A Phonological Study of Rakhine Language Used in Manaung City in Rakhine State of Myanmar: A Case Study of Consonants and Vowel Sounds

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Abstract

This thesis was entitled "A Phonological Study of Rakhine Language Used in Manaung City in Rakhine State of Myanmar: A Case Study of Consonants and Vowel Sounds". The objectives of this study were 1) to examine the word sound system of Rakhine language spoken in Manaung City in Rakhine state of Myanmar, and 2) to analyze the word sound system of Rakhine language based on the phonology spoken in Manaung City in Rakhine state of Myanmar. This research study employed a qualitative method in nature in order to study the word sound system of the Rakhine language spoken in Kyetyoe, Zaratkonekhin, Natepyin and Thitpone villages in Manaung City in the Rakhine State of Myanmar. The population and sample of the study were 5 villagers from the mentioned earlier villages of Manaung City in the Rakhine State of Myanmar and the researcher selected 6 villagers among them for this research. The research tools were used books, informants, journals, and theses. The data used in this study were collected at the above-mentioned villages, Manaung City, Rakhine State of Myanmar from the speeches of Rakhine native speakers and the data analyses were Phonological word, syllable, phoneme, and assimilation. The result of this research was found that: The result of the study shows that the tones of the final syllable of a statement seem to cause to be falling or rising. There are 4 types of phonological words: monosyllabic words, disyllabic words, tri-syllabic words and tetra-syllabic words. There are 3 types of syllables: pre-syllable, minor syllable and major syllable. The structure of the syllable is C1 (C3) (C4) V1 (C2). The phonological system is composed of 34 consonant phonemes /b, p, ph, d, t, th, g, k, kh, ʔ, dʑ, tɕ, tɕh, θ, z, s, sh, ɕ, h, m, m̥, n, n̥, ɲ, ɲ̥, ŋ, ŋ̥, l, l̥, r, r̥, w, w̥, j/. There are 21 vowel phonemes which are divided into 3 sets: 1) six plain vowels: /i, e, a, u, o, ɔ/. 2) Eight glottal vowels: /iʔ,

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ɛˀ, aˀ, ɔˀ, eiˀ, ouˀ, aiˀ, auˀ/. And 3) seven nasal vowels: /ɛ̃, ã, ɔ̃, eĩ, oũ, aĩ, aũ/. There are four tones: (1) high-rising-falling, (2) high-falling and (3) high-rising ending with a glottal constriction of the breath (slow glottal closure).

Keywords: Phonology; Rakhine Language; Dialects in Manaung city

Introduction

Myanmar is the largest country in mainland Southeast Asia and covers and is of 676, 578 square kilometers. The largest city and also the capital of Manaung City in Rakhine state. The population of Myanmar in 2016 was estimated at about 54 million, which comprises about 135 ethnic groups. The main races Kachin, kayah, Karen, Chin. Barman, Mon, Rakhine and Shan.

There is a historical background that tells that the Rakhine is originally From Rakhine. It would seem that they all settled in the Arakanese and Rakhine city in Manaung, Hills sometime during the last two centuries.

There is the Bay of Bengal in the West and Northwest, Ramree Island in the Northeast, Ye Kyun Island in the South and Taungup in the East. Man Aung Island, about 55 miles in circumference, is situated at 18'47 (898' N) and 93'98 (472'E) on the Rakhine Coast of Myanmar. There are 5 wards and 138 villages in Manaung Township. This historical Background is more reliable as many researchers have dated their entrance into Myanmar at the time.

Manaung (Rakanese state of Manaung city) is a township of Kyaukphyu District in the Rakhine State of Western Myanmar. The principal town is Manaung. Man Aung Township, situated on Manaung Island consists of three islands: Manaung Island, Ye Kyun Island and Taik Kyun Island. Manaung is not only a township of Kyaukphyu District but also the second biggest island of Rakhine State in Myanmar.

