CAUSES OF ENGLISH SPELLING ERRORS MADE BY THAI FOREIGN LANGAUGE LEARNERS

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Abstract

This paper aims to account for the underlying causes of spelling errors made by Thai university students. It first presents a general overview of writing and definitions of the relevant terminology in the English writing system. Spelling errors made by Thai university students are then categorised into eight major types. The distinction between English and Thai writing systems which tends to be attributed to the occurrence of Thai learners' spelling mistakes is accounted for. It is important for both teachers and learners to be aware of underlying causes of spelling errors, in order to assist in minimising erroneous spelling. It is argued that understanding these causes could be of great help not only to second/foreign language (L2/FL) learners, but also to university lecturers in this field.

Keywords: Writing System, English Writing System, Thai Writing System, Foreign Language Learners' Writing Errors, Thai

Introduction

In this paper, various symbols are deployed to represent specific meanings. These symbols are shown in Table 1.

Table 1 Definitions of symbols used (based on Cook, 2004)

Symbol	Definitions	Example
' ' (single quotation marks)	Words or sentences used as examples	'battery'
< > (angle brackets)	An actual written form of an example	<What is language?>.
'≡'	Corresponds to, correspnding to, which corresponds to	<c> ≡ /tʃ/ in cello
'ø'	Zero sound	<h> ≡ ø in 'silhouette'
/ / (slant)	Shows a broad phonemic pronunciation of an example using the International Phonetic Alphabet (IPA)	daughter /dɔːtə(r)/

General overview of writing

Some people are unable to write, since writing has to be learned and taught. In contrast, speaking is learned naturally, shaped by the environment. Children assimilate speaking throughout infancy, and they learn how to speak before they learn how to write. In many languages, there is a spoken form, but no written form (Cook, 2013). Speech comes before writing, where writing is "the graphic representation of a language" (Lado, 1964, p. 18). There are three types of writing system; namely, logographic, syllabic and alphabetic systems (Baron, 2005; Birch, 2007). The kanji system in Japanese is an example of a logographic writing system in which "one

symbol represents the concept or meaning of an individual word or part of a word" (Birch, 2007, p. 16). Syllabic writing refers to a system where the "symbols represent the syllables of the language" (Lado, 1964, p. 18), whereas when one symbol corresponds to one sound, this is called an alphabetic writing system.

A piece of writing may survive longer than an act of speech, and it also displays features, such as punctuation. It can be read many times by readers at their own pace. Furthermore, writing is planned in advance; and rewriting and editing can be done many times. The levels of formality, editing, lexical density and durability of texts are features that distinguish writing from speech (Cook, 2004; Baron, 2005). According to Bloomfield (1933, p. 21), "writing is not language, but merely a way of recording language by means of visible marks." Nevertheless, in order to study language, it is indispensable to know something about writing.

Basic terminology of the writing system

Every language has its own script; however, "one language may be written in different scripts, and the same script may be used to write different languages" (Sampson, 1985, p. 21). "The script is not itself the language", but it is a tool *for making examples of a language visible"* (ibid., p. 21, original emphasis). "Scripts are sets of discrete, articulated and arbitrary signs, which enable any constructed message to be transmitted without necessarily using natural means" (Catach, 1988 cited Jaffré, 1997, p. 6). The term 'letter' refers to one of the units of script which together constitute "the elements of various writing systems" (Sampson, 1985, p. 22). In English, we can use Russian letters, or Arabic letters, but it is unacceptable to use Chinese or Japanese letters as unist of scripts. The units of the latter two languages are called 'characters'.

