

**LANGUAGE IN INDIA**  
**Strength for Today and Bright Hope for Tomorrow**  
**Volume 7 : 6 June 2007**

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**WRITTEN MANIPURI (MEITEIRON) –  
PHONEME TO GRAPHEME  
CORRESPONDENCE**

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# WRITTEN MANIPURI (MEITEIRON) - FROM PHONEME TO GRAPHEME

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**Abstract:** Man is bound to speak, which is the main device to express ones feelings or concepts inside out. The hand written language records the spoken one and plays the vital role in information technology as well as electronic retrieval system. Linguistics, the study of language, was taken for granted to be the study of spoken language until recently. The written was just written down the spoken language. Besides, it should be easy and natural to learn the spoken language as it is the only language visible, language that is seen with the eyes and make with the hands, just as the spoken language is heard with the ears and spoken with the mouth. This paper focuses on the problems of Meiteiron written using Bengali script, the advantage of using Meitei script for written Meiteiron and some innovative approach to Meiteiron written using the indigenous script.

## 1. Introduction:

Meiteiron (Manipuri) is the only scheduled Tibeto-Burman language of India, which has its own script known as Meitei/Meetei Mayek “Meitei script”. At present, for all purposes, Meiteiron is written using Bengali script. The Government of Manipur have replaced the Bengali script with Meitei script from Class I to III and also assured that Bengali script would be completely replaced in a phase-wise manner. The Bengali script used for written Meiteiron is not exactly the same as that of the Bengali alphabet, for instance, symbol for /w/ in Meiteiron is not available in Bengali alphabet. While it is found in Assamese, the symbol for /ɪ/ in Assamese is different from that of Manipuri written using Bengali script. Therefore, the script used for written Meiteiron is a combination of Assamese and Bengali scripts. Bengali script replaced Meetei/Meitei Mayek (indigenous Manipuri script) and subsequently became the official script of the *Konung* “the Royal Palace” (1709-1941). It can be mentioned that the office effort of *Konung* to impose a concoction of Bengali, Devanagari and Gurmukhi script on the people was not welcomed by one and all. Another reason for replacement of Bengali script for written Meiteiron was due to —“...when the British conquered Manipur in 1891, the conquerors did not want to use Manipuri script because of the large number of Bengali clerks under British employment who did not know Meitei Mayek. Moreover, printing press in Bengali script was already available. Another press with Meitei Mayek was impracticable at that time” (H. Bhuban Singh, 2003). The origin of the indigenous Meitei script is still in dilemma. The Meitei letters have peculiar shapes and its exact affinities are not known. Meitei script has released and unreleased symbols, tone mark, and cluster mark which are essential for written Meiteiron. The history of Manipur records that the *Puyas* “the historical documents” of Manipur were written in original script, which has been burnt during the reign of *Pamheiba*, the king of *Kangleipak* “Manipur” in the early 18<sup>th</sup> century. Kangjiya states that “Meetei Mayek experts and authorities say the script dates back as early as 3900 years ago” (Kangjiya, 1996). Regarding the origin of Meitei script, Tomchou comments that “It is quite probable that ancient Meitei scholars devised their own system of writing at a time when the alphabetic system of writing reached the whole of civilization elsewhere.” (W. Tomchou, 1991). It can also be recalled that: “the accepted date for the earliest use of Meitei script is between

the 11<sup>th</sup> and 12<sup>th</sup> centuries” (Ch. Manihar Singh, 1984:23). According to different scholars the number of Meitei script is varied. G.A. Grierson has mentioned 35 letters in his well-known book “Linguistic Survey of India Vol. III Part III” and some scholars are of the opinion that it is 27 in number (L. Sarbajit Singh, 2002). In 1980, the Government of Manipur has recognized the alphabet with 27 letters (Manipur Gazette, No. 33, 1980). It can be pointed out that 27-alphabet seems to be matching for modern Manipuri speech sounds. In the meantime, the Government of India has included the Meiteiron in the 8<sup>th</sup> Schedule of Indian Constitution as “Manipuri written in Bengali.” It can be observed that Meitei script for written Meiteiron is in the implementation stage. At the outset, the study tries to make acquaint with the Meiteiron sounds for the purpose. The section 3 gives a brief note on the Bengali script and the problem encountered while using it for Meiteiron spelling. The Meetei/Meitei Mayek “Meitei script” is described in detail in section 4. The discussion and the innovative comments on written Meiteiron conclude this paper.

