

Analysis of English Liquids /r/ and /l/ for Teaching Korean EFL

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## Abstract

While English liquids /r/ and /l/ are two separate phonemes, there is only one consonant in Korean to represent English /r/ and /l/. The consonant is more similar to /l/. As a result, Korean EFL students often make a mistake by saying *I eat lice every day*. This paper describes /r/ and /l/ in terms of manner and place of articulation of each sound. The paper also provides in-depth analysis of /r/ and /l/ varieties and the implications for teaching English liquids /r/ and /l/ to Korean EFL learners. In conclusion, Korean EFL teachers should teach students how to identify and produce /r/ and /l/ explicitly.

*Keywords:* liquids /r/, liquids /l/, articulation

## Analysis of English Liquids /r/ and /l/ for Teaching Korean EFL

**Difficult English Liquids /r/ & /l/ for Korean Learners**

It is challenging for teachers to teach Korean EFL English pronunciation. Different sound systems between Korean and English seem to play a crucial role to interfere with pronouncing English sounds. Avery and Ehrlich (1992, pp. 138-141) claim that Korean EFL learners have difficulties pronouncing /p/ vs. /f/, /b/ vs. /v/, /s/ vs. /ʃ/, /l/ vs. /r/, /θ/ vs. /ð/, voiced fricative /z/, affricates and consonant clusters in regard to consonants. This research paper will explore English liquids /r/ and /l/, which are regarded as two of the most challenging consonants pedagogically (Celce-Murcia et al., 2010, p.59).

Korean has only one single liquid phoneme that is transcribed phonemically /l/. Specifically, Korean /l/ has two allophones: flap [ɾ] in intervocalic position as in *uli* meaning ‘we’; alveolar lateral [l] in pre-consonantal or final position as in *tal* meaning ‘moon’ (Han, 2001, p.694). However, English liquids /r/ and /l/ are different and have separate phonemes as in *grass/glass, pray/play, right/light*. Therefore, Korean EFL learners are likely to replace /r/ with /l/. As a result, Korean EFL students often surprise native English speakers by saying *We eat steamed lice* though their intention is *We eat steamed rice* when they are asked what Koreans eat as a main meal. Avery and Ehrlich (1992, p.140) point out that Korean EFL learners substitute /l/ for /r/ as in *long* instead of *wrong*, and substitute /r/ or /ɾ/ for /l/ between vowels as in “*filing*” instead of “*firing* or *fighting*”. In sum, Korean EFL learners struggle with /r/ and /l/, which is derived from each different sound system. It is valuable to describe and analyze /r/ and /l/. If EFL teachers do not know how to articulate the sounds accurately and understand their differences, they cannot teach and help students to identify and pronounce each sound accurately, leading to unsuccessful communication with others they might encounter in the future.

### **The Phonetic Characteristics of English Liquids /r/ & /l/**

Both /r/ and /l/ are characterized as voiced sounds because these two phonemes are produced with vocal cords vibrating. Therefore, /r/ and /l/ are described more according to the other two dimensions: place of articulation and manner of articulation.

#### **Place of Articulation**

In terms of place of articulation, /r/ is basically classified as palatal and there might be variation in producing /r/. According to Celce-Murcia et al. (2010, p.60), there are two different ways of articulating /r/. One is palatal /r/ and the other is alveolar /r/. The tongue tip is raised toward the palate behind the alveolar ridge and the tongue tip is curled up and back. The other way is that the tongue tip stays low with more rounded lips and the body of the tongue is bunched up toward to the alveolar or alveolarpalatal area, which is less common and classified as alveolar (Celce-Murcia et al.,2010, p.60). In both cases, care should be taken for the tongue tip not to make contact with the roof of the mouth.

/l/ has two allophones: light (clear) [l] and dark (velarized) [ɫ]. In terms of place of articulation, /l/ belongs to alveolar and [ɫ] is classified as velarized. To be specific, the clear [l] is produced when the tongue tip touches the alveolar ridge and the dark [ɫ] is articulated when the body of the tongue is raised toward the velum. In this case, the tongue tip may or may not remain in touch with the alveolar ridge (Celce-Murcia et al.,2010, p.60). More detailed distinction will be discussed in the *In-depth Analysis of /l/* section.