The basic unit of a written language is the 'graph' which is similar to the 'phone', the unit of sound in spoken language. In a sound system there are 'phonemes' and 'allophones'; conversely, in a writing system the terms 'grapheme' and 'allograph' are used. Hence, 'the graphs', $< g, \mathbf{g}, \mathscr{g} >$, are allographs of the grapheme <g>' (Sampson, 1985). A grapheme refers to "the smallest unit in the writing system capable of causing a contrast in meaning" (Crystal, 2003, p. 257). According to Cook and Bassetti (2005), there are two distinct meanings of the term 'writing system'. The first general sense "is related to the terms 'script' and 'orthography'" (p. 3). In this sense, a writing system can be defined as "a set of visible or tactile signs used to represent units of language in a systematic way" (Coulmas, 1996, p. 560); while orthography refers to "the set of rules for using a script in a particular language" (Cook and Bassetti, 2005, p. 3). A 'script' is "the graphic form of the units of a writing system" (Coulmas, 2003, p. 35). In the second sense, there is an overlap between the terms 'writing system' and 'orthography'. The former means "the set of rules employed in a particular language for spelling, punctuation etc, namely 'the English writing system', 'the Japanese writing system', and so on" (Cook and Bassetti, 2005, p. 3). In this sense the term is language-specfic (Coulmas, 1996). For example, the Japanese writing system is mixed, using Kanji characters and two kana syllabic symbols, hiragana and katakana (ibid.). However, for Sampson (1985) and Sproat (2000), the terms, 'writing system' and 'orthography' may be used interchangeably. In this paper, 'writing system' refers to "the way that a particular language and its users systematically employ writing" (Cook, 2004, p. 27).

Knowledge of writing does not merely involve learning how to write letters, spell words, and use upper and lower cases (in the English language), or even putting

down representations of sounds on paper. Knowledge of the writing system, which is relatively complicated, includes:

> knowing the regularities of the written language, the form of written symbols, the way they are sequenced on the page, the system of punctuation marks and other typographical conventions, the system of spelling in sound-based written languages, a set of individual idiosyncratic words forms, and much else beside.(Cook, 2001, pp. 1-2)

Second language acquisition of English spelling

Although spelling is "a sign of education" (Cook, 1997, p. 474), and even though it is important for L2/FL learners, studies have shown that this area has received scant attention (Ibrahim, 1978; Bebout, 1985; Haggan, 1993). When L2/FL learners learn how to write in English as a second writing system, they tend to transfer features of their first writing system to the second. Learners not only transfer the phonology, but also other characteristics of their first language (L1). For example, Arabic learners may write <bicture> for <picture> owing to the lack of /p/ in Arabic (Cook, 2004). Since there are no /l/ and /r/ or /b/ and /v/ phoneme contrasts in Japanese, speakers of Japanese might spell <violin> as <biolin> and <neglect> as <negrect> (Gunion, 2012). The effects of transfer occurring between the writing systems of a learner's first and second languages may lead Dutch learners to spell <week> as <wekk> by doubling consonants, since one of the characteristics of Dutch is that a consonant is doubled after a short vowel (Cook, 2004; Van Berkel, 2005). The different conventions for letter doubling and the lack of some phonemes in L2/FL learners' first language phonological systems can thus readily cause spelling mistakes.

It is apparent that the acquisition of English spelling among L2/FL learners is influenced not only by orthography, but also the sound system of their first language (Bebout, 1985). Okada (2005) concluded that the interference of the Japanese

orthographic system (i.e., romaji) as well as phonological distinctions between Japanese and English have effects on the occurrence of spelling errors by Japanese EFL writers. Moreover, different spelling errors are likely to be made by learners who have different first languages, so that difficulties with English spelling are probably many and various (Cook, 1997). For instance, spelling errors made by Italian students often involve the omission of consonants, as in <wether> for <whether> and the failure to double a consonant, as in <biger>. Speakers of Arabic, meanwhile, may substitute <c> for <q>, as in <cuickly> (Cook, 1999).

A review of the literature reveals that there has been little research on spelling errors made by L2/FL learners in Asian contexts, such previous studies of spelling errors made by L2/FL learners have focused on learners in Japan (Okada, 2005; Gunion, 2012) and Arabic countries (Ibrahim, 1978; Haggan, 1993; Al-Shabbi, 1994), but no comparable research has been conducted with Thai learners. This scarcity is the reason for this study.

An investigation of the spelling errors made by L2/FL learners can be beneficial both in the field of second language acquisition and for teachers to be better informed about how to scaffold learners (Gunion, 2012) in their learning process. Understanding the causes of these spelling errors may help in reducing learners' spelling problems.

Spelling errors made by Thai learners

Examples of spelling errors were collected from the result of a sentence composition task, which were texts written by first-year Thai university students studying English as a foreign language. From a group of forty students, twenty were selected randomly. Each student wrote two essays of different length (at least 100 and at least 150 words

respectively). The focus of the study was on uncovering how many spelling errors Thai learners made as well as the types of errors.

