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# Comparison between English Loanwords in Thai and Indonesian: A Comparative Study in Phonology and Morphology

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**Abstract**— Loanwords are very influential in language learning because learners have a tendency to pronounce or write target language's words based on the corresponding loanwords in their first languages. For that reason, research on English loanwords in both Thai and Indonesian is a potential source for Thai and Indonesian language learning, and even English as a foreign language (EFL) learning in Thailand and Indonesia. The objective of this research is to find out the differences and similarities between English loanwords in Thai and those in Indonesian in terms of their phonological and morphological adaptation. Since not all suprasegmental features, such as tone, exist in both languages, the phonological analysis pays more attention on vowel and consonant changes. The morphological analysis on the other hand focuses on morphological changes of polymorphemic words. The data of this research were collected from previous studies and interviews with native speakers of each language. The finding shows that both Thai and Indonesian have different as well as similar processes of phonological and morphological adaptation of English loanwords.

**Keywords**— loanword; English; Thai; Indonesian

## I. INTRODUCTION

English which has long been recognized as the language of international communication is one of those from which tons of words are borrowed in many other languages, including Thai and Indonesian. Words that are borrowed usually undergo some changes so as to suit the linguistic features of the new language. Hence, the differences between the Thai and Indonesian linguistic features may result in dissimilar forms of English loanwords in the two languages.

Loanwords are very influential in language learning because language learners, especially beginners whose native language has many words cognate with the target language, will tend to pronounce or write those words by following the rules of their native language instead of the target language. Therefore, the objectives of this research is to compare English loanwords in Thai and those in Indonesian in terms of their phonological and morphological adaptation

The data of this research were collected from 6 previous studies of English loanwords in Thai ([1], [2], [3], [4], [5], [6]), and other 6 studies of those in Indonesian ([7], [8],

[9], [10], [11], [12]). Data check was conducted through consulting online etymological dictionaries and native speakers of each language.

## II. PHONOLOGICAL ADAPTATION

The English, Thai and Indonesian phonological systems are different from each other. These three languages also use different orthographic systems. English and Indonesian use the Roman alphabet but with different spelling systems (Indonesians adopted the Dutch spelling system with several changes). Thai on the other hand has its own script, which is also known as the Thai alphabet. These two factors contribute significantly to several similarities and differences of phonological adaptation between English loanwords in Thai and those in Indonesian.

### A. Non-native Sound Adaptation

English sounds that do not exist in Thai and Indonesian are usually adapted through alterations. They are replaced with resembling native sounds in those languages. In the table below are some notable alterations of syllable-initial consonants (onsets) in English that cannot be found in Thai and Indonesian.

TABLE I. NON-NATIVE SINGLE ONSET ADAPTATION

English	Thai	Indonesian
/g/ /gæŋ/ (gang)	/k/ /kɛŋ/	/g/ /gɛŋ/
/v/ /'vit.ə.mɪn/ (vitamin)	/w/ /'wi.ta:.min/	/f/ /'fi.ta.min/
/θ/ /'θaɪ.rɔɪd/ (thyroid)	/th/ /'thaj.rɔɪj/	/t/ /'ti.rɔit/
/z/ /'zen.ɑ:n/ or /'zi:.nɑ:n/ (xenon)	/s/ /'si:.nɔ:n/	/s/ /'se.nɔn/
/ʃ/ /'ʃɒk/ (shock)	/ch/ /'chɔk/	/sj/ /'sjɔk
/tʃ/ /'tʃek/ (check)	/ch/ /'chɛk/	/c/ /'cek/
/dʒ/ /'dʒæk.ɪt/ (jacket) /'dʒel.i/ (jelly) /'haɪ.drə.dʒən/ (hydrogen)	/c/, /j/ /'cɛk.kɛt/ /'jen.li:/	/j/, /g/ /'ja.ket/ /'je.li/ /'hi.dro.gen/

Some of them are altered based on either shared places-and-manners of articulation (/g>/k/, /v>/f/, /z>/s/) or auditory similarities (/v>/w/, /θ>/th, t/, /ʃ>/ch, sj/, /tʃ>/ch, c/, /dʒ>/c, j, ʒ/). The adaptation of /dʒ>/g/ seems to result from transliteration of the English letter “g” /dʒi:/ into the Indonesian “g” /ge/.

In the adaptation of syllable-final consonants (codas), there are some changes that are specific to Thai and do not occur in Indonesian. Those changes can be classified into two types: alteration (/s>/t/, /ʃ>/t/, /l>/w, n/) and deletion (/r>/Ø). Since there is no coda /ʃ/ in Indonesian, it is replaced with the voiceless alveolar fricative /s/.

