Emotive Terms in Korean: from Semantics to Big Data-based Analysis

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1 Introduction: Spectrum of Emotive Terms in Korean

In this chapter, I offer an overview the Semantics and Pragmatics of various terms that reflect the speaker's emotional attitudes in Korean, including *emotive color terms, racial slurs, emotive taste terms*, and *temperature terms*. At the interface of Pragmatics and Semantics, I show how the dynamic paradigm of multiple expressives, a target emotive term and other emotive expressions in the sentence, can be predicted by the *Compatibility Condition Model* and the *Compatibility Condition Index* (Yoon 2015, 2018, 2021a).

Japanese/Korean Linguistics 30 Edited by Sara Williamson, Adeola Aminat Babayode-Lawal, Laurens Bosman, Nicole Chan, Sylvia Cho, Ivan Fong, and Kaye Holubowsky. Copyright © 2023, CSLI Publications. I first focus on the Semantics of various terms that reflect the speaker's emotional attitudes in Korean, including *emotive color terms, racial slurs, emotive taste terms*, and *temperature terms*. In exploring extremely complex connotational nuances in 77 variants of emotive color terms (Yoon 2018), for example, I show the regularity of how such abundant derivations can be achieved by systematic phonetic and morphological alternations.

(1) 77 variants of kamah-ta 'black'

- i. kama-nolukkeyha-ta 'yellowish black'
- ii. kamah-ta 'vivid deep black'
- iii. kama-kamah-ta 'very vivid deep black'
- iv. kam-ta 'vivid black'
- v. kamti-kam-ta 'vivid black or blackish in places'
- vi. keme-kemeh-ta 'very pale black'
- vii. kemeh-ta 'pale black'
- viii. kamwu-kkulum-ha-ta 'slightly grayish deep blackish'
- ix. kamwu-taytay-ha-ta 'un-refreshingly deep blackish.neg.att'
- x. kamwu-tayngtayng-ha-ta 'unbecomingly deep blackish.neg.att'
- xi. kamwu-ley-ha-ta 'pale deep blackish'
- xii. kamwu-swukswuk-ha-ta 'pleasantly plain deep blackish.pos.att'
- xiii. kamwu-suley-ha-ta 'deep blackish'
- xiv. kamwu-sulum-ha-ta 'deep blackish'
- xv. kamwu-capcap-ha-ta 'somber(/dull/cheerless) deep blackish.neg.att'
- xvi. kamwu-cokcok-ha-ta 'unevenly blackish.neg.att'
- xvii. kamwu-chikckik-ha-ta 'somber(/dull/cheerless) deep black.neg.att'
- xviii. kamwu-thoythoy-ha-ta 'messy murky deep blackish.neg.att'
- xix. kam-phalah-ta 'bluish vivid black'
- xx. kemwu-kkulum-ha-ta 'slightly grayish light blackish'
- xxi. kemwu-teytey-ha-ta 'somewhat vulgar light blackish.neg.att'
- xxii. kemwu-teyngteyng-ha-ta 'unbecomingly light blackish.neg.att'
- xxiii. kemwu-rey-ha-ta 'pale light blackish'
- xxiv. kemwu-swukswuk-ha-ta 'pleasantly plain light blackish.pos.att'
- xxv. kemwu-suley-ha-ta 'light blackish'
- xxvi. kemwu-sulum-ha-ta 'light blackish'
- xxvii. kemwu-cepcep-ha-ta 'somber(/dull/cheerless) light blackish.neg.att'
- xxviii. kemwu-cwukcwuk-ha-ta 'unevenly light blackish.neg.att'
- xxix. kemwu-chwukchwuk-ha-ta 'light blackish and damp'
- xxx. kemwu-chwungchwung-ha-ta 'gloomy light blackish.neg.att'
- xxxi. *kemwu-chikchik-ha-ta* 'somber(/dull/cheerless) light blackish.neg.att'
- xxxii. kemwu-thwuythwuy-ha-ta 'messy murky light blackish.neg.att'
- xxxiii. kemwu-kkulum-ha-ta 'grayish light blackish'
- xxxiv. kama-malswuk-ha-ta 'black and neat (well-groomed).pos.att'

- xxxv. kama-(mwu)thulum-ha-ta 'black and chubby (face)'
- xxxvi. kama-pancilu-ha-ta 'black and glossily (sleekly)'
- xxxvii. kemwus-kemwus-ha-ta 'black or blackish in places'
- xxxviii. kem-ta 'black'
- xxxix. kemti-kem-ta 'extremely black'
 - xl. kem-pwulk-ta 'blackish and red'
 - xli. kem-chukchuk-ha-ta 'unpure black'
 - xlii. kem-pheleh-ta 'blackish and deep blue/green'
 - xliii. kem-phwulu-ta 'blackish and blue/green'
- xliv. *kem-phwulu-cepcep-ha-ta* 'somber(/dull/cheerless) blackish and blue/greenish.neg.att'
- xlv. kkamah-ta 'vivid deep black'
- xlvi. kkamwu-kkulum-ha-ta 'grayish and somewhat vivid deep blackish'
- xlvii. kamwu-taytay-ha-ta 'somewhat vulgar vivid deep blackish.neg.att'
- xlviii. *kkamwu-tayngtayng-ha-ta* 'unbecomingly somewhat vivid deep blackish.neg.att'
- xlix. kkamwu-ley-ha-ta 'pale somewhat vivid deep blackish'
 - l. *kamwu-swukswuk-ha-ta* 'pleasantly plain somewhat vivid deep blackish.pos.att'
 - li. kkamwu-sulum-ha-ta 'somewhat vivid deep blackish'
 - lii. *kkamwu-capcap-ha-ta* 'somber(/dull/cheerless) somewhat vivid deep blackish.neg.att'
- liii. kkamwu-cokcok-ha-ta 'unevenly somewhat vivid deep blackish'
- liv. *kkamwu-chikckik-ha-ta* 'somber(/dull/cheerless) strong black.neg.att'
- lv. kkamwu-thoythoy-ha-ta 'murky somewhat vivid deep blackish'
- lvi. kkamwus-kkamwus-ha-ta 'vivid deep black or blackish in places'
- lvii. kkamwus-ha-ta 'somewhat seemingly vivid deep blackish'
- lviii. kkam-ta 'strong vivid black'
 - lix. kkemeh-ta 'strong deep black'
 - lx. kkemwu-kkulum-ha-ta 'slightly grayish and slightly strong deep blackish'
- lxi. *kkemwu-teytey-ha-ta* 'somewhat vulgar slightly strong deep blackish.neg.att'
- lxii. *kkemwu-teyngteyng-ha-ta* 'unbecomingly slightly strong deep blackish.neg.att'
- lxiii. kkemwu-ley-ha-ta 'pale yet slightly strong deep blackish'
- lxiv. kkemwu-sulum-ha-ta 'slightly strong deep blackish'
- lxv. kkemwu-swukswuk-ha-ta 'pleasantly plain slightly strong deep blackish.pos.att'
- lxvi. kkemwu-cepcep-ha-ta 'somber(/dull/cheerless) slightly strong deep blackish.neg.att'
- lxvii. kkemwu-cwukcwuk-ha-ta 'unevenly slightly strong deep blackish'

lxviii. kkemwu-chwukckwuk-ha-ta 'strong deep black and damp'

lxix. kkemwu-chwungckwung-ha-ta 'gloomy strong deep black.neg.att'

lxx. kkemwu-thwuythwuy-ha-ta 'murky slightly strong deep blackish'

lxxi. kkemwus-kkemwus-ha-ta 'strong deep black or blackish in places'

lxxii. kkemwus-ha-ta 'somewhat seemingly strong deep blackish.neg.att'

lxxiii. kkem-ta 'strong black'

lxxiv. say-kkamah-ta 'very vivid deep black'

lxxv. says-kkamah-ta 'very vivid deep black'

lxxvi. si-kkemeh-ta 'excessively strong deep black.neg.att'

lxxvii. si-khemeh-ta 'excessively strong deep black.neg.att'

I further show how these emotive variants systematically convey the speaker's positive or negative emotional attitude that is reflected in a particular derivation of the base term, in addition to its base meaning. To capture the precise meaning differences, I propose a hybrid analysis of these emotive terms at the interface of Pragmatics and Semantics. Further, I show how the dynamic paradigm of multiple expressives, a target emotive term and other emotive expressions in the sentence, can be predicted by the *Compatibility Condition Model* and the *Compatibility Condition Index* (Yoon 2015, 2018, 2021a). The rigorous investigation of numerous possible variants for a single base term reveals the systematicity of expressives, as *part of our grammar*, while the identification of another case of expressive element in language further supports the notion of *multidimensionality* (Potts 2005 et seq.).

In examining the Compatibility Condition on the polarity/degree of emotional attitude for the emotive elements in Korean (Yae and Yoon 2017, Yoon 2021b, 2022a,b), I show the results obtained from a big data-based trend analysis including usages in Twitter, news articles, and blogs. Two main issues are reexamined here: one concerns constraints on the Compatibility Condition and how to measure the degree of compatibility; and the second concerns how strict the compatibility condition of expressives is, and what happens if the condition is flouted. One implication of the current study is that, by specifying an Emotional Index for expressive items in the sentiment lexicon, the Compatibility Condition, as a grammatical constraint, predicts how multiple occurrences of compatible expressives can be used to strengthen a speaker's positive or negative emotion. Finally, I suggest a condition for rescuing by pragmatic effects as a secondary mode of pragmatic sanctioning in exceptional cases of co-occurrences of conflicting attitudinal components, which is predicted by the sarcasm/ironv regions in the Compatibility Condition Model.

2 Semantic-Pragmatic Analysis

2.1 The Expressive Dimension of Racial Slurs

In Yoon 2015, I explore the semantic properties of racial slurs in Korean, as in (2), and shows that slurs are expressive items in the sense of Potts (2005 et seq.). The expressive dimension of racial slurs is shown by the main characteristics of expressives suggested by Potts.

- (2) That *bastard* Frederic is famous.
- (3) Ku ppalkayngi nom-un yumyenghay. that commie.neg.att jerk.neg.att-Top famous 'That commie jerk is famous.'

2.2 Compatibility Condition Model

Based on the observation of empirical data with regard to the compatibility between slurs and other expressives, I propose the following equation of Compatibility Condition Index (CCI) to calculate the compatibility between two expressive items (Yoon 2015:(25)).

(4) Compatibility Condition Index (CCI)

 = length of overlapped range of narrow Expressive Index (EI)
 = length of broad Expressive Index (EI)
 × 100(%)

Further, to show how the CCI correctly predicts the distributional pattern of expressives, I propose the following *Compatibility Condition Model (CCM) for multiple expressives*:



Figure 1. Compatibility Condition Model (CCM; Yoon 2015)

This CCM is supported by the following four pieces of evidence. First, the cooccurrence patterns between slurs and other expressive nouns is predicted to follow the patterns suggested in CCM, as shown in the following Table 1.

epithets for 'guy'	slurs				
	ppalkayngi 'commie' kkamtwungi 'nigger/blackie' [-1,5]	kemtwungi 'darkie' [–1,0]	hukin 'black people' [-1,1]	hukhyeng 'black brother' [0,1]	
saykki 'bastard' [-1,5] nom.casik 'jerk' [-1,0] namca 'man/guy' [-1,1] ssi 'Mr./Ms.' [0,1] pwun, nim 'sir' [.5,1]	high compatibility mid compatibility low compatibility incompatibility		_		

Table 1. The compatibility of ethnic slurs and expressive nouns

case markers	slurs					
	ppalkayngi 'commie' kkamtwungi 'nigger/blackie' [-1,5]	kemtwungi 'darkie' [-1,0]	hukin 'black person' [-1,1]	<i>hukhyeng</i> 'black brother' [0,1]		
ttawi-ka 'Nom.ANTI.HON' ttawi-eykey 'Dat.ANTI.HON'[=1 = 5]	high compatibility	mid compatibility				
ka 'Nom.NEU' eykey 'Dat.NEU' [-1,1] kkeyse 'Nom.HON' kkey 'Dat.HON' [.5,1]	low compatibility					
	incompatibility					

Second, a similar pattern is expected between slurs and case markers with different emotional attitudes, as given in Table 2.

Table 2. Compatibility of slurs and case markers

Third, another way to test the compatibility condition is testing the distribution of slurs against (anti-)honorific markers, as shown in Table 3.

(anti-)honorific markers	slurs				
	ppalkayngi 'commie' kkamtwungi 'nigger/blackie' [-1,5]	kemtwungi 'darkie' [-1,0]	hukin 'black person' [-1,1]	hukhyeng 'black brother' [0,1]	
-peli 'NEG.ATT' [-1,5] ø 'NEU.ATT' [-1,1]	high compatibility low compatibility	mid compatibility			
-si 'SUBJ.HON' [.5,1]	incompatibility				

Table 3. Compatibility of slurs and (anti-)honorific markers

Finally, the compatibility model can be also tested by the naturalness of cooccurrence between slurs and negative or positive verbal markers, as shown in Table 4. In all these tables, we expect the high compatibility (dark gray regions) between two emotive terms sharing their emotive stance (e.g. two strong negative terms, two positive terms).

