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Phonology of Shella

Dr. Chelmelyne Dhar

ABSTRACT

For studying the Phonology of a language or a dialect, there is a need to classify and describe the vowel and consonant sounds that constitute the sound system as one of the aspects.

Crystal (2008) defined vowel sound as “ Vowel is one of the two general categories used for the classification of speech sounds, the other being consonant. Vowels can be defined in terms of both phonetics and phonology.

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Phonology of Shella

Dr. Chelmeiyne Dhar

I. INTRODUCTION

For studying the Phonology of a language or a dialect, there is a need to classify and describe the vowel and consonant sounds that constitute the sound system as one of the aspects.

Crystal (2008) defined vowel sound as “ Vowel is one of the two general categories used for the classification of speech sounds, the other being consonant. Vowels can be defined in terms of both phonetics and phonology. Phonetically, they are sounds articulated without a complete closure in the mouth or a degree of narrowing which would produce audible friction; the air escapes evenly over the centre of the tongue. If air escapes solely through the mouth, the vowels are said to be oral; if some air is simultaneously released through the nose, the vowels are nasal. In addition to this, in a phonetic classification of vowels, reference would generally be made to two variables, the first of which is easily describable, the second much less so: (a) the position of the lips – whether rounded, spread, or neutral; (b) the part of the tongue raised, and the height to which it moves”.

On the other hand Crystal (2008) defined Consonant as “Consonants can be defined in terms of both phonetics and phonology. Phonetically, they are sounds made by a closure or narrowing in the vocal tract so that the airflow is either completely blocked, or so restricted that audible friction is produced. Consonant articulations are relatively easy to feel, and as a result are most conveniently described in terms of place and manner of articulation. In addition, a routine phonetic description of consonants would involve information about the mode of vibration of the vocal folds (see voicing), and it is often necessary to specify the duration of the sound, the airstream mechanism involved and the direction of airflow (egressive or ingressive). From a phonological point of view, consonants are those units which function at the margins of syllables, either singly or in clusters”.

Thus, Vowels can be defined as sounds which are articulated without a complete closure in the mouth and with a degree of narrowing which would produce audible friction; the air escapes evenly through the center of the tongue. If the air escapes evenly through the mouth it’s an oral vowel; if the air is simultaneously released through the nose, it is a nasal vowel.

For the description of vowel some criteria has to be taken into consideration. These are the body of the tongue, the height of the tongue and the lip positions. These are the factors that are involved in the production of vowels.

II. VOWELS (MONONPHTHONGS) IN SHELLA

There are seven phonemic monophthongs in Shella. They are /i, e, a, a:, u, o, and ə/. The monophthongal phonemes are displayed in the chart below:

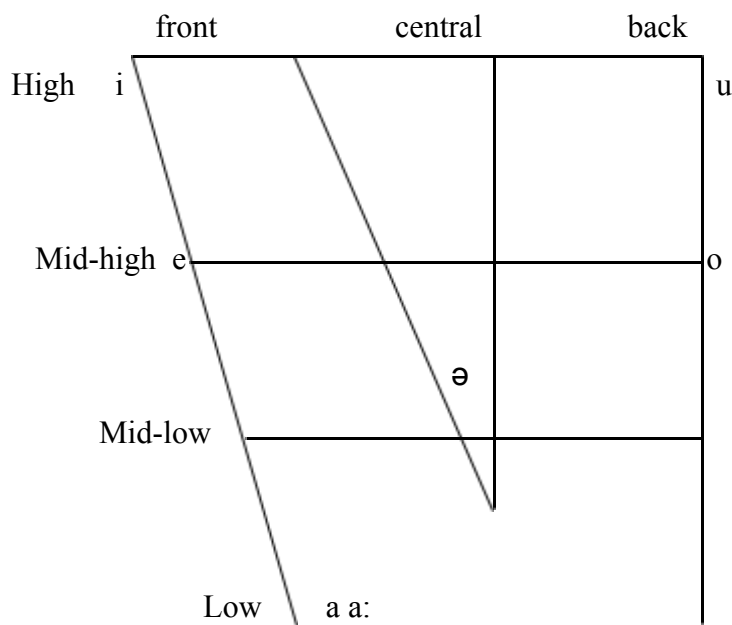


Fig: Shella monophthongs

III. DESCRIPTION OF MONOPHTHONGS IN SHELLA

For vowel description, the data given are monosyllabic. Hence the description of vowels is based on the environment viz, V, VC, CVC, CCVC, and CV.

/i/ is called the high, front, short, unrounded vowel. In the production of this sound the front part of the tongue is raised towards the hard palate and the lips are spread. It occurs initially, medially and finally. This is shown in the example below:

Initial	Medial	Final
/im/ 'live'	/jɪŋ/ 'cloth'	/di/ 'tree'
/ʃit/ 'cook'	/sim/ 'bird'	/ʃɪi/ 'bone'
/iʔ/ 'ripe'	/tʰlim/ 'leech'	/ʃabi/ 'brain'

/e/ is a front, mid-high, unrounded vowel. It is produced with the front part of the tongue lower than /i/ and the lips are unrounded. It occurs in the open and closed syllable in CVC and CCVC shapes in the initial, medial and final positions but rarely occurs in VC shape. Below are the examples:

Initial	Medial	Final
/e/ 'see'	/peʔ/ 'to winnow'	/ʃe/ 'white'
/eʔ/ 'difficult'	/tʰeŋ/ 'sow'	/ske/ 'deer'
/rkʰeŋ/ 'dry'	/ʃem/ 'soft'	/dpe/ 'fire place'

/a/ is produced with the front of the tongue moving towards the central position and the tongue is lowered. The lips remain in the neutral position and unrounded. It occurs commonly with CVC and CCVC structure but rarely occurs in VC shape in the initial, medial and final positions.

Initial	Medial	Final
/at/ 'swell'	/paʔ/ 'to make a sound'	/tbat/ 'cling'
/aŋ/ 'to open the mouth'	/maʔ/ 'look'	/kʃap/ 'chew'

/a:/ is produced as a vowel /a/ but they differ only in length. /a:/ is produced with longer duration. In Shella /a/ and /a:/ are contrastive. This vowel rarely occurs in VC shapes. It is prominