The Role of Stylistic Variation and Language Proficiency Level in the L2 Acquisition of English Plurality*

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Abstract

The aim of this paper is to provide more evidence around L2 morpheme acquisition by examining the English plural morpheme production of 20 adult Thai L2 learners of English in two different speech contexts. L2 learners at two proficiency levels - lower-proficiency and advanced - participated in the experiment. Picture Storytelling and Short Sentence Reading Tasks were designed to elicit informal and formal registers, respectively. The findings from the Picture Elicitation Task highlight late acquisition of the English plural morpheme despite the fact that Thai students are taught this feature from a very young age. The presence of orthography in the formal setting as tested in Short Sentence Reading Task did not have a major impact on the performance of the lower-proficiency group, but greatly affected the performance of the advanced group.

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บทบาทของการผันแปรทางวัจนลีลาและระดับสมิทธิภาพทางภาษาในการรับรู้หน่วยคำพหูพจน์ภาษาอังกฤษที่เป็นภาษาที่สอง*

ปาริชาติ ภูติรัตน์**

บทคัดย่อ

งานวิจัยมีนี้จุดประสงค์เพื่อวิเคราะห์เรื่องการรับรู้หน่วยคำแสดงพหูพจน์ภาษาอังกฤษที่เป็นภาษาที่สองในวัจนลีลาหรือสถานการณ์การพูดที่แตกต่างกัน โดยศึกษาการออกเสียงหน่วยคำแสดงพหูพจน์ในภาษาอังกฤษของผู้เรียนชาวไทยที่เรียนภาษาอังกฤษเป็นภาษาที่สองจำนวน 20 คน ที่มีระดับสมิทธิภาพทางภาษาอังกฤษที่แตกต่างกัน งานวิจัยนี้ได้มีการทดสอบผ่านบททดสอบสองกิจกรรมที่แสดงสถานการณ์ทางการพูดสองแบบ ได้แก่ การเล่าเรื่องผ่านภาพและการอ่านประโยคขนาดสั้น ผลการทดสอบจากการเล่าเรื่องผ่านภาพคือผู้เรียนชาวไทยทั้งสองกลุ่มมีการรับรู้หน่วยคำประเภทนี้ช้า ทั้งๆ ที่มีการเรียนการสอนเรื่องหน่วยคำพหูพจน์ตั้งแต่วัยเด็ก และการเห็นคำภาษาอังกฤษที่แสดงหน่วยคำพหูพจน์ในแบบทดสอบการอ่านประโยคขนาดสั้นซึ่งแสดงถึงวัจนลีลาที่เป็นทางการกว่าก็ไม่ได้ส่งผลต่อการออกเสียงหน่วยคำแสดงพหูพจน์ในภาษาอังกฤษในกลุ่มผู้เรียนที่มีสมิทธิภาพทางภาษาอังกฤษระดับต่ำกว่าให้ดีขึ้น แต่การเห็นคำที่แสดงหน่วยคำ

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อย่างชัดเจนนั้นมีผลอย่างมากต่อผลของการออกเสียงของกลุ่มผู้เรียนที่มีสมิทธิภาพทางภาษาอังกฤษระดับสูง

คำสำคัญ: หน่วยคำพหูพจน์ในภาษาอังกฤษ; การรับรู้หน่วยคำภาษาที่สอง; การผันแปรทางวัจนลีลา; การรับรู้ภาษาที่สอง

1. Introduction

The study presented in this paper has two objectives. First, it aims to examine the role that different speech registers play in the acquisition of the English regular plural morpheme {s} by Thai university students who study English as their second language. The second goal is to investigate the impact of language proficiency level on the presence/absence of English plurals in the participants' utterances.

It has long been known that structural differences between the native language (NL) and a second language (L2) can cause difficulties for adult second language learners (Lado, 1957; Richards, 1969). One distinctive morphological difference between Thai and English is the attachment in English of an inflectional morpheme after countable nouns to indicate plurality. Morphologically speaking, the Thai language lacks a plural morpheme. Further, the Thai phonological system does not permit alveolar fricatives in syllable-final position (Hudak, 1990). Thus, the problem can occur for Thai adult L2 learners not only in their writing, but also in their interlanguage phonology.

Another perspective worth focusing on is speech styles. Style shift is commonplace and obvious in both L1 and L2 data. More importantly, Tarone (1979) highlighted that L2 speakers' oral language production systematically varies depending on speech situations and the attention they pay to uttering the messages. As a result, this sociolinguistic factor may imply different accuracy rates in different speech registers. Therefore, in order to provide some insight into the relationship between language proficiency level and level of speech formality in acquiring the English plural morpheme, two research questions were formulated, as follows:

1. Will Thai L2 learners of English exhibit better performance in producing the English plural morpheme in formal speech than in an informal setting?

2. Will Thai L2 learners with an advanced level of English have better results producing the English plural morpheme than less advanced learners?

2. Theoretical Frameworks

2.1 The Acquisition of the English Plural Morpheme

Since the 1970s, linguists have reported on how learners acquire grammatical morphemes in English. It was found that each morpheme is cognitively developed in gradual stages as children acquire their first language. First language acquisition research has shown that one of the earliest acquired morphemes for native speakers of English is the English plural morpheme (Brown, 1973; de Villiers & de Villiers, 1973; Krashen, 1981; Ettlinger & Zapf, 2011). Brown (1973) pioneered a longitudinal study examining the natural sequence of 14 English grammatical morphemes produced by three young children whose native language was English. These morphemes included the present progressive *-ing*; the prepositions *in* and *on*; plural morphemes-both *-s* and irregular; the possessive inflection *-s*; regular and irregular third person; regular and irregular past tense; articles; the uncontractible and contractible forms of the copula *be*; and uncontractible and contractible auxiliaries. This classical work demonstrated that the plural morpheme was acquired fourth among the 14 tested morphemes. This finding agreed with de Villiers and de Villiers's (1973) report of early acquisition of English plurals in their cross-sectional work. In fact, this feature is present in the speech of native speakers

from the time they are eighteen months old (Berko, 1958; de Villiers & de Villiers, 1973 cited in Ettlinger & Zaph, 2011). It could be argued that the early appearance of the plural morpheme is due to the experience of parental speech when a young learner receives a particular input more frequently than other inputs. Interestingly, it was found that native language environment and frequency of morpheme exposure do not impact the sequence of morpheme acquisition in a child's grammar (de Villiers and de Villiers, 1973).

However, this phenomenon does not apply in the case of second language learning. Dulay and Burt (1974) investigated the acquisition of the English plural morpheme in child learners whose native language was Spanish. The data showed that this feature, among 11 functors or morphemes studied, was acquired fifth. This finding accords with data from Larsen-Freeman (1975), Hakuta (1976), and Rosansky (1976) that indicates a much later developmental stage for acquiring the English plural morpheme in both child and adult L2 learners. Therefore, second language learners' acquisition of the English plural morpheme does not seem to follow the path reported for first language acquisition (Dulay & Burt, 1974; Bailey, Madden & Krashen, 1974; Larsen-Freeman, 1975; Hakuta, 1976; Rosansky, 1976).

Unfortunately, studies of English plural morpheme acquisition by Thai L2 learners are scarce. The most recent studies were conducted by Mongkolla (2013) and Sangchote (2014). Mongkolla (2013) focused on the production of the English plural morpheme at the word level by high school students. The results revealed that her participants acquired the allomorph [s] before the allomorphs [əz] and [z], respectively. Her explanation was that the sound [s] exists in Thai phonemic inventories, while [z] is absent. A year later, Sangchote extended Mongkolla's (2013) research by testing the same issue above the word level (2014). She added hints to the target paragraph to examine whether

the presence of cue words would assist in the production of English plurals in the participants' utterances. Both studies indicated that the allomorph [s] seems to be the earliest internalized, as this allomorph corresponds to the plural suffix grapheme <-s>. Unexpectedly, cue words, such as numbers or demonstratives, were not significant in increasing production of the English plural morphemes in L2 speech (Sangchote, 2014). In sum, these studies confirm that even though Thai students are required to learn English starting in Grade 1, and English plurals are taught early (Khamkhien, 2010; Noom-Ura, 2013), Thai L2 learners have not yet fully acquired this morpheme even at the university level.

Since the previous works show that L2 learners of English exhibit a delay in acquiring the plural morpheme, this study takes on the challenge of investigating further whether L2 learners at various levels of language proficiency in two distinct speech situations will demonstrate similar behavior.