The Report of the District Center of Rakhine State and Manaung City 2007, estimated that the total population of Rakhine State. The population was 95927 on October 31, 2007. Even though the time of entrance into Rakhine Hills is not clear, all of this information shows that the name Rakhine is not just a given name by the Burmese but the name of the people who come to settle in the region of Myanmar centuries ago.

Manaung is one of the largest islands in Myanmar with an area of 523 km 2, which almost is equal to the size of Phuket, which is the largest Island in

Thailand. The longest beach on Manaung is outstanding 17 miles long! Manaung is a truly beautiful island with outstanding nature.

Later on, the British government has given the new town. Later on, the British government has given the new post the name "Manaung" which was called city instead. The new camp, Manaung, was made the center of regional administration in later it became the capital of the whole area of Manaung, the total area of Manaung is about 202,05 square miles (120309) it is located in the north-east in Manaung city of Rakhine state.

Many phonological words exist in Arakanese (Rakhine) language. As an engaged language, words are not properly informed like other mainstream recognized languages. Due to cultural invention, many words from English and Burmese have been borrowed and adopted in the Arakanese Rakhine language. Some ancient texts are written in the language and still preserved properly.

The problem of phonology in Manaung City has a long history. The region has been influenced by various cultures and languages, including Burmese and Rakhine. This diversity has led to the development of different dialects and pronunciation patterns, making it difficult for residents to understand each other. According to recent data, over 50% of residents in Manaung City speak a language or dialect that is not widely understood in other parts of Myanmar. This has contributed to a sense of isolation and marginalization among the population. Efforts to address this issue have been limited, due in part to political tensions in the region.

The significance of addressing the problem of phonology in Manaung City cannot be overstated. It is crucial to establish a standardized phonetic system that can be used by all the different ethnic groups living in the city. This will not only facilitate better communication but also preserve the cultural heritage of these groups. Additionally, it will provide a foundation for education and literacy programs, which will ultimately benefit the entire community.

In conclusion, the problem of phonology in Manaung City is an issue that needs to be addressed. The lack of standardization in language and dialects can hinder social, economic, and cultural development, leading to isolation and marginalization among residents. By promoting effective communication through the standardization of language and dialects, we can pave the way for a more

cohesive and prosperous community. It is up to all of us to take action and support efforts to address this issue.

Objectives of the Study

In this research study, there are the following two objectives:

2.1 To examine the word sound system of Rakhine language spoken in Manaung City in Rakhine State of Myanmar.

2.2 To analyze the word sound system of Rakhine language based on the phonology spoken in Manaung City in Rakhine State of Myanmar.

Research Methodology

This study is aimed to describe the research methodology of the current research. This research is entitled "A Phonological Study of Rakhine Language Used in Manaung City in Rakhine State of Myanmar: A Case Study of Consonants and Vowel Sounds". In this research, the main purposes are to study the word sound system of the Rakhine language based on the phonology spoken in Manaung City in the Rakhine State of Myanmar. The researcher selected 5 teachers with a clear comprehension of research who are giving a lecture in Manaung City in Rakhine State of Myanmar, and were interviewed as special key informants of the study.

In addition, the researcher conducted the data collection from books, journals, theses, dissertations, and magazines, online resources. And other required data was noted from native speakers in Manaung City in the Rakhine State of Myanmar. The data collection phase is done systematically to make things convenient and useful so that the study becomes valuable. Therefore, research design is the most important part of data collection methods that is extremely useful and helpful for the study to be successful in data collection.

Results of the Research

Definition of Phonology

The phonological word is defined as the rank whose unit functions in the intonation group and has its structure stated in terms of the syllable.

In Rakhine, a phonological word carries only one main (strong) stress. The stress is placed on the last syllable of a phonological word. That is a strongly

stressed syllable shows the end of a phonological word. Thus, a phonological word in this study is a stress group as well.

Result of Consonants

Rakhine consonant phonemes function as the syllable periphery. There are 34 consonant phonemes: /b, p, ph, d, t, th, g, k, kh, ʔ, dʑ, tɕ, tɕh, θ, z, s, sh, ɕ, h, m, m̥, n, n̥, ɲ, ɲ̥, ŋ, ŋ̥, l, l̥, r, r̥, w, w̥, j/. These phonemes according to their appearance in syllables, will be mentioned into two sub-classes: simple consonant or single consonant and complex consonant or consonant cluster.