## 2. Available Meiteiron Sounds:

The inventory phonemes of Meiteiron vary from author to author of Manipuri grammars (P.C. Thoudam, 1980), (S.L. Chelliah, 1994), (D.N.S. Bhat, and M.S. Ningomba, 1997), (Ch. Yashawanta Singh, 2000), etc. However we can resolve it to a more relevant one that Meiteiron has 38 phonemes in all—24 consonants, 12 vowels (6 monophthongs and 6 diphthongs), and 2 tones.

### 2.1.1. Consonant Phonemes of Meiteiron:

	<i>Bilabial</i>		<i>Alveolar</i>		<i>Palatal</i>		<i>Velar</i>		<i>Glottal</i>
	<i>V.less</i>	<i>V.ed</i>	<i>V.less</i>	<i>V.ed</i>	<i>V.less</i>	<i>V.ed</i>	<i>V.less</i>	<i>V.ed</i>	<i>V.less</i>
<i>Plosive:</i> <i>Unaspirated</i>	p	b	t	d	c	ɟ	k	g	
<i>Aspirated</i>	p <sup>h</sup>	b <sup>h</sup>	t <sup>h</sup>	d <sup>h</sup>		ɟ <sup>h</sup>	k <sup>h</sup>	g <sup>h</sup>	
<i>Nasals</i>		m		n				ŋ	
<i>Fricative</i>					s				h
<i>Approximant</i>		w		ɹ		j			
<i>Lateral Approximant</i>				l					

Figure 1. Chart of consonant phonemes of Meiteiron

**2.1.2. Distribution of Meiteiron consonant sounds (word level):**

<i>Phonemes</i>	<i>Initial</i>	<i>Medial</i>	<i>Final</i>
p	+	+	+
p <sup>h</sup>	+	+	-
b	+	+	-
b <sup>h</sup>	+	+	-
t	+	+	+
t <sup>h</sup>	+	+	-
d	+	+	-
d <sup>h</sup>	+	+	-
c	+	+	-
ʃ	+	+	-
ʃ <sup>h</sup>	+	-	-
k	+	+	+
k <sup>h</sup>	+	+	-
g	+	+	-
g <sup>h</sup>	+	-	-
m	+	+	+
n	+	+	+
ŋ	+	+	+
s	+	+	+
h	+	+	-
w	+	+	-
ɹ	+	+	+
j	+	+	-
l	+	+	+

Figure 2. Chart of distribution of consonant phonemes of Meiteiron

Exotic phonemes: /b, b<sup>h</sup>, d, d<sup>h</sup>, g, g<sup>h</sup>, ʃ, ʃ<sup>h</sup>, ɹ/ can occur in the initial position only in loan words. However, /ʃ/ can occur initially in indigenous word, for example /ʃə.goi/ “dance”. It is possible that the very word may be derived from \* /cə.koi/ which is found in *Sekmai* dialect of Meiteiron. The phonemes /ɹ/ and /s/ cannot occur in the final position in indigenous Meiteiron words.

