidentally, the noun *kacang* has become *kacangcali* ‘edge, boundary’ in MoK, via compounding with the noun *cali* ‘place’, whereas *kacang* has been specialized as a degree adverbial.

Another interesting case of decategorialization is the elative *mopsi*, which has been derived from *mot-psi-i* ‘in such a way × is not usable; unusably’, which lost its ability to be modified by certain modifiers, as shown in (13):

(13)	a.	<i>Bob-i</i> Bob-NOM ‘Bob is very tired.’	<i>mopsi</i> very	<i>phikonha-ta</i> be.tired-DEC
	b.	* <i>Bob-i</i>	<i>cenhye</i> at.all[NPI]	<i>mopsi</i> [unusably] <i>phikonha-ta</i>
	c.	* <i>Bob-i</i>	<i>maywu</i> very	<i>mopsi</i> [unusably] <i>phikonha-ta</i>

The source construction of the elative *mopsi* involves a negative word *mot* ‘cannot’. In such cases, the phrase may be modified by a negative polarity item, such as *cenhye* ‘(not) at all’. However, when it has become a degree marker and its negative origin has become no longer transparent, it can no longer be modified by a NPI, as shown in (13b). Furthermore, the source construction at the level of lexical composition allowed modification by an intensifying adverb, a common verbal characteristic. However, such modification renders the sentence very awkward, largely due to the feeling that comparable intensifiers are redundantly juxtaposed, as shown with the intensifying adverb *maywu* ‘very’ (to mean literally ‘in a very unusable/useless manner’), in (13c).

However, since most degree markers are adverbials by category, mostly through derivation by means of adverbializers that denote a manner, they are modifiable by adverbial modifiers. For this reason, the extent of decategorialization among the degree markers in comparatives in general can be said to be rather limited. This has largely to do with the relatively low level of grammaticality of such concepts.

4.2.4. Erosion

Also known as phonetic reduction, erosion refers to the loss in phonetic substance. Korean has a large number of grammatical markers that have undergone extensive or drastic erosion, partly due to its agglutinating nature, e.g. *-la-ko-ha-nun-kes-un* [END-CONN-say-ADN-thing-TOP] > *-lan* TOP] (Rhee, 2011: 764).⁷ Loss of phonetic substance may operate in the process of reduction of syntagmatic string (‘coalescence’ Haspelmath 2011) or in the contraction of polymorphemic words (‘fusion’ Lehmann, 2015[1982]).

However, the operation of this parameter is not prominent in the development of comparatives in Korean. In terms of morphosyntax of the comparatives, the degree markers are not bound morphemes (thus of lesser grammaticalization), whereas the standard markers

⁶ Incidentally, the comparative standard marker *pota* further developed into a free-standing comparative adverb without specific standard, as ‘a better future’ (implying ‘better than now’), in MoK, an instance of ‘debonding’ (and of degrammaticalization; Norde, 2009).

⁷ Even at the lexical level, the use of shortened forms is widely attested (see Lee, 2010 for a detailed description of reductive operations). As for the development of the topic marker *lan*, there is no clear pathway of this extensive erosion. This drastic erosion may have been influenced or prompted by the formally and functionally similar gram *-ulan/-ullan* attested from Old Korean with the meaning of ‘if (we) speak about’ (‘conditional reference’ Kim, 1989: 64–65), whose origin, however, has not yet been established.

are fully bound morphemes (thus of greater grammaticalization). Thus, it is expected that fully bound forms would have undergone more extensive erosion than the non-bound forms. However, this is not straightforwardly the case with comparatives. For instance, the superior/inferior standard marker *-pota* ‘than’ is a bound form which has eroded from *po-tak-a* [see-approach-CONV] at a moderate level, and the superlative marker *-eyse* ‘from, among’ has eroded from *-ey-isi-e* [at-exit-CONV]. However, other standard markers, though morphologically bound, do not exhibit noticeable morphosyntactic erosion.

On the other hand, among the degree markers, which are morphosyntactically free forms, erosion is rarely exhibited: all degree markers relatively well retain their source structures, except for a few cases, e.g. *mopsi* ‘very’ from *mot-psu-i* [not-use-ADVZ] and *maywu* ‘very’ from *mayp-u* [be pungent-ADVZ]. This state of affairs also suggest that degree markers are not highly grammatical concepts and their development does not require extensive grammaticalization processes.

4.3. Rise and fall of comparatives

We have seen in the above that there are multiple forms that signal diverse notions involved in comparatives in MoK. However, there are even more forms that appeared in history and then fell into disuse. A diachronic survey reveals the dynamic nature of grammatical forms that are in competition for functional primacy. Thus we now look at the comparative markers from a diachronic perspective.

