A CONSTRAINT-BASED APPROACH TO REDUPLICATION OF NON-IDEOPHONIC WORDS IN KOREAN*

Chung, Chin Wan

Indiana University

1. Introduction

Recently there have been a number of studies on partial reduplication in Korean ideophones which include Chung (1997, 1998), Davis and Lee (1994, 1996), Jun (1994), Kang (1998), and Kim (1996) to name a few. Reduplication in non-ideophonic words in Korean has not been pursued as frequently as ideophones partly because of the productivity of reduplication in such words.

The main purpose of this study is to shed some light on patterns of reduplication in non-ideophonic words in Korean within the framework of Optimality Theory (Prince and Smolensky 1993), especially within the more advanced version of Optimality Theory called Correspondence Theory (McCarthy and Prince (hereafter M&P) 1995). In this study I divide non-ideophonic words in Korean into two groups. One group belongs to Native Korean words (NK) and the other to Sino-Korean words (SK). In both NK and SK, full reduplication is productive but partial reduplication is not so productive as full reduplication.

The organization of this study is as follows. In section 2, I introduce data on full and partial reduplication in NK and SK. In section 3, I provide an analysis for patterns of reduplication found with NK and SK. I summarize the analysis in section 4.

1. Data

Full reduplication in NK duplicates the whole base including any feature of the base consonants and the reduplicated part is viewed as being affixed rightward as seen in (1). I analyze the data given in (1) as suffixing type of reduplication because prefixing reduplication duplicates the initial CV of the base which will be discussed in section 3.2. When the base word is reduplicated, the reduplicated word denotes plural and emphatic semantic connotation. In the data given in (1), the copied part is underlined and in boldface.

(1) Full reduplication in NK

Base		Redup.	Gloss
a. /cip/	→	[cip-**c'ip**]	'each house'
b. /s'aŋ/	→	[s'aŋ-**s'aŋ**]	'each pair'
c. /kyəp/	→	[kyəp-**k'yəp**]	'many folds'
d. /koɨl/	→	[koɨl-**koɨl**]	'each county'
e. /kəli/	→	[kəri-**kəri**]	'each street'
f. /kolmok/	→	[kolmok-**k'olmok**]	'each alley'
g. /kaci/	→	[kaci-**kaci**]	'various kinds of'
h. /kunte/	→	[kunte-**kunte**]	'various places'

i. /cʰale/	→	[cʰare-**cʰare**]	'in due order'
j. /kupi/	→	[kupi-**kupi**]	'at every bend'
k. /nal/	→	[na-**nal** (i)]	'every day'
l. /tal/	→	[ta-**tal** (i)]	'every month'

The last two examples in (1) show some difference from the rest of the data in that the coda of the base word is not realized in the output.

Partial reduplication in NK reduplicates the initial CV of the base, and the reduplicant is affixed leftward as shown by the data given in (2). Most data (a-d) of the prefixing partial reduplication are time adverbial words. When a base word is partially reduplicated, the output has meaning that denotes one more day, week, or year than the time represented by the base word. Thus, when the base word /kɨlpʰi/ 'two days hence' is partially reduplicated, the output [**kɨ**-kɨlpʰi] denotes 'three days hence'. When the data that are not time adverbial words are partially reduplicated, they have emphatic connotation.

(2) Partial reduplication in NK

Base		Redup.	Gloss
a. /kɨcək'e/	→	[**kɨ**-kɨcək'e]	'three days ago'
b. /kɨlpʰi/	→	[**kɨ**-kɨlpʰi]	'four days hence'
c. /cinanhæ/	→	[**ci**-cinanhæ]	'two years ago'
d. /cinancu/	→	[**ci**-cinancu]	'two weeks ago'
e. /pik'ota/	→	[**pi**-pik'ota]	'twist'
f. /təuk/	→	[**tə**-təuk]	'more and more'
g. /təkuna/	→	[**tə**-təkuna]	'moreover'

Full reduplication in SK displays a reduplicating pattern which is different from that of NK. In SK, each syllable of the base is reduplicated and the reduplicated syllable is affixed right after that syllable showing consecutive type of reduplication (AB → A**AB**B) as can be seen in (3). The semantic relation holding between the base and the reduplicated form is similar to that of the full reduplication in NK denoting emphatic and plural.