**2.2. Vowel Phonemes of Meiteiron:**

**2.2.1. Monophthongs of Meiteiron:**

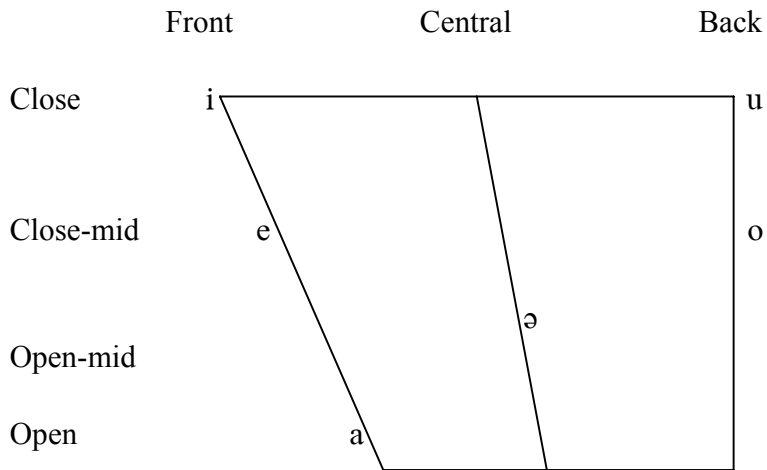


Figure 3. Chart of monophthongs of Meiteiron

**2.2.2. Diphthongs of Meiteiron:**

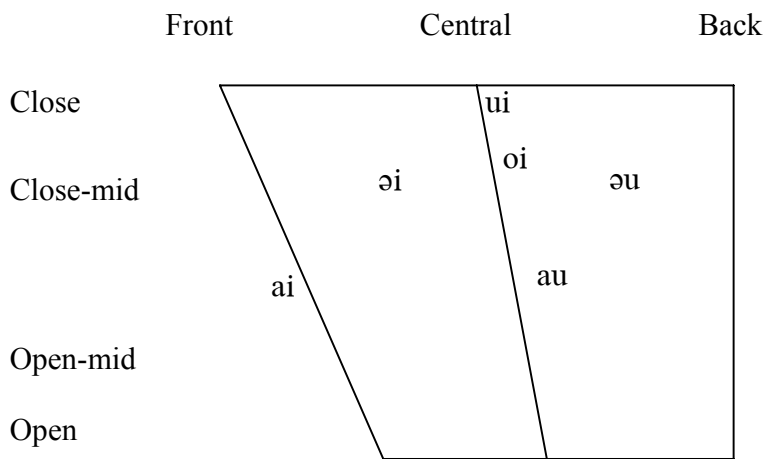


Figure 4. Chart of diphthongs of Meiteiron

### 2.2.3. Distribution of Meiteiron vowel phonemes (word level):

<i>Phonemes</i>	<i>Initial</i>	<i>Medial</i>	<i>Final</i>
i	+	+	+
e	+	+	+
ə	+	+	+
a	+	+	+
o	+	+	+
u	+	+	+
əi	+	+	+
oi	+	+	+
ui	+	+	+
ai	+	+	+
au	-	+	+
əu	+	+	+

Figure 5. Chart of distribution of consonant phonemes of Meiteiron

/au/ can also occur in the initial position in some regional dialects /au/ “the first crop of double cropping”.

### 2.3. Tones of Meiteiron:

Level: unmarked

Falling: / ˘ /

### 3. Bengali Script and Meiteiron Spelling:

The Bengali script for written Meiteiron uses 55 symbols to represent 38 phonemes (including two tones) of Meiteiron. The extra symbols are being used unconsciously or very sparingly. In English, it is found that a letter represents more than one sound. In case of written Meiteiron with Bengali script, mapping of extra letters to a fix number of sounds is very contradictory as well as purposeless. Eventually, the presence of extra letters leads to a major problem of spelling errors. Some symbols are useful to indicate the tonal variations in writing Meiteiron, for instance, ঙৈ /i/ against ঙ়ৈ /i/, উৈ /u/ against উৈ /ü/, etc. However, all the tone vowels (monophthongs and diphthongs) of Meiteiron