In the category of the standard markers, we have a single marker *-pota* for superior and inferior, which developed from *po-* ‘see’ and *tak-* ‘approach’, from the 19th century (see Table 1 above). However, there were other markers, e.g. *-lawa*, *-twuko(n)/-tokon*, *-Alon*, *-(y) eys(y)e*, etc., as exemplified in (14):

- (14) a. *pul-s* *pich-Alo* *CANGEMh-om-i* *ILWEL-lawa* *nul-e*
fire-GEN light-INST be.magnificent-NOMZ-NOM sun.and.moon-than excel-CONN
‘The light (shining forth from my enlightened body) is brighter than the sun and the moon, and..’ (1447 *Sekposangcel* 9:15a)
- b. *ce-y* *SIL-ey-n* *saonav-otAy* *wussalAm-twuko* *te-un* *yanghA-ya*
that-NOM reality-at-TOP worthless-but superior.person-than be.better-ADN pretend-CONN
‘Such a person is worthless in reality but pretends to be better than superior persons, and..’ (1447 *Sekposangcel* 9:14)
- c. *ohilye* *KAKPYELhi* *NOSIMh-om-Alon* *te-unila*
contrarily particularly fret.mind-NOMZ-than be.better-DEC
‘Contrarily, (meditating looking blankly at the empty space) is better than diligently fretting your mind.’ (1482 *Kumkangkyengsamkahay* 4:30)
- d. *KYENG* *tiny-on* *POK-i* *tye-yeysye* *te-unila*
scripture carry-ADN blessing-NOM that-than be.better-DEC
‘Blessings brought forth from carrying the scripture (verses in person) are greater than that (=giving alms to others). (1482 *Kumkangkyengsamkahay* 3:44b)

The standard markers in superior and inferior comparatives shown above had differential levels of strength and lifespan, some falling into disuse early in history, some persisting longer, but all of them eventually yielded to *-pota*, which is nearly the sole marker in MoK, with *-eyse* only occasionally occurring in certain restricted contexts. The forms are listed in Table 3 with their literal meanings, source components, and the time they were used.

As shown in Table 3, the most long-lived form was *-twuko(n)* and the most short-lived form was *-Alon*. The MoK standard marker *-pota* is the eroded form of its predecessor *-potaka*, which was in use only for a short while. The lexical sources of some of the forms, e.g. *-lawa* and *-Alon*, have not yet been established. Other forms involve a converb, which primarily functions as a linker, translatable as ‘and’ ‘after’ ‘while’, etc. (see Koo, 1987, for an elaboration of the meaning of these linkers). The role of these linkers is to mark the departure point, the one to which the comparee is compared. Thus, by saying ‘‘after’ being at, or seeing, or storing x’’, one is saying, in effect, ‘‘comparing with x’’ and ‘‘than x’’.

There were also multiple standard markers in equative comparatives in history. We noted that there are three major forms, i.e. *-kathi*, *-chelem*, and *-mankhum*, in equative comparatives in MoK (see Table 1 above). The history shows that these forms had a great spelling variation, and most defunct forms were these variants. If we group together these variants, the total inventory is not very different from the one in MoK. The forms are listed in Table 4 with their literal meanings, source components, variants, and the time they were used.

As shown in Table 4, it is evident that the source concepts are rather heterogeneous, not forming any congruous conceptual category. Furthermore, all forms attested in the history of Korean are still in use, though with spelling variation. Even though they share the function of marking the standard in equatives, they have very subtle semantic differences as illustrated in (15):

Table 3

The standard markers in superior/inferior comparatives in history.

Form	Literal Meaning	Source Component	Time Used
<i>-pota</i>	after seeing x	<i>po-</i> v. ‘see’; <i>tak-</i> v. ‘approach’; <i>-a</i> CONV ‘and’	(19c. ~ present)
<i>-potaka</i>	after seeing x	<i>po-</i> v. ‘see’; <i>tak-</i> v. ‘approach’; <i>-a</i> CONV ‘and’	(18c.) [now defunct; survives as <i>-pota</i>]
<i>-twuko(n)</i>	after storing x	<i>twu-</i> v. ‘store’; <i>-ko</i> CONV ‘and’	(15c. ~ 19c.) [now defunct]
<i>-(y)ey(s)y(e)</i>	after existing at x	<i>-ey</i> LOC. ‘at’; <i>isi-</i> v. ‘exist’; <i>-e</i> CONV ‘and’; <i>-eyse</i> LOC/ABL	(15c. ~ 18c.) [now nearly defunct]
<i>-lawa</i>	(unknown)	<i>-la</i> ‘?’; <i>-wa</i> ‘with’	(15c. ~ 17c.) [now defunct]
<i>-Alon</i>	(unknown)	<i>-Alo</i> ‘from’(?’); <i>-n</i> TOP(?)	(15c. ~ 16c.) [now defunct]

Table 4

The standard markers in equative comparatives in history.