2.2 Plurality in English and Thai

To make count nouns plural in English in the regular way, the plural suffix {s} is attached at the end of the noun. Regardless of its orthography, <-s> or <-es>, there are three ways of pronouncing the plural morpheme, [-s], [-z], or [-əz], depending on the final sound of the noun it is attached to. According to Allan et al. (2010), these variants follow the conditions of the morphophonemic rules described below. First, [əz] is added after nouns that end with sibilants, as in 'beaches' [bitʃ+əz]. In the case of nouns ending with other voiced consonants or vowels, {s} is changed to [z], as in 'phones' [fonz]. If neither of these conditions is met, [s] is pronounced to indicate plurality in count nouns, as in 'books' [bʊks]. However, not all count nouns follow this rule. Irregular forms of plurals can occur in a number of ways-e.g. the plural form

can change from its singular counterpart, as in ‘person - people’ or ‘stimulus - stimuli,’ or remain unchanged from the singular form, as in ‘deer’ or ‘salmon’. Unfortunately, irregular plurals are outside the scope of this research.

Plural formation is a lot less morphologically complicated in Thai as Thai is not an inflected language (Iwasaki & Ingkaphirom, 2005). Therefore, if one wants to form a plural noun in the Thai language system, no suffix marker is needed in any situation. The addition of a numeral/quantifier followed by a noun classifier, or a noun classifier followed by a demonstrative, is a common structure to represent the quantity of the noun (Smyth, 2005).

For example:

(1)	*mæ̂:w*	*nùŋ*	*tu:̄a*
	cat	one	clf.
	“One cat”		
(2)	*mæ̂:w*	*sǎ:m*	*tu:̄a*
	cat	three	clf.
	“Three cats”		
(3)	dèk	k^{h}ōn	nán
	child	clf.	that
	“That child”		
(4)	dèk	p^{h}û:ak	nán
	child	clf.	that
	“Those children”		

2.3 Stylistic Variation

It has long been reported that variations in speech can be affected by many factors, including sociolinguistic conditions (Labov, 1966; Beebe, 1974; Romaine, 1978; Trudgill, 1974; Wolfram, 1989; Levy, 2010). As far as stylistic variables are concerned, speakers tend to systematically select certain variants for specific occasions (Labov, 1969). More formal speech will reflect normative forms. In other words, speech formality plays a significant role in the type of variants speakers select in their utterances. The more attention speakers pay to their speech, the more standard the forms they use. On the other hand, vernacular, or natural conversation, is considered to be the most informal style, as the speakers have minimal focus on production during this type of speech. This stylistic variation applies not only to native language production, but also to L2 production (Tarone, 1983; Beebe, 1980; Schmidt, 1977; Tiewcharoenkij, 2005; Chaichanasak, 1995; Weinberger, 1987; Major, 2004; Phootirat, 2012). The findings from Tarone (1979) confirm that L2 learners also adjust linguistic features based on speech register.

In addition to the selection of different variants in different contexts, NL interference is also involved in speech variability. Adjemain (1976) observed L2 production closely and found that the NL has a greater impact on the interlanguage, or the target language version of the learners, in casual speech than in citation form, because speakers pay less attention to the L2 rules in naturalistic settings. This implies that to obtain L2 data that is closest to actual conversation in an experimental setting, free conversation is the best option (Labov, 1969).

3. Methodology

3.1 Participants

For this study, the participants were Thai L2 learners of English studying at a university located on the north side of Bangkok. Their ages ranged from 18-21 years old (mean age = 19.8). They had attended the Thai school system and had never studied or lived abroad. The preference for college students over other occupations-e.g., news announcers, teachers, or trainers-was because they are not often required to use a formal register in their everyday speech (Beebe, 1974; Treyakul, 1986). The students were divided into two groups based on their English language background and proficiency level. The first group, the lower-proficiency group, consisted of 10 sophomores (5 male speakers and 5 female speakers) who were not majoring in English or studying in an international program. At the time of the study, they were enrolled in a lower intermediate English course, namely *Foundation English 2*. The second group consisted of 10 third-year students (3 male speakers and 7 female speakers) majoring in English, who were categorized as advanced learners.

3.2 Test Materials

Two sets of materials representing two different speech styles were designed for the participants to produce the target feature - the English plural morpheme {s}.