cannot be handled with these symbols in Bengali script, for instance, আ /a/, ঐ /əi/, etc. Some consonants are being used for marking of tonal variations, for instance, ঞ /ŋ/ for level in syllable final against ঞ /ŋ/ and ঞ /j/ for falling against ঞ /i/, also ঞ /i/ is used for level against ঞ /i/ elsewhere. In fact, marking of tone in consonant is not acceptable linguistically and using either ঞ or ঞ against ঞ creates inconsistency in writing Meiteiron. Bengali conjoint symbols used in written Meiteiron create confusion in pronunciation of Meiteiron words. For instance, in ঞা /ŋa.ta/ “early” the phonemes /n/ and /t/ are not to be clustered in actual Meiteiron pronunciation however orthographically it is expressed as clustered. The insertion of “akar” † /a/ for released consonants in the final position of a word creates ambiguity with the consonants followed by /a/, for instance, ঞা /u.nə/ “by wood” and ঞা /u.na/ “leaf”. M. S. Ningomba discusses regarding this matter in a paper “Manipurida akar” (Ningomba, 1971). The words borrowed from Indo-Aryan languages like—Bengali, Sanskrit, etc. are putting on as original one. English and many other languages are also facing such problem in their spelling system and is becoming a big question of inconsistency. The Spelling Committee, Government of Manipur framed the first office spelling regulation rule in 1925. After a long gap of 44 years, in 1969 the government devised another spelling regulation rule for Meiteiron spelling with some modification to the former. Though there is a conventionalized order of the authority, the Meiteiron spelling with Bengali script is becoming independent day by day. “The various daily papers and books including the text one published in the language have been found using variant spelling systems. Besides, those who are learning postgraduate in language and literature have come across different spelling system as different teachers have taught them. Consequently, while they again become teachers in different institutions they started teaching the spelling system differently. Likewise, spelling problem is disseminated just like an epidemic.” (N. Gopendro Singh, 1998).

### 3.1 Bengali consonant symbols used in written Meiteiron:

ক	খ	গ	ঘ	ঙ
চ	ছ	জ	ঝ	ঞ
ট	ঠ	ড	ঢ	ণ
ত	থ	দ	ধ	ন
প	ফ	ব	ভ	ম
য	র	ল	ৱ	শ
ঐ	স	হ	ক্ষ	ড়
ঢ়	য়	ং	ঃ	ৎ
		ৎ		

Figure 6. Chart of Bengali consonant symbols used in written Meiteiron

### 3.2. Bengali vowel symbols used in written Meiteiron:

অ	আ	ই	ঈ
উ	ঊ	ঋ	ৠ
এ	ঐ	ও	ঔ
	অং	অঃ	

Figure 7. Chart of Bengali vowel symbols used in written Meiteiron

### 3.3. Meiteiron phonemes and their corresponding Bengali Letters:

The Meiteiron phonemes and their corresponding Bengali letters are given in the following tables (fig. 8, fig.9 and fig.10).

### 3.3.1. Consonants:

	<i>Meiteiron Phonemes</i>	<i>Bengali Letters</i>
01	p	প
02	p <sup>h</sup>	ফ
03	b	ব
04	b <sup>h</sup>	ভ
05*	t	ত, ট and ং
06*	t <sup>h</sup>	থ and ঠ
07*	d	দ and ড
08*	d <sup>h</sup>	ধ and ঢ
09	c	চ
10*	j	জ and য
11	j <sup>h</sup>	ঝ
12	k	ক
13	k <sup>h</sup>	খ
14	g	গ
15	g <sup>h</sup>	ঘ
16	m	ম
17*	n	ন, ণ and ঞ
18*	ŋ	ঙ and ঙ
19*	s	স, ছ, শ and ষ
20	h	হ
21	w	ঝ
22*	r	র, ড় and ঢ়
23	j	য়
24	l	ল

Figure 8. Chart of Meiteiron consonants and corresponding Bengali Letters

### 3.3.2. Monophthongs:

	<i>Meiteiron Phonemes</i>	<i>Bengali Letters</i>
01*	i	ই and ঐ
02.	e	এ
03	a	আ
04	ə	অ
05	o	ও
06*	u	উ and ঊ

Figure 9. Chart of Meiteiron monophthongs and corresponding Bengali Letters

### 3.3.3. Diphthongs:

	<i>Meiteiron Phonemes</i>	<i>Bengali Letters</i>
01**	ai	—
02	əi	ঐ
03**	oi	—
04**	ui	—
05**	au	—
06	əu	ঔ

Figure 10. Chart of Meiteiron diphthongs and corresponding Bengali Letters.

It can be observed from the above tables that more than one Bengali alphabet is used to represent a Meiteiron phoneme (see the above \*marks). While some diphthongs of Meiteiron have no equivalent in Bengali (see the above \*\*marks).