Form	Literal Meaning	Source Component	Variant	Time Used
<i>-kathi</i>	in a manner of being similar to x 16c. ~ present	<i>kath-</i> v. ‘be like’; <i>-i</i> ADVZ. ‘of manner’ <i>-mankhum</i>	<i>kAthi</i> , <i>Athi</i> , <i>kAschi</i> , <i>kAchi</i> , <i>kAtthi</i> , <i>kAsthi</i> , <i>kaschi</i> , <i>kachi</i> each of amount x	<i>ma</i> N. ‘amount’; <i>-s</i> GEN; <i>-kam</i> DERV ‘each’
<i>mankom</i> , <i>maskam</i> , <i>manci</i> , <i>manchi</i> , <i>machi</i> , (<i>man</i>)	16c. ~ present			
<i>-chelem</i>	in the shape of x 18c. ~ present	<i>thyey</i> SK.N. ‘body’; <i>-lo</i> INST ‘with’	<i>chyelo</i> , <i>chyela</i>	

(15)	a.	<i>ku-nun</i> he-TOP	<i>mikwuksalam-kathi</i> American-like	<i>yenge-lul</i> English-ACC	<i>ha-n-ta</i> say-PRES-DEC
	b.	<i>ku-nun</i>	<i>mikwuksalam-mankhum</i> American-like	<i>yenge-lul</i>	<i>ha-n-ta</i>
	c.	<i>ku-nun</i>	<i>mikwuksalam-chelem</i> American-like	<i>yenge-lul</i>	<i>ha-n-ta</i>
a.b.c. ‘He speaks English like an American.’					

Table 5

The quasi-standard markers in equative comparatives in history.

Form	Literal Meaning	Source Component	Variant	Time Used
<i>-mattana</i>	as is the case with x	<i>mac-</i> v. ‘be correct’; <i>-tana</i> ‘?’	<i>mastana</i>	20c. ~ present [rare, dialectal]
<i>-taylo</i>	with the likeness of x	<i>tay-</i> N. ‘likeness’(?’); <i>-lo</i> INST ‘with’	<i>taylo</i>	16c. ~ present nominal/clausal
<i>-tasiphi</i>	as	<i>-ta</i> END; <i>siph-</i> ‘think’; <i>-i</i> ADVZ ‘of manner’		18c.(?) ~ present
<i>-man</i>	amount	<i>ma</i> N. ‘amount’	<i>mankom</i> , <i>maskam</i> , <i>manci</i> , <i>manchi</i>	16c. ~ present
<i>-(k)wa</i>	with	<i>-(k)wa</i> COM	<i>(k)walo</i>	15c. ~ present
<i>-ey</i>	at	<i>-ey</i> LOC		15c.

Even though all sentences in (15) denote the person's ability to speak English, (15a) focuses on the equality of comparability of the speaker's fluency; (15b) focuses on the speaker's attainment of reaching the fluency level of an American; and (15c) focuses on the fact that the speaker is feigning the identity as if he or she were an American. This difference shows in part 'persistence' (Hopper, 1991), in that *-kathi* of (15a) developed from the verb *kath-* 'be like', whereas *-mankhum* developed from the noun *man* 'amount' with one entity reaching the comparable amount of the referenced entity (see below for more). It is unclear, however, how *-chelem*, from a noun denoting 'body', developed into the 'non-genuine' meaning. It is possible that it was influenced by another lexeme that originated from the same source, i.e. *-chey*, which developed the 'pretense' meaning from around the 17th century (e.g. *a(l)-nun chey* [know-ADN pretense] 'pretending to know').

There is another group of standard markers whose function is not typical of the standard markers discussed thus far. These quasi-standard markers are listed in Table 5.

As indicated in Table 5, the most recent one *-mattana* is rare in use and often considered dialectal. The infrequent use of *-mattana* is largely due to its selectional peculiarity, i.e. it is defective in the sense that it can host only one particular kind of noun, i.e. those denoting words or speech, such as *mal* 'word(s)/speech' or *malssum* 'word(s)/speech from an honorable person'. Thus, *ney mal-mattata* [your word-like] can be translated as 'just like what you said; as you said'. For this rather severe selectional restriction, *-mattana* is one of the least productive particles in MoK.

Similarly, *-taylo* is somewhat different from others. In MoK it serves as a postpositional particle with the 'like' meaning, but it also serves as a conjunction with the 'as' meaning. These two groups of uses are shown in (16) and (17), respectively:

- | | | | |
|------|------------------------------------|-----------------------------------|-------------------------------------|
| (16) | a. <i>ney mal-taylo</i> | [your word-TAYLO] | 'just like what you said' |
| | b. <i>pep-taylo</i> | [law-TAYLO] | 'in conformity with the law' |
| | c. <i>khunkes-un khunkes-taylo</i> | [big.thing-TOP big.thing-TAYLO] | 'big things together separate from' |
| (17) | a. <i>po-n taylo</i> | [see-ADN TAYLO] | 'as you saw' |
| | b. <i>tochakha-nun taylo</i> | [arrive-ADN TAYLO] | 'as soon as (you) arrive' |
| | c. <i>thum na-nun taylo</i> | [free.time OCCUR-ADN TAYLO] | 'whenever (you) find free time' |
| | d. <i>cichi-l taylo cichi-ta</i> | [be.tired-ADN TAYLO be.tired-INF] | 'be as tired as tired can be' |
| | e. <i>toy-l.swu.iss-nun taylo</i> | [become-can-ADN TAYLO] | 'as much as possible' |

In (16), *-taylo* denotes the sameness of the content of the predicate in view of the content of the host noun, e.g. *ney mal-taylo* [your word-like] to mean 'just like what you said', analogous to the particle *-mattata* described above. The usage in (16c) is a little more complex in that *-taylo* denotes the sameness of items that have been set apart based on the referenced quality, i.e. 'the big size' here. In these examples, it is clear that *-taylo*, by virtue of hosting a nominal, has the grammatical status as a postpositional particle. However, as shown in (17), there are many other similitive uses of *-taylo* hosting an adnominalizer (thus suggesting its nominal nature) and connecting with a clause (thus suggesting its conjunctive nature). In these cases, *tay* of *-taylo* is functioning as the noun and *-lo*, a postpositional particle.

