

PL-SKT Loanwords in NE Thai Dialect Dictionary: A Case Study of Sound Changes in Vowels and Consonants

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Abstract—The Northeastern (NE) Thai dialect dictionary compiled by the National Cultural Council is one of the best NE dialect dictionaries. Pali and Sanskrit (PL-SKT) loanwords used in the spoken and written language and in NE literature were collected from the dictionary. Some words were very different from the original Pali and Sanskrit words because of sound changes in vowels and consonants. The objectives of this study were to explore the sound changes in vowels and consonants of PL-SKT loanwords in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council. The conceptual framework of this study consists of usage of PL-SKT words through sound change theories. A qualitative method was employed and the data collection was done from the Northeastern (NE) dialect dictionary compiled by the National Cultural Council. It was found that there were 3,022 PL-SKT loanwords. Two kinds of sound change in vowels and consonants were found: intentional sound change and unintentional sound change. Seven types of vowel sound change and fourteen types of consonant sound change were found. Surprisingly sound changes in vowels and consonants with analogy in PL-SKT declension were found. The types of sound change in PL-SKT words seem to have occurred because they were more convenient to pronounce and beautiful in the spoken and written language including NE dialect literature.

Index Terms—PL-SKT, loanwords, vowel, consonants, dialect dictionary

I. INTRODUCTION

Pali and Sanskrit entered Thailand through Indian religions such as Buddhism, and Indian people also played an important role in introducing Pali and Sanskrit in Thailand through culture and beliefs. Pali and Sanskrit words were borrowed in the Thai language in large numbers. It has been found that there are more words derived from Sanskrit than those derived from Pali in the King Ramkhamhaeng inscription (Prapanvidya, 1979). Through the impact of Pali and Sanskrit on Thai language, some elements of the Thai language such as sound, word etc., were changed.

Thai people feel very close to both Pali and Sanskrit because they have been employed from the Sukhothai period up through the Bangkok period in a variety of ways, namely, in writing, speaking, transliterating, coining new terminology in many fields, and in literature. Historically, in southern Thailand, Pali and Sanskrit words were found in literary works (Wipolchai, 2015, p. 17). It can thus be stated that Thai language and Thai dialects have been greatly influenced by Pali and Sanskrit. As a result, Pali and Sanskrit loanwords have been compiled in dictionaries of dialects such as the Northeastern (NE) dialect dictionary etc., (National Cultural Council, 1994). More importantly, many of them have been collected in the dictionaries of the Royal Institute from the earliest volumes up to the most recent ones.

The sound system of the Pali language is similar to that of the Sanskrit language, but the two are dissimilar from the sound system of the Thai language because while Pali and Sanskrit are in the same language family, Thai is in a different language family. Given the differences in the sound systems of Pali-Sanskrit and Thai language, it is interesting to study the Pali and Sanskrit words in the NE Thai dialects, especially in terms of vowel and consonant sound changes, for NE Thai dialects have the phonemes of vowel and consonant sounds that are different from those of Pali and Sanskrit obviously. NE Thai people have borrowed Pali and Sanskrit words to use in their dialects, and the sound changes in these words appeared in the Northeastern (NE) dialect dictionary compiled by Somdej Phramahaweerawong (1972) and organizations such as the National Cultural Council (1994).

In the light of the above, Jarumetheechon (2016, p. 45) stated that when Thai people borrowed Pali and Sanskrit words, these words not only contributed semantically to the dialects, but also affected their sound systems. There are two kinds of sound change, namely, sound change according to the nature of language and sound change for the benefit of language use, i.e., obtaining words that are convenient in language use and using words that are beneficial in linguistic beauty. This is seen in the work entitled Kwam Phook Khaen Kamsorn Poo Ya Ta Yai Phai Khoei [Words of Blessings of the Wrist Tying Ceremony: Teachings of Grandfathers, Grandmothers, Daughters-in-law and Sons-in-law] of a Northeastern scholar Boonjerm (1999), in which there seem to be many Pali and Sanskrit loanwords in NE Thai dialects.

Interesting research questions addressed here are how many kinds of vowel and consonant sound change of Pali and Sanskrit words are there in the Thai language? and how did these Pali and Sanskrit words change sound in vowel and consonant? Therefore, the researcher intended to make an analytical study of vowel and consonant sound changes of Pali

and Sanskrit words that appeared in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council in order to answer these questions and thus benefit the field of Pali and Sanskrit loanwords study.

II. REVIEW OF LITERATURE

According to the review of literature as conducted before making a study in this research, the previous data including the researches as conducted in relation to the present research will be reviewed and taken into account.