(3) Full reduplication in SK[1]

Base		Redup.	Gloss
a. /kikwe/	→	[ki-**ki**kwe-**kwe**]	'very strange'
b. /kimyo/	→	[ki-**ki**myo-**myo**]	'marvelous'
c. /hyəŋsæk/	→	[hyəŋ-**hyəŋ**sæk-**s'æk**]	'all forms and colors'
d. /cason/	→	[ca-**ca**son-**son**]	'generation after generation'
e. /sipi/	→	[si-**si**pi-**pi**]	'judgement'
f. /sikak/	→	[si-**si**kak-**k'ak**]	'hourly'
g. /hilak/	→	[hi-**hi**naŋ-**nak**]	'rejoicing'
h. /cəŋtaŋ/	→	[cəŋ-**cəŋ**taŋ-**taŋ**]	'fair and square'
i. /kucəl/	→	[ku-**ku**cəl-**cəl**]	'every phrase and sentence'
j. /ulcʰaŋ/	→	[ul-**ul**cʰaŋ-**cʰaŋ**]	'luxuriant'

Partial reduplication in SK reduplicates the initial syllable (CVC) of the base and the reduplicant is affixed leftward. The semantic connotation holding between the base and the reduplicated form in this type of reduplication is similar to that found in NK partial reduplication. Thus, when the base word /cənnal/ 'yesterday' is partially reduplicated, the reduplicated form [**cən**-cənnal] denotes 'two days ago' as can be seen in (4).

(4) Partial reduplication in SK

Base		Redup.	Gloss
a. /cənnal/	→	[**cən**-cənnal]	'two days ago'
b. /cəncu/	→	[**cən**-cəncu]	'two weeks ago'
c. /cəntal/	→	[**cən**-cəntal]	'two months ago'
d. /manse/	→	[**man**-manse]	'cheers'

3. Analysis

In this section, I will provide an analysis within Correspondence Theory. First I begin with patterns of reduplication found with NK and will be followed by reduplication in SK.

3.1 Full reduplication in NK

To analyze full reduplication in NK, I have employed the constraints given in (5).

(5) Constraints for full reduplication

a. MAX-BR: Every segment of the base has a corresponding segment in a reduplicant.
b. MAX-IO: Every segment of the input has a correspondent in an output
c. Tensification: In C_1 C_2 (where C is an obstruent), the second consonant should be tensified.
d. IDENT-σ_1 BR (F): The feature of the first syllable of the base is identical with the feature of its corresponding segment in the reduplicant.
e. IDENT-BR (Laryn): The laryngeal feature (fortis or aspiration) is identical in corresponding segments between the base and reduplicant.
f. *lC: The lateral /l/ is not allowed before coronal consonants /n, t, s, c/ in syllable contact.

In an Optimality-Theoretic perspective, full reduplication occurs if MAX-BR, which requires a complete copy between the base and reduplicant, is undominated. Thus, MAX-BR is undominated in this type of reduplication. Tensification, MAX-IO, and IDENT-σ_1 BR (F) are also very high ranked in full reduplication in NK. A crucial ranking relation in this type of reduplication is between Tensification and IDENT-BR (Laryn). Tensification must dominate IDENT-BR (Laryn) because Tensification takes the precedence over IDENT-BR (Laryn) even at the cost of violating IDENT-BR (Laryn). This is illustrated in the constraint table (6).

(6) Tensification » IDENT-BR (Laryn)

/cip+RED/	Tensification	IDENT-BR (Laryn)
a. cip-**cip**	*!	
☞ b. cip-**c'ip**		*

High ranking constraints such as MAX-BR, MAX-IO, IDENT-σ_1 BR (F), and Tensification do not show any particular ranking among them. Thus, MAX-BR, MAX-IO, and IDENT-σ_1 BR (F) should be ranked higher than IDENT-BR (Laryn) by transitivity. The ranking MAX-BR, MAX-IO, IDENT-σ_1 BR (F), and Tensification over IDENT-BR (Laryn) can account for the most data given in (1). But if this ranking is applied to (1k) and (1l), this ranking cannot select the correct optimal form as exhibited in (7).

