

## A comparative Study of phonology and lexical words of Phuan in Nong Khai and Udon Thani, Thailand

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### บทคัดย่อ

บทความนี้มีจุดมุ่งหมายเพื่อเปรียบเทียบระบบเสียงและคำศัพท์ของกลุ่มชาติพันธุ์พวนในจังหวัดหนองคายและอุดรธานี การศึกษาใช้วิธีการสัมภาษณ์โดยนำคำศัพท์พื้นฐานสอบถามผู้บอกภาษา และนำข้อมูลที่ได้มาวิเคราะห์หาหน่วยเสียงพยัญชนะ หน่วยเสียงสระ โดยการหาคู่เทียบเสียง ใช้แบบทดสอบเสียงวรรณยุกต์ของวิลเลียม เจ เก็ดนีย์ วิเคราะห์หาหน่วยเสียงวรรณยุกต์ และศึกษาโครงสร้างพยางค์ ส่วนการวิเคราะห์คำศัพท์แบ่งเป็นการใช้คำศัพท์เหมือนกัน และการใช้คำศัพท์ต่างกัน โดยพิจารณาตามกฎ การแปรเสียงทางภาษาศาสตร์ ผลการศึกษาพบว่า ภาษาพวนจังหวัดหนองคายและอุดรธานี มีหน่วยเสียงพยัญชนะต้น 20 หน่วยเสียง หน่วยเสียงพยัญชนะท้าย 9 หน่วยเสียง มีหน่วยเสียงสระเดี่ยว 18 หน่วยเสียง หน่วยเสียงสระประสม 3 หน่วยเสียง หน่วยเสียงวรรณยุกต์มี 6 หน่วยเสียง มีการแตกตัวของวรรณยุกต์เป็น 3 ทาง ลักษณะทางสัทศาสตร์ของเสียงวรรณยุกต์มีความแตกต่างกันเล็กน้อย ส่วนโครงสร้างพยางค์ของคำแบ่งออกเป็น 5 แบบ การเปรียบเทียบคำศัพท์ภาษาพวนจังหวัดหนองคายและอุดรธานี พบว่า มีการใช้คำศัพท์เหมือนกันและการใช้คำศัพท์ต่างกัน

**คำสำคัญ :** ระบบเสียง, คำศัพท์, ภาษาพวน

### Abstract

This article aimed to compare phonology and lexical words of Phuan living in Nong Khai and Udon Thani Province. The data were collected from informants through standard wordlists. Thus, analyzed the data to find consonant and vowel phonemes by finding minimal pairs using William J. Gedney's determining Tone box. Both consonant phonemes and syllable's structures were analyzed. As to lexical items analysis, it was classified into identical words and non-identical words considered through Linguistics' variable rules. The study showed that Phuan in Nong Khai Province and Udon Thani Province has 20 initial consonants, 9 final consonants, 18 single vowels, 3 diphthong vowels, 6 tonal phonemes, and has three-way splitting of vowel tones. There are slight differences in phonetic tones, whereas there are 5 different syllable structures. A comparative study of lexical words of Phuan language in Nong Khai and Udon Thani found that both identical and non-identical words are used.

**Keywords:** phonology, lexical words, Phuan Language

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## Introduction

Ethnic group that speaks “Phuan Language” is one of the ethnic groups that has very interesting history and language. Phuan people were originally from Xiangkhouang Province which was located in the south-west of Luang Prabang and in the north-east of Vientiane, Laos. They had immigrated to Thailand many times, due to their hard times living in their homeland; for example, being forcibly moved, escaping from war, or even immigrating on their own will. The immigrations have occurred since the Thonburi Kingdom of Siam. Phuan people have spread over the central area of Thailand, for instance, Phrae, Phichit, Kamphaeng Phet, Uthai Thani, Sing Buri, Lopburi, Suphan Buri, Saraburi, Prachinburi, Nakhon Nayok, Nong Khai, Udon Thani, Loei, and Chachoengsao, but Lopburi was the province that the most Phuan people live (Tussanai Ar-romsuk 1978 : 4-7).