The first task was a picture elicitation, which reflected a free conversation style, with some implicit numeral hints shown in the pictures. The researcher

asked the participants to tell a story freely based on what they saw in the pictures they were shown. However, when there was a long pause, the researcher asked questions to stimulate sentence production, without hinting at quantity-related words in the questions.

The second task was a short sentence reading. Twenty sentences (15 sentences with target words and five filler sentences) were shown to the participants on PowerPoint slides. The sentences were typed in Cambria with a font size of 60. The number of words in a sentence ranged from four to eight. Each participant was asked to read the sentence aloud once. Then, the researcher moved to the next slide manually. This task was regarded as eliciting speech in a more formal setting, as the setting contained written text, which is thought to encourage increased attention to production when reading the sentences.

3.3 Procedure

The subjects were scheduled to participate in the experiment individually in different time slots. Before the experiment, the participants filled out questionnaires asking about demography and L2 learning behavior, as well as ethical consent forms. After filling out the forms, each student individually participated in the recording process in a soundproof room and sat facing a laptop. Each subject was digitally recorded via Audacity 2.1.2 (Audacity Team, 2016) using an Olympus ME-52W noise-cancelling microphone.

Before the first task, the researcher asked each participant several basic questions to reduce anxiety and stress. The production for this part of the session was not taken into consideration. Then, the picture elicitation task began. Each participant was shown a set of four pictures and asked to tell a

story about each picture. The researcher allowed the participants to talk as long as they wished and sometimes asked questions to encourage the participants to produce more utterances with the plural morpheme. The length of the picture elicitation task varied from five to eight minutes. After that, the participants were asked to read 20 sentences, shown on slides, out loud. Each sentence contained four to six words-e.g., “I haven’t been home for years” or “Several rabbits are in the room.” Participants were given only one chance to read each sentence; once the participant finished a sentence, the researcher moved to the next slide.

3.4 Data Analysis

The data was transcribed using phonetic transcription after obtaining the recordings, which had a total of 479 targeted tokens (179 tokens from Task 1 and 300 tokens from Task 2). To ensure the reliability of the findings, the following procedure was followed. First, partial sections from the recordings across all subjects and tasks were randomly selected. After that, the researcher compiled an 8-minute long audio file of these short selections and emailed it, with the speakers’ identities concealed, to an American linguist with knowledge of the Thai and English language systems. The American linguist then transcribed the short selections, and the results were analyzed against the researcher’s transcription.

The calculation was based on a point-to-point reliability measure by taking the number of agreements between the two results from transcribers, divided by the sum of agreements and disagreements, times 100 to yield a percentage. In total, there were 70 items in the short selections, and four of them were inconsistent, yielding 94.2% agreement between the two

transcribers. Disagreements were resolved by asking another transcriber to identify the problematic phones. The researcher tallied the scores with criteria based on the existence of the plural morpheme {s} as follows:

1 point for accurate pronunciation of the English plural allomorph;

½ point for a deviant variant of the English plural allomorph; and

0 point for absence of the English plural morpheme.

One full point was scored in cases where the correct allomorph was pronounced. Half a point was deducted when the actual production of the L2 allomorph did not correspond with the target form-for example, when the English plural allomorph in the word 'teachers' was articulated with [-s] rather than [-z]. If no plural form was produced, zero points were given. Then the raw scores were descriptively converted to percentages and analyzed, which allowed meaningful comparison between tasks and groups of participants.

4. Results

Table 1 presents the results from the Picture Elicitation Task (Task 1), which reflects informal speech mode. Both individual and average scores and percentages are displayed. The calculation was based on the existence of plural nouns in the participants' utterances during the story-telling process and the actual production of each allomorph. Even though the numbers of plural noun forms produced were rather different-78 words from the lower-proficiency group and 101 words from the higher-proficiency group-interestingly, the average scores of the two groups are not as significantly different as might have been assumed based on the participants' respective

levels of L2 proficiency. The mean of the lower-proficiency group was 23.77%, while that of the higher-proficiency students was 26.96%.