(7)

/nal+RED/	IDENT-σ_1 BR (F)	Tensification	MAX-IO	MAX-BR	IDENT-BR (Laryn)
☹ a. nal-**nal**					
☞ b. na-**nal**			*!		

In (7), the actual output (b) loses to (a) because (a) satisfies every constraint while (b) does violate MAX-IO once. (b) violates MAX-IO since the coda consonant of the base is not realized in the output. Thus, the constraint ranking in (7) cannot fully account for the data given in (1).

The data given in (1k) and (1l) are interesting. In Korean the nasal plus lateral sequence /nl/ or the lateral plus nasal sequence /ln/ is highly prohibited. One of the ways to avoid the /nl/ or /ln/ sequence is the lateralization of /n/ as shown in (8).

(8) Lateralization (Kim-Renaud 1974/91: 222-4)

a. /cənla/	→	[cəlla]	'name of a province'
b. /cʰənli/	→	[cʰəlli]	'a thousand li (about 400k)'
c. /kʰalnal/	→	[kʰallal]	'the blade of a knife'
d. /pʰulnæ/	→	[pʰullæ]	'smell of grass'
e. /kɨnlo/	→	[kɨllo]	'labor'

But (1k) and (1l) do not undergo lateralization. Instead they follow the other way of avoiding the baned sequence; the lateral /l/ deletes before coronal consonants /n, t, s, c/ as shown by the examples given from (9) to (11).[2]

(9) /l/ deletion in Korean: /ln/ → [_n]

a. /pətɨlnamu/	→	[pətɨnamu]	'a willow'
b. /t'alnim/	→	[t'anim]	'a daughter'
c. /solnamu/	→	[sonamu]	'a pine tree'

(10) /lt/ → [_t]

a. /cʰaltol/	→	[cʰatol]	'quartz'
b. /yəltaci/	→	[yətaci]	'opening and shutting'
c. /miltaci/	→	[mitaci]	'a sliding door'

(11) /ls/ → [_s]

a. /malso/	→	[maso]	'horses and cattle'
b. /pulson/	→	[puson]	'a small fire shovel'

c. /hwalsal/ → [hwasal] 'an arrow'

(12) /lc/ → [_c]

a. /pani̱lcil/ → [pani̱cil] 'sewing'
b. /s'alcən/ → [s'acən] 'a rice store'
c. /c^{h}alco/ → [c^{h}aco] 'glutinous millet'

Based on the /l/ deletion before coronal consonants, we can come up with *lC as given in (5e). This phonological markedness constraint *lC should crucially be ranked higher than MAX-IO. Thus, the very high ranking *lC and IDENT-σ_1 BR (F) will force the optimal form to delete the lateral /l/ of the base instead of the lateralization of /n/ to [l] as is illustrated in the constraint table (13).

(13)

/tal+RED/	IDENT-σ_1 BR (F)	*lC	MAX-IO	MAX-BR
a. nal-**nal**		*!		
☞ b. na-**nal**			*	
c. nal-**lal**	*!			

(a) is not the optimal form because of its violation of the high ranking *lC. (c) is not the optimal form either since it violates IDENT-σ_1 BR (F). The optimal form (b) dodges the violation of both IDENT-σ_1 BR (Place) and *lC by deleting /l/. The constraint *lC can also be applied to the rest of the data given in (1). If it is employed, it will be satisfied trivially. The overall constraint ranking for full reduplication in NK is given in (14).

(14) Constraint ranking for full reduplication in NK

IDENT-σ_1 BR (Place), *lC — Tensification

MAX-IO, MAX-BR — IDENT-BR (Laryn)

3.2 Partial reduplication in NK

The constraints for partial reduplication in NK, which duplicates the initial CV of the base, are presented in (15).

(15) Constraints for partial reduplication in NK

a. Afx≤σ : The phonological exponent of an affix is no larger than a syllable.
b. MAX-IO: Every segment of the input has a correspondent in an output.
c. MAX-BR: Every segment of the base has a correspondent in a reduplicant.
d. NoCoda: Syllables are open.
e. Anchor-L: The left edge of the base and reduplicant shares the same element.
f. Anchor-R: The right edge of the base and reduplicant shares the same element.

In an Optimality-Theoretic perspective, partial reduplication results in if the MAX-BR constraint is violated under the pressure from some higher ranked constraint(s). Since the reduplicant in partial reduplication in NK consists of only CV, we need constraint(s) that can restrict the reduplicant to not only to a single syllable but also to a syllable core (CV). This could be

captured by Afx≤σ and NoCoda. Ranking Afx≤σ and NoCoda over MAX-BR will delimit the size of the reduplicant to CV as is illustrated in the constraint table (16).

(16)

/RED+cinanhæ/	Afx≤σ	MAX-IO	NoCoda	MAX-BR
a. **cin**-cinanhæ			**!	****
☞ b. **ci**-cinanhæ			*	*****
c. **ci**-cinanæ		*!		****
d. **cinan**-cinanhæ	*!		***	**

(c) and (d) are not the optimal forms because they violate the undominated constraints MAX-IO and Afx≤σ each. These two constraints do not show any ranking between them. (a) is not the optimal form because it fares worse on NoCoda than the actual optimal form (b).

The constraint table (16) reflects *the Emergence of the Unmarked* with respect to the prosodic structure of the reduplicant. As M&P (1994, 1995) discuss, the structural characteristics of the reduplicant can be defined by the ranking schema for the emergence of the unmarked as given in (17).

(17) Ranking schema for Reduplication (the Emergence of the Unmarked)
I-O Faithfulness » Phono-Constraints » B-R Identity

Regarding the emergence of the unmarked in partial reduplication in NK, NoCoda which does not play an important role in Korean phonology, serves as a critical role in partial reduplication. The instantiation of the emergence of the unmarked with respect to NoCoda is presented in (18).

(18) The Emergence of the Unmarked in partial reduplication in NK

Schema:	I-O Faithfulness	» Phono-Constraints	» B-R Identity
Instantiation:	MAX-IO	» NoCoda	» MAX-BR

Partial reduplication in NK is prefixing reduplication because the reduplicant is affixed at the left edge of the base. Since this is the case, Anchor-L which, ensures the prefixation of the reduplicant, must dominate Anchor-R, which makes certain that the reduplicant be suffixed. This is illustrated in the constraint table (19).

(19) Anchor-L » Anchor-R

/RED+pik'ota/	Anchor-L	Anchor-R
☞ a. **pi**-pik'ota		*
b. **ta**-pik'ota	*!	

The constraint table (20) illustrates the constraint ranking established so far for the prefixing partial reduplication in NK.

(20)

/RED+kɨlpʰi/	Afx≤σ	MAX-IO	NoCoda	Anchor-L	MAX-BR
a. kɨl-kɨlpʰi			**!		**
☞ b. kɨ-kɨlpʰi			*		***
c. pʰi-kɨlpʰi			*	*!	***
d. kɨlpʰi-kɨlpʰi	*!		**		

In (20), the Anchor-L constraint actually does not show any particular ranking with other constraints. Thus, it may be ranked higher than NoCoda. The overall constraint ranking for prefixing partial reduplication in NK is given in (21).

(21) Ranking for NK prefixing partial reduplication

Afx≤σ, MAX-IO — NoCoda — MAX-BR

Anchor-L — Anchor-R

3.3 Full reduplication in SK

Full reduplication in SK reflects a consecutive type of reduplication (AB → AABB). For the analysis of this type, I have employed the constraints presented in (22).

(22) Constraints for full reduplication in SK

a. Afx≤σ: The phonological exponent of an affix is no larger than a syllable.
b. MAX-BR: Every segment of the base has a correspondent in a reduplicant.
c. Align (RED, L, σ, R)=[Align-RED]: Align the left edge of the reduplicant with the right edge of the base.
d. Tensification: In C_1 C_2 (where C is an obstruent), the second consonant should be tensified.
d. IDENT-BR (Laryn): The laryngeal feature (fortis or aspiration) is identical in corresponding segments between the base and reduplicant.

Since in this type of reduplication each syllable of the base serves as an independent base for the reduplicant, we need a constraint that can restrict the reduplicant to a single syllable. This task can be done by Afx≤σ. Thus, this constraint is undominated in full reduplication in SK. The other two undominated constraints MAX-BR and Align-RED also play an important role in that the former requires a complete copy of the base and the latter calls for the suffixation of the reduplicant. All those three constraints do not show any ranking among them.

Tensification which is ranked very high must outrank IDENT-BR (Laryn). If the constraint ranking between them is reversed, the output will be either tensed or will not be tensed at all to satisfy IDENT-BR (Laryn). The first case is not possible in Korean because that case means a consonant triggering tensification in the syllable coda position is tensed and its correspondent in the reduplicant should have laryngeal feature. This is highly prohibited in Korean phonology because any laryngeal feature in syllable coda position is not allowed. The second case is also

not desirable in Korean because the second obstruent in C_1\$$C_2$ must be tensified even it results in the violation of IDENT-BR (Laryn). This ranking relation is illustrated in (23).

(23)

/sikak+RED/	Afx≤σ	MAX-BR	Align-RED	Tensification	IDENT-BR (Laryn)
a. sikak-**s'ikak**	*!				*
b. si-**sikak**-k'ak	*!		*		*
☞ c. si-**si** kak-**k'ak**					*
d. si-**si** kak-**kak**				*!	
e. sikak-**k'ak**		*!*			*

(a) and (b) are not the optimal forms since they do not reduplicate consecutively violating Afx≤σ consequently. (d) is not the optimal form either because it violates Tensification which is ranked higher than IDENT-BR (Laryn). (e) is not the optimal form since it violates the undominated MAX-BR twice. (c) now emerges as the optimal form which violates IDENT-BR (Laryn) only once. The constraint ranking established in (23) can account for all the data in (3) except (3g). (3g) /hilak/ → [hi-**hi**naŋ-**nak**] 'rejoicing' involves several interesting things with respect to phonology in Korean and reduplication *per se*. Phonologically it involves /l/ weakening. In Korean the lateral /l/ weakens to [r] between two vowels as shown by the examples in (24).

(24) /l/-weakening

a. /kʰwelak/	→	[kʰwerak]	'pleasure'
b. /uləto/	→	[urəto]	'though crying'
c. /ilwon/	→	[irwon]	'one member'

The output form [hi-**hi** rak-**rak**], which has undergone the /l/ weakening, is not the correct output form. (3g) also involves /l/ to [n] change in onset position. In Korean /l/ changes to [n] word-initially or preceded by a consonant in a syllable onset position as can be seen in (25).

(25) /l/ → [n]

a. /lotoŋ/	→	[notoŋ]	'labor'
b. /loin/	→	[noin]	'an old man'
c. /siŋli/	→	[siŋni]	'victory'
d. /kamlo/	→	[kamno]	'sweet dew'

The output form [hi-**hi** rak-**nak**] in which the lateral /l/ has changed to [n] after /k/ is still not the optimal form either. What happens in the optimal output [hi-**hi**naŋ-**nak**] is that firstly the coda consonant of the base /k/ changes to [ŋ] because of the syllable contact which prohibits rising sonority in syllable contact. Secondly, the nasal feature of the onset of the reduplicant is copied back by the corresponding segment in the base changing [r] to [n]. All these can be accounted for by the following additional constraints for full reduplication in SK.

(26) Additional constraints for SK full reduplication

a. Onset Con: /l/ is not allowed in a syllable onset position.

b. *VlV: /l/ is not allowed between two vowels.
c. Syllable Contact (SYLL CON): (Davis et al. 1997)
Coda $ Onset
$Son_1 \geq Son_2$
The sonority of the onset of the second syllable (Son_1) is the same as or less sonorous than that of the coda of the first syllable.

a. IDENT-BR (Nas): The nasal feature of the base consonants is identical with their corresponding segments in the reduplicant.
b. IDENT-IO (Nas): The input and output are identical in terms of nasal feature.

The constraint table (27) illustrates the interaction of constraints given in (27).

/hilak+RED/	SYLL CON	ONSET CON	*VlV	IDENT-BR (Nas)	IDENT-IO (Nas)
a. hi-**hi** lak-**lak**	*!	**	*		
b. hi-**hi** rak-**nak**	*!			*	
c. hi-**hi** laŋ-**nak**		*!	*	**	*
d. hi-**hi** nak-**nak**	*!				*
e. hi-**hi** raŋ-**nak**				**!	*
☞ f. hi-**hi** naŋ-**nak**				*	**

SYLL CON, ONSET CON, and *VlV do not show any ranking among them. The crucial ranking relation is between SYLL CON and IDENT-BR (Nas). SYLL CON must be ranked higher than IDENT-BR (Nas). If the ranking between them is reversed, an output with rising sonority in syllable contact will emerge as the optimal form. The other crucial ranking is between IDENT-BR (Nas) and IDENT-IO (Nas). IDENT-BR (Nas) must outrank IDENT-IO (Nas) because the base copies the nasal feature of the reduplicant to satisfy the B-R Identity constraint at the cost of violating the I-O Faithfulness constraint. This is a case of overapplication in reduplication in which the effects of phonology imposed on the reduplicant are carried over to the base. With respect to the overapplication in reduplication, M&P (1995) proposes a ranking for such case of reduplication as given in (28).

(28) Overapplication in (B)ase, when R(eduplicant) is Target of phono-constraint
Phono-constraint, B-R Identity » I-O faithfullness

But the overapplication of SK full reduplication has a constraint ranking that is a little bit different from M&P's proposal. In the Korean case, the phono-constraint is ranked higher than B-R Identity as given in (29).

(29)
Phono-constraint, B-R Identity » I-O faithfullness
SYLL CON » IDENT-BR (Nas) » IDENT-IO (Nas)

The constraint ranking established in (27) can be applied to the data in (3); if it is applied, it will not effect the results of the consecutive reduplication in SK because it will be satisfied trivially. The overall constraint ranking for full reduplication in SK is given in (30).

(30) Constraint ranking for full reduplication in SK

Afx≤σ, MAX-BR, Tensification, Align-RED
|
IDENT-BR (Laryn)

SYLL CON, ONSET CON , *VIV
|
IDENT-BR (Nas)
|
IDENT-IO (Nas)

3.4 Partial reduplication in SK

Partial reduplication in SK duplicates the initial CVC of the base, and the reduplicant is affixed leftward. This type of reduplication exhibits a reduplicating pattern very similar to that of partial reduplication in NK in that the direction of the affixation is identical and the size of the reduplicant is not larger than a syllable. The only difference between these two types of reduplication is the prosodic structure of the reduplicant. The prosodic structure of NK partial reduplication is CV while that of SK is CVC. Thus, I will use the same constraints that were used for NK partial reduplication. I will not use MAX-IO here since it is undominated and does not make a crucial difference in the structure of the reduplicant. The constraints for SK partial reduplication are given in (31).

(31) Constraints for SK partial reduplication

a. Afx≤σ: The phonological exponent of an affix is no larger than a syllable.
b. MAX-BR: Every segment of the base has a correspondent in a reduplicant.
c. NoCoda: Syllables are open.
d. Anchor-L: The left edge of the base and reduplicant shares the same element.
e. Anchor-R: The right edge of the base and reduplicant shares the same element.

The shape of the reduplicant can be achieved through the constraint interaction of the three constraints: Afx≤σ, MAX-BR, and NoCoda. The undominated Afx≤σ should outrank MAX-BR otherwise the best form will be the one which faithfully reduplicates whole elements of the base. MAX-BR , in turn, must outrank NoCoda to delimit the reduplicant to CVC. If the ranking between them is reversed, the shape of the reduplicant should be CV. This is illustrated in the constraint table (32).

(32)

/RED+cənnal/	Afx≤σ	MAX-BR	NoCoda
a. **cə**-cənnal		***!	*
☞ b. **cən**-cənnal		**	**
c. **cənnal**-cənnal	*!		**

The other important constraint ranking relevant to SK partial reduplication is Anchor-L over Anchor-R. This ranking relation is already explained in section 3.2. Thus, I will just present a constraint table that shows the direction of the affixation as given in (33).

(33)

/RED+cəncu/	Anchor-L	Anchor-R
☞ a. cə**n**-cəncu		*
b. **c**$_4$**u**$_5$-c$_1$ə$_2$n$_3$c$_4$u$_5$	*!	

The overall constraint ranking for prefixing partial reduplication in SK is presented in (34).

(34) Constraint ranking for SK partial reduplication

Afx≤σ | MAX-BR | NoCoda

Anchor-L | Anchor-R

4. Conclusion

In this study I have analyzed types of reduplication found with non-ideophonic words in Korean. The analysis indicates that we need to divide non-ideophonic words in Korean into two groups since NK and SK exhibit different reduplicating patterns. Full reduplication in NK is normal suffixing reduplication while SK shows a consecutive type of reduplication and it also reflects a case of overapplication. Prefixing partial reduplication in NK reduplicates the initial CV whereas that of SK reduplicates the initial syllable (CVC) of the base. I have analyzed this by the different ranking between MAX-BR and NoCoda in the two different types of reduplication.

NOTES

*I would like to thank Byung-Jin Lim, Kwang-Chul Park, Minkyung Lee, and the audience of Mid-America Linguistics Conference for their comments. I cannot thank enough Stuart Davis for his valuable comments. Of course any mistakes are my own.

[1]In NK there are few words that seemingly undergo consecutive type of reduplication like full reduplication in SK. However, the status of the base of some of them is doubtful which is marked by *.

*sik^{h}ol	→	Si-**sik^{h}ol-k^{h}ol**	'inquisitively'
*c^{h}ikp^{h}ok	→	c^{h}ik-**c^{h}ikp^{h}ok-p^{h}ok**	'chug-chug'
*hwec^{h}an	→	Hwe-**hwec^{h}an-c^{h}an**	'coiling around tightly'
*sæt^{h}ɨm	→	Sæ-**sæt^{h}ɨm-t^{h}ɨm**	'every nook and cranny'
s'ɨks'ak	→	s'ɨk-**s'ɨk**s'ak-**s'ak** or s'ɨks'ak-**s'ɨks'ak**	'with a rasping sound'

[2]There are some examples that do not undergo /l/ deletion before coronal consonants to avoid the /ln/ sequence when personification marker /-nim/ is involved. Instead they undergo lateralization. These seem to be frozen forms in Korean.

/pyəl+nim/ → [pyəllnim] 'a star'

/tal+nim/ → [tallnim] 'moon'

I would like to thank Sang-Cheol Ahn for bringing this up.

REFERENCES

Beckman, Jill. 1997. Positional faithfulness. Handout from the talk given at Hopkins Optimality theory workshop/Maryland Mayfest 1997, May 1997.

Chung, Chin Wan. 1997. A correspondence theoretic approach to partial reduplication in Korean. Studies in the Linguistic Sciences 27: 33-47.

____. 1998. Fixed segmentism in Korean partial reduplication: three instances of the emergence of the unmarked. The 11th International Conference on Korean Linguistics: 272-281.

Davis, Stuart., Alex Eulenberrg and Seoung-Hoon Shin. 1997. On the role of syllable contact In optimality theory. MS., Indiana University.

Davis, Stuart and Jin-Seong Lee. 1994. Infixal reduplication in Korean ideophones. Japanese/Korean Linguistic 4: 447-61.

____. 1996. Korean partial reduplication reconsidered. Lingua 99: 85-105.

Jun, Jongho. 1994. Metrical weight consistency in Korean partial reduplication. Phonology11: 69-88.

Kang, Ongmi. 1998. A correspondence-theoretic analysis on Korean partial reduplication [in Korean]. To appear in Journal of Korean linguistics.

Kim-Renaud, Young-Key. 1974/91. Korean consonantal phonology. Seoul: Hanshin Publishing Co.

Lee, Jin-Seong. 1992. Phonology and sound symbolism of Korean ideophones. Unpublished Ph.D. Dissertation, Indiana University, Bloomington.

McCarthy, John and Alan S. Prince. 1994. Emergence of the unmarked: Optimality in prosodic morphology. NELS 24: 333-379.

____. 1995. Faithfulness and reduplicative identity. UMOP 18: 249-384.

Prince, Alan S. and Paul Smolensky. 1993. Optimality theory: Constraint interaction in generative grammar. MS., Rutgers University, New Brunswick, and University of Colorado, Boulder.

Urbanczyk, Suzanne. 1995. Double reduplication in parallel. UMOP 18. 499-532.