Phuan Language has its own characteristics which are very interesting. For examples, final consonant / -k / will not be pronounced after long vowels in Phuan language, namely, Thai standard word “ปาก” / pa:k / will be pronounced as ‘ป๊ะ’ / paʔ / and words with the vow “ใ-” in Thai standard such as “ใจ” will be pronounced as ‘ใจอ’ / cə: / in Phuan language. Moreover, Suwilai Preamsirat et al. (2004: 50,129) had mapped ethnic groups in Thailand and found that there were up to 200,000 people who speak Phuan Language. In the northeast, there were approximately 7,000 of Phuan speakers living in Udon Thani and approximately 4,000 of Phuan speakers living in Nong Khai.

From what mentioned above, Phuan people living in Nong Khai and Udon Thani are another major ethnic groups in the Northeastern of Thailand. As a Thai teacher who has been interested in Tai-Dialect, researcher realized the significance of the studying of ethnic groups that speak Tai Language Family which is considered a significant identity of the ethnic groups in Thailand. Thus, I am interested in studying Phuan people in Nong Khai and Udon Thani to see language trends in globalization and other environments. This

study not only strengthen the integrity of studies on dialect of the mentioned ethnic group, also it can be beneficial for academic studies on dialects, especially a Tai Language Family study as well as passing the understanding of language, culture, and history to the society.

## Research Purpose

To study a comparative of phonology and lexical words of Phuan in Nong Khai and Udon Thani, Thailand

## Research Method

### Phase 1 Preparation

Study papers, documents and researches related to Phuan and Tai Language Family. Determine wordlist to collect data in Phuan Language, and Nong Khai and Udon Thani’s history for further study.

### Phase 2 conducting research

**1. Creating wordlist**, researcher studied related documents as guidelines on determining lexical units, including setting appropriate units about 1,530 units.

#### 2. Study Areas

Phuan Language used in Kut Bong, Phon Phisai district, Nong Khai, and Phuan Language used in Klang Yai, Ban Phue district, Udon Thani were chosen.

#### 3. Informant Selection

Informants were chosen as following criteria; Informants aged over 60 that had permanent resident in the study areas and spoke Phuan Language in daily life; Informants that has education level lower or equal to compulsory education; Informants whose occupation status are being unemployed, being a farmer or being an employee; Informants who have complete speech organs, correct pronunciation and have a good hearing.

**4. Research tools** used in data collections were wordlists, William J. Gedney’s determining Tone box, tools and media, digital recorder, pencil, pen,

eraser, notebook, and digital camera.

### 5. Interview

Researcher gave the wordlist and Gedney's Tone box (William J. Gedney 1973) which comprised of 60 words as well as media and tools to illustrate situations in order to make informants understand the meaning of the words needed. The informants were asked to pronounce twice each word. Once they pronounced, researcher used IPA forms to record the phonetic alphabets and used a digital recorder to record audio for verification afterwards.

### 6. Data collection

Researcher used the wordlist together with other tools to interview Phuan Language informants by making them pronounce twice per word. Researcher listened carefully to the informants and record into phonetic symbols (IPA). The audio was also recorded by a digital recorder for verification afterwards.

### Phase 3 Data Analysis

After collecting data from both areas, there were 1,300 lexical words that could be analyzed. Researcher analyzed Phuan Language using minimal

pairs and sub-minimal pairs. In tonal analysis, Gedney's tonal box was applied in phoneme splits and mergers. Lexical items analysis of Phuan Language was to classify identical words and non-identical words considered through Linguistics' variable rules.

### Phase 4 Data comparison

Analyzed and compare phonology and lexical words of Phuan in Nong Khai and Udon Thani Province from the data collected.

### Phase 5 Conclusion, discussion, and recommendation Data synthesis and recommendation

Researcher compared the data of Phuan language from the analysis and then present the result and comparison in the form of result tables, discussion, and recommendations.

