The Acquisition of English Liquid Contrast by Northern Thai Speaking Learners

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บทคัดย่อ

งานวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาว่า คนไทยเหนือจะสามารถแยกแยะเสียงคู่ตรงข้ามของคำที่มี /r/ และ /l/ ในภาษาอังกฤษได้หรือไม่ เนื่องจากในภาษาถิ่นเหนือมีเสียง /ล/ เพียงเสียงเดียวเท่านั้น โดยมีสมมติฐานว่าคนไทยเหนือจะไม่สามารถออกเสียงคู่ตรงข้ามของคำที่มี /r/ และ /l/ เป็นพยัญชนะต้นในภาษาอังกฤษได้ในทุกบริบท งานวิจัยนี้เก็บข้อมูลจากนักศึกษาของมหาวิทยาลัยเชียงใหม่จำนวน 10 คนที่ไม่ได้สังกัดภาควิชาภาษาอังกฤษ ด้วยการให้นักศึกษาอ่านออกเสียงคำภาษาอังกฤษจากบทความและรายการคำ เพื่อดูความแตกต่างของการออกเสียงคู่คำเดียวกันในบริบทที่ต่างกัน ในงานวิจัยนี้ใช้การถอดรหัสการออกเสียงแบบกว้างและเสียงที่เปล่งออกมาถึง 80% ขึ้นไปจะถูกกำหนดว่าเป็นเสียงหลักของหน่วยเสียงนั้น

ผลการวิจัยพบว่า การออกเสียงคู่ตรงข้ามของกลุ่มตัวอย่างส่วนใหญ่เป็นไปตามสมมติฐานที่ระบุไว้ ซึ่งนักศึกษาจำนวน 8 คนไม่สามารถออกเสียงคู่ตรงข้ามของคำที่มี /r/ และ /l/ เป็นพยัญชนะต้นในภาษาอังกฤษได้ในทุกบริบท อันเนื่องมาจากอิทธิพลของการถ่ายโอนจากภาษาแม่

คำสำคัญ : การรับรู้ภาษาที่สอง, การถ่ายโอนภาษา, หน่วยเสียงตรงข้ามในภาษาอังกฤษ

ABSTRACT

This study aims to investigate whether northern Thai speakers make a distinction between /r/ and /l/ in English since there is only one liquid, which is /l/, existing in their native dialect. The hypothesis was formulated that northern Thai speakers do not acquire English /r/ and /l/ contrast in all tasks. Ten non-English major undergraduate students studying at Chiangmai University participated in this study. There were two tasks including a passage reading and a word list reading. The same ten minimal pairs of /r/ and /l/ in word-initial position were presented to the participants in both tasks to read out loud. The data were transcribed by using broad phonetic transcription and the acquisition of the phone was determined by adopting 80% benchmark (Eckman et al., 2007).

The findings reveal that the hypothesis was vaild by the majority of the participants. In other words, eight out of ten northern Thai speaking participants do not acquire English /r/ and /l/ contrast in word-initial singletons in at all due to the effect of L1 transfer (Lado, 1957).

Keywords: second language acquisition, language transfer, L2 phonemic contrast

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Introduction

There are a number of linguistic aspects to explore in the field of Second Language Acquisition (SLA). One of the interesting areas is second language (L2) phonology which generally focuses on how L2 learners attempt to acquire a new phonological system. It has been reported that one of the factors affecting the acquisition of novel sounds is the first language (L1) transfer (cite). Therefore, this work attempts to examine if the lack of liquid contrast in the northern Thai speaking participants' grammar will play a role in the L2 acquisition process of acquiring English /r/ and /l/ contrast.

According to Lado (1957), it was claimed that L1 strongly influences the L2 acquisition in that differences between the two systems causes difficulty in learning, whereas similar features are believed to facilitate L2 learning. However, this is not always proven to be true in L2 acquisition. Beebe (1980) found that the liquid contrast in Thai did not allow her Thai subjects to transfer that feature to acquire to the /r/ and /l/ in English effectively. She explains that L1 sociolinguistic component considerably influences English /r/ and /l/ pronunciation produced by Thai speakers.