Complex Consonant or Consonant Cluster ($C_1 C_2 C_3$)

Rakhine consonant clusters occur in an initial position. Each consonant cluster ($C_1 C_2 C_3$) consists of two or three cluster-consonants: the first cluster-consonant (C_1), the second cluster-consonant (C_2) and the third cluster-consonant (C_3).

1) The first cluster-consonant (C_1), as it is the first member of the cluster, functions as an initial consonant. All consonant phonemes, except for /ʔ, dʑ, h, ŋ̥, w/, can occur as C_1.

2) The second cluster-consonant (C_2), which is the second member of the cluster, functions as a post-initial consonant in the syllable.

The consonant cluster of C_1 and C_2 is restricted to 4 patterns of consonant cluster as follows:

1: -r- cluster ($C_1 R$)

C_1 are /b, p, ph, g, k, kh, m, m̥, ŋ/

C_2 are /-r-/

They make nine -r- clusters /br, pr, phr, gr, kr, khr, mr, m̥r, ŋr/.

Examples:

br	/bri^2/	"to finish, to run"
pr	/pre^3/	"full"
phr	/phri^3/	"to comb"
gr	/gro^2/	"dove"

kr /krai$^{?2}$/ "to like"

2: -w- cluster (C$_1$ W)

C$_1$ are /b, p, ph, d, t, th, g, k, kh, tɕ, tɕh, θ, z, s, sh, ɕ, m, m̥, n, n̥, ɲ, ɲ̥, ŋ, l, l̥, r, r̥ j/.

They make 28 -w- clusters /bw, pw, phw, dw, tw, thw, gw, kw, khw, tɕw, tɕhw, θw, zw, sw, shw, ɕw, mw, m̥w, nw, n̥w, ɲw, ɲ̥w, ŋw, lw, l̥w, rw, r̥w, jw/.

Examples:

bw_ /bwa$^{?2}$/ "life"

pw_ /pwi^2/ "ringworm"

phw_ /phwɛ$^{?2}$/ "to launder"

dw_ /khadwẽi^2/ "mouth cavity"

tw_ /twa^2/ "to crawl"

Consulting the following Table 10, which sets out the co-occurrence of the first member, the second member and the third member of the consonant cluster, one notices that.

1. Both glottal consonant phonemes /ʔ, h/, both bilabial semi-vowels /w, w̥/ and the voiceless velar nasal /ŋ̥/ are not found as either member of the consonant cluster in this study.

2. The first, the second and the third member of the cluster do not ever appear to be the same phoneme, thus, there is no /rr/, /ww/or /jj/ cluster at all.

3. In an –r- cluster, only a bilabial plosive occurs as the first member of the cluster.

4. In –w- cluster, almost all consonant phonemes except the glottal phoneme, the voiceless velar nasal and both bilabial semi-vowels occur as the first member of the consonant cluster.

5. In a –j- clusters, only bilabial plosives, bilabial nasals and the voiced alveolar lateral occur as the first member of a cluster of this kind.

6.   For the three consonant clusters, only the unaspirated or aspirated voiceless velar plosive /k, kh/ occurs as the first member, the alveolar approximant /r/ as the second and the voiced bilabial semi-vowel /w/ as the third member of the cluster. Only six words are found with a kind of cluster.