Table 1

Overall and individual scores and percentages of English plural morpheme production in the Picture Elicitation Task (Task 1)

Lower-proficiency Participant	**# of Plural Nouns**	**Score**	**%**	**Higher-proficiency Participant**	**# of Plural Nouns**	**Score**	**%**
1	8	3	37.50	A	9	3.5	38.89
2	7	2	28.57	B	11	3.5	31.82
3	10	4	40.00	C	11	3	27.27
4	8	1	12.50	D	10	2.5	25.00
5	7	1	14.29	E	12	4.5	37.50
6	9	2	22.22	F	11	2	18.18
7	9	2	22.22	G	10	2.5	25.00
8	6	1.5	25.00	H	9	2	22.22
9	6	1	16.67	I	10	2.5	25.00
10	8	1.5	18.75	J	8	1.5	18.75
Mean	**7.8**	**1.9**	**23.77**	**Mean**	**10.1**	**2.75**	**26.96**
Total	**78**			**Total**	**101**		

In Task 2, there were a total of 300 tokens, or 15 targeted words from each participant, produced in Task 2. In contrast to the findings obtained from Task 1, the more advanced L2 learners performed better, with higher percentages, than the lower-intermediate learners in the Short Sentence Reading Task, as seen in Table 2 below. This table shows that the mean of the higher-proficiency group is 66.33%, which is double the average of the lower-proficiency group (31.33%).

Table 2

Overall and individual scores and percentages of English plural morpheme production in the Short Sentence Reading Task (Task 2)

Lower-proficiency Participant	**Score**	**%**	**Higher-proficiency Participant**	**Score**	**%**
1	6	40.00	A	10	66.67
2	5.5	36.67	B	11	73.33
3	7	46.67	C	8	53.33
4	3	20.00	D	11	73.33
5	4.5	30.00	E	11.5	76.67
6	5	33.33	F	9	60.00
7	5	33.33	G	9.5	63.33
8	4	26.67	H	10	66.67
9	3	20.00	I	9.5	63.33
10	4	26.67	J	10	66.67
Mean	**4.7**	**31.33**	**Mean**	**9.95**	**66.33**

With respect to the research questions, there are two main variables at play-level of proficiency and style of speech. First, as expected, the data from this study reveals that the English plural morpheme was uttered more frequently by more advanced L2 learners than by lower-proficiency L2 learners in both tasks. However, close examination of the data shows that the performance of the higher-proficiency group on the two tasks exhibits a major difference. In general, the mean results from this group seem higher in both speech situations but, in Task 1, the English plural suffix did not distinctively appear in the participants' speech in comparison to what was observed in Task 2 (Figure 1).

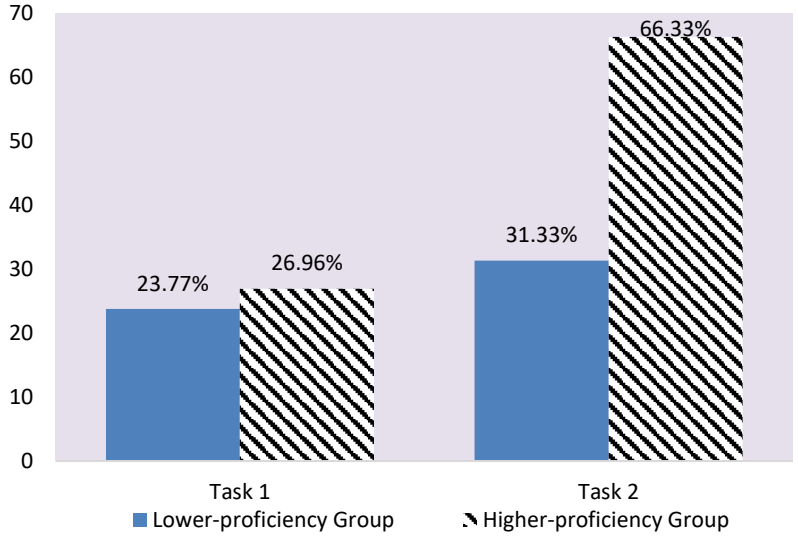

Figure 1. Comparison of the production of the English plural morpheme by the lower-proficiency group and the higher-proficiency group in Tasks 1 and 2

5. Discussion

Based on the results of this study, two important points are worth discussing. The first is that the results are interpreted based on the performance of two target groups with different levels of L2 proficiency. As in previous works (Krashen, 1989; Neuman & Koskinen, 1992; Krashen & Seliger, 1976; Yin, 2015), the current research supports the proposal that formal L2 instruction is important in mastering the target language. In this case, more than 60% of the English major participants' courses involved English language content, including Linguistics, whereas the other group was taking only one English course in a formal learning context in the current semester and barely used English in their everyday life.