In previous literature, some studies (Beebe, 1980 ; Chunsuvimol, 1993; Manoyen, 2011 ; Phootirat, 2012) have examined the production of English /r/ and /l/ by L2 learners whose native language is Thai; however, all of their Thai subjects are native speakers of standard Thai, or central Thai (CT) dialect, which consists of liquid contrast. In fact, the Thai language has some regional dialects where /r/ does not exist in their phonological inventories. For instance, in northern Thai (NT) dialect, speakers always pronounce [l] or [h] systematically when the grapheme <ร> appears in a word-initial singleton in writing (Pankhuenkhat, 1982 ; Burutphakdee, 2004; Hatfield, 2005). Following Phootirat's (2012) work in the investigation of English /r/ and /l/ contrast by Thai and Lao speakers of English, it is fascinating to investigate how the native dialect, particularly northern Thai, influences the acquisition of English liquid contrast occurring in the simple onsets by northern Thai speakers. Therefore, the hypothesis is formulated stating that northern Thai speakers do not acquire English /r/ and /l/ contrast in word-initial singletons in all tasks.

Theoretical Description

Phonological Structure between Thai and English

Thai language is considered by linguists as an 'uninflected, primarily monosyllabic, tonal language' in the Tai-Kadai family (Smyth, 1987 cited in Panlay, 1997). There are four main regional dialects which are divided based on the geographical area including central Thai (also known as standard Thai), northern Thai, northeastern Thai and southern Thai (Kruatachue, 1960; Palikupt, 1983). Even though this study concentrates on the distribution of liquid in northern Thai, it is also worth describing that of central Thai liquids.

In central Thai phonological inventory, there are two liquid sounds including /r/ and /l/ which are represented as <ร > and <ล >, respectively. There are three common variants of /r/ in central Thai including (1) a voiced apico-alveolar trill [r], which usually occurs in the formal contexts, (2) a voiced apico-alveolar flap [ɾ] is considered as the most common variant in the word-initial position, and (3) a voiced apico-alveolar approximant [ɹ], which appears only in the speech of speakers who are very fluent in English, and in the speech of southern Thai speakers (Harris, 1996). As far as a lateral is concerned, there are two variants of /l/ including (1) a voiced apico-alveolar lateral approximant [l], which normally occurs only in the syllable initial position as in [l̀ɔ̀ɪy] *'to float'*, and (2) a voiced dental-alveolar clear lateral [l̪], which is pronounced when /l/ precedes close front vowels: [i] and [i:] as in [l̪iɪb] *'lean'*. Harris (1996) also noted that speakers may pronounce [l] with an alveolar nasal [n] in fast speech.

Phonetically speaking, Thai /r/ and /l/ are allowed to appear only in the onset position. Although they are contrastive, Thai speakers pronounce these sounds as [l] in informal context (Harris, 1972; Treyakul, 1986; Tingsabadh & Abramson, 1993). Despite the liquids being merged, interlocutors understand the meaning by primarily considering the surrounding context as presented in (1).

(1) lód kānní: sí: khā:w
car this color white
'This car is white.'

On the other hand, in northern Thai dialect, /r/ is not existent in the phonological inventory (Pankhuenkhat, 1982; Burutphakdee, 2004; Hatfield, 2005). There is only a lateral onset [l] in the system. Northern Thai speakers always substitute [h] for <ร> in all inherited words from central Thai, and substitute [l] when <ร> is seen in all loan words from central Thai and other languages as exemplified in (2) (Pankhuenkhat, 1982).