Each script was scrutinised for errors, and then all words that deviated from the spellings in the Longman Dictionary of Contemporary English (Longman, 2005) were recorded. All erroneous words were taken from the script, and if there was an exact repetition of the same error by a specific student, it would be counted as only one error. When there was more than one error in the same word, all errors were counted; for instance, in <sprot man> for <sportsman> where the errors were the transposition of <ro> for <or>, the omission of <s> and a word space, consequently to tallying three errors. According to the suggestions of Wing and Baddeley (1980) and Cook (2004), the errors observed were classified into eight major categories.

1. **Insertion (addition):** one letter inserted/added, as in <betaween> for <between>

2. **Omission:** one letter omitted, as in <telephon> for <telephone>

3. **Substitution:** one letter substituted, as in <herry> for <hurry>

4. **Transposition (inversion):** two adjacent letters transposed, as in <gola> for <goal>

5. **Grapheme substitution:** "involving more than two letters but only a single cause, for example when an equivalent according to sound correspondence rules is substituted for the usual form, as in 'thort' for 'thought'" (Cook, 2004, p. 124)

6. **Word space:** an extra word space or a lack of word space, as in <class room> for <classroom> and <anythingelse> for <anything else>

7. **Capital**, as in 'english' for 'English'

8. **Other**

Error rates and categories

In the twenty papers analysed, a total of 143 spelling errors were found. The mean number of errors made by each Thai learner was thus 7.15. The 143 errors were categorised according to the eight major types, and the findings are shown in Table 2.

Table 2 The number of spelling errors made by Thai learners

Student	Insertion	Omission	Substitution	Transposition	Grapheme substitution	Word space	Capital	Other	Total
1	2	4	1	-	-	4	4	-	15
2	1	1	1	1	-	3	3	-	10
3	2	4	1	-	-	-	2	1	10
4	3	7	3	2	-	2		-	17
5	-	3	1	1	-	2	2	-	9
6	1	1	1	-	-	-	-	-	3
7	-	2	-	-	-	-	-	-	2
8	-	2	2	-	-	1	-	1	6
9	-	1	2	1	-	1	1	1	7
10	-	2	1	1	-	2	-	-	6
11	-	-	-	-	-	3	-	-	3
12	1	2	2	-	-	5	-	-	10
13	2	1	1	-	-	-	1	1	6
14	-	1	-	-	-	-	1	-	2
15	-	1	3	-	-	-	1	1	6
16	6	3	2	2	-	1	-	-	14
17	-	2	1	-	-	1	-	-	4
18	1	-	1	-	-	-	-	-	2
19	-	2	1	-	-	-	-	-	3
20	1	1	5	1	-	-	-	-	8
Total	20	40	29	9	0	25	15	5	143
%	13.99	27.97	20.28	6.29	0	17.48	10.49	3.5	100

In Figure 1, the frequency of the eight types of spelling errors is compared.

Figure 1 Frequency of type of spelling errors
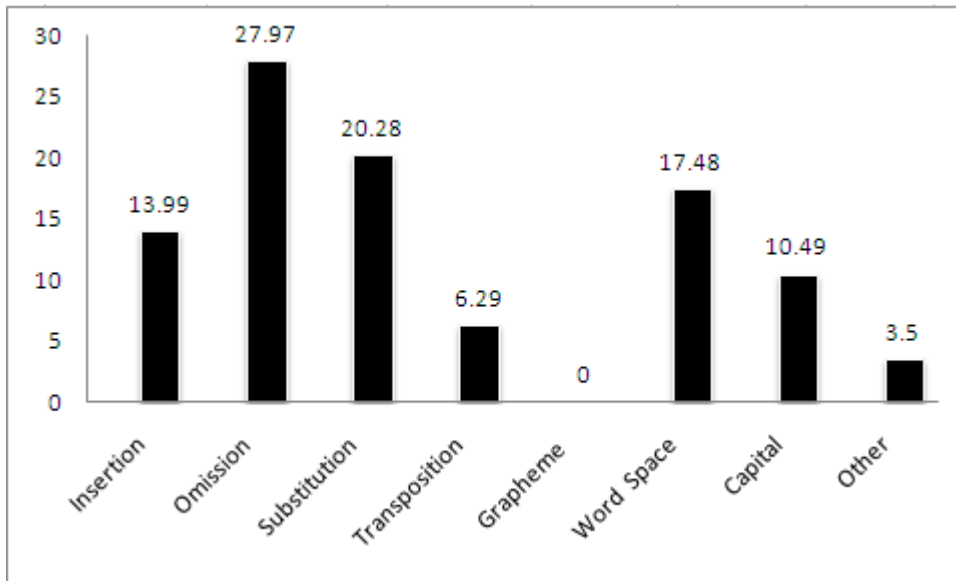
As shown in Figure 1, omission (27.97%) was the commonest type of spelling error made by the Thai learners, followed by substitution (20.28%), word space (17.48 %), and insertion (13.99%). Transposition was the next least frequent (6.29%), and no grapheme substitution was found. Omissions of single letters occurred most frequently in this study, and the Thai learners omitted more consonants (60%) than vowels (40%).