The conceptual motivation behind the development of the two uses, both making reference to similarity, is relatively clear. In the postpositional use, exemplified in (16), the content of the nominal host, e.g. 'words', 'law', etc., is being compared with the content of the predicate. In the conjunctive use of *-taylo* in (17a) is nearly the same as the postpositional uses, i.e. what was seen is confirmed by the following proposition. The promptness meaning in (17b) is motivated by the simultaneity, i.e. temporal identicalness, of two events. The recurrence meaning in (17c) is motivated by the absence of exception, which leads to the sameness of regularity in occurrence of two events. The maximum degree meaning in (17d) is also motivated by the sameness of the degree of anything reaching that state of affairs and the degree of the state reached by the referenced sentential subject. Similarly, (17e) is based on the same kind of motivation as (17d), except that it tends to involve a conative agent, whereas the latter does not.

The quasi-standard marker *-tasiphi* in Table 5 is also a similitive conjunction. It developed from the MK verb *siph-* 'think', which has undergone grammaticalization along diverse paths to modal markers, connectives, and discourse markers (see Kim, 2010; Rhee, in press, for a detailed description).

Another group of the quasi-standard markers in Table 5 consists of *-man*, *-(k)wa*, and *-ey*. Though they are quite dissimilar in terms of the source semantics, their usage has a shared feature. These forms function as the standard markers only when the predicate itself makes reference to a similarity-based judgment of quality, i.e. being identical, similar, or different. In other words, these markers, as standard markers, have the selectional restriction of having to cooccur with such predicates as *ttokath-* 'be identical', *kath-* 'be same/similar', *pisusha-* 'be similar', *talu-* 'be different', etc. For these restrictions, the standard markers in this category do not occur at a high frequency.

We noted in Table 2 that there are three degree markers in superlative comparatives in MoK, i.e. *kacang* (< 'tip of an edge'), *ceyil* (*lo*) (< 'number one'), and *choyko(lo)* ('the highest'). In history, there was another form *mas*, which, as a noun or adjective 'first, top',

Table 6
The degree markers in elative comparatives in history.

Form	(Literal) Meaning	Source Component	Variant	Time Used
<i>mas</i>	first	<i>mas</i> N. 'first, top'		15c. ~ 17c.
<i>oalo</i>	entirely	<i>oon</i> A. 'all, whole'; <i>-lo</i> INST 'with'(?)	<i>olo, oolo</i>	15c. ~ 17c.
<i>khi</i>	hugely	<i>khu-</i> A. 'be big'; <i>-i</i> ADVZ 'of manner'		15c. ~ 18c.
<i>cyenghi</i>	correctly	<i>cyeng</i> sk.n. 'correctness'	<i>cenghi</i>	15c. ~ 20c.
<i>cenhye</i>	entirely	<i>cen</i> sk.n. 'entirety'; <i>ha-</i> V. 'do/be'; <i>-e</i> CONV 'and'		15c. ~ 20c. [now NPI]
<i>camos</i>	(very)	(unknown)	<i>CAMAS, CAMA, camo, camat, camut, camus</i>	15c. ~ 20c. [now mildly archaic]
<i>ha</i>	plentifully	<i>ha-</i> V. 'be many/much'		15c. ~ 20c. [now archaic]
<i>tokpyeli</i>	(especially)	(unknown)	<i>tokhye, tokpyelhi</i>	16c. ~ 18c.
<i>wenkan</i>	first	<i>wenkan</i> N. 'first'	<i>wen, wenkun, (wenak)</i>	16c. ~ 19c.
<i>iskus</i>	contentedly	<i>iskus</i> ADV. 'contentedly, sufficiently'	<i>iskas, iskes</i>	17c. ~ 18c.
<i>keluki</i>	excellently	<i>keluk</i> N. 'excellence'; <i>-i</i> ADVZ 'of manner'	<i>kelaki</i>	17c. ~ 19c.