(2)

Central Thai	Northern Thai	Gloss
[rá:k]	[há:k]	*'to love'*
[rô:k]	[lô:k]	*'disease'*

(Pankhuenkhat, 1982 : 8)

Due to the fact that /r/ and /l/ does not appear in coda position in all dialects of Thai language, and there is no consonant cluster in northern Thai, the pronunciation of English /r/ and /l/ contrast in word-initial singletons is the core focus in this study.

Regarding General American English (GA) which is considered as the model standard pronunciation used in American English media and for Asian L2 learners in learning English (L2) (Cruttenden, 2001 cited in Ball and Muller, 2005), liquids are considered as contrastive sounds in syllable-initial in both singletons and clusters, in syllable-finally in both singletons and clusters (Barber *et al*., 2009; Culpeper *et al*., 2009). The substitution of one phoneme in a minimal pair may cause different meanings.

In GA English, /r/ is described as a voiced-alveolar approximant [ɹ], which can be appeared in both pre- and post-vocalic position in the syllable, such as *'red'* and *'door'* respectively (Barber *et al*., 2009; Culpeper *et al*., 2009).

While, /l/ is transcribed as a voiced-alveolar lateral approximant [l], there are two main types of lateral /l/ including clear /l/ or [l] and dark /l/ or [ɫ]. Clear /l/ is pronounced before a vowel as in *'lime', 'leg', 'look'*; while dark /l/ is pronounced after a vowel as in *'full', 'meal', 'crystal'*. The back of the tongue is raised towards the velum when pronouncing dark /l/ rather than when pronouncing clear /l/ (Crystal, 2003).

Interlanguage

In acquiring a language in addition to the native language, it is hypothesized that adult second language learners activate independent grammar in their L2 utterances (Nemser, 1971; Selinker, 1972; Corder, 1974). In other words, the L2 production exhibits systematically unconventional patterns, which represent the new linguistic system being acquired during the developmental course of learning the target language, but not yet accomplished the native-like status (Nemser, 1971; Selinker, 1972; Corder, 1974). Furthermore, Corder explained that the system does not solely base on the transfer from the mother tongue and does not project the second language system being learned. In fact, it also shows a unique pattern that can be found neither in the NL nor TL (as seen in Figure 1). In 1972, Selinker coined the term '*interlanguage*' (IL) to describe this process and suggested that the data should be examined individually, rather than collectively.

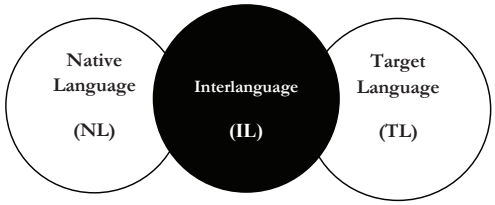

Figure 1 Interlanguage
Source: Adapted from Corder (1974: 162)

In SLA, an interlanguage approach is widely used to analyze the L2 learners' grammar in various aspects of SLA including phonology, morphology and syntax (Gass & Selinker, 2008). Recently, a number of linguists have adopted the IL analysis to look at interphonology (Tarone, 1979, 1985; Eckman, 1981; Sato, 1984; Phootirat, 2012; Eckman *et al.*, 2013).

Due to this present study focuses on investigating the acquisition of English /r/ and /l/ contrast in word-initial singletons, the concept of L2 phonemic contrast is provided.

L2 Phonemic Contrast

L2 phonomic contrast is one of the interesting aspects in L2 phonology; however, there are a few studies investigated English phonemic contrast produced by non-native English speakers. Eckman et al. (2007) examined the perception and production of English /s/

and /ʃ/ contrast by Japanese and Korean speakers. The difference distribution and status of /s/ and /ʃ/ in both NLs are main factors in L2 speakers' production of those in the TL. Later, Eckman et al. (2013) further investigated the production of three phonemic contrasts (/s/-/ʃ/, /p/-/f/, and /f/-/v/) by Korean speakers, which focused on NL transfer and hypercorrection errors. The results suggested that NL transfer plays a role in producing the non-existing phonemes; while, hypercorrection occurs due to the difference of phonemic contrast distribution between the NL and TL. To the best of my knowledge, only a few studies have explored the English liquid contrast by Thai L2 learners (Phootirat, 2012). She revealed that most participants have acquired the /r/-/l/ contrast in more formal tasks than that in less ones.