It should be noted that a word was marked as erroneously spelled when a letter was capitalises when not necessary, and when lower case was used where a letter should be capitalised.

Underlying causes of the occurrence of spelling errors

It is clear from previous studies that differences between a learner's first language and the English language tend to be a main cause of spelling errors (e.g., Cook, 2004; Okada, 2005). Other causes of erroneous spelling identified by scholars are L2/FL learners' pronunciation (Abbott, 1979; Brown, 1988), consonant doubling (Kallom,

1917; Bebout, 1985), the interference of the learner's first language (Ibrahim, 1978; Brown, 1988; Cook, 1997; 2004; Okada, 2005), transferring some features of the first language (Cook, 2004), the lack of knowledge of L2 spelling (Van Berkel, 2005), homophones in English (Brown, 1988) and slips of the pen (Ibrahim, 1978; Brown, 1988; Carney, 1994). Possible causes of the spelling errors made by the Thai university students are as follows:

1. Learners' wrong pronunciation: Thai learners spelt <matt> for <match>, <though> for 'thought', <boyfrien> for 'boyfriend', and <wan> for 'want'. The pronunciation of final sounds in English is consistently ignored by Thai learners; for example when <song> is pronounced /sɒŋ/ with no audible release. Apparently, unlike English, Thai is a language in which a final consonant sound has no audible release. This distinction may be responsible for these specific spelling mistakes, where these words were spelt according to their pronunciation. One of the weakness of Thai learners' pronunciation is in the final sound, which they usually pronounce incorrectly or omit. For example, 'match' /mætʃ/ may be pronounced /mæt/ without pronouncing /t/ or /tʃ/.

One characteristic of Thai sound system is the lack of final voicing, for example where < เพลง > is pronounced /pʰleːŋ/ (song) without pronouncing /ŋ/. When Thai letters occur in different positions in a word, their pronunciations at the initial and the final positions differ. Additionally, only nine consonant sounds (/p, t, k, ʔ, m, n, ŋ, w, j/) can appear in the final position (Tingsabadh and Abramson, 1993). In contrast, a final sound in English is vital, since it often specifies the meaning of a word, as in <find> (/faɪnd/), <fine>) (/faɪn/), and <file> (/faɪl/).

Learners' wrong pronunciation accounts for the insertion of extra letters, such as <betaween> and <notthing>. This finding corroborates the suggestions of Abbott (1979) that "an 'adequate' pronunciation is one which facilitates accurate spelling" (p. 175). In the data for this paper, consonants were inserted into words more often (80%) than vowels (20%), and furthermore, letters were inserted in the middle of a word (60%) more often than at the end (40%).

2. Differences between the Thai and English consonant sound systems: The different sound systems of Thai and English can cause Thai learners to spell words wrongly. For example, /θ/ and /ð/ do not exist in Thai, and hence Thai learners substitute /t/ for /θ/ and /ð/, as in <noting> for <nothing> (<th> ≡ /θ/), and <someting> for <something>. Some Thai learners are unable to differentiate /ʃ/ from /ʧ/ and /r/ from /l/. The way they pronounce has a considerable influence on their writing system, as in using <sheer> for <cheer> and <reader> for <leader>.