A. *Theory of Language Change and Sound Change*

Hale (2007) stated that the nature of change is ultimately rooted in acquisition, the primary linguistic data (PLD) used in constructing G1 and G2 are crucially different; hence inevitably language changes. A general theory of change must provide an account for any change (innovation), regardless of whether or not it diffuses (Hale, 1998, p. 6). Generally, linguists have been more successful at describing what happened than why it happened. Some people claim (Lass, 1980) that ‘language change is simply not amenable to explanation.’ While Postal’s (1968) position is that ‘change is simply the result of the general tendency of human cultural products to undergo nonfunctional stylistic change’.

Jufrizal and Refnaldi (2017) stated that languages always change in day-to-day communication; however, this may not be easily apparent or obvious. As for the causes of language change, Aitchison (2004) gives four general causes of language change: (i) fashion and random fluctuation, (ii) foreign elements, (iii) social needs, and (iv) politeness while Kullavanijaya (1999, p. 384) stated that language change is due to many causes such as sound change, comparison, and borrowing from other languages.

Kullavanijaya (1999) and Khanithanan (1983) stated that sound change found in languages is of two kinds: these are 1) conditioned sound changes and unconditioned sound changes. The first kind means a sound changes in certain circumstances only. There are six kinds of sound change of this kind, namely, assimilation, dissimilation, metathesis, deletion, insertion and epenthesis. On the other hand, unconditioned sound change means a certain sound in a language changes to be another sound in all circumstances. Unconditioned sound change is found less frequently than conditioned sound change.

B. *Sound Change in Pali and Sanskrit*

Sound change of Pali and Sanskrit words in Standard Thai has been studied by many Thai scholars such as Phunthumedha (1975) and Pengphala (2000). Phunthumedha (1975) stated that pronunciation of Pali and Sanskrit words is unlike that of the Thai language. There will be two kinds of sound change in Pali and Sanskrit language; intentional sound change and unintentional sound change. Pengphala (2000) also explained the issue of sound change between Pali and Sanskrit on the one hand compared with the Thai language on the other saying “the sound system of Pali and Sanskrit is very different from that of the Thai language because Pali-Sanskrit and the Thai language are different in terms of the language families to which they belong. Therefore, sounds of Pali and Sanskrit words were changed when they came to be used in the Thai language.” Especially, this was done to make it easy for Thai people to pronounce.

Not only this, Buaphanngam (2017) who studied vowel changes of Pali and Sanskrit words in the Thai language on the-basis of historical-comparative linguistics, also stated that this phenomenon was a result of language contact between Pali-Sanskrit and Thai, all of which have been around for over a thousand years. He found the process of the phonological change in Pali and Sanskrit loanwords in the Thai language to be systematic.

Furthermore, Pimpuang (2023), who studied sound change of Pali and Sanskrit loanwords in an important old epic entitled Thao Hung or Cheuang stated that the vowel and consonant sound changes were made for the sake melodiousness of the poetry of the work.

C. *Pali and Sanskrit Loanwords in NE Dialects*

Regarding Pali and Sanskrit loanwords in Northeastern Thai dialects, Jarumetheechon (2016), who conducted research on Pali and Sanskrit loanwords in these dialects stated that the original forms and words in Pali and Sanskrit were borrowed into the dialects through religious influences and beliefs, especially Buddhism. In this process, there were many types of changes such as sound stretching, sound reduction, sound cutting, sound pranks and sound conversion, as well as coining new words. Many Pali and Sanskrit loanwords entered NE dialects.

The Royal Institute has also compiled dictionaries related to Pali and Sanskrit words in literature, namely, The Dictionary of the Vocabulary in the Northeastern Thai Literary Work Thao Hung or Thao Cheuang, Volume 1 (2005); The Dictionary of the Vocabulary in the Northeastern Thai Literary Work Thao Hung or Thao Cheuang, Volume 2 (2008); the Dictionary of the Vocabulary in the Northeastern Thai Literary Work Thao Hung or Thao Cheuang, Volume 3 (2013); and the Dictionary of the Vocabulary in the Northeastern Thai Literary Work Thao Hung or Thao Cheuang, Volume 4 (2019). It should be noted that in addition to a great number of Lao words, there are many Pali and Sanskrit words used in this literary work.

Considering Pali and Sanskrit loanwords in NE dialects, the researcher has found many of Pali and Sanskrit loanwords which NE Thai people used in ways different from the ways they were originally used. For example; *ເຮົາເຈົ້າ* /ren-jo:/ means the king; however, it can be stated that both marked vowel and consonant sound changes have occurred.

A review of literature regarding the documents and researches related to sound change of vowels and consonants helped researcher to devise the conceptual framework of research to be applied and studied in this research, especially, the important matters, namely, sound change theories, sound changes of Pali and Sanskrit in the Thai language, and the way in which Pali and Sanskrit entered NE Thai dialects.