Due to previous research investigating English liquids in several aspects, most linguists have focused on the production of standard Thai speakers without considering other dialects which demonstrate the different distribution of liquid in their phonological system such as northern or northeastern Thai. Therefore, it is fascinating to study further on how northern Thai ESL learners will acquire the English liquid contrast since there is only one lateral liquid in their native inventory.

Language transfer

It has been long known that the L1 plays a major role in L2 acquisition. According to Lado (1957), he hypothesized that when there is any similar sound between two systems; learners are likely to transfer an existing sound in their NL into the TL. On the other hand, if the L2 has any different sound from that in the L1, learners tend to select the closest sound in the L1 to substitute that in the L2 (Lado, 1957; Schachter & Celce-Murcia, 1971; Dulay & Burt, 1974; Schumann, 1979; Beebe, 1980; Zobl, 1980; Dušková, 1983; Schachter, 1983, 1992; Zimmer *et al.*, 2009 cited in Osborne, 2010; Liu, 2011; Grami and Alzughaibi 2012).

With respect to L2 acquisition, most researchers paid attention to the transfer from the NL, which mainly concerned with the speakers of standard language regardless of the native dialect. In the case, the participants of the current study are the native speakers of northern Thai; however, they also speak standard Thai at some extent in their daily life. This leads to the question of which system, native dialect or standard language, will come into play when they are in the process of acquiring English as their L2.

Methodology

Participants

Ten undergraduate students who are northern Thai speakers studying in a non-English major at Chiangmai University participated in this study. All of them were purposively selected by using demographic information in order to ensure that they routinely speak northern Thai.

Method

There are two tasks including passage reading and word list reading which were conducted in both Thai and English for the purpose of collecting the L2 data in different contexts. Each task consisted of twenty similar target words which are ten minimal pairs of /r/ and /l/ in Thai, and ten minimal pairs of the same phonemes in English in word-initial singletons. There are five paragraphs in the passage reading (PR), which only three target paragraphs were scored or analyzed. In the word list reading (WL), there are similar twenty target words and fifty fillers, which were added to distract the participants' awareness of the target words. Both tasks were displayed on PowerPoint and recorded by the Audacity 2.0.5 (Audacity team, 2013). All participants pronounced each word in all tasks out loud via a microphone in a quiet room. Then, only twenty target tokens in the two tasks were selected to be transcribed and analyzed individually according to each participant. The data was cross-checked with an American English teacher who has trained in phonetics and phonology courses in order to ensure the reliability of the results. The agreement result of both transcribers is 95.75%. After that, the acquisition of the phoneme was considered if the participant pronounced each phoneme 80% of the time (Eckman *et al.*, 2007). Lastly, a binary notation (+/-) was used to point out whether participants make a liquid distinction or not.

Findings

Before reporting the acquisition of English /r/ and /l/ contrast in word-initial singletons produced by northern Thai speakers, it is worth presenting the results of the production of English /r/ and /l/ in word-initial singletons.

Table 1 demonstrates the production of English /r/ and /l/ in word-initial singletons by northern Thai speakers. Three main columns are given in Table 1 including the participant (P), English /r/ production, and English /l/ production, respectively. Under the production row demonstrates the passage reading task (PR), and the word list reading task (WL). The actual liquid variants that are produced by the participants are provided with respect to the task. Also, the English /r/ acquisition according to each participant is categorized under the actual production column under the tasks. The cells in the row indicate the percentage of sounds produced by each participant; while, the shaded blank is given for the absent variant. Bold fonts represent the percentage of the acquired variants that reached 80% of the time.