TABLE III. NON-NATIVE SINGLE CODA ADAPTATION

English	Thai	Indonesian
/s/ /'boʊ.nəs/ (bonus)	/t/ /bo:.nát/	/s/ /bo.nus/
/ʃ/ /'flæʃ/ (flash)	/t/ /'flét/	/s/ /'flɛs/
/r/ /'lɒk.əʳ/ (locker)	Ø /'lɒk.kâ:/	/r/ /'lɒ.kər/
/l/ /'i:.meɪl/ (email) /'æp.l/ (apple)	/w/, /n/ /'i:.me:w/ /'ʔɛp.pân/	/l/ /'i.me.l/ /'ʔa.pəl/

Besides the single onsets and codas, there are also those which are in the form of consonant clusters. The majority of onset clusters retain their forms, as long as they are permissible in Thai and Indonesian phonological systems. On the contrary, most of the coda clusters of English loanwords in both Thai and Indonesian are reduced to single consonants. For instance, the cluster /nt/ becomes /n/, as in /sɪ'ment/ (cement) > /si:.men/ (THA) & /sə.men/ (IND).

Another type of consonant cluster adaptation that is found in both languages is vowel insertion (anaptyxis). In Thai, the insertion of the vowel /a/ normally occurs between sC onset clusters, such as /sp/, /st/, /sl/, and /sk/. In Indonesian, the vowel /ə/ tends to be inserted between IC coda clusters, like /lm/ and /lf/.

TABLE IIIII. VOWEL INSERTION

English	Thai	Indonesian
/sp/ /'spɒn.sər/ (sponsor)	/sap/ /'səpɔ:n.sə:/	/sp/ /'spɒn.sər/
/st/ /'steɪk/ (steak)	/sat/ /'səték/	/st/ /'stek/
/sl/ /'sloʊ.gən/ (slogan)	/sal/ /'salo:.kɛ:n/	/sl/ /'slo.gan/
/sk/ /'skæn/ (scan)	/sak/ /'səkɛ:n/	/sk/ /'skɛn/
/lm/ /'fɪlm/ (film)	/m/ /'fi:m/	/ləm/ /'filəm/
/lf/ /'gɒlf/	/p/ or /f/ /'kɒp/ or /kɒf/	/ləf/ /'gɒləf/

In Thai, there is also deletion of codas (single or cluster) preceded by glide sounds: /j/ and /w/. Those glides usually

result from the adaptation of diphthongs ending with /i/ or /ɔ/, e.g. /aɪ>/aj/ and /aʊ>/aw/. Some examples of coda deletion in this case are: /ə'kaʊnt/ (account) > /ʔé:kkháw/ (THA) and /dɪ'zain/ (design) > /di:.sa:j/ (THA). Such phenomenon does not occur in the adaptation of English loanwords in Indonesian.

B. English, Thai, and Indonesian /r/ Sounds

English, Thai, and Indonesian have different types of /r/. In English, the sound /r/ is actually an alveolar approximant [ɹ]. On the other hand, both the Thai /r/ and Indonesian /r/ are in the forms of alveolar trill [r]. The difference between those in Thai and Indonesian is that the Indonesian [r] is always clearly pronounced and can be present in all positions, while the Thai [r] can be either pronounced or sometimes unpronounced, or even replaced by sound [l], especially in informal speech. For example, the loanword for “free” in Thai has 3 alternate pronunciations: /fri:/, /fli:/, and /fi:/. The Thai [r] never occurs in coda positions. The English syllable-final /r/ is usually deleted in Thai, as in /brəʳ/ (beer) > /bia/ and /'nju:.kliəʳ/ (nuclear) > /niw.khliə/.

C. Glottal Stop /ʔ/

In both Thai and Indonesian, the glottal stop /ʔ/ is put before a vowel, as a single onset of a syllable, when there is no other consonant preceding it, e.g. /'pɪk.ʔp/ (pick-up truck) > /pɪk.ʔp/ (THA) & /pɪk.ʔp/ (IND). In informal Indonesian, /ʔ/ also often replaces the coda /k/. For example, the loanword for “plastic” in Indonesian can be pronounced /plas.tik/ or /plas.tiʔ/.

D. Coda Devoicing

Coda devoicing is the process where voiced consonants become voiceless when they are in coda positions. Some examples of coda devoicing of English loanwords that can be found in both Thai and Indonesian are: /b, d, g/ (voiced) > /p, t, k/ (voiceless).