III. RESEARCH METHODOLOGY

This study is based on documentary data and descriptive writing of the research findings. In conducting the research based on its objectives, the researcher proceeded according to the research methodology as follows:

The important population studied in the research was the 3,022 Pali and Sanskrit words in the Northeastern dialect dictionary compiled by the National Cultural Council.

Surveying of data related to the research was done and literature concerning the sound change theories in vowels and consonants was reviewed. This included sound change theories of Pali and Sanskrit loanwords in the Thai language and in Northeastern dialects in order to be understood and applied in the conceptual framework of the study.

Data collection and recording of all the data related to the sound changes of Pali and Sanskrit loanwords in the Thai language were done by the Northeastern (NE) dialect dictionary compiled by the National Cultural Council.

Classification of Pali and Sanskrit loanwords in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council was done according to sound change theories in vowels and consonants.

Data analysis based on the conceptual framework of sound change theories in Pali and Sanskrit words in Thai language was done in order to help understand clearly the sound changes according to the objectives of the research.

Results, conclusion and discussion about the research results were presented through the thorough descriptive writing in order to help understand all the contents of the research and for the benefit of future research in this field.

IV. RESEARCH RESULTS

The research results found after the researcher completed the study on the sound changes in vowels and consonants of Pali and Sanskrit loanwords in the Northeastern (NE) Dialect Dictionary compiled by the National Cultural Council were as follows:

A. Vowel Sound Changes of PL and SKT Words in the NE Dialect Dictionary

Sound change means the process in which sounds in one language becomes other sounds in another language. This change may occur due to the nature of the languages or it may be done intentionally by users in order to make words beautiful. Phanthumedha (1975) stated that the following two aspects of sound change were found: conditioned sound change and unconditioned sound change. The first one can occur through the intention of users in order to make the Pali and Sanskrit words melodious and beautiful. Contrarily, the latter means the sound change can occur according to the nature of language. The vowel sound changes were as follows:

(a). Lengthening of Vowels

Lengthening of vowels means the linguistic phenomenon based on an unintentional lengthening of a short vowel sound in a syllable having neither an aspirated consonant nor a syllable final stop. It probably occurred for convenience in pronunciation. Examples of this lengthening from the Northeastern (NE) dialect dictionary compiled by the National Cultural Council are:

PL-SKT Words		PL-SKT Words in NE Thai	
समर्थ	samartha	สามรท	sǎ:-mâ:t (NE, p. 306)
मरुत्यु	m ^a tyu	มฤตยู	má-rút-ta- ju: (NE, p. 224)
रात्रि	r ^á tri	ราตรี	ra:- tri: (NE, p. 251)

(b). Shortening of Vowels

Shortening of vowels means the linguistic phenomenon in which there is the unintentional sound change to shorten the long vowel sound, and make the final consonant to be a spelling. Examples of this shortening found in the Northeastern (NE) dialect dictionary compiled by National Cultural Council include:

PL-SKT Words		PL-SKT Words in NE Thai	
नील	níla	นึล	nin (NE, p. 164)
सुकर	sÚkara	สุกร	sù-kə:n (NE, p. 311)
नीति	níti	นึติ	ní-ti? (NE, p. 164)

(c). *Shifting of Vowels*

Shifting of vowels is an unintentional sound change in which a vowel sound in a PL-SKT word in a NE Thai dialect is changed to another vowel sound. Some examples of such vowel shift in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council are:

PL-SKT Words		PL-SKT Words in NE Thai	
कुशल	kuḌala	โกศล	ko:-sõn (NE, p. 26)
बीज	bīja	พีช	phū:t (NE, p. 212)
वाज्र	vajra	เวชร	pét (NE, p. 213)
कमल	kamala	กมล	kà-mon (NE, p. 2)
लिङ्ग	liÉga	ลิ่งก	luṅ (NE, p. 262)
कुञ्जर	kuñjara	กุกฺขร	kun-cho:n (NE, p. 24)
प्रिकथा	príkÒÁ	ปริกษา	pruik-sǎ: (NE, p. 184)
सिमा	símÁ	เสมา	sě:-ma: (NE, p. 314)
PL-SKT Words		PL-SKT Words in NE Thai	
बिकुल	bikula	พิกุล	phí-kun (NE, p. 210)
विदान	vitÁna	เวदान	phe:-da:n (NE, p. 213)

(d). *Diphthongization*

Diphthongization is the linguistic phenomenon based on the unintentional sound change where a simple vowel sound in a PL-SKT word is replaced by a diphthong in NE Thai dialects. Examples of this diphthongization given in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council are:

PL-SKT Words		PL-SKT Words in NE Thai	
सथिर	sathira	เสถียร	sà-thĭan (NE, p. 313)
थिर	Ḍira	เตียร	sĭan (NE, p. 280)
थिरज्जलान	tiracchÁna	เตียรจฺจลาน	dia-rát-chǎ:n (NE, p. 124)

(e). *Monothongization*

Monothongization means the linguistic phenomenon based on an unintentional sound change whereby a diphthong sound in a PL-SKT word is replaced by a simple vowel sound in NE Thai dialects. Monothongization was found in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council in these examples:

PL-SKT Words		PL-SKT Words in NE Thai	
डैन्य	Ḍainya	แदनยา	sĕ:n-ja: (NE, p. 317)
वैद्य	vaiḌya	แพดย์	phĕ:t (NE, p. 215)
वाय	vaidya	แพดย์	phĕ:t (NE, p. 215)

(f). *Consonantization*

Buaphanngam (2017) described consonantization as the linguistic phenomenon based on an unintentional sound change in which a vowel sound becomes a consonant; it occurs when vocalic sounds available in only Sanskrit like the trill, tap or flap sounds in PL-SKT words are replaced vowel sounds such as /w/, /w:/, /i/ or /ə:/ in loanwords received in NE Thai dialects. Examples of this sort of consonantization found in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council are:

PL-SKT Words		PL-SKT Words in NE Thai	
अद्धि	^addhi	अद्ध	rĭt (NE, p. 253)
अभि	^aḌi	अभि	rww:-sĭ:

ฤๅ	^a kÒa	ฤๅ	(NE, p. 254) r̥h̄:k (NE, p. 253)
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(g). *Sound Loss*

Sound loss is the linguistic phenomenon based on the unintentional sound change wherein a vowel sound in a final syllable of a PL-SKT is lost, leaving only the consonants in loanwords received in NE Thai dialects. Examples of such sound loss found in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council are:

PL-SKT Words		PL-SKT Words in NE Thai	
นรก	nara <u>ka</u>	นรก	ná- rók (NE, p. 159)
อาศรม	Á <u>Drama</u>	อาศรม	ʔa:-s óm (NE, p. 350)
หฤทัย	h ^a <u>daya</u>	หฤทัย	hà-rú- thai (NE, p. 327)
วรม	var <u>Òa</u>	พรม	phát (NE, p. 205)
พรม	bra <u>hma</u>	พรม	phrom (NE, p. 205)
พกฺตร	bak <u>tra</u>	พกฺตร	phák (NE, p. 208)
ศาสตร	ĐÁ <u>stra</u>	ศาสตร	sà:t (NE, p. 278)
กาวย	kÁ <u>vya</u>	กาพย์	kà:p (NE, p. 21)
ศูนย	ĐÚ <u>ya</u>	ศูนย	sǔ:n (NE, p. 280)
กรรม	kar <u>ma</u>	กรรม	kam (NE, p. 3)

B. *Consonant Sound Change of PL and SKT Words in the NE Dialect Dictionary*

According to the consonant sound change of Pali and Sanskrit in the Northeastern (NE) dialect dictionary, the following 14 categories; 1) sound change of grouped consonant for the same group 2) sound change of ungrouped consonant for the grouped consonant 3) sound change of consonant ๗ (p) to ๗ (p) and ๖ (b) 4) sound change of consonant ๓ (t) to ๓ (t) and ๓ (d) 5) sound change of ฤ (Ô) to become ฤ (t) and ฤ (d) 6) sound change of ๖ (v) to become ๖ (w) and ๗ (ph), 7) epenthesis 8) metathesis, 9) sound deletion 10) wrong sound deletion, 11) sound insertion, 12) wrong analogy, 13) popular etymology of PL-SKT in Thai word and 14) popular etymology of Thai word in PL-SKT, were found obviously. They are as follows.

(a). *Sound Change of Grouped Consonant for the Same Group*

Sound change of grouped consonants (*vargas*) for the same group is to change the grouped consonant sounds based on the unintentional change in order to put a consonant into the same consonant group. Sound change sometimes can occur in different consonant groups, but it must be same or similar at the place of sound. Examples of this change found in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council are:

PL-SKT Words		PL-SKT Words in NE Thai	
กนิษฐา	k aniÒÔhÁ	กนิษฐา	kh à-nít-thă: (NE, p. 2)
สกุลฉาป	sakul <u>ch</u> Ápa	สกุลฉาป	sà-kun-lá- cà :p (NE, p. 282)
กปา	k apaÔa	กปา	kh à-bòt (NE, p. 33)

(b). *Sound Change of Ungrouped Consonant for the Grouped Consonant*

Sound change of ungrouped consonants for the grouped consonant is to change the ungrouped consonant sounds based on the unintentional change in order to put a consonant in the grouped consonant. Examples of this change found in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council are:

PL-SKT Words		PL-SKT Words in NE Thai	
ฉิมพลี	ś imbalÍ	ฉิมพลี	ch īm-phá-li: (NE, p. 95)
ฉลาภ	ś alÁka	ฉลาภ	ch à-là:k (NE, p. 293)

(c). *Sound Change of the Consonant ɸ (p) to ɸ (p) and ɸ (b)*

Change of the consonant sound ɸ (p) to be pronounced ɸ (p) or ɸ (b) is a process in which Pali and Sanskrit words are changed based on an unintentional sound change. This change of Pali and Sanskrit sound is partially influenced by the Khmer language and also Pali and Sanskrit has the impact to the Thai language directly. Examples of this change found in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council are:

PL-SKT Words		PL-SKT Words in NE Thai	
ປຣກ	prabhÁ	ປຣກ	prà-pha: (NE, p. 181)
ປຸປ	puÒpa	ປຸປ	hùt-sà-ba: (NE, p. 174)
ປຣາຸ	porÁÆa	ປຣາຸ	hò:-ra:n (NE, p. 176)

(d). *Sound Change of the Consonant ʈ (t) to ʈ (t) and ʈ (d)*

Change of the consonant sound ʈ (t) to be pronounced ʈ (t) or ʈ (d) is a process in which Pali and Sanskrit words are changed based on an unintentional sound change. This change of Pali and Sanskrit sound is partially influenced by the Khmer language, and also Pali and Sanskrit has the impact to the Thai language. Examples of this change found in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council are:

PL-SKT Words		PL-SKT Words in NE Thai	
ທຸຸ	tʰÆa	ທຸຸ	trin (NE, p. 128)
ກນຸຸ	kantÁra	ກນຸຸ	kan-dá:n (NE, p. 18)
ຸຸຸ	tuÒÒi	ຸຸຸ	đùt-sà-di: (NE, p. 123)

(e). *Sound Change of the Consonant ʈ (t) to ʈ (t) or ʈ (d)*

Change of the consonant sound ʈ (t) to be pronounced ʈ (t) or ʈ (d) is also a process to change Pali and Sanskrit words based on an unintentional sound change. This change of Pali and Sanskrit sound is partially influenced by the Khmer language, and also Pali and Sanskrit has the impact on the Thai language directly. Examples of this change found in the Northeastern (NE) dialect dictionary compiled by National Cultural Council are:

PL-SKT Words		PL-SKT Words in NE Thai	
ວັສຸສາຣ	vaÒÒasaÉsÁra	ວັສຸສາຣ	wát-tà-sòŋ-sǎ:n (NE, p. 270)
ປິຸກ	piÒaka	ປິຸກ	pi-dòk (NE, p. 190)
ຸຸກ	ÓkÁ	ຸຸກ	đii-ka: (NE, p. 112)

(f). *Sound Change of the Consonant ɸ (w) to ɸ (w) or ɸ (ph)*

Change of the consonant sound ɸ (w) to ɸ (w) or ɸ (ph) is also a process to change Pali and Sanskrit words based on an unintentional sound change. This change of Pali and Sanskrit sound is partial influenced by Khmer language, and also Pali and Sanskrit has the direct impact on the Thai language. Examples of this change found in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council are:

PL-SKT Words		PL-SKT Words in NE Thai	
ວິຸຍາຸ	viññÁÆa	ວິຸຍາຸ	win-ja:n (NE, p. 271)
ວິຸຸ	viĐÆu	ວິຸຸ	pít-sà-nú? (NE, p. 275)
ວຸຸຈິກ	va^aĐcika	ວຸຸຈິກ	prút-sà-cik (NE, p. 206)

(g). *Epenthesis*

Kullavanijaya (1999) stated that epenthesis means the process of inserting a sound in a word based on the unintentional sound change to make pronunciation easier. Examples this change found in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council are:

PL-SKT Words		PL-SKT Words in NE Thai	
ອມາຕຍ໌	amÁtya	ອ໌ມາຕຍ໌	?am-mà:t (NE, p. 351)

ยมบาล	yamap Ála	ยมพบาล	jom- phá -ba:n (NE, p. 238)
มายา	m ÁyÁ	มายชา	ma:n -ja: (NE, p. 230)

(h). Metathesis

Metathesis means the process in which the positions of Pali and Sanskrit consonants are changed when employed in Thai based on an unintentional sound change. An example of this change found in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council is:

PL-SKT Word		PL-SKT Word in NE Thai	
จกัรวาก	cakr avÁka	จากพรวาก	cà:k-kà- phrá:k (NE, p. 85)

(i). Sound Deletion

Makchaeng (1982) stated that sound deletion means the process of omitting or removing a specific sound or phoneme from a Pali and Sanskrit word based on an intentional sound change. Examples of this change found in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council are:

PL-SKT Words		PL-SKT Words in NE Thai	
กปปร	k appara	กโปปร	kà -po:n (NE, p. 2)
จกัควาล	cak kavÁla	ควาล	kà-wa:n (NE, p. 6)
กัษมา	k ÒamÁ	ษมา	sà-ma: (NE, p. 281)

(j). Wrong Sound Deletion

Wrong sound deletion is the process of omitting or removing a partial sound or phoneme from a word based on an intentional sound change. An example of this change found in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council is:

PL-SKT Words		PL-SKT Words in NE Thai	
จีวัตกัษย	jí vataksya	ตักมัย	tàk-sǎj (NE, p. 131)

(k). Sound Insertion

Sound insertion means the phonological process in which a sound is added to a word based on an intentional sound change. Examples of this change found in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council are:

PL-SKT Words		PL-SKT Words in NE Thai	
ลีลา	lí lÁ	ลีลล	li:- lâ:t (NE, p. 262)
กุล	k ulá	กกุล	sà -kun (NE, p. 282)
กมล	k amálá	กมลล	kà-má- lê:t (NE, p. 2)

(l). Wrong Analogy

Mattiello (2016) stated that analogy can be defined as the process whereby a new word is coined that is clearly modeled on an already existing word or on a set of words constituting a word family. A new analogical word is commonly called the 'target', whereas the source word/set of words it is based on is referred to as either the 'model' or 'trigger'.

Here, wrong analogy means the process to insert any sound into Pali and Sanskrit words based on an intentional sound change. It can be noticed that the newly inserted sounds were not available in Pali and Sanskrit. Examples of this change found in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council are:

PL-SKT Words		PL-SKT Words in NE Thai	
วาสุกั	vÁsuk i	วาสุกั	wa:-sù- kri: (NE, p. 271)
ปุโรหิต	pu rohita	ปุระโรหิต	prà -ro:-hìt (NE, p. 182)
ขขุก	kha±g a	ขขุก	kh ǎn (NE, p. 34)

(m). Popular Etymology of PL-SKT in Thai Word

Srimannarayana (2016, p. 289) stated that popular etymology means any change in the written form or pronunciation of a word in order to make it look or sound similar to a more familiar word with little or no regard to similarity in meaning or derivation. Here, popular etymology of PL-SKT in Thai words means pronunciation of Pali and Sanskrit words based on the intention of users was made the same as Thai sounds that Thai people knew and could pronounce easily. Examples of this change found in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council are:

PL-SKT Words		PL-SKT Words in NE Thai	
ปถิเลยยก	p Ālileyyaka	ปถิเลยยก	pà: -le:-laj (NE, p. 190)
กนฺธรว	g andharva	กนฺธรว	khon -than (NE, p. 52)
กฉปปี	kacch apí	กฉปปี	kà-càp-pì: (NE, p. 8)

(n). *Popular Etymology of Thai Words in PL-SKT*

Srimannarayana (2016) stated that popular etymology is the process based on the intention of users to ascribe the sound changes of Pali and Sanskrit words to words of another language in this case of Thai so that they appeared to be Pali and Sanskrit words, even if they never appeared in Pali and Sanskrit. Examples of this change found in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council are:

Thai Words		PL-SKT Words in NE Thai	
พัน	phan	พรวณ, พันธุ์	phan (SKT-varÆa, bandhu) (NE, pp. 205, 209)
सान	sā:n	สาร	sā:n (PL & SKT-sÁra) (NE, p. 307)

C. *Vowel & Consonant Sound Changes With PL-SKT Declension Analogy*

Sound changes in vowels and consonants can occur together in the same Pali and Sanskrit words. Surprisingly, this thing was found in this Northeastern (NE) dialect dictionary compiled by the National Cultural Council. It is to use the Pali and Sanskrit words with analogy of the form of PL-SKT word declension. It is noticed that the word analogy with ‘nominative’ or the first case of the masculine (male gender) and the first case of the feminine (female gender) was found. Furthermore, it seems to have a word analogy and with ‘dative,’ or the fourth case, of the masculine (male gender) that was found the most.

However, it is true that only the word formation derived from the PL-SKT word declension analogy was brought to employ, but the grammatical cases namely; ‘nominative’ or ‘dative’ do not used at all. Examples of this change found in the Northeastern (NE) dialect dictionary compiled by the National Cultural Council are:

PL-SKT Words		PL-SKT Words in NE Thai	
รณโณ	raññō	เร็งโณ	reṅ- ioo (NE, p. 250)
กณญา	kaññĀ	เค็งญา	keṅ- jaa (NE, p. 27)
กุกกุ	kukkuŌa	กุกโก	kūt- too (NE, p. 25)

V. DISCUSSION AND CONCLUSION

To sum up, Pali and Sanskrit loanwords as collected in the NE Thai dialect dictionary by the National Cultural Council were studied in terms of sound changes in vowels and consonants. It can be stated that most of Pali and Sanskrit words used in this dictionary are similar to those in other dictionaries in the following two categories of change, namely, intentional sound changes and unintentional sound change, according to the sound change theories as expressed by the linguistic scholars.