Table 1 The acquisition of English /r/ and /l/ by northern Thai speakers across tasks

(percentage)

Participant	/r/					/l/			
	PR		WL			PR			WL
	[◆]	[l]	[P]	[◆]	[l]	[◆]	[l]	[dz◊]	[l]
P1	60	40		20	80		100		100
P2	60	40		50	50		100		100
P3	20	80		10	90		100		100
P4	20	80	10	20	70		100		100
P5	100			100			100		100
P6	100			100			100		100
P7	20	80		10	90		90	10	100
P8	50	50		40	60	20	80		100
P9	20	80		40	60	10	90		100
P10	10	90		10	90		100		100

As shown in Table 1, the results of acquiring English /r/ can be divided into four cases: (1) 2 out of 7 participants (P5 and P6) have acquired the standard variant [ɹ] for English /r/ with 100% in all tasks; (2) 3 out of 10 participants (P3, P7 and P10) have acquired [l] for English /r/ that reached 80% of the time in all tasks; (3) 3 out of 7 participants (P1, P4 and P9) have acquired [l] for English /r/ that reached 80% of the time in some tasks; and (4) 2 out of 7 participants (P2 and P8) do not acquire any specific phones for English /r/ in any task.

In case of English /l/ production, all participants have acquired [l] for English /l/ that reached 80% of the time in all tasks. Due to the fact that /l/ appears in their native dialect (NT), they do not have any problems in acquiring /l/ in the L2. In addition, these results will be discussed further in the discussion section.

With respect to the hypothesis stating that northern Thai speakers do not acquire the liquid contrast in English in word-initial singletons in all tasks, the acquired variants of /r/ and /l/ in the same task were compared to identify whether the contrast of /r/ and /l/ exists in each task as presented in Table 2 below.

As mentioned previously, the acquisition of the phoneme was considered if the participants are able to make a distinction between /r/ and /l/ that reached 80% of the time (Eckman *et al.*, 2007). For example, if the

participant produces a trill [r] 60% of the time, and other variants 40% of the time when pronouncing an English /r/, then this participant would be considered as not having acquired the /r/. However, if another participant produces [l] 81% of the time when pronouncing an English /r/, then this participant would be considered as having acquired English /r/ as [l].

As mentioned earlier, a binary notation was used in the process of transcription and scoring to investigate the phonemic contrast. If the learners acquired variants of /r/ and /l/ differ, then "+" is marked to designate the contrast between /r/ and /l/. On the other hand, "-" signifies three cases as following: (1) when the same variant is acquired for both liquid phonemes; (2) when the learners do not acquire any sound for both /r/ and /l/; or (3) when the learners show the acquisition of a variant for only one liquid phoneme, but variants for the other liquid phoneme are pronounced freely. Then, the acquisition of English /r/ and /l/ between two tasks was compared, and the individual acquisition was summarized in terms of each participant.

According to Table 2, four main columns are given including pattern of acquiring English /r/ and /l/ contrast according to the hypothesis, the participant (P), the passage reading task (PR), and the word list reading task (WL) respectively. Under the task row presents the target phoneme: /r/ and /l/, and whether there is a contrast (/r/-/l/) for each task. The cells under the /r/ and /l/ column indicate the sound that each participant had acquired for each phoneme (/r/ or /l/); while, the shaded blank is given when the participant pronounces that phoneme with free variant which does not reach 80% of the time. Under the contrast column (/r/-/l/), "+" or "-" signifies the distinction or non-distinction of /r/ and /l/ pronunciation according to each participant.