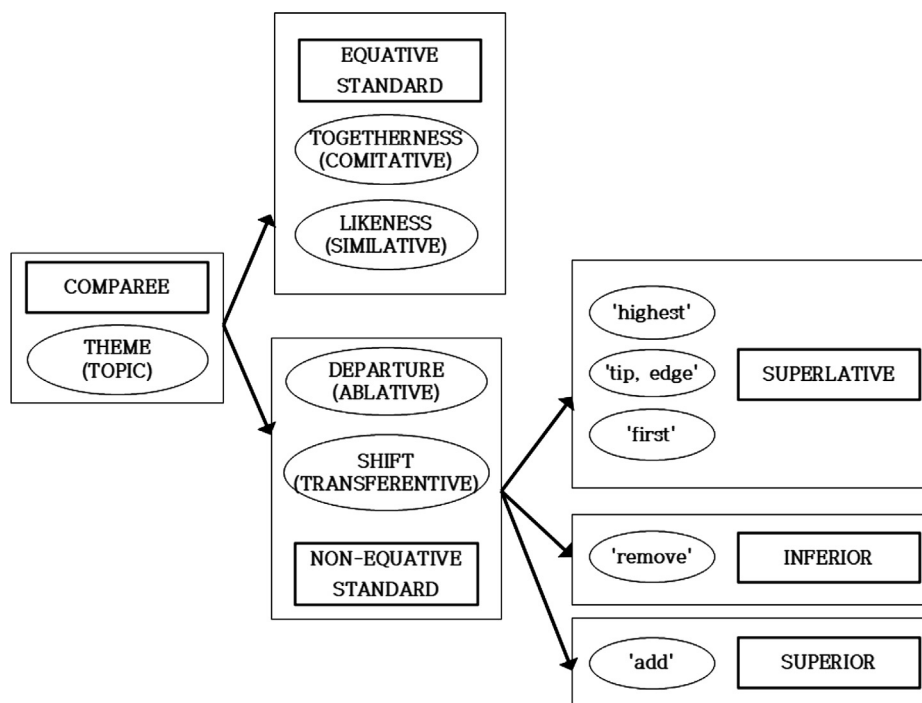


Fig. 1. Conceptual connection among comparatives.

(19) a. *-mankhum* as a degree connective

(To a friend going abroad for an advanced degree)

<i>pwuti</i>	<i>momkenkanghakey</i>	<i>ni-ka</i>	<i>wenha-nun.mankhum</i>	<i>kongpwu manhi</i>	<i>ha-ko</i>	<i>w-a</i>
please	in.health	you-NOM want-	study		much do-and	come-END
		CONN				

‘Please stay healthy, study as much as you have wanted to, and return.’ (2004, Drama *Aycenguy coken* Episode #47)b. *-mankhum* as a causal connective

(A company-owner, trying to obtain the right to rent a space in a posh department store)

<i>talang-uy</i>	<i>cinka-lul</i>	<i>a-nun.</i>	<i>kancelhakey</i>	<i>ipcem-ul</i>	<i>wenha-</i>
		<i>mankhum</i>			<i>pnita</i>
[name]-	true.worth-ACC	know-CONN	earnestly	open.store-	want-DEC
GEN				ACC	

‘Since I know the prestige of (your) Dalang (Department Store), I earnestly wish to open a store in it.’ (2011, Drama *Loyal phaymilli* Episode #7)c. *-chelem* as a pretense connective

<i>amwuil</i>	<i>eps-ess-ten-kes.</i>	<i>yeycen-chelem</i>	<i>mos</i>	<i>sal-lkey-a</i>
	<i>chelem</i>			
nothing	not.exist-PST-RETRO-	before-like	cannot	live-FUT-END
	CONN			

‘We may not be able to live like before as if nothing had happened.’ (2006, Drama *Kwung* Episode #9)d. *-chelem* as an inference-evidential marker

(Reporting someone else’s observation about someone who was deeply agonized)

<i>manhi</i>	<i>ancoh-apoi-nuntey</i>	<i>ekcilo</i>	<i>kyenti-ko.iss-nun-kes.chelem.poy-</i>
			<i>ess-tapnita</i>
much	bad-seem-CONN	effortfully	endure-PROG-PRES-INFR-PST-DEC.REPT

‘(He) said that (she) seemed to be very bad and have been trying hard to endure.’ (2006, Drama *Somwunnan chilkongcwu* Episode #41)e. *-kathi* as an inference-evidential marker

(A psychologically disturbed woman, with reference to her own body, as to whether her flesh would fit for cooking)

<i>mas-i</i>	<i>eps-ul-kes.kathi.poi-</i>
	<i>na-yo?</i>
taste-NOM	not.exist-FUT-INFR-Q-POL

‘Does (it) seem to be not tasty?’ (1995, Movie *301 302*)

In (19a) *-mankhum* functions as a connective marking the equative degree. It hosts a clausal complement which is marked by an adnominal, which suggests the nominal origin of *-mankhum*, i.e. *ma(n)* ‘amount’. The ‘degree’ is close to ‘amount’ and thus its functional extension is well-motivated. In (19b), the connective *-mankhum* marks ‘causality’, the motivation of which is also straightforward if we consider that *-mankhum* has the ‘amount’ meaning as well. The causal ‘since’ in the translation is interchangeable with ‘as much as’, just because the English complex conjunction also underwent the [amount > cause] change. Example (19c) shows an interesting usage of the marker *-chelem*, which carries the pretense-marking function. Since a person, for example, is likened to the ‘body’ (<*chey* ‘body’) of something/someone when the person is not, the form containing *chey*, like *-chelem*, can easily develop into a marker of pretense.¹⁰ Excerpts (19d) and (19e) are similar in function and form, both involving the nominalizer *-kes* ‘thing’ and the lexeme *poi-* (or *poy-*) ‘be seen’. The inference meaning ‘seem’ arose from a literal meaning of ‘be seen as a thing that...’. Since inference is usually based on visual perception, and mental understanding is often metaphorically encoded as visual perception across languages (Lakoff and Johnson, 1980; Sweetser, 1990; Evans and Wilkins, 2000; Vanhove, 2008; Eom, 2020, among others), this type of functional extension is a reasonable grammaticalization scenario. This state of affairs