Although the level of exposure to the L2 can explain the difference between the two groups within the formal setting, the findings around register variation require a different explanation. Interestingly, when it comes to the naturalistic style, which best demonstrates immediate L2 cognitive reflection with lower awareness of forms, the difference in average occurrences of the English plural suffix between the two groups is minimal. Therefore, it can be inferred that the graphemic hints shown in Task 2 play a significant part in the pronunciation of the English plural morpheme {s}, especially in the more advanced group, as the average percentage more than doubles in Task 2 (from 26.96% in Task 1 to 66.33% in Task 2). Having said that, the orthographic cues shown in the short sentences did not significantly assist in raising awareness of the plural forms of the lower-proficiency group, as reflected in their L2 pronunciation. Their L2 mental grammar is still in the early stages of acquiring this feature, and therefore the majority of the L2 forms produced by this group were approaching the NL-like system, or lack of suffix attachment.

As Adjemain (1976) explained, the more formal the setting is, the more TL-like is the form that is articulated. Between the two variables, speech formality and language proficiency level, what is more important in enhancing the presence of the plural {s} seems to be the readiness of the L2 acquisition. To determine whether a linguistic feature has been acquired, an 80% accuracy in production benchmark was adopted (Cancino et al., 1975; Andersen, 1978; Eckman, 1991; Carlisle, 2006; Phootirat, 2012). The results of this study show that none of the participants have reached the 80% criterion, which implies that the L2 participants in this study had not yet internalized the L2 grammatical feature.

Another explanation can be drawn from a phonetic point of view. Even though [s] exists in the Thai phonemic inventory, its occurrence is restricted to

syllable-initial position. However, it does not seem problematic for Thai learners to pronounce this sound finally, as [s] is an easily detected phone due to its high acoustic frequency and its one-on-one relationship with the morphemic representation {s} (Ottenheimer, 2006; Silveira, 2007). However, it is more troublesome for Thai learners to acquire the sound [z] due to its absence in the NL system. In addition, English [z] is acoustically partially voiced (Yavas, 2011). Therefore, it is quite a challenge for Thai learners to perceive and differentiate the English alveolar fricative pair [s]-[z] in production, particularly in word-final position (Mongkolla, 2013).

All in all, the outcomes from this study provide evidence in support of the late acquisition of the English plural morpheme, which may indicate the need for a review of pedagogical techniques and English lessons in Thai educational system.

6. Conclusions and Further Recommendations

The current research investigates the relationship between stylistic variation and level of L2 proficiency in the production of the English plural morpheme {s} by adult Thai L2 learners of English. Two groups of participants were observed in this study-10 non-English majors and 10 English majors. In order to measure L2 production in different speech registers, two tasks were conducted-Picture Elicitation and Short Sentence Reading Tasks. The findings agree with previous reports showing that L2 learners with a more advanced level of English performed better than those studying at the lower-intermediate level. This is especially true for the findings of the Short Sentence Reading Task representing formal speech style. However, the L2 production of the

groups in informal style, as tested in the Picture Elicitation Task, did not reflect a significant distinction between the groups in terms of acquisitional development of the plural suffix. The results from this paper agree with what has been reported in other studies of L2 morpheme acquisition-namely, that the English plural morpheme is acquired at a later stage, and the impact of orthography affects mainly the grammar of more advanced L2 learners, and less substantially that of lower-proficiency students.

To conclude, it is worth addressing the shortcomings of this study. This paper is limited to only the regular forms of the English plural. This study could be extended by including both regular and irregular English plurals. Additionally, it would be fruitful to compare the production of the English plural morpheme in the production of child and adult Thai learners to determine the result of L2 acquisition stage. This could yield implications for curriculum redesign for educators. It is likely the case that a review of grammar lessons should be undertaken, as it has been claimed that there are natural sequences for acquiring certain morphemes in both L1 and L2. This claim has implications for increasing the effectiveness of teaching and improving the efficiency of students in learning the right thing at the right time. Maybe it is time for Thai educators and English teachers to shape our English language education by taking the learner's L2 acquisition stage into account, since this could help to improve students' English language learning and ensure that the learning lessons are aligned with the learner's developmental stage. Lastly, this research focuses on only one English inflectional morpheme. It would be valuable to explore or compare the acquisition of other grammatical suffixes by Thai L2 learners in the future.

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