According to the first category of intentional sound change of Pali and Sanskrit words, there seem to be an obvious purpose to use Pali and Sanskrit words in communication to the receivers. Application of Pali and Sanskrit words in the Thai language depended upon the writers or composers and it will not occur itself. On the contrary, the second category of unintentional sound change of Pali and Sanskrit words will be employed in the communication without the intention of the writer, but it is the nature of language use and change.

As elaborated the two categories of sound change as found in the above, there were two categories of sound change in vowels and consonants. Both of them follow the theory of the intentional and unintentional sound change, and they obviously have the sound change when Pali and Sanskrit loanwords were employed in NE Thai dialect dictionary by the National Cultural Council. For this sound change of vowels and consonants, there seem to be similar to others. However, it can be said that some Pali and Sanskrit words used are not similar the most due to the different system of NE dialect as compared with other dialects in Thailand. There will be two kinds of vowel and consonant change as follows.

For the vowel change of Pali and Sanskrit loanwords in the dictionary, the following 7 categories of sound change: lengthening of vowels, shortening of vowels, shifting of vowels, diphthongization, monothongization, consonantization, and sound loss were found. With respect to the consonant change of Pali and Sanskrit loanwords in the dictionary, it was found that there were 14 categories of consonant sound change. They are as follows: 1) sound change of the grouped consonant for the same group 2) sound change of the ungrouped consonant for the grouped consonant 3) sound change of consonant ɲ (p) to ɲ (p) and ɲ (b) 4) sound change of consonant ɲ (t) to ɲ (t) and ɲ (d) 5) sound change of ɲ (Ō) to become ɲ (t) and ɲ (d) 6) sound change of ɲ (v) to become ɲ (w) and ɲ (ph), 7) epenthesis 8) metathesis, 9) sound deletion 10) wrong sound deletion, 11) sound insertion, 12) wrong analogy, 13) popular etymology of PL-SKT in Thai word and 14) popular etymology of Thai word in PL-SKT.

To discuss, sound changes in vowels and consonants can occur together in the same Pali and Sanskrit words. In the Northeastern (NE) dialect dictionary compiled by the National Cultural Council, the Pali and Sanskrit words with analogy of the declension in form the first and fourth case were found, but they were used as the subject in the first case. There seem to be in the same line with Kullavanijaya (1999) who stated that according to this aspect, the word must frequently be used until it was brought to be analogy.

As mentioned in the above, Pali and Sanskrit words used in the Thai language are under the theory of intentional sound change and unintentional sound change. This seems to be in line with Khanithanan (1983), who stated that when talking about the sound change of words in the world, there are two categories of sound change: conditioned sound change and unconditioned sound change. This theory was also supported by other scholars such as Kullavanijaya (1999).

Considered the vowel sound change of Pali and Sanskrit words, it is very similar to that of Phanthumetha (1975), and Pengphala (2000), who stated that the changes in the sounds of vowels of Pali and Sanskrit words by lengthening, shortening, vowel shifting etc., were due to the features of words. With respect to this issue, there seems to be similar to Buaphanggam (2017), who studied vowel change in Pali and Sanskrit words in the Thai language on the basis of historical-comparative linguistics and stated that this phenomenon was a result of language contact between Pali, Sanskrit and Thai.

When studied this changing of vowel and consonant sounds with the inflected forms found in the NE Dialect Dictionary by the National Cultural Council, the researcher found this changing of Pali and Sanskrit words analogous to the forms of the cases in the first and fourth declensions. They were the same as that found in the Dictionary of the Vocabulary in the Northeastern Thai Literary Work Thao Hung or Thao Cheuang compiled by the Royal Institute (2019). It is noteworthy that such words were found only in dialect languages, as employed in NE literature; they did not appear in Standard Thai because when the NE people borrowed Pali and Sanskrit words, they applied them according to their convenience and beauty in NE Thai dialects.