¹⁰ The development of this highly subjective meaning has occurred to *chey* ‘pretense’ itself and its closely related lexeme *chek* ‘pretense’ (see Section 4.3).

also shows that grammaticalization often involves a construction rather than a single lexeme, as has been pointed out in a number of studies (Heine et al., 1991; Hopper and Traugott, 2003[1993]; Bybee et al., 1994, among many others).

Another important issue with respect to the development from nominal to clausal marker is the role of analogy. Since the original semantics of these markers survived in the new grammatical domains, this type of functional extension can be regarded as an instance of analogy-driven secondary grammaticalization. This type of grammaticalization is an instance of generalization of a grammatical function as discussed in the literature (e.g. Hopper and Traugott, 2003[1993]; Fischer, 2011; Lehmann, 2004; De Smet, 2011; Heltoft, 2011; and many others), and as exemplified by some verbal morphologies in Korean that developed into nominal, phrasal, and clausal morphologies, still carrying the core semantics from earlier usage (Rhee and Koo, 2015, see also Rhee, 2014). The conceptual relatedness of the equatives that enabled the emergence of new functions in new contexts and grammatical domains can be shown as in Fig. 2.

With respect to the degree markers for elatives, we noted that there are and have been many of them in Korean (see Table 2 for those in contemporary Korean and Table 6 for historical forms). When all these forms are considered, there are eight major source concepts which form a network of elativity, i.e. Surpassing, Multiplicity, Magnitude, Excessivity, Unusualness, Exactness, Primacy, and Sufficiency, even though classification and membership may be subject to variation by differential granularity. In addition, we noted that the excessive degree markers have developed from Surpassing and Multiplicity (see Table 2 for those in contemporary Korean). Thus the source concepts of the excessive degree markers constitute a subset of those of the elative degree markers. The conceptual network of elative and excessive degree markers, with the meanings of the source lexemes, can be shown as Fig. 3.

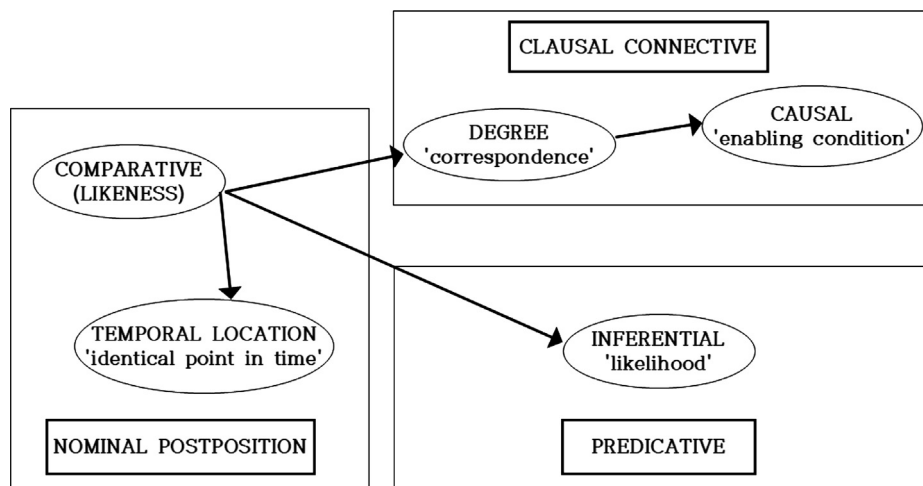


Fig. 2. Functional network of equatives.

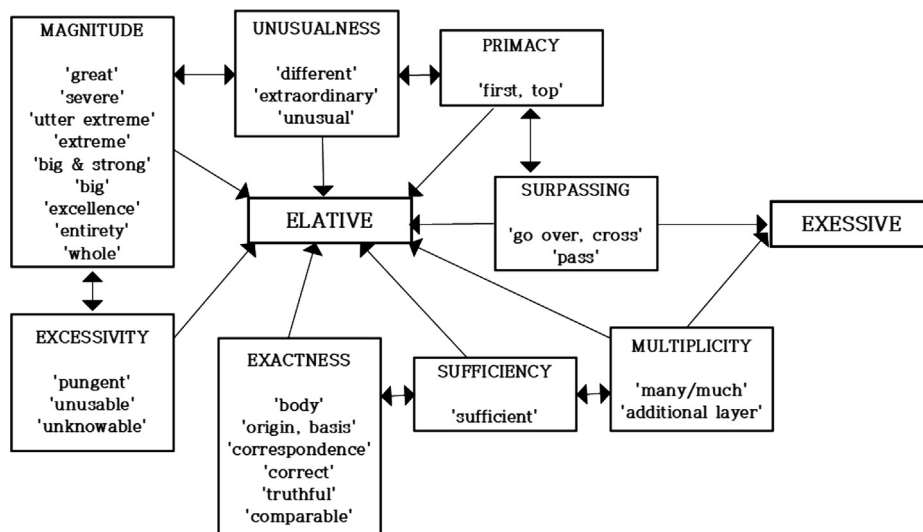


Fig. 3. Conceptual network of elative and excessive degree markers.