#### **Manner of Articulation**

In terms of manner of articulation, /r/ and /l/ are classified as approximants. According to Pennington (1996, p. 46), approximants are voiced sounds articulated when "...one

articulator moves close to another, though not close as to cause a turbulent airflow". Similarly, Celce-Murcia et al. (2010, p.59) argue that approximants refer to the sound produced when "...the airstream moves around the tongue and out of the mouth in a relatively unobstructed manner..." and approximants can be specified into liquids (/r/ and /l/) and glides (/y/ and/w/). /r/ and /l/ are called liquids because both of these two phonemes are articulated with relatively less obstruction in a fairly fluid manner when the air stream passes through the mouth compared to other consonants (Celce-Murcia et al.,2010, p.59; Avery & Ehrlich, 1992, p.22).

/r/ is also referred to as retroflex because of the curling back tongue to pronounce /r/ as mentioned above (Avery & Ehrlich, 1992, p.23). In a similar way, Pennington (1996, p. 46) claims that when we produce /r/, the tongue tip or blade is close to the back of the alveolar ridge, and never touches the roof of the mouth. The back of the tongue is raised and generally the lip is protruded or rounded in English and the tongue tip may be curled back in a retroflex position. Avery and Ehrlich (1992, p.23) argue that there is some disagreement when we describe the features of /r/ because of dialect differences, and "the characterization of /r/ as a retroflex sound" seems most useful pedagogically. Again, it is noted that the tongue tip does not touch the roof of the mouth such as palate or alveolar ridge in order for the airstream to escape through between the tongue tip and the roof of the mouth (Celce-Murcia et al.,2010, p.60; Garn-Nunn & Lynn, 2004, p.86).

In the case of /l/, the sound is articulated laterally, i.e. when the airstream escapes from each side around the tongue because the tongue tip blocks the airstream by touching the alveolar ridge. That is why /l/ is also referred to lateral consonant (Garn-Nunn & Lynn, 2004, p.85; Avery & Ehrlich, 1992. p.23). Pennington (1996, p.46) argues that the tongue tip is farther forward and the lip is more spread than for /r/ when /l/ is articulated. Furthermore, Pennington (1996) claims

that there are two ways of producing /l/: Some people articulate /l/ “...by bringing one side of the tongue into contact with the front and one side of the alveolar ridge”, so the air stream goes “...over the tongue body and down over the side of the tongue that is not making the constriction”. Others articulate /l/ “...by arching the body of the tongue up into the palatal region while bending the sides of the tongue down”, so the air stream escapes from both sides of the tongue (p.46).

### **In-depth Analysis of /r/**

#### **/r/-coloring**

When a vowel is followed by /r/ and occurs in the same syllable, the vowel changes with the influence of the retroflex quality of /r/ and this phenomenon is referred to as /r/-coloring (Celce-Murcia et al., p.127). Specifically, uncolored vowels such as /ɪ/ /ε/ /ʊ/ /ʌ/ /ɑ/ /ɔ/ /ay/ /aw/ change into as [ɪr] [εr] [ʊr] [ɜ<sup>r</sup>] [ɑr] [ɔr] [ayr] [awr] respectively: the symbol [ɜ<sup>r</sup>] refers to a /r/-colored vowel for /ʌ/. For example, *cut* sounds [kʌt] and *curt* with the vowel /ʌ/ followed by /r/ changes the quality of /ʌ/ into [ɜ<sup>r</sup>] (Celce-Murcia et al., 2010, p.127).

#### **Intrusive /r/**

When /r/ is used to link vowel to vowel as in *Eva(r) and Jim*, it is referred to as intrusive /r/. According to Roach (2000) and Wells (1997), intrusive /r/ is common in British English though it is regarded as nonstandard (as cited in Celce-Murcia et al., 2010, p. 452). However, intrusive /r/ is not a common feature in North American English (NAE) and it is limitedly used only in certain dialects in New England (Celce-Murcia et al., 2010, p.452).