## 4. The Meitei/Meetei Mayek (Meitei script):

The indigenous script of Meiteiron has 27 *Iyek Ipi* “main letter” of which 18 are indigenous and 9 are exotic. There are 8 *Lonsum/Lom Iyek* “unreleased letter”, 8 *Cheitap Iyek* “vowel signs including matra” and 5 *Khudam Iyek* “punctuation marks including diacritics”. It is interesting to mention that Meitei script has its own numeral known as *Cheising Iyek*.

**4.1. Iyek Ipi (Main letters):**

<i>Meitei script</i>	<i>IPA representation</i>	<i>Meitei script</i>	<i>IPA representation</i>	<i>Meitei script</i>	<i>IPA representation</i>
ᩁ	k	ᩁ	s	ᩁ	l
ᩁ	m	ᩁ	p	ᩁ	n
ᩁ	c	ᩁ	t	ᩁ	k <sup>h</sup>
ᩁ	ŋ	ᩁ	t <sup>h</sup>	ᩁ	w
ᩁ	j	ᩁ	h	ᩁ	u
ᩁ	i	ᩁ	p <sup>h</sup>	ᩁ	ə
ᩁ	g	ᩁ	j <sup>h</sup>	ᩁ	r
ᩁ	b	ᩁ	ʃ	ᩁ	d
ᩁ	g <sup>h</sup>	ᩁ	d <sup>h</sup>	ᩁ	b <sup>h</sup>

Figure 11. Chart of main letters of Meitei script

**4.2. Lonsum/Lom Iyek (Unreleased letters):**

<i>Meitei script</i>	<i>IPA representation</i>	<i>Meitei script</i>	<i>IPA representation</i>
ᩁ	k	ᩁ	l
ᩁ	m	ᩁ	p
ᩁ	n	ᩁ	t
ᩁ	ŋ	ᩁ	i

Figure 12. Chart of unreleased letters of Meitei script

**4.3. Cheitap Iyek (Vowel Signs including matra):**

<i>Meitei script</i>	<i>IPA representation</i>	<i>Meitei script</i>	<i>IPA representation</i>
ᩁ	u	ᩁ	i
ᩁ	a	ᩁ	e
ᩁ	o	ᩁ	əu
ᩁ	əi	ᩁ	ŋ

Figure 13. Chart of vowel signs including matra of Meitei script

#### 4.4. Swar Mayek (Vowels due to matras):

<i>Meitei script</i>	<i>Phonetic representation</i>	<i>Meitei script</i>	<i>Phonetic representation</i>
Ɱ`	a	Ɱ◦	e
Ɱ°	əi	Ɱᵇ	o
Ɱᵇ	əu	Ɱᵇ	əŋ

Figure 14. Chart of vowels due to matras of Meitei script

#### 4.5. Khudam Iyek (Punctuation Marks including Diacritics):

<i>Meitei script</i>	<i>Punctuation marks</i>	<i>Meitei script</i>	<i>Diacritics marks</i>
≈	? (question mark)	.	Falling tone mark
	, (comma)	—	Cluster mark
	. (full stop)		

Figure 15. Chart of punctuation marks including diacritics of Meitei script

#### 4.6. Cheising Iyek (Numerals):

<i>Meitei script</i>	<i>Pronunciation</i>	<i>International numerals</i>	<i>Meitei script</i>	<i>Pronunciation</i>	<i>International numerals</i>
○	/p <sup>h</sup> un.bə/	0	Ɱ	/mə.ŋa/	5
Ɱ	/ə.mə/	1	Ɱ	/tə.ruk/	6
Ɱ	/ə.ni/	2	Ɱ	/tə.ɪet/	7
Ɱ	/ə.hum/	3	Ɱ	/ni.pan/	8
Ɱ	/mə.i/	4	Ɱ	/ma.pən/	9