verbal markers	slurs				
	ppalkayngi 'commie' kkamtwungi 'nigger' [-1,5]	kemtwungi 'darkie' [–1,0]	hukin 'black person' [-1,1]	hukhyeng 'black brother' [0,1]	
-peli 'NEG.ATT' chve- 'intensely' [-15]	high compatibility	mid compatibility			
0 'NEU.ATT' [-1,1]	low compatibility				
-si 'SUBJ.HON' -cwu 'favorably' [.5,1]	incompatibility				

Table 4. Compatibility of slurs and various verbal markers

This prediction is borne out as shown in the co-occurrence patterns of slurs and expressive nouns in Korean National Corpus *The Sejong Corpus*, as in Table 5.

epithets for 'guy'	slurs				
	Strong Neg kkamtwungi 'blackie/ nigger' [-1,5]	Neg <i>kemtwungi</i> 'darkie' [–1,0]	Neut hukin 'black person' [-1,1]	Pos hukhyeng 'black brother' [0,1]	Strong Pos hukin-sensayng 'sir. black' [.5,1]
Strong Neg saykki 'bastard'	CCI: 100% high compatibility	50%	25%	0%	0%
Neg nom/casik 'ierk' [-1.0]	CCI: 50% mid compatibility	100%	50%	0%	0%
Neut namca 'man'	CCI: 25% low compatibility	50%	100%	50%	25%
Pos ssi 'Mr./Ms.' [0, 1]	CCI: 0% in- compatibility	0%	50%	100%	50%
Strong Pos pwun/nim 'sir' [.5,1]	0%	0%	25%	50%	100%

 Table 5. Co-occurrences of slurs and expressive nouns in Korean National Corpus

 The Sejong Corpus

2.3 Nonconformity Cases

In 2.1-2.2, I have shown how to predict the compatibility between emotionally charged items. In 2.3, however, I show that there are several exceptional cases to CCM, and suggest another condition for rescuing by pragmatic effects as a secondary mode of pragmatic sanctioning in exceptional cases of co-occurrences of conflicting attitudinal components, as shown in the following four cases. First, when we see the case of juxtaposition of opposite attitudes, pragmatic effects such as sarcasm, irony, or hyperbole arise. In (5) below (Yoon 2015:(42)), the juxtaposition of strong negative slur 'commie' and high honorific form 'sir/ma'am' exhibits high frequency in Google search to convey a sarcastic flavor toward the North Korean.

- (5) a. Ppalkayngi-pwun: 6,490 hits on Google search (June 27, 2014) commie.neg.att-sir.hon
 - b. Ppalkayngi-nim: 32,700 hits on Google search (June 27, 2014) commie.**neg.att**-sir.**hon**
 - 'The (cidishonorable) commie, the (cihonorable) being.'

Second, we frequently observe the case of flip-flop of bipolar emotional index to convey strengthened emotion by flipping the otherwise negative emotive stance to positive one, as in (6b), or to convey intimacy, as in (7) in English (Yoon 2015:(44-46)), as well as in Korean.

(6) a. That fucking bastard Burns got promoted again!

b. That's really fucking brilliant!

(7) Hiya, bitches! (to extremely close friends)

Third, code-switching across different levels in honorific dimension is another universally observed strategy to modulate social distance, as shown in (8) (Yoon 2015:(48)).

(8) Sakwa-ka. o-ass-eyo. sakwa-ka. oa-ss-e!
 apple-Nom come-Pst-Decl.hon apple-Nom come-Pst-Decl.anti.hon
 'Here come the apples. Here are the apples!' (by an apple vendor)

Finally, the autonomy of emotion- and honorific-dimensions, shown in the following English and Korean examples (Yoon 2015:(50-51)), further supports the notion of multidimensionality.

(9) a. "Sir, You Bastard"(book title by G. F. Newman, 1970, UK)

b. "How dare you, sir!"

(spoken by the waiter, Jack, to a rude patron at an upscale restaurant, *"Will & Grace" NBC TV series*)

(10) Hoycangnim-kkeyse cwusik-ul maykakhay-peli₂-si₃-ess-e.
 president-Nom.hon stock-Acc sell-neg.att-subj.hon-Pst-Decl
 'The (_{CI}honorable)₁ (_{CI}honorable)₃ president has (_{CI}regreattably)₂ sold his stocks.'

This is predicted by the *sarcasm/irony regions* in the Compatibility Condition Model.



Lexical Category 1

Figure 2. Sarcasm and Irony areas in CCM

3 Big Data Analysis

Although the empirical study with Sejong corpus above (table 5) supports CCM, I reexamine the Compatibility Condition on the polarity/degree of emotional attitude for the emotive elements in Korean (Yae and Yoon 2017, Yoon 2021b, 2022a,b). I discuss results obtained from *a big data-based trend analysis* including usages in Twitter, news articles, and blogs. Two main issues are reexamined in these studies: one concerns constraints on the Compatibility Condition and how to measure the degree of compatibility; and the second concerns how strict the compatibility condition of expressives is, and what happens if the condition is flouted. The results from the big data-based trend analysis reveal which part of the prior theoretical analysis is valid in

reality and which part requires revision.