#### **Rhotic [r] vs. non-rhotic [r]**

Another feature of /r/ is rhotic in postvocalic position. Pennington (1996, p.67) refers to

rhotic as “r-ful” in post-vocalic position. This rhotic varieties of /r/ are distinctively different between NAE and British English. Celce-Murcia et al. (2010, p.451) simply claim that NAE is rhotic; Pennington (1996) argues NAE and many other varieties of English spoken in England are rhotic (p.67). In terms of regions as to rhotic [r], Wells (1982) reports in more detail: Irish, Scottish and Canadian English, as well as General American, some English English accents, and some Caribbean varieties are rhotic (as cited in McMahon, 2000, p.232).

According to McMahon (2000, p.232), rhotic [r] is pronounced in all possible phonological contexts: initial position, as in *rid*; inter vocal, as in *sorry*; final, as in *ladder*; and in clusters, as in *brown* or *nerd*

### **Other varieties of /r/**

According to Ladefoged and Johnson (2011, p.176), English /r/ is pronounced in some different forms: trills, taps and flaps. Trills are articulated with “the tip of the tongue is set in motion by the current of the air” and found in a few Scottish accents. Taps and flaps are articulated “by a single contraction of the muscles so that an articulator is thrown against another” and these two are different in terms of “...the direction of the movement-from back to front for flaps, up and down for taps” (p. 176). Taps are articulated as in the pronunciation of /t, d, n / in words *butter*, *caddie*, *scanner* and flaps are articulated as in an r-colored vowel in the stressed syllable as in *dirty* (p.176). However, Celce-Murcia et al.(2010, p.80) regard flaps and taps as the same and confine to /t/ instead of /t,d,n/, arguing flaps and taps occur when /t/ is after a vowel or an /r/ and before an unstressed syllable as in “...data, city, dirty...”.

In addition, there is variation of /r/ in regards to the degree of retroflexion of /r/. According to Pennington (1996, p.68), a moderately retroflexed /r/ or non-retroflexed /r/ is probably the most common though English speakers in Southern and Southwestern America are

likely to have a strongly retroflexed /r/. Remarkably, Romaine (1978) reveals that there is a distinct difference between males and females in terms of post-vocalic /r/ in Scotland: Males in all ages groups have a stronger /r/ than females without exception (as cited in Pennington, 1996, p.68).

### **In-depth Analysis of /l/**

#### **Light [l] and dark [ɫ]**

In the section of *Place of articulation of /l/*, it is noted that /l/ has two allophones: light [l], alveolar liquid, as in *light, lamb* and dark [ɫ], velar liquid, as in *call, doll*. Pennington (1996) explains the difference of light [l] and dark [ɫ] in terms of positional variation. In other words, the place of articulation of a consonant may be changed from its reference or target position because of the place of articulation of a following consonant or vowel (p.54). She claims that dark [ɫ] can be explained with “backward movement (backing) of the place of articulation”, one of the place effects (p. 54). Specifically, light [l] is produced when the tip of the tongue is in position at the alveolar ridge and commonly in preceding a vowel (pre-vocalic position) as in *lay, lemon, lame*. In the meantime, dark [ɫ] is articulated with a high back tongue in position at a velar. Therefore, Pennington (1996) explains dark [ɫ] is produced with “backing (velarization) of /l/ especially when it follows a vowel (post-vocalic position) as in *tell [tɛɫ], milk [mɪɫ], cold [kɔwɫd]*.”

Similarly, Celce-Murcia et al.(2010, p.84) argue that the /l/ becomes darker as the tongue approaches the velum. They claim that light [l] with the tongue tip in the alveolar are generally “...occurs syllably-initially or before front vowels...” as in *lead, listen*, on the other hand, dark [ɫ] with the body of the tongue in the velar area “...occurs syllable-finally or before back vowels...” as in *call, kill* (p.84). According to them, /l/ from words with *-ly* suffixes such as *politely, sadly* has lightest [l], while /l/ from words with final clusters such as *milk, self* has darkest [ɫ] (p.84).