Thai lacks the consonant sounds, /θ, ð, ʃ, ʒ, tʃ, dʒ, z, v, r/. Thai learners then tend to replace these phonemes with the Thai phonemes: /v/-/ w/, /z/-/s/, and / θ, ð/-/t, s/. They make spelling errors because they tend to write a word as they pronounce it. Therefore, "accurate pronunciation is such an asset in learning to spell" (Hildreth, 1955, p. 29)

3. Homophony: In English some words are spelt differently but have the same pronunciation, such as <to>, <too>, and <two>. Two spelling errors were identified which came from the links between <live> and <believe> and <till> and <til> in 'until'. For Thai speakers, <lieve> in the word 'believe' has the same pronunciation as

<live>. This made it possible for them to spell <belive> for <believe>. They also spelt <untill> instead of <until>.

4. Thai learners probably link some sounds to an easy high frequent word: The correspondence between phonemes and graphemes in English varies from one-to-one to one-to-many, where, for example, <ea>, <ear>, <eer>, <eir>, <ere>, <ier>, <eo> correspond to /ɪə/ (Naruemon, 2006). Thai university students linked the sound, /ɪə/, to <ere> in 'here'; accordingly, they wrote <chere> for <cheer> and <hart> for <heart> (because <ar> ≡ /ɑː/ in 'art', 'cart' and 'farm'.

5. Differences between the English and Thai writing systems: Some aspects of the English writing system differ from those in Thai. These include the use of word spaces and capital letters. In this study, lack of word spaces was found more frequently (52%) than extra word spaces (48%), such as in <inlove> for <in love>, and <highschool> for <high school>, as opposed to <every body> for <everybody> and <foot ball> for <football>. The omission of word spaces may occur because Thai does not exploit spaces between words, instead deploying them to demonstrate clause or sentence boundaries, as in < ฉันรักคุณ แต่คุณไม่รักฉัน > (/tɕʰǎnrǎkkʰun tɛ̀ːkʰunmâjjrǎk tɕʰǎn/- <I love you, but you don't love me.>). In contrast to Thai, rules for the use of word spaces in English are very strict.

The problem of using capitals mainly occurred with proper nouns. The learners did not use upper case when they wrote Thai and English proper nouns and common nouns which follow proper nouns. Instead of using capital letters, they used lower case, as in <valentine's day> for <Valentine's Day>, <ping river> for <Ping

River>, <sunday> for <Sunday> and <big C> for <Big C> (a name of the department store).

English has its own rules concerning how and when capital letters should be used. For example, the first letters of sentences, days, months and proper names have to be capitalised. It is considered to be a mistake and unacceptable if capitalisation is used wrongly. Furthermore, in English most Scottish family names use capitals in the middle of a word, for instance in McDonald, McClelland, McIntosh and McCarthy. In contrast, all letters in Thai are written in the same case no matter where they occur in words or sentences.

6. Differences between grapheme and phoneme correspondence in Thai and English: A pair of letters in English corresponds to only one sound, as in <winner> (<nn> ≡ /n/) and <pepper> (<pp> ≡ /p/), but this type of correspondence is not found in Thai. This might cause Thai learners to spell <winer>, instead of <winner> and <peper> for 'pepper'.

Written symbols in both English and Thai are used according to sound-based systems, where sounds correspond to letters and meanings. However, the correspondence between phonemes and graphemes in English is not one-to-one (Cook and Bassetti, 2005). For instance, one single letter in English may represent many phonemes, where for example (<i> can be pronounced differently in the words: 'bike', 'horrible', 'police' and 'fix'). Additionally, different letters can correspond to the same phonemes, such as where <sh>, <ssi>, <su>, <ssu>, <si>, <ci>, <ti>, <ce>, <xu>, and <ch> correspond to /ʃ/ in fashion, passion, sugar, pressure, tension, special, creation, ocean, luxury, and machine (Naruemon, 2006).

The correspondences between phonemes and graphemes in English are more complicated than in Thai, as two letters, or a digraph, are able to correspond to only one phoneme (two-letters-to-one-phoneme) (Carney, 1994; Cook, 2001), such as when <ch> represents /tʃ/, or a single letter represents two phonemes (one-letter-to-two-phonemes) (Cook, 2001), for example when <q> corresponds to /kw/. The principle of one-to-many mapping between graphemes and phonemes in English (Cook, 2004) can cause difficulties for L2/ FL learners.