Figure 16. Chart of numerals of Meitei script

#### 4.7. Convention of Meiteiron Spelling with Meitei Script:

Written Meiteiron using Meetei/Meitei Myek is conventionally from left to right and have a space between the words as that of Roman script writing English. Capitalization is not used in written Meiteiron. The letters in Meetei Mayek are named after parts of human body. (Pravabati Chingangbam and Tabish, 2000). Main letters are used to write: released consonants and vowels in initial or isolation of a syllable (see Figure 11). In the main character set, there are only three independent vowel symbols—Ɱ /u/, Ɱ /i/, and Ɱ /ə/. The symbols for other vowel sounds are produced by attaching the *Cheitap* (matras)

to the independent vowel 𑜏 “atiya” (see Figure 14). The sound /ə/ does not expressed when it follows a consonant in Meitei script. *Lonsun/Lom Iyek* is used for writing unreleased sounds (see Figure 12). The *Cheitap* (matras) 𑜀, 𑜁, 𑜂, 𑜃, 𑜄, 𑜅, 𑜆 are used to write immediately after a released consonant and “ ” below it, for instance, 𑜀𑜃, 𑜁𑜃, 𑜂𑜃, 𑜃𑜃, 𑜄𑜃, 𑜅𑜃, 𑜆𑜃 respectively. *Lum Iyek* (falling tone mark) . is marked just after the syllable, which has falling tone, for instance, “tea” and “plastic” in Meiteiron, are pronounced differently as 𑜀𑜃 /ca/ “tea” and 𑜀𑜃. /cà/ “plastic”. *Tapna Khudam/Apun Iyek* \_ is marked below the clustered consonants as 𑜀𑜃𑜄𑜅 /pɪ/ as in 𑜀𑜃𑜄𑜅𑜆𑜇 /cəm.pɪa/ “lemon”. It is indicated that 𑜀 and 𑜏 can be used to indicate level and falling tones respectively in the final position of a syllable, for instance, 𑜀𑜃 /məŋ/ “grave” and 𑜀𑜃𑜄𑜅 /məŋ/ “dream”. However 𑜏 is to be used elsewhere if it is in the environment of any matras, for instance, 𑜀𑜃𑜄𑜅 /kaŋ/ “a cart”, 𑜀𑜃.𑜄𑜅 /kàŋ/ “mosquito”, 𑜀𑜃𑜄𑜅 /caŋ/ “limit”, etc. Punctuation symbols in Meitei script is termed as *Khudam Iyek* (see Figure 15). The symbols other than in *Khudam Iyek* will follow the international symbols (Generic ASCII punctuation).

#### 4.8. Phoneme to Grapheme representation:

##### 4.8.1. Consonants:

<i>Consonants</i>	<i>Meitei script</i>	<i>Example words</i>	<i>IPA representation</i>	<i>Gloss</i>
p	ᵿ	ᵿᵿ	/pi/	tear
unreleased /p/	ᵿ	ᵿᵿᵿ	/top/	cannon
p <sup>h</sup>	ᵿᵿ	ᵿᵿᵿ	/p <sup>h</sup> i/	cloth
b	ᵿ	ᵿᵿᵿ	/t <sup>h</sup> ə.bək/	job
b <sup>h</sup>	ᵿ	ᵿᵿᵿ	/b <sup>h</sup> ot/	election
t	ᵿ	ᵿᵿᵿ	/til/	saliva
unreleased /t/	ᵿ	ᵿᵿᵿ	/k <sup>h</sup> ut/	hand
t <sup>h</sup>	ᵿ	ᵿᵿᵿ	/t <sup>h</sup> oŋ/	bridge
d	ᵿ	ᵿᵿᵿ	/do.lai/	a palanquin
d <sup>h</sup>	ᵿ	ᵿᵿᵿ	/d <sup>h</sup> ol/	drum
c	ᵿ	ᵿᵿᵿ	/cil/	mouth
ʃ	ᵿ	ᵿᵿᵿ	/ʃə.goi/	dance
ʃ <sup>h</sup>	ᵿ	ᵿᵿᵿ	/ʃ <sup>h</sup> al/	cymbal
k	ᵿ	ᵿᵿᵿ	/kok/	skull
unreleased /k/	ᵿ	ᵿᵿᵿ	/kok/	skull
k <sup>h</sup>	ᵿ	ᵿᵿᵿ	/k <sup>h</sup> a/	south
g	ᵿ	ᵿᵿᵿᵿ	/teŋ.got/	bowel
g <sup>h</sup>	ᵿ	ᵿᵿᵿᵿ	/g <sup>h</sup> ə..ri/	watch
m	ᵿ	ᵿᵿᵿᵿ	/mit/	eye
unreleased /m/	ᵿ	ᵿᵿᵿᵿ	/mə.nəm/	smell
n	ᵿ	ᵿᵿᵿ	/na/	ear
unreleased /n/	ᵿ	ᵿᵿᵿᵿ	/mon/	pillow
ŋ	ᵿ	ᵿᵿᵿ	/ŋà/	fish
unreleased /ŋ/	ᵿ	ᵿᵿᵿᵿ	/joŋ/	monkey
ɹ	ᵿ	ᵿᵿᵿᵿ	/cə..ioŋ/	bunch
s	ᵿ	ᵿᵿᵿᵿ	/səm/	hair
h	ᵿ	ᵿᵿᵿ	/hi/	boat
w	ᵿ	ᵿᵿᵿ	/wà/	bamboo
j	ᵿ	ᵿᵿᵿᵿ	/joŋ/	monkey
l	ᵿ	ᵿᵿᵿᵿ	/lai/	god
unreleased /l/	ᵿ	ᵿᵿᵿᵿ	/cil/	mouth