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REFERENCES

- [1] Aitchison, J. (2004). *Words in the Mind: An Introduction to the Mental Lexicon*. 4rd ed. Oxford: Basil Blackwell Publishers.
- [2] Boonjerm, S. (1999). Kwam Phook Khaen Kamsorn Poo Ya Ta Yai Phai Khoei [Words to Accompany the Wrist-Tying Ceremony: Teachings of Grandfathers, Grandmothers, Daughters-in-law and Sons-in-law]. Ubon Ratchathani: I-San Heritage Press.
- [3] Buaphanggam, S. (2017). Vowel Changes in Pali and Sanskrit Loanwords in Thai. *Damrong Journal*, 16(1), 147-174.
- [4] Hale, M. (1998). Diachronic Syntax. *Syntax*, 1(1), 1-18.
- [5] Hale, M. (2007). *Historical Linguistics: Theory and Method*. Oxford & Malden: Blackwell.
- [6] Jarumetheechon, E. (2016). *Pali and Sanskrit Loan Words in Isan Language*. Buriram: Mahachulalongkornrajavidyalaya University Buriram Buddhist College.
- [7] Jufrizal, M. H. and Refnaldi, M. L. (2017). *Sociolinguistics and Language Teaching*. Tangerang Selatan: Universitas Terbuka.
- [8] Khanithanan, W. (1983). *Historical Linguistics: Evolution of Thai and English*. Bangkok: Thammasat University Press.
- [9] Kullavanijaya, P. (1999). Karn Pian Plaeng Khong Pasa [Language Changes]. In the *Teaching Documents on Thai Language 3 in Unit 7-15*. Nonthaburi: Sukhothai Thammathirat Open University Press.
- [10] Lass, R. (1980). *On explaining language change*. Cambridge: Cambridge University Press.
- [11] Makchaeng, S. (1982). *Pali-Sanskrit in Thai Language*. Bangkok: Department of Thai Language. Faculty of Humanities and Social Sciences, Thonburi College of Teachers.
- [12] Mattiello, E. (2016). Analogical Neologisms in English. *Italian Journal of Linguistics*, 28(2), 103-142.
- [13] National Cultural Council. (1994). *Dictionary of Northeastern Thai Dialect*. Bangkok: Aroon Karnpim.
- [14] Pengphala, P. (2000). *Balee Sanskrit Nai Pasa Thai* [Pali and Sanskrit in the Thai Language]. Bangkok: Ramkhamhaeng University Press.
- [15] Phanthumetha, B. (1975). *Balee Sanskrit Nai Pasa Thai* [Pali and Sanskrit in the Thai Language]. Bangkok: Ramkhamhaeng University Press.
- [16] Phinthong, P. (1994). *Isan-Thai-English Dictionary*. Ubon Ratchathani: Siritham Press.

- [17] Pimpuang, K. (2023). Sound Change, Value of PL-SKT Loanwords and Reflections of Society and Beliefs in the Epic Thao Hung or Cheuang. *Journal of Language Teaching and Research*, 14(6), 1761-1772.
- [18] Postal, P. (1968). *Aspects of phonological Theory*. New York: Harcourt and Brace.
- [19] Prapanvidya, C. (1979). Karn Khaoma Khong Balee Laeh Sanskrit Nai Pratet Thai. Entering of Pali and Sanskrit in Thailand]. In *the Seminar Proceeding on the Influence of Pali and Sanskrit on Thai during 24-27 October 2022*: Chiang Mai: Chiang Mai University.
- [20] Royal Institute. (2005). *The Dictionary of the Vocabulary in the Northeastern Thai Literary Work Thao Hung or Thao Cheuang Vol. 1*. Bangkok: Office of the Royal Society of Thailand.
- [21] Royal Institute. (2008). *The Dictionary of the Vocabulary in the Northeastern Thai Literary Work Thao Hung or Thao Cheuang Vol. 2*. Bangkok: Office of the Royal Society of Thailand.
- [22] Royal Institute. (2013). *The Dictionary of the Vocabulary in the Northeastern Thai Literary Work Thao Hung or Thao Cheuang Vol. 3*. Bangkok: Office of the Royal Society of Thailand.
- [23] Royal Institute. (2013). *The Dictionary of Royal Institute B.E.2554* (2nd ed.). Bangkok: Royal Institute.
- [24] Royal Institute. (2019). *The Dictionary of the Vocabulary in the Northeastern Thai Literary Work Thao Hung or Thao Cheuang Vol. 4*. Bangkok: Office of the Royal Society of Thailand.
- [25] Phramahaweerawong, Somdej. (1972). *Esan-Thai Dictionary*. Nakhon Luang Krungthep Thonburi: Thai Watana Panich.
- [26] Srimannarayana, M.M. (2016). *An Introduction to Sanskrit Linguistics: Comparative and Historical*. Delhi: B.R. Publishing Corporation.
- [27] Wipolchai, N. (2015). An Analytical Study of Pali and Sanskrit Loanwords in Phramahajataka Khamkab, A Southern Thai Literary Work. *Journal of Humanities and Social Sciences*, 7(2), 17-46.



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