Table 7
The main source schemas for comparative constructions.

Source schema	Label of schema
<i>X is Y surpasses Z</i>	Action
<i>X is Y at Z</i>	Location
<i>X is Y from Z</i>	Source
<i>X is Y to Z</i>	Goal
<i>X is Y, Z is not Y</i>	Polarity
<i>X is Y, then Z</i>	Sequence
<i>X is Y (like) Z</i>	Similarity
<i>X and Z, X is Y</i>	Topic

4.5. A crosslinguistic comparison

We have seen in the preceding exposition the diverse markers used in the comparative constructions in contemporary Korean as well as in history of Korean. We will briefly view this state of affairs from a crosslinguistic perspective. In his pioneering work, [Ultan \(1972\)](#) analyzed three basic comparative predications, i.e. equative, comparative (of inequality), and relative superlative, based on a survey of 123 languages.¹¹

[Ultan \(1972\)](#) notes that comparatives denoting inequality (i.e. superior and inferior) tend to use ‘separative’ standard markers (e.g. ablative, partitive-genitive, negative) and ‘sociative’ features (e.g. dative, relative, instrumental-comitative), reflecting the similarities between the comparee and the standard. Korean also fits in this crosslinguistic profile, as seen with the MK standard markers *-lawa* (< ‘with’ instrumental) and *-Alon* (< ‘from’ ablative). The use of transferentive in Korean, which signals a change of scenes, is also similar to ablative in the sense that both denote ‘departure’ or ‘separation’ from the standard. [Ultan’s \(1972\)](#) generalization that superlative standard tends to be more separative than sociative is also applicable to Korean, in that the two markers *-eyse* and *-cwungey(se)* are functionally polysemous with the locative (‘at/in’) and the ablative (‘from’) meanings.

With reference to Korean equatives, [Ultan \(1972: 122\)](#) notes that Korean uses the noun *man* meaning ‘size’ to designate the correspondence (note, however, that more accurately *man* makes reference to ‘amount’ either in quantity or quality). The counterpart of other markers such as ‘equally’ ‘like, as’, etc. in Finnish, and ‘equally’ in Chinese, etc., for equatives is also found in Korean, i.e. *-kathi* ‘be like’.

[Ultan \(1972\)](#), in agreement with previous research ([Sapir, 1958: 144–145](#), [Rohr, 1929: 10–11](#), [Jespersen, 1965\[1924\]: 245–246](#)), points out that semantically comparatives (i.e. inferior and superior) and superlatives are slightly different aspects of the same basic concept, because both constructions represent binary comparisons, with the only difference being explicit or implicit standards (p. 124). This claim is also supported from the Korean situation, in which inferior, superior and superlative are under the category of Non-equative, in which the markers are developed from such notions as Departure and Shift (see [Fig. 1](#) above).

An intriguing approach to grammaticalization of comparatives is presented in [Heine \(1997: 109–130\)](#). [Heine \(1997\)](#) analyzes the crosslinguistic sources of comparatives by way of event schemas as [Table 7](#) (p. 112), in which all target schemas mean ‘X is Y-er than Z’.

All the schemas in [Table 7](#) signal inequality of the qualities and thus are applicable to superiors and inferiors only. When Korean superior and inferior comparative constructions are applied to this conceptual schema analysis, it is found that Korean comparatives, listed in [Table 3](#), largely fall into four categories of source schemas, as in (20):

- | | | |
|------|---|----------------------------|
| (20) | a. <i>Z-pota(ka)</i> ‘than’ (< ‘after seeing Z; seeing Z and then’) | Sequence |
| | b. <i>Z-twuko(n)</i> ‘than’ (< ‘after storing Z; storing Z and then’) | Action; Sequence |
| | c. <i>Z-eyse</i> ‘than’ (< ‘after existing at Z; from Z’) | Location; Sequence; Source |
| | d. <i>Z-lawa</i> ‘than’ (< ‘with’ (?)) | Location(?) |
| | e. <i>Z-Alon</i> ‘than’ (< ‘from’ (?)) | Source |

As shown in (20), the most productive schema is Sequence schema, indicated by the converb markers *-a/-e* and *-ko*, the most frequently used verbal connectives, of which one of the functions is to mark sequence. Similarly, the use of the Source schema in two markers is exhibited in the postpositional particles *-eyse* and *-Alon*, marking ablative (note, however, that the MK *-Alon* has not yet been analyzed in full detail; see [Table 3](#)). The Location schema is also attested in the marker *-eyse* which is ultimately traceable to the verb of existence *is(i)-* ‘exist’. In this comparative marker the verb of existence designates the starting point. However, it is not entirely clear if the MK and EMoK *-lawa* is based on the Loca-