TABLE IVV. CODA DEVOICING

English	Thai	Indonesian
/b/ /'klʌb/ (club)	/p/ /'khlàp/	/p/ /'klup/
/d/ /'daʊn'ləʊd/ (download)	/t/ /'da:w.lò:t/	/t/ /'dɔn.lot/
/g/ /'wɪɡ/ (wig)	/k/ /'wɪk/	/k/ /'wik/

E. Unreleased Stop Codas

Unlike those in English, final stop consonants in both Thai and Indonesian have no audible release. Consequently, final English released stops tend to change to unreleased ones when borrowed into both Thai and Indonesian. Some final released consonants in English that become unreleased in both Thai and Indonesian are exemplified in the table below.

TABLE V. FINAL RELEASED STOP ADAPTATION

English	Thai	Indonesian
/p/ /su:p/ (soup)	/p̄/ /súp̄/	/p̄/ /sup̄/
/t/ /'doʊ.nət/ (donut)	/t̄/ /do.nát̄/	/t̄/ /do.nát̄/
/k/ /tʃek/ (check)	/k̄/ /chék̄/	/k̄/ /cek̄/

F. Aspirated vs. Unaspirated Consonants

In Thai, aspiration is one of its contrastive features. According to [5], in the adaptation of English onsets, Thai aspiration is unpredictable. English onsets therefore can be either aspirated or unaspirated when borrowed into Thai. In coda positions, Thai consonants are unaspirated.

In Indonesian, aspiration is not a contrastive feature. Indonesian consonants are basically unaspirated and therefore all English aspirated consonants are deaspirated when borrowed into Indonesian.

The table below provides some examples of the differences between aspirated and unaspirated consonants of English loanwords in the two languages.

TABLE VI. ASPIRATED VS. UNASPIRATED CONSONANTS

English	Thai	Indonesian
[p <sup>h</sup> ] (aspirated) [ 'p <sup>h</sup> ʊd.ɪŋ] (pudding)	/ph/ (aspirated) /phút.dìŋ/	/p/ (unaspirated) /pu.dìŋ/
[p <sup>h</sup> aʊnd] (pound)	/p/ (unaspirated) /pɔ:n/	/pɔn/
[t <sup>h</sup> ] (aspirated) [t <sup>h</sup> i:m] (team)	/th/ (aspirated) /thi:m/	/t/ (unaspirated) /tim/
[t <sup>h</sup> ʌn] (ton)	/t/ (unaspirated) /tan/	/tɔn/
[k <sup>h</sup> ] (aspirated) [ 'k <sup>h</sup> æl.kjʊ.ləs] (calculus)	/kh/ (aspirated) /khe:w.khu:.lát/	/k/ (unaspirated) /kal.ku.lus/
[ 'k <sup>h</sup> æp.tən] (captain)	/k/ (unaspirated) /káp.tan/	/kap.ten/

G. Vowel Duration Adaptation

While in English the duration of vowels does not necessarily differentiate meaning (as stated in [16], English vowels differ primarily based on whether they are tense or lax), in Thai it is prominently contrastive. In Indonesian, on the other hand, vowel length does not make any change in word meaning. Thus, vowel lengthening tends to occur only in Thai.

TABLE VII. VOWEL DURATION ADAPTATION

English	Thai	Indonesian
/ɒ/ /bɒm/ (bomb)	/ɔ/ (short) /bɔm/	/ɔ/ /bɔm/
/bɒs/ (boss)	/ɔ:/ (long) /bɔ:t/	/bɔs/
/e/ /tʃek/ (check)	/e/ (short) /chék/	/e/ /cek/
	/e:/ (long)	

/sel/ (cell)	/se:w/	/sel/
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III. MORPHOLOGICAL ADAPTATION

Morphological adaptation of English loanwords in Thai and Indonesian includes: compounding, ellipsis, clipping, and initialism.

A. Compounding

As stated by [15], compounding is the process of combining two, or more, roots to form new stems. The words in bold in the table below are some examples of compounding of English loanwords in Thai and Indonesian. Some of them tend to be equivalent in both languages (with similar literal meanings and morpheme order). Most of them are formed through compounding the loanwords from English with those from the borrowing languages. In order to function in sentences, the compounding is necessary as it makes the meaning of the loanwords well-understood and not ambiguous.