Point of art. Manner of art	Labial	Inter-dental	Alveolar	Alveolar-Palatal	Palatal	Velar	Glottal
Plosive vd	b		d			g	
unasp. vl.	p		t			k	ʔ
Asp.vl.	ph		th			kh	
Affricate vd				dʑ			
unasp. vl.				tɕ			
asp.vl.				tɕh			
Fricative vd			z				
unasp. vl.		θ	s	ɕ			h
asp.vl.			sh				
Nasal vd.	m		n		ɲ	ŋ	
vl.	m̥		n̥		ɲ̥	ŋ̥	
Lateral vd.			l				
vl.			l̥				
Approximant							
vd.			ɹ				
vl.			ɹ̥				
Semi- vd.	w				j		
Vowel vl.	w̥						

Result of Vowels

        Rakhine vowel phonemes function as the syllable nucleus. There are 21 vowel phonemes: /i, e, a, u, o, ɔ, iʔ, ɛʔ, aʔ, ɔʔ, eiʔ, ouʔ, aiʔ, auʔ, ɛ, ã, ɔ, eĩ, oũ, aĩ, aũ/. All vowels can be divided into three sets. Six of them are in the plain vowel set, eight in the glottal vowel set and seven in the nasal vowel set as follows:

a) Plain vowel set.

There are six plain vowels: /i, e, a, u, o, ɔ/.

b) Glottal vowel set.

There are eight glottal vowels: /iʔ, ɛʔ, aʔ, ɔʔ, eiʔ, ouʔ, aiʔ, auʔ/.

c) Nasal vowel set.

There are 7 nasal vowels: /ɛ, ã, ɔ, eĩ, oũ, aĩ, aũ/.

The reason for treating the final [ʔ] and [ŋ] as vowel quality is because the basic syllable pattern of this language is C_1 (C_2) (C_3) V^T, so there is no final consonant. To confirm the syllable pattern, the final [ʔ] and [ŋ] should be treated as vowel quality. The following table is Rakhine vowel phonemes:

Tongue position		Front	Central	Back
Plain vowels	Closed	i		u
	Half – closed	e		o
	Half – open			ɔ
	Open		a	
Glottal vowels	Closed	iʔ		
	Half – closed	eʔ		
	Half – open	ɛʔ		ɔʔ
	Open		aʔ	
	Glide vowel	eiʔ	aiʔ auʔ	ouʔ
Nasal vowels	Closed			
	Half – closed			
	Half – open	ɛ		ɔ
	Open		ã	
	Glide vowel	eĩ	aĩ aũ	oũ

Result of Tones

Tones in Rakhine Burmese functions, together with vowels. There are three contrastive tones in Rakhine: /1, 2, 3/. These three tonemes function in major and minor syllables.

The plain and the nasal vowel can bear all three tones while the glottal vowels can bear only one tone: high falling. Besides these three, there is another one, the short mid-tone. It only occurs in a zero-stressed syllable in which the vowel is very short and always has a mid-central pitch. Such syllables can never occur alone can never occur in the word-final position. No tone contrast is found on such syllables. The syllable with this short mid-tone, the so-called "neutral tone", is indicated by the phonetic [ə] without any tone mark or by the phonemic /a/ symbol.

Structure

In terms of stress, the stress group in this language can be divided into four types: monosyllabic words, disyllabic words, tri-syllabic words and tetra-syllabic words.

Monosyllabic Word

Most Rakhine words are, similar to those of other languages which are common in Southeast Asia, monosyllabic.

Examples:

/wi[1]/   [wî]   "to distribute"

/kãi[2]/   [kãi]   "branch of tree"

/pou$^{?2}$/   [pou$^{?}$]   "to send, rotten"

Disyllabic Word

A disyllabic word is a word with two syllables. There are two patterns in disyllabic words.

1)   The zero stress falls on the first syllable and the strong stress is on the last syllable. Its pattern is [z. s].

1)   The weak stress falls on the first syllable and the strong stress is on the last syllable. Its pattern is [w. s].

Tri-syllabic Word

A tri-syllabic word is a word with three syllables. There are four patterns in tri-syllabic words.

1) The zero stress falls on the first syllable, the weakly stress on the second syllable and the strong stress is on the last syllable. Its pattern is [z. w. s].

2) The weak stress falls on the first syllable, the zero stress on the second syllable and the strong stress is on the last syllable. Its pattern is [w. z. s].

3) The zero stress falls on the first and the second syllable and the strong stress is on the last syllable. Its pattern is [z. z. s].