### Research results

1. Comparison of phonology of Phuan in Nong Khai and Udon Thani

**1.1 Consonant phonemes comparison** of Phuan Language in Nong Khai and Udon Thani Province are as follows:

Manner of Articulation	Articulation	Bilabial	Labio-dental	Alveolar	Palatal	Velar	Glottal
	Voicing						
Stops or Plosives	Voiceless unaspirated	<b>p</b>		<b>t</b>		<b>k</b>	<b>ʔ</b>
	Voiced aspirated	<b>p<sup>h</sup></b>		<b>t<sup>h</sup></b>		<b>k<sup>h</sup></b>	
	Voiced	<b>b</b>		<b>d</b>			
Affricates	Voiceless unaspirated				<b>c</b>		
Fricatives	Voiceless		<b>f</b>	<b>s</b>			<b>h</b>
Nasals	Voiced	<b>m</b>		<b>n</b>	<b>ɲ</b>	<b>ŋ</b>	
Lateral Liquids	Voiced			<b>l</b>			
Glides	Voiced	<b>w</b>			<b>j</b>		

**Initial consonant** in Phuan Language of both areas have 20 phonemes, namely, / p-, t-, k-, ʔ-, p<sup>h</sup>-, t<sup>h</sup>-, k<sup>h</sup>-, b-, d-, c-, f-, s-, h-, m-, n-, ɲ-, ɳ-, l-, w-, j- /

Phuan Language \ Manner of Articulation	Nong Khai	Udon Thani
Stops	p- t- k- ʔ- p <sup>h</sup> - t <sup>h</sup> - k <sup>h</sup> - b- d-	p- t- k- ʔ- p <sup>h</sup> - t <sup>h</sup> - k <sup>h</sup> - b- d-
Affricates	c-	c-
Fricatives	f- s- h-	f- s- h-
Nasals	m- n- ɲ- ɳ-	m- n- ɲ- ɳ-
Lateral Liquids	l-	l-
Glides	w- j-	w- j-

**Final consonants** in Phuan of both areas have 9 phonemes, namely, / -p-, -t-, -k-, -ʔ-, -m-, -n-, -ɳ-, -w-, -j- /

Phuan Language \ Manner of articulation	Nong Khai	Udon Thani
Stops	-p -t -k-ʔ	-p -t -k-ʔ
Nasals	-m -n -ɳ	-m -n -ɳ
Glides	-w -j	-w -j

1.2 Vowel phoneme comparison of Phuan Language in Nong Khai and Udon Thani Province are as follows:

Tongue Position and Lip Positions \ Tongue Height	Front	Near back	Back
	Unrounded	Unrounded	Rounded
Close	i i:	ɯ ɯ:	u u:
Close mid	e e:	ə ə:	o o:
Open mid	ɛ ɛ:		ɔ ɔ:
Open		a a:	
Diphthongs	ia	ɯa	ua

Single vowel phonemes in Phuan of both areas have 18 phonemes, namely, / i, i:, e, e:, ε, ε:, ʊ, ʊ:, ə, ə:, a, a:, u, u:, o, o:, ɔ, ɔ: /

Phuan Language	Nong Khai	Udon Thani
Phonemes		
Front phonemes	i, i:, e, e:, ε, ε:	i, i:, e, e:, ε, ε:
Near back phonemes	ʊ, ʊ:, ə, ə:, a, a:	ʊ, ʊ:, ə, ə:, a, a:
Back phonemes	u, u:, o, o:, ɔ, ɔ:	u, u:, o, o:, ɔ, ɔ:

Diphthong phonemes in Phuan of both areas have 3 phonemes, namely, / ia, ʊa, ua /

Phuan Language	Nong Khai	Udon Thani
Phonemes		
Diphthong Phonemes	ia, ʊa, ua	ia, ʊa, ua

**1.3 Tonal phoneme comparison**

Using a William J. Gedney’s determining Tone box (1972), 6 tonal phonemes were found in Phuan Language of both areas. Three-way splitting was similarly found but there were slight differences

in tonal splits and mergers. Namely, Phuan Language in Nong Khai had a tonal split of AC 1 – 2 3 4, B DL DS 1 2 3 – 4 and DL 4 = DS but Phuan Language in Udon Thani had a tonal split of AC 1 – 2 3 4 and B DL DS 1 2 3 – 4.