7. Spelling errors caused by learners' carelessness and confusion: The main reason for transposition errors may be due to Thai learners' carelessness. So <ir> in the word <girl> was transposed by Thai learners more than once, as in <grilfriend> for <girlfriend> and <gril> for <girl>. They were also confused about the spellings of the three words, 'bath', 'baht and 'Raja<u>bhat</u>', as in <bath> for <baht> (Thai currency), or <Rajabath> for <Rajabhat> (the name of a university). Other transpositions which occurred were <chaing mai> for <Chiang Mai> (a province in Thailand), <eles> for <else> and <gola> for <goal>.

Probably due to confusion, learners wrote <fell> for <feel> and <loss> for <lost>. Thai learners also tend to substitute <a> for <e>, such as in <enyone> for <anyone>, <strenge> for <strange>, and <reletionship> for <relationship>. This pattern is similar to one found in learners from Malaysia in Cook's (1997) study. Cook also found that there were exchanges between the three vowels <a>, <e>, and <i>, as in <exectly>, <catagories>, <definetely>, and <feasable> (p. 481) in the essays of adult L2 users of English.

8. The 'silent' final <e> in English is responsible for vowel omission in the words, <becaus>, <telephon>, and <insid>. In English, a silent e can fulfil various functions. Firstly, it can show that the <a> of 'make' ≡ /eɪ/ and not /æ/. Secondly, the <s> is not a separate morpheme, as in <horse>. Thirdly, it may show that the <c> in <peace> corresponds to /s/ and not /k/. Finally, words have at least three letters in order to meet the general requirements for nouns, verbs, and adjectives, as in <toe> (Kessler and Treiman, 2001).

9. The overgeneralisation of English spelling rule. The use of <puted> and <payed> was due to overgeneralisation. In English, one way to change a verb from the present tense to the past is by adding <ed>. However, many verbs have irregular past tense forms. Thai university students applied the regular past tense verb ending -ed to verbs for which this rule should not be applied. Instead of using the irregular past tense forms, Thai university students used <payed> for <paid> and <buyed> for <bought>. Taking only the regular past tense inflection leads to many such spelling mistakes (Ibrahim, 1978).

Conclusion

A preponderance of Thai learners' spelling errors is probably caused by the negative interference of the Thai writing system and the differences between the Thai and English writing systems, together with a dearth of knowledge of English phonological systems and poor lexical awareness. The complexity, illogicality and irregularity of the English writing system leads Thai learners to experience many difficulties in spelling (Treiman, 1993). The complexity of English is based upon the one-to-many relationships between phonemes and graphemes. The spellings of some words are

unpredictable; orthographic rules always have exceptions, and the same grapheme may represent two or more phonemes. Thai learners of English are likely to link spelling to pronunciation, which is not always the right strategy in spelling English word correctly. Some spelling errors are, of course, merely "performance errors which is a temporary lapse [or a slip of the pen]" (Carney, 1994, p. 81). Understanding the sources of spelling errors may help in minimising L2/FL learners' mistakes and the complexity of spelling for them (Kessler and Treiman, 2003). Awareness of the underlying causes presented in this paper may help teachers to know how to assist their students to cope with spelling in English.

It seems clear that instruction in spelling has been neglected, and there is no systematic spelling instruction in English language teaching in Thailand. The findings of this study point to main sources of Thai university students' spelling errors. Consequently, to reduce these errors, more time should be spent on teaching the English writing system explicitly (Pérez Cañado, 2006). This would include placing more emphasis on the distinctions between the two languages which lead to erroneous spelling, the orthographic regularities of English (Cook, 2005), and the complexity of phoneme and grapheme correspondence. Arguably, incorporating this knowledge into lessons and gradually raising learners' awareness will help in developing L2/FL learners' orthographic abilities.

However, if words are spelt poorly and carelessly, the effectiveness of communication will suffer (Peters, 1985, p. 3). In addition, it is harder for readers to understand the words used, and the message that a writer is trying to communicate might not be transmitted as intended.

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