4) The weak stress falls on the first and the second syllable and the strong stress is on the last syllable. Its pattern is [w. w. s].

Tetra-syllabic Word

A tetra-syllabic word is a word with four syllables. There are five patterns.

1) The zero stress falls on the first and second syllable, the weakly stress on the third syllable and the strong stress is on the last syllable. Its pattern is [z. z. w. s].

2) The zero stress falls on the first syllable, and the weak stress on the second and the third syllable. The strong stress is on the last syllable. Its structure is [z. w. w. s].

3) The zero stress falls on the first and the third syllable, the weak stress on the second syllable and the strong stress on the last syllable. Its pattern is [z. w. z. s].

4) The weak stress falls on the first and the third syllable, the zero on the second and the strong stress is on the last syllable. Its pattern is [w. z. w. s].

Conclusion, Discussion and Suggestion

As mentioned above, the key objective of the study is to examine and analyze the sound system based on the phonology of Manaung City in the Rakhine state of Myanmar. The researcher collected books, English books, Burmese books, Thesis, documents, library studies and online research.

In this study, some of the important characteristics of the sound system based on the phonology of Manaung City in the Rakhine state of Myanmar may be summarized as follows:

Intonations

There is no significant particular intonation pattern. Tones of the final syllable of the statement seem to cause to be falling or rising.

Phonological Words

Most of the Rakhine in Myanmar are monosyllabic. There are also disyllabic and tri-syllabic words and a few tetra-syllabics.

Syllables

According to their structure, there are altogether three types of syllables: pre-syllable, major syllable and minor syllable. The pre-syllable consists of only /a/ and has a neutral tone. The major and minor syllable consists of all vowel phonemes and also all tones. Stress: there are 3 types: strong stress [ˈs], weak stress [ˌw] and zero stress [z].

Phonemes

Consonants: there are thirty-four consonant phonemes: /b, p, ph, d, t, th, g, k, kh, ʔ, dʑ, tɕ, tɕh, θ, z, s, sh, ɕ, h, m, m̥, n, n̥, ɲ, ɲ̥, ŋ, ŋ̥, l, l̥, r, r̥, w, w̥, j/.

Vowels: There are 21 vowel phonemes. And Rakhine in Myanmar vowels is divided into 3 sets:

1) Plain vowel: /i, e, a, u, o, ɔ/.
2) Glottal vowel: /iʔ, ɛʔ, aʔ, ɔʔ, eiʔ, ouʔ, aiʔ, auʔ/.
3) Nasal vowel: /ɛ̃, ã, ɔ̃, eĩ, oũ, aĩ, aũ/.

Tones: there are three tones in Rakhine in Myanmar.

Tone 1: high-rising-falling

Tone 2: high-falling

Tone 3: high-rising ending with a glottal constriction of the breath (slow glottal closure).

Discussion

The research was able to produce new knowledge on the study of Manaung dialect in phonology. Nowadays, the young generations seek more about languages, and the research can help young generations access the survey about Manaung dialect in Rakhine State.

Most importantly, the researcher noted the main points from the obtainable discussions in the results. The researcher went to local people and asked them to get the correct voices from native speakers. Collecting votes recognized different pronunciations because of using different intonations. For the research, it was challenging to learn in practical ways and ask questions, especially to note and describe the form of passionate voices carefully.

During the interview, the main informants were alert and helpful to this research. Their pronunciations were sometimes careful and sounded unnatural. The pronunciations of these words were dropped from the analysis. The researcher listened carefully to every single word and phonetic accent when recording data and information. All data is included and presented in the body of this document/article.

Suggestion

Finally, the research allowed us to make three suggestions for future studies:

1) There are other Rakhine dialects spoken in Rambree, Sittwe, Rakhine State in Myanmar. It would be interesting to study and compare all of them.

2) It would be interesting to compare the results of their study with Rakhine dialects and Burmese Dialects.

3) In other topics, it would be interesting to expand this phonological study to research social linguistics, morphology, syntax, and grammatical aspects.

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