First, data source of the study on the racial slur kkamtwungi 'blackie, nigger' is as follows.

Data source	Total number of collected items	Number of entries (percentage)
Twitter	16,948,327	750 (0.0044%)
News	1,057,758	62 (0.0059%)
Blog (weblogs)	171,719	9 (0.0052%)

Table 6. Data source of kkamtwungi 'blackie, nigger'

Second, distribution across different text categories of the collected data in Table 7 reveals that ethnic slurs like kkamtwungi 'blackie, nigger' are frequently used in informal contexts.

Formality of text categories	Categories of texts	2015-07-04-2016-07-05	Percentage
Semi-formal	Current events	13	1.58%
	Life/Culture	22	2.68%
	Entertainment	7	0.85%
	Sports	3	0.37%
Formal	Economy	0	0.00%
	Tech	3	0.37%
	World	23	2.80%
	Politics	0	0.00%
Informal	Personal posting at Twitter/blogs	750	91.35%
Total		821	100%

Table 7. Categories of texts containing kkamtwungi 'blackie, nigger' in 2015, 2016

Third, the following word cloud for kkamdwungi 'blackie, nigger' clearly exhibits that it typically accompanies negative emotive words.



4 Other Emotive Terms in Korean (vs. English)

The following Word cloud shows different sentiment between two variants of taste terms like 'bitter.' See Yoon (2018, 2021a, b, 2022a, b) for sentiment in color terms and temperature terms in Korean.



Figure 5. Word Cloud for ssupssul 'bitter.neg'

5 Sentiment of Onomatopoeia and Mimetic Words

Finally, ideophones (e.g. nomatopoeia and Mimetic words) in Korean also show rich emotive variants, as in (11).

(11) Onomatopoeia and Mimetic words in Korean: Positive vs. Negative variants

a. Alloktallok vs. Ellwuktellwuk 'colorful'

- b. Pokulpokul vs. pwukulpwukul '(boiling sound)'
- c. Photongphotong vs. phitwungphitwung 'chubby'
- d. Panccakpanccak vs. penccekpenccak 'flashing'
- e. Chokchok vs. cwukchuk 'moist'
- f. Salccak vs. sulccak 'gently vs. sneakily'
- g. Colcol vs. cwulcwul '(flowing water sound)'

One implication of the current study is that, by specifying an *Emotional Index* for expressive items in the sentiment lexicon, the Compatibility Condition, as a grammatical constraint, predicts how multiple occurrences of compatible expressives can be used to strengthen a speaker's positive or negative emotion.

6 Conclusion

In exploring extremely complex connotational nuances in 77 variants of emotive color terms, for example, I show the regularity of how such abundant derivations can be achieved by systematic phonetic and morphological alternations. I further show how these emotive variants systematically convey the speaker's positive or negative emotional attitude that is reflected in a particular derivation of the base term, in addition to its base meaning. The rigorous investigation of numerous possible variants for a single base term reveals the systematicity of expressives, as *part of our grammar*, while the identification of another case of expressive element in language further supports the notion of *multidimensionality* (Potts 2005 et seq.).

I reevaluate the Compatibility Condition on the polarity/degree of emotional attitude for the emotive elements in Korean (Yae and Yoon 2017, Yoon 2021b, 2022a,b). In discussing the results obtained from *a big data-based trend analysis* including usages in Twitter, news articles, and blogs, two main issues are reexamined: one concerns constraints on the Compatibility Condition and how to measure the degree of compatibility; and the second concerns how strict the compatibility condition of expressives is, and what happens if the condition is flouted. The new results from the big data-based trend analysis reveal which part of the prior theoretical analysis is valid in reality and which part requires revision. One implication of the current study is that, by specifying an *Emotional Index* for expressive items in the sentiment lexicon, the Compatibility Condition, as a grammatical constraint, predicts how multiple occurrences of compatible expressives can be used to strengthen a speaker's positive or negative emotion. Furthermore, I suggest a condition for rescuing by pragmatic effects as a secondary mode of pragmatic sanctioning in exceptional cases of co-occurrences of conflicting attitudinal components, which is predicted by the *sarcasm/irony regions* in the Compatibility Condition Model. More analysis of ideophones and honorific systems are in my future agenda.

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