Table 2 The characteristic of acquiring English /r/ and /l/ contrast by northern Thai speakers across tasks

Participant		PR			WL		
		/r/	/l/	/r/-/l/	/r/	/l/	/r/-/l/
Support	P1		l	-	l	l	-
	P2		l	-		l	-
	P3	l	l	-	l	l	-
	P4	l	l	-		l	-
	P7	l	l	-	l	l	-
	P8		l	-		l	-
	P9	l	l	-		l	-
	P10	l	l	-	l	l	-
Disprove	P5	♦	l	+	♦	l	+
	P6	♦	l	+	♦	l	+

Table 2 demonstrates the acquisition of English /r/ and /l/ contrast in word-initial singletons by northern Thai speakers. The data gathered from most participants (8 out of 10 participants) have not acquired English liquid contrast in all tasks, which supports the hypothesis. However, the production of only two participants (P5 and P6) disproves the hypothesis which they have acquired the standard variant of English /r/ and /l/ contrast in all tasks. In addition, these results will be further discussed in the next section.

Also, the production of /r/ and /l/ in northern Thai and central Thai are also collected for considering the current distribution of the /r/ and /l/ in Thai language.

Table 3 presents the acquisition of /r/ and /l/ contrast in northern Thai (NT) comparing with that in central Thai (CT). Three main columns are given including the participant (P), the acquisition of liquid contrast in NT, and the acquisition of liquid contrast in CT, respectively. Under the task row in both dialects presents similar to Table 2.

Table 3 The acquisition of the /r/ and /l/ contrast in northern Thai and central Thai by northern Thai speakers

Participant	NT						CT					
	PR			WL			PR			WL		
	/r/	/l/	/r/-/l/	/r/	/l/	/r/-/l/	/r/	/l/	/r/-/l/	/r/	/l/	/r/-/l/
P1		l	-		l	-	l	l	-	l	l	-
P8		l	-	l	l	-	l	l	-	l	l	-
P9		l	-		l	-		l	-		l	-
P3		l	-		l	-		l	-	r	l	+
P4		l	-		l	-	r	l	+		l	-
P7		l	-		l	-		l	-	r	l	+
P2	l	l	-		l	-	r	l	+	r	l	+
P5		l	-		l	-	r	l	+	r	l	+
P6		l	-	l	l	-	r	l	+	r	l	+
P10		l	-		l	-	r	l	+	r	l	+

As shown in Table 3, there is no liquid contrast in their utterances when they speak northern Thai as expected. However, three cases of the production of /r/ and /l/ in central Thai were found, that varies depending on each individual. First, three out of 10 participants (P1, P8 and P9) do not make a distinction of liquid in any task. Second, three out of 10 participants (P3, P4 and P7) make a distinction of liquid in some task. Third, four out of 10 participants (P2, P5, P6 and P10) clearly make a distinction in all tasks.

Next, the acquisition of liquid contrast in three systems including NT, CT and IL are presented.

Table 4 The acquisition of the /r/ and /l/ contrast in northern Thai, central Thai and English by northern Thai speakers

Participant	NT						CT						IL					
	PR			WL			PR			WL			PR			WL		
	/r/	/l/	/r/-/l/	/r/	/l/	/r/-/l/	/r/	/l/	/r/-/l/	/r/	/l/	/r/-/l/	/r/	/l/	/r/-/l/	/r/	/l/	/r/-/l/
P1		l	-		l	-	l	l	-	l	l	-		l	-	l	l	-
P8		l	-	l	l	-	l	l	-	l	l	-		l	-		l	-
P9		l	-		l	-		l	-		l	-	l	l	-		l	-
P2	l	l	-		l	-	r	l	+	r	l	+		l	-		l	-
P3		l	-		l	-		l	-	r	l	+	l	l	-	l	l	-
P4		l	-		l	-	r	l	+		l	-	l	l	-		l	-
P7		l	-		l	-		l	-	r	l	+	l	l	-	l	l	-
P10		l	-		l	-	r	l	+	r	l	+	l	l	-	l	l	-
P5		l	-		l	-	r	l	+	r	l	+	◆	l	+	◆	l	+
P6		l	-	l	l	-	r	l	+	r	l	+	◆	l	+	◆	l	+

After close examination, the acquisition of liquid contrast by these ten northern Thai speakers can be divided into three cases. First, it seems that three out of 10 participants (P1, P8 and P9) do not make a distinction of liquid in all systems. Second, five out of 10 participants (P2, P3, P4, P7 and P10) do not make a liquid distinction in their IL even though they occasionally pronounce liquid contrastively in CT. Third, only two participants (P5 and P6) pronounce the liquid contrast in CT and IL in all tasks. These results will be further discussed in the next section.