TABLE VIII. COMPOUNDING

English	Thai	Indonesian
/disk/ (disk)	<b>/phê:n-dít/</b> (plate-disk)	<b>/kəpiŋ-dis/</b> or <b>/piriŋan-dis/</b> (plate-dis)
/dʒi:nz/ (jeans)	<b>/ka:ŋke:ŋ-ji:n/</b> (pants-jeans)	<b>/cəlana-jin/</b> (pants-jeans)
/'pɪkʌp/ (pick-up)	<b>/rót-píkʔáp/</b> (car-pickup)	<b>/mobil-pikʔap/</b> (car-pickup)
/bɔ:l/ (ball)	<b>/lú:k-bɔn/</b> (ball-ball)	/bɔla/ (ball)
/fæn/ (fan)	<b>/fɛ:n-khlàp/</b> (fan-club)	/fɛn/ (fan)
/gəʊn/ (gown)	<b>/sía-ka:w/</b> (dress-gown)	/gaun/ (gawn)
/'ræktɪ/ (racket)	<b>/máj-rékkêt/</b> (wood-racket)	/raket/ (racket)
/'websaɪt/ (website)	/wépsáj/ (website)	<b>/situs-wep/</b> (site-web)

B. Ellipsis and Clipping

In line with [13], ellipsis is the shortening of a phrase or compound so that the shortened form has the former meaning of the whole phrase or compound. Ellipsis can be found in the loanword of the English compound /'bɑ:skɪt-bɔ:l/ (basketball) in Indonesian, which was shortened by eliminating the morpheme /bɔ:l/. This process belongs to ellipsis since Indonesian /basket/ is equivalent to English /'bɑ:skɪt/, which in English is still in the form of a “full” word.

Clipping, as in [14], is the shortening of a word without any change in its word meaning or class. Unlike the corresponding loanword in Indonesian, Thai loanword

/bá:t/ is a clipped form of /bá:tsakêtbən/, which was borrowed from the English /'bɑ:skɪt-bə:l/. The adaptation is considered clipping because the word /bá:t/ is equivalent to /'bɑ:s/ (a half-part of /'bɑ:skɪt/ in /'bɑ:skɪt-bə:l/) which cannot stand alone as a word in English.

C. Initialism

According to [13], initialism is a word created by combining the initial letters of a phrase and pronounced as a series of letters. Since English, Thai, and Indonesian have different orthographic systems, both Thai and Indonesian have either transcribed or transliterated forms of English initialisms. In the following table are some examples of loanwords in Thai and Indonesian created by borrowing from three English abbreviations, namely: DJ (disk jockey), TV (television), and ATM (automated teller machine).

TABLE IX. INITIALISM ADAPTATION

English	Thai	Indonesian
/'di: dʒeɪ/ (DJ)	/di: ce:/	/di.je/
/ti: 'vi:/ (TV)	/thi: wi/	/ti.fi:/
/.eɪ.ti: 'em/ (ATM)	/ʔe: thi: ʔem/	/ʔa.te.ʔem/

In the case of the Indonesian word /ʔa.te.ʔem/, it is an abbreviated form which is spelled in Indonesian alphabets (through transliteration) and stands for an Indonesian phrase that has similar meaning to that of the English /,eɪ.ti: 'em/.

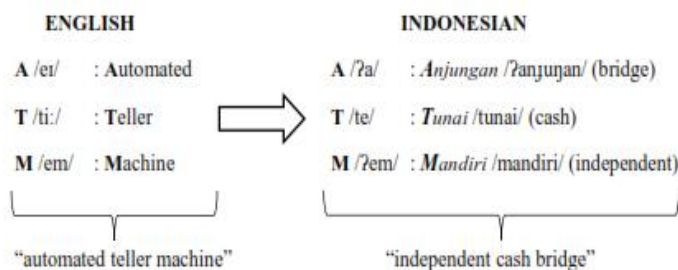


Fig. 3. The morphological adaptation of the English /,eɪ.ti: 'em/ (ATM) into the Indonesian /ʔa.te.ʔem/ (ATM).

IV. CONCLUSION

There are several factors that contribute to the adaptation of English loanwords in Thai and Indonesian, such as orthographic systems (when the words are transcribed or transliterated), phonological systems, and morphological systems.

Phonologically, the changes can be categorized into several types, some of which are non-native sound adaptation, /r/ and /ʔ/ adaptation, coda devoicing, released stop coda adaptation, aspiration, and vowel duration

adaptation. Morphologically, there are roughly three kinds of adaptation that can be compared in Thai and Indonesian, namely: compounding, shortening (ellipsis/clipping), and initialism.

Since this paper seeks to find out the differences and similarities of loanword adaptation in both languages at large, not all the details of phonological and morphological changes can be included in the discussion. Therefore, more focused and in-depth comparative studies of English loanwords in these two languages are among the things demanding further attention.

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