	A	B	C	DL	DS
1	ɿ.1		ɿ.5		
2	ɿ.2		ɿ.3		
3		ɿ.4	ɿ.6		
4	ɿ.4				

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	A	B	C	DL	DS
1	ɿ.1		ɿ.5		
2	ɿ.2		ɿ.3		
3		ɿ.4	ɿ.6		
4	ɿ.4			ɿ.6	

Phuan Language in Udon Thani

2. A comparison of lexical words between Phuan Language used in Nong Khai and Udon Thani showed that there were both identical and non-identical words used as follows:

2.1 Identical words used in both areas could be divided into 2 groups:

2.1.1 Identical words that have the same written form – having homophone of an initial and final consonant. For example,

Lexical	Udon Thani	Nong Khai
‘ก่อไฟ’	daj <sup>2</sup> faj <sup>2</sup>	daj <sup>2</sup> faj <sup>2</sup>
‘ขี้เกียจ’	k <sup>h</sup> i: <sup>5</sup> k <sup>h</sup> a:m <sup>6</sup>	k <sup>h</sup> i: <sup>5</sup> k <sup>h</sup> a:m <sup>6</sup>
‘จิ้งจก’	ci <sup>1</sup> ciam <sup>6</sup>	ci <sup>1</sup> ciam <sup>6</sup>
‘ตลิง’	ta <sup>3</sup> faj <sup>4</sup>	ta <sup>3</sup> faj <sup>4</sup>
‘ถวัลีสง’	t <sup>h</sup> ua <sup>1</sup> din <sup>2</sup>	t <sup>h</sup> ua <sup>1</sup> din <sup>2</sup>
‘เมฆ’	k <sup>h</sup> i: <sup>5</sup> ftua <sup>6</sup>	k <sup>h</sup> i: <sup>5</sup> ftua <sup>6</sup>
‘ปลอกหมอน’	sop <sup>4</sup> mɔ:m <sup>1</sup>	sop <sup>4</sup> mɔ:m <sup>1</sup>
‘ปลาหมึก’	pa: <sup>2</sup> ?i: <sup>2</sup> hu: <sup>2</sup>	pa: <sup>2</sup> ?i: <sup>2</sup> hu: <sup>2</sup>
‘ผ้าถุง’	p <sup>h</sup> a: <sup>5</sup> sin <sup>4</sup>	p <sup>h</sup> a: <sup>5</sup> sin <sup>4</sup>
‘ส้มโอ’	ma: <sup>3</sup> kiaj <sup>6</sup>	ma: <sup>3</sup> kiaj <sup>6</sup>

2.1.2 Identical words whose variables could be divided into 2 types which are acoustic variation and lexical variation.

1) Variation of vowel and consonant

Lexical	Udon Thani	Nong Khai
‘เขียง’	hianj <sup>1</sup>	k <sup>h</sup> ianj <sup>1</sup>
‘ตะเกียง’	ka <sup>3</sup> cianj <sup>2</sup>	ka <sup>3</sup> tianj <sup>2</sup>
‘ฟุ้งพอน’	cu:m <sup>2</sup> fu:m <sup>2</sup>	cɔ:m <sup>2</sup> fɔ:m <sup>2</sup>
‘ม้าม’	me:m <sup>6</sup>	ma:m <sup>6</sup>

2) Variation of lexical

Lexical	Udon Thani	Nong Khai
‘นกกนางแอ่น’	nok <sup>4</sup> ?i: <sup>2</sup> ?ɛ:m <sup>3</sup>	nok <sup>4</sup> ?ɛ:m <sup>3</sup>
‘นกกกระยาง’	nok <sup>4</sup> ka <sup>3</sup> ja:j <sup>2</sup>	nok <sup>4</sup> ja:j <sup>2</sup>
‘บันได’	hua <sup>1</sup> k <sup>h</sup> an <sup>2</sup> daj <sup>2</sup>	k <sup>h</sup> an <sup>2</sup> daj <sup>2</sup>
‘หอม(นาม)’	hɔ:m <sup>1</sup> p <sup>h</sup> ak <sup>6</sup> bua <sup>3</sup>	hɔ:m <sup>1</sup> bua <sup>3</sup>