Figure 17. Chart of consonants phoneme-grapheme representation



#### 4.8.2. Vowels:

<i>Vowels</i>	<i>Meitei symbols</i>	<i>Example words</i>	<i>IPA representation</i>	<i>Gloss</i>
i	ᳵ	ᳵ	/i/	thatch
matra of i	ᳶ	ᳶᳵ	/mi/	spider
e	᳷᳚	᳷᳚	/e/	an exclamation
matra of e	᳷	᳷᳚	/cè/	paper
a	᳷᳚	᳷᳚ᳵ	/a.lu/	potato
matra of a	᳷	᳷᳚	/ca/	tea
o	᳷᳚	᳷᳚ᳵ	/ok/	pig
matra of o	᳷	᳷᳚ᳵ	/lol/	language
u	᳷᳚	᳷᳚	/u/	tree
matra of u	᳷	᳷᳚	/cu/	sugarcane
ə	᳷᳚	᳷᳚ᳵ	/ə.ni/	two
ai	᳷ + ᳵ	᳷ᳵ	/maï/	face
oi	᳷᳚ + ᳵ	᳷᳚ᳵ	/k <sup>h</sup> oi/	bee
ui	᳷᳚ + ᳵ	᳷᳚ᳵ	/huï/	dog
əi	᳷᳚	᳷᳚	/əï/	I
matra of əi	᳷	᳷᳚	/cəï/	stick
au	᳷ + ᳷᳚	᳷᳚ᳵ	/pau/	news
əu	᳷᳚	᳷᳚	/əu/	yes
matra of əu	᳷	᳷᳚	/məu/	woman

Figure 18. Chart of vowels phoneme-grapheme representation

#### 5. Discussion:

From a linguist's point of view, an ideal alphabetic system should have one-to-one correspondence between the phonemes and graphemes i.e. each grapheme should represent only one phoneme. Written Meiteiron using 55 Bengali letters makes an interruption to phoneme-grapheme approach. The problems in the Meiteiron spelling system that arises due to the use of Bengali script have been discussed above. The use of computers for the study and analysis of languages is very important. The spelling problems in written Meiteiron if not rectified will be translated into the electronic documents, which may prevent in designing effective language processing tools. The use of Meitei script for written Meiteiron is the only way to solve the Meiteiron spelling