Discussion

According to the hypothesis stating that northern Thai speakers do not acquire English /r/ and /l/ contrast in word-initial singletons in all tasks, the hypothesis is attested by the data gathered from most participants (80%).

Based on the results in Table 4, it seems that the data gathered from most participants (80%) support the first hypothesis, which language transfer influences on their L2 production. However, I cannot presume which language system that three out of eight participants (P1, P8 and P9) transfer non-distinction of liquid; it is quite clear that five out of eight participants (P2, P3, P4, P7 and P10) transfer non-distinctive of liquid from their native dialect rather than CT when they pronounce English liquid contrast. Many studies have also revealed this similar phenomenon that L2 speakers tend to transfer the closest sound in their L1 when they are learning the L2 (Beebe, 1980; Schmidt, 1987; DeVane, 1990; Bada, 2001; Eckman *et al.*, 2007 ; Phootirat, 2012).

Interestingly, according to the data, it is obvious that only two participants (P5 and P6) have acquired the liquid contrast in both IL and CT. In other words, one may assume that both participants have transferred the contrast from the CT rather than the NT. A close analysis reveals the acquisition of /r/ in the two systems have progressed separately in phonetically speaking: they pronounced an approximant [ɹ]

in their IL English, but a trill [r] in CT. As a result, the contrast in the IL for P5 and P6 does not proceed from the CT transfer, but their own IL learning progress. After the interview, both participants show high interest in western media that they like to imitate native speech when watching movies. This can be supportive by Vygotsky's (1978) Zone of Proximal Development (ZPD) explaining that learners are able to acquire skills that go beyond the limits of their actual capability through observation and imitation. Some studies have supported that the ZPD process enables learners in learning the L2 effectively as explained earlier (McCafferty, 2002; Schwieter, 2010; Rezaee and Azizi, 2012). Thus, the imitation of native speech possibly allows the learners to imitate the target-like pronunciation of liquids.

Conclusion

This study aims to investigate the acquisition of English /r/ and /l/ contrast in word-initial singletons by ten northern Thai speakers whose native dialect has only one liquid, /l/, in the phonological inventory. Interlanguage analysis is used to investigate the actual production of ten participants rather than the accuracy of the target phonemes (/r/ and /l/). A certain phone is considered as an acquired variant when the participant pronounces that phone at least 80% of the time. Then the results of English /r/ and /l/ were compared and signified the presence of phonemic contrast by using a binary notation (+/-).

The results of this study reveal that the hypothesis is valid by the data gathered form most participants (80%). Close examination point out that only five out of eight participants have transferred the non-distinction of the liquid contrast in their native dialect into their IL production. The results of this study reveal that the hypothesis is valid by the data gathered from most participants (80%). Close examination demonstrates that only five out of eight participants have transferred the non-distinction of the liquid contrast in their native dialect into their IL English production. While the data gathered from three out of eight participants have shown that they do not make a liquid distinction at all in the three systems. Only two participants have acknowledged the liquid contrast in both L1 and IL across tasks which disprove this hypothesis. However, in this case, the contrast in these two systems has developed distinctively. One of the explanations being offered for the acquisition of IL English is due to their personal interest in western media. According to the Zone of Proximal Development (ZPD) (Vygotsky, 1978), it is believed that the attentiveness in learning foreign languages will facilitate their language learning, which can influence the learners' pronunciation to be native- or near native-like as evidenced by much research (McCafferty, 2002; Schwieter, 2010; Rezaee and Azizi 2012).

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