2.2 Lexical words that were used differently

Lexical	Udon Thani	Nong Khai
‘กลม’	kom <sup>2</sup>	mon <sup>2</sup>
‘กระทะ’	ka <sup>3</sup> t <sup>h</sup> a? <sup>3</sup>	mɔ: <sup>5</sup> k <sup>h</sup> a:j <sup>1</sup>
‘ครก’	k <sup>h</sup> ok <sup>4</sup>	sɔ:j <sup>2</sup>
‘ตกลา’	tuk <sup>3</sup> pa: <sup>2</sup>	sit <sup>4</sup> bet <sup>4</sup>
‘ผ้าขาวม้า’	p <sup>h</sup> a: <sup>5</sup> k <sup>h</sup> a:w <sup>1</sup> ma: <sup>6</sup>	p <sup>h</sup> a: <sup>5</sup> p <sup>h</sup> e: <sup>2</sup>
‘ผ้าเช็ดตัว’	p <sup>h</sup> a: <sup>5</sup> set <sup>4</sup> to: <sup>2</sup>	p <sup>h</sup> a: <sup>5</sup> tum <sup>6</sup>
‘ผ้าห่ม’	p <sup>h</sup> a: <sup>5</sup> nuam <sup>2</sup>	p <sup>h</sup> a: <sup>5</sup> hom <sup>3</sup>
‘เฟื่องฟ้า’	fuaj <sup>4</sup> fa: <sup>6</sup>	dɔ? <sup>2</sup> ka <sup>3</sup> dat: <sup>3</sup>
‘รักแร้’	k <sup>h</sup> i: <sup>5</sup> ta <sup>3</sup> le: <sup>6</sup>	k <sup>h</sup> i: <sup>5</sup> niaj <sup>2</sup>
‘อ้วน’	?uan <sup>5</sup>	tuj <sup>5</sup>

## Discussion

The result of the comparative study showed that in term of consonant and vowel phonemes, there were no differences but when considering the tones, especially the splits and mergers, they were very interesting. Namely, Phuan Language in both areas has 3 ways splitting. Somehow, there were slight differences in tonal splits and mergers as Phuan Language in Nong Khai had a tonal split of AC 1 – 2 3 4, B DL DS 1 2 3 – 4 and DL 4 = DS but Phuan Language in Udon Thani had a tonal split of AC 1 – 2 3 4 and B DL DS 1 2 3 – 4 which were related to Utaiwan Tanyong's (1983), Kantima Wattanaprasert and Suwattana Liamprawat's (1988), and Charuwan Sukpiti's (1989) studies.

Tonal phonemes of Phuan Language used in Udon Thani showed that there was a split of AC 1 – 2 3 4 and B DL DS 1 2 3 – 4 which was related to Tassanai Ar-romsuk's (1978), Chonlada Sungvant's (1991), Niramol Boonson's (1997), Pornpen Tanprasert's (2003), Phinnarat Akharawatthanakun's (2003), Usana Aree, (2003), and Hathairat Chaturapat-tarawong's (2015) studies.

The result of lexical words study showed the identical words in both areas which shared a lot of lexicals meaning that they had a close relation. Also, it showed variations of acoustic and lexical as Amara Prasitrattasin (2013: 18-19) mentioned that Language variations could happen in both acoustics lexical and syntax. Those variations would not change its meaning.

In term of non-identical words, it showed that most of the lexicals were borrowed from Central Thai Language, for example, 'กระต๊อ' Phuan Language informants living in Udon Thani used /ka<sup>3</sup> t<sup>h</sup>a<sup>2</sup>/. In contrast, Phuan Language informants living in Nong Khai used /mɔ:<sup>5</sup> k<sup>h</sup>a:<sup>1</sup>/. Or 'ผ้าเช็ดตัว' Phuan Language informant living in Udon Thani used /p<sup>h</sup>a:<sup>5</sup> set<sup>4</sup> to:<sup>2</sup>/ but Phuan Language informant living in Nong Khai used /p<sup>h</sup>a:<sup>5</sup> tum<sup>6</sup>/ instead.

The differences seen in this article could be concluded that living in different areas and environments could be one of factors that caused the differ-

ences in Phuan Language of both areas as Somsong Burutpat (2000 : 1-2) mentioned. Distance was another factor that affected the language as shown in lexical words used in both areas.

However, it is normal that language changes, as Amara Prasitrattasin (2005 : 105) mentioned that changes of language in any societies could be results of social, economic, and political changes in that era. Therefore, Phuan Language in different areas has gradually changed. The result of this study will identify trends in Phuan Language change in the future and will be beneficial for further linguistic study.

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