problem. Meitei script is a good example of an alphabetic system that is based on the phonemics of the language. Meitei script for Meiteiron is almost adopting phoneme-grapheme system. Although there are some sounds (potential phonemes), which have been developed due to the influence of the globalization of language, for instance, 𑜀 /ɹ/, 𑜁 /s/ in the final position of a syllable. It can be mentioned that these sounds cannot exist in the final position of a syllable in indigenous Meiteiron lexicon. However it will be rather nice, if possible, to bring forth the *Lonsum Iyek* (unreleased letters) for such letters, which can occur at the final position of a syllable. 𑜂 /i/ in *Lonsum Iyek* (unreleased letter) could be omitted—argument here is that this letter of Meitei script can be treated as an independent syllable, for example, 𑜃𑜂𑜃 /cak.i/ “burnt”. We have seen in section 4 above that 𑜄 /ŋ/ in the final position of a syllable but not in the environment of other matras can be used for tone variation against 𑜅 /ŋ/. This indicates that use of . / ˘ / *lum* (tone marker) for the final /ŋ/ with the environment of other matras is obvious. So is the case, such situation for unreleased 𑜅 /ŋ/ can be served with or without the . / ˘ / *lum* (tone marker) accordingly. It can be resolved that 𑜄 /ŋ/ in Meitei script could be terminated by this inconsistency due to this letter will be solved.

## 6. Conclusion:

In this paper, we have highlighted the problems in Meiteiron spelling system when Bengali script is used for writing Meiteiron. In the absence of a standardized spelling system, the orthographic expression for Meiteiron becomes uneven. As a result, the learner and teacher of this language lead to bewilderment. Extra letters of Bengali script other than the required sound used for Meiteiron interrupt the phoneme-grapheme approach to learning as well as language processing. Adoption of Meitei Mayek is the very way to solve the problems confronted in Meiteiron orthography today. Over and above, it would be one of the best among sound to symbol languages of the world.

## 7. Acknowledgements:

We wish to evince our acknowledgements to 1. The Department of Linguistics, Manipur University, Canchipur, Imphal, 2. The Department of Computer Science & Engineering, Indian Institute of Technology Guwahati, Guwahati and 3. The Department of Information Technology, Ministry of Communications & Information Technology, Government of India for the facilities made available.

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## Appendix

### Iyek Ipi (Main letters):

<i>Meitei script</i>	<i>Read as</i>	<i>Meitei script</i>	<i>Read as</i>	<i>Meitei script</i>	<i>Read as</i>
𑜀	/kok/	𑜁	/səm/	𑜂	/lai/
𑜃	/mit/	𑜄	/pa/	𑜅	/na/
𑜆	/cil/	𑜇	/til/	𑜈	/k <sup>h</sup> əu/
𑜉	/ŋəu/	𑜊	/t <sup>h</sup> əu/	𑜋	/wai/
𑜌	/jaŋ/	𑜍	/huk/	𑜎	/u/
𑜏	/i/	𑜐	/p <sup>h</sup> əm/	𑜑	/ətia/
𑜒	/gok/	𑜓	/j <sup>h</sup> əm/	𑜔	/.ai/
𑜕	/ba/	𑜖	/jil/	𑜗	/dil/
𑜘	/g <sup>h</sup> əu/	𑜙	/d <sup>h</sup> əu/	𑜚	/b <sup>h</sup> əm/

### Lonsum/Lom Iyek (Unreleased letter):

<i>Meitei script</i>	<i>Read as</i>	<i>Meitei script</i>	<i>Read as</i>
𑜛	/kok lon.sum/	𑜜	/lai lon.sum/
𑜝	/mit lon.sum/	𑜞	/pa lon.sum/
𑜟	/na lon.sum/	𑜠	/til lon.sum/
𑜡	/ŋəu lon.sum/	𑜢	/i lon.sum/

### Cheitap Iyek (Vowel Signs including matra):

<i>Meitei script</i>	<i>Read as</i>	<i>Meitei script</i>	<i>Read as</i>
𑜣	/a.nəp/	𑜤	/i.nəp/
𑜥	/u.nəp/	𑜦	/o.nəp/
𑜧	/je.nəp/	𑜨	/cəi.nəp/
𑜩	/səu.nəp/	𑜪	/nuŋ/

### Khudam Iyek (Punctuation Marks including Diacritics):

<i>Meitei script</i>	<i>Read as</i>	<i>Meitei script</i>	<i>Read as</i>
𑜫	/ə.həŋ k <sup>h</sup> u.dəm/	.	/lum i.jek/
	/cəi.k <sup>h</sup> ən/	—	/ə.pun i.jek/
	/cəi.k <sup>h</sup> əi/		

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