In addition, British and NAE speakers have a different tendency in regards to the pronunciation of /l/. British speakers tend to pronounce a very clear and light /l/ in prevocalic position, however, NAE speakers are likely to produce more velarized, i.e. a darker [ɫ] (Celce-Murcia et al., 2010, p.452). Ladefoged and Johnson (2011) argue that likewise American English initial [l] has more velarization than in British English initial [l] (p.178). Additionally, there is less distinction between [l] and [ɫ] articulation in American English, while there is a considerable differences in British English (p.67). They claim that the velarized [ɫ] is similar to back vowel rather than an alveolar consonant (p.67).

### **Vocalization of /l/**

One of the /l/ sound variations is vocalization of /l/, which the consonantal phoneme /l/ changes into a vowel. According to Pennington (1996, p.69), it is found that Londoners, American Blacks and Hongkongers are likely to pronounce the back vowel [oʊ] instead of dark [ɫ]. For example, they may pronounce *help* as [hɛoʊp̚] instead of [hɛ ɫp], and *sell* as [seoʊ] instead of [sɛɫ]. She claims that the process of vocalization of /l/ "...is particularly common in pre-consonantal position" (p.69). In addition, some American Black and Southern speakers sometimes drop out /l/ completely "as in the pronunciation of *help* as [hɛp̚] or *self* as [sɛf]..."(p.69).

### **The Intrusive [l]**

According to Pennington (1996), another feature of /l/ which is referred to as the intrusive [l] is found. People in Bristol are likely to pronounce *America* as [əmɛrəkəl], *Eva* as [ivəl] like the pronunciation of *evil* (p.69). Pennington(1996) claims that this phenomenon is related to vocalization of /l/ and in a similar way, Russ (1984) argues that "*Bristol l* is a

widespread but highly stigmatized feature and may result from the vocalization of final [l] in *bill*, *tool*, *nibble* and *single*” (as cited in Pennington, 1996. P.69).

### **The Implications for Teaching English Liquids /r/ & /l/ to Korean EFL Learners**

English liquids /r/ and /l/ have much dialectal variation in terms of their phonemic status and phonetic realization (Zampini, 2008, p.219). Likewise, McMahon (2000) claims that “the actual phonetic realization of /r/ is not constant” though it is mainly an alveolar or post-alveolar approximant (p.231). As a result, Korean EFL learners might have more difficulties learning these English liquids /r/ and /l/ because of these variations as well as the different sounds between Korean and English.

Avery and Ehrlich (1992) recommend that EFL teachers teach students the distinction between /r/ and /l/ explicitly by telling them that /l/ is articulated with the tongue tip touch the alveolar ridge while /r/ does not touch any part of the roof of the mouth. In addition, EFL teachers can use minimal pairs such as “...long/wrong, lamb/ram, lip/rip, filing/firing, ceiling/searing...”(p.140). In a similar way, Celce-Murcia et al.(2010) point out that EFL teachers teach students distinctive different features of /r/ and /l/ with regards to place and manner of articulation with the help of visual aids such as sagittal section diagrams. Since there is only one consonant to represent [r] and [l] in Korean, it is necessary to teach the different sounds in an explicit way. The research results based on 18 Korean late learners show that the pronunciation of /r/ and /l/ significantly improved after the instruction focused on perceptual training with a explicit training not natural learning (Han, 2001, pp. 706-707).

In addition, teachers are required to design meaningful practice for identifying, pronouncing, and using the English liquids in a context with an explicit teaching of the characteristics of the two sounds. For example, a variety of integrative activities using /r/ and /l/

minimal pairs such as role-play, information gap, games can be used for authentic and practical teaching instead of just listing and letting students pronounce each minimal pair without any context.

The one thing to be desired is that the majority of research on English liquids has focused on Japanese EFL learners (Zampini, 2008, p.229) and it is necessary to do various studies and research on Korean EFL learners. I hope this research paper will contribute to teaching Korean EFL learners more effectively through providing EFL teachers in Korea with knowledge about /r/ and /l/ leading EFL learners to identify and produce /r/ and /l/ precisely. Teachers should make students say “I go to church to [prey]” not “I go to church to [pley]” though some might go to play.

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