¹¹ [Ultan \(1972\)](#) also notes earlier studies of comparatives based on multiple languages, e.g. [Zierner \(1884\)](#), [Valin \(1952\)](#), [Small \(1929\)](#), [Raun \(1960\)](#), and [Canger \(1966\)](#).

tion schema, because its basic meaning is accompaniment (i.e. comitative ‘with’) rather than existence. It may, however, be interpreted as indicating coexistence, in the absence of the Accompaniment schema.¹²

Still another reference suitable for a crosslinguistic analysis is Kuteva et al. (2019), an extensive lexicon for source lexemes and target grammatical forms across languages. Kuteva et al. (2019: 478) list the following sources of comparatives and the forms with which such grammaticalization has been attested:

- (21) a. **Ablative**: Archaic Chinese *yu*; Latin ablative case suffix; Bulgarian *ot*; Bijie Yi *ka*; Tibetan *-nas*; Turkish ablative suffix; Aranda *-nge*
 b. **Exceed**: Duala *buka*; Yabem *-lelec*; Thai *kwaa*; Vietnamese *hon*; Yoruba *ju*; Bari *to-tongun*; Wolof *gen*; Igbo *ka*; Margi *mdia*; Banda *dere*; Fulfulde *buri*; Swahili *ku-shinda*; Kikuyu *gukira*; Ewe *wú*; Bulu *dañ*; Gbaya *gán*; Vai *bére*; Susu *dangi*; Zande *susa*; Teso *aki-telekarit*
 c. **How? (W-Question)**: Hungarian *mint*; Colloquial German *wie*?
 d. **Locative**: Old Chinese *yu*; Primi *to*; Naga *ki*; Ake *nen*; Hungarian *-nál*
 e. **Pass**: Twi *sej*; Baka *wot*; Kisi *hiòù*; Tswana *go feta*; Lao *kua*; Turku PA *fut*; Ndjuka CE *pasa*
 f. **Recipient**: Rapanui *ki*; Susu *be*
 g. **Resemble**: Archaic Chinese *ru*; Early Modern Chinese *si*; Late Archaic and Han Chinese *bi*; Chinese *xiang*; Colloquial German *wie*
 h. **Up**: Zhaba *tha*; Chukchi *-ik*; Naga *-ki*; Ubykh *-n*; Miwok *-y*; Salinan *ti*; Mandinka *ma*; Tamazight *fell/foull*; Tamil *-il-*; Mapuche *meu*; many Polynesian languages

Kuteva et al. (2019: 37) note that crosslinguistically, ablative markers form one of the most common means of encoding the standard in comparative constructions (see also Stassen, 1985; Heine, 1997), and report that other researchers (Noonan and Mihás, 2007: 18-19) have argued that case syncretism between ablative and comparative is attested in a large number of languages. In view of this, Korean, with the use of ablative in comparatives, also fits into this crosslinguistic pattern. Furthermore, Korean also has Locative (e.g. *-eyse* and *-lawa*) as a shared feature with crosslinguistically attested grammaticalization. However, other sources are not found among the grammaticalization scenarios of the Korean comparative standard markers.

5. SUMMARY AND CONCLUSION

Korean has a large number of markers signaling diverse notions involved in comparative constructions. We have looked at the types of comparatives that are used in contemporary Korean and analyzed the source semantics of the comparative markers, such as standard markers and degree markers. We noted that the same standard marker is shared by superior and inferior comparatives and that only a small set of standard markers are used in equatives and superlatives. The degree markers are limited in number for superiors, inferiors and superlatives, whereas those for elatives (and moderately for excessives) are considerably higher in number. We argue that the multiplicity of the relative degree markers is due to the fact that the notion of relative degree is not high on the grammaticality continuum and thus they have not undergone grammaticalization processes to a great extent. The source concepts for these relative degree markers are Surpassing, Multiplicity, Magnitude, Excessivity, Unusualness, and Exactness. And the source concepts for the excessive degree markers are Surpassing and Multiplicity, a subset of the source concepts of relative degree markers.

With respect to grammaticalization mechanisms, we concluded that Desemanticization is evident in many of the comparative markers, and thus Extension is also observable, even though many markers of superlative, relative, excessive degree markers do not exhibit noticeable context extension phenomena. Decategorialization is also variable: some forms show loss of categorial properties to a great extent, whereas some others, especially the degree markers for elatives and excessives, do not. Erosion is largely limited, with a few exceptions.

From historical data sources, we identified many more markers that were used for comparatives but fell into disuse in MoK. However, the source concepts of these markers, including contemporary as well as historical forms, are largely stable, only with a few additions to the contemporary inventory. Multiplicity of the forms in history points to the constant renewal of forms despite the presence of the forms for the same function. Based on our analysis, we created conceptual and functional networks that are visible in the comparatives in Korean, and further observed that the concepts and schemas used in Korean are largely consonant with those attested in literature.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

¹² In Heine (1993), the Accompaniment schema is among the nine source schemas of auxiliaries.

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