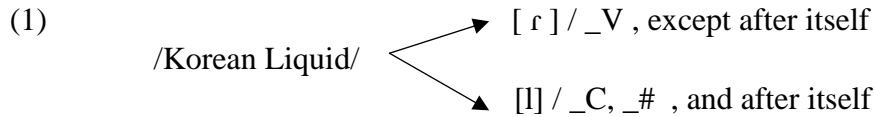


Korean [r] and [l] revisited : evidence for two phonemic liquids in Korean

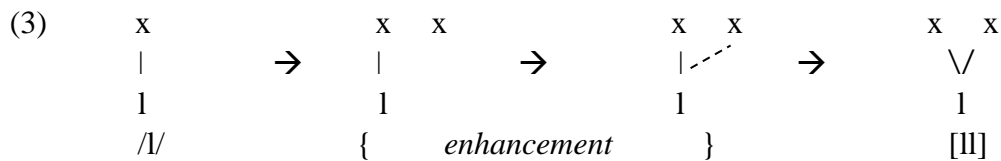
Laurence Labrune, Université Bordeaux Montaigne & UMR 5264 CLLE

The common assumption is that there exists one phonemic liquid in Modern Korean, with two main allophones, a rhotic and a lateral, distributed as in (1). Examples are given in (2).

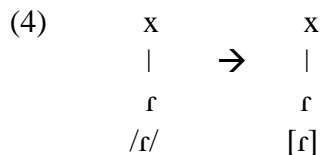


- (2) [pal] 'foot' [param] 'wind' [kallɛ] 'branch' [karɛ] 'phlegm'
 [ɔllida] 'to freeze' [ɔrida] 'to be young' [tolmeŋi] 'rock' [radio] 'radio'

In this paper, I will argue that there exist two distinct phonemic liquids in modern Korean: /l/ and /r/, but that the difference between the two is neutralized in most environments, except intervocally, where a distinctive contrast between [r] and [ll] (a geminate lateral) occurs. The lateral /l/ is realized as geminated at the surface level between two vowels as the result of an enhancement process, whose purpose is to maintain the lateral feature of /l/ and preserve the distinction with /r/. The enhancement process consists in the addition of a prosodic position x after /l/, which results in a surface geminate [ll], as illustrated in the representation in (3) cast in the autosegmental framework (Goldsmith 1976):



The representations in (3) can be compared with those in (4), which show the structure of the rhotic liquid /r/. Contrary to the lateral, the rhotic is always mono-positional.



A surface geminated lateral can also be the result of a sequence of two /r/'s, of an /r/ and an /l/, or of an /l/ and an /r/, that is, correspond to a false geminate. In all these cases, the surface realization is [ll], even for /r r/, due to the action of a cross-linguistically common constraint that bans geminated rhotics (this issue will be further discussed in the talk). In addition, there are contexts in which a surface geminated [ll] is banned (no enhancement). These contexts are the word-initial position, the word-final position, and before or after another consonant. All these contexts happen to be known to be difficult positions for geminates to occur. In a number of environments, the contrast between /r/ and /l/ is thus neutralized. The only truly overtly distinctive position at the surface level between /r/ and /l/ is the intervocalic one, which is also the most favored environment for geminates to occur.

The evidence which supports this view is the following:

- i) The well-known, puzzling fact, that native speakers of Korean are able to distinguish rhotics and laterals in foreign languages, contrary to speakers of languages with a single phonemic liquid such as Japanese speakers (Ingram & Park 1998). This can be easily accounted for if one assumes that Korean has a phonemic lateral distinct from a rhotic.

ii) The fact that simplex laterals may be adapted as geminate laterals in loans, whereas rhotics are adapted as a simplex /r/ or as 0 (Kang 2012, Heo & Lee 2004), as shown in (5).

(5)	a.	b.	c.	d.	e.
environment liquid in source language	#_	V_C	C_V	V_V	V_#
/l/	r	l	(i)ll	ll	l
/r/	r	∅, r(i)	(i)r	r	∅, r(i)

- a. (Eng.) *light* → (Kor.) [rajt^hi]
 (Eng.) *right* → (Kor.) [rajt^hi]
- b. (Eng.) *milk* → (Kor.) [milk^hi]
 (Eng.) *card* → (Kor.) [kadi]
 (French) *normandie* → (Kor.) [norimaŋdi]
- c. (Eng.) *black* → (Kor.) [pillæk]
 (Eng.) *drive* → (Kor.) [tiraibi]
- d. (Indon.) *Bali* → (Kor.) [palli]
 (Eng.) *police* → (Kor.) [p^hollisi]
 (Italian) *Bari* → (Kor.) [pari]
- e. (Eng.) *meal* → (Kor.) [mil]
 (Eng.) *car* → (Kor.) [ka:]
 (Eng.) *tour* → (Kor.) [t^huɔ]
 (French) *tour* → (Kor.) [t^huri]

iii) The fact that some laterals trigger the tensification of a following obstruent, notably the (i)l future morpheme in verbs, or the final l in Sino-Korean morphemes (in this latter case, the tensification only occurs before coronals). Examples: *masil* + *kɔs* → [maʃilk^hʔot] "thing to drink", *pal* + *tal* → [palt^hal] "development". Under the present analysis, the tensification of the consonant after /l/ results from the presence of the extra x position. This is consistent with the analysis that views Korean tense obstruents as underlyingly geminates (Lee S. 1994, Han 1996).

iv) Diachronic evidence : it is commonly considered that Korean had two distinct phonemic liquids until Middle Korean (Lee Sung-Nyong 1954, Pak čaŋ-wŏn 1986, Ramsey 2004, Vovin 2020). The present analysis just assumes that the dephonologization of the original phonemic contrast between the two liquids has not yet reached its end in Modern Korean.

v) Verbal morpho-phonology. In Modern Korean, there exists four groups of verbs in which a liquid is involved and which display an irregular morphology: the *alta* 'to know' group, the *morita* 'to ignore' group, the *mutta* 'to ask' group and the *irita* 'to reach' group. Under the present approach, these four types will be distinguished by means of the presence of a phonemic /l/ or /r/ in the base, i.e. respectively (in a nutshell): /ar-/ , /mol-/ , /mut-/~/mur-/ , /iri-/

vi) Frequency facts: if counted as a single phoneme, the liquid is the most frequent consonant of all in the non-initial position of words. (Labrune 1994, the initial position is removed from the counting since liquids are banned word-initially, which is why a counting which does not distinguish between initial and non-initial position blurs the figures). This supports the view that there may actually be two distinct phonemes instead of one.

Typological data which shed new light on the Korean facts will also be discussed, if time allows.

References: Goldsmith, J. 1976. *Autosegmental phonology*. Phd dissertation. MIT. Han J-I. 1996. Perception of Korean tense consonants: evidence for a geminate analysis of tense consonants. *Japanese Korean Linguistics vol. 5*. Stanford U. Press. Heo Y-H and Lee A. 2004. The Phonological Adaptation of Foreign Liquids in Korean. *LSO Working Papers in Linguistics 4*. Ingram, J., & Park S-G. 1998. Language, context, and speaker effects in the identification and discrimination of English /r/ and /l/ by Japanese and Korean listeners. *JASA 103* (2). Kang Y. 2012. The adaptation of English liquids in contemporary Korean : a diachronic Study. *Catalan Journal of Linguistics 11*. Labrune, L. 1994. *Le statut phonologique de /r/ en japonais et en coréen*. Thèse de doctorat, Paris 7. Lee S. 1994. Neutralization and tensification in Korean. *Japanese Korean Linguistics vol. 4*. Stanford U. Press. Lee S-N. 1954. Ičo čoki ii l.r-im p^hyoki munče. Reprinted in *I Sij-Nyŏŋ kukčhak sŏnčip 2* (1988). Seoul: Min-imša. Pak č-w. 1986. Kuko *d *l^h ii čeku mič^h ki pčŏŋhwa. *Kukčhak sinčŏnku*. Ramsey, S. R. 2004. Accent, liquids, and the search for a common origin for Korean and Japanese. *Journal of Japanese Language and Literature 382*. Vovin, A. 2020. Old Korean and Proto-Korean *r and *l revisited. *International Journal of Eurasian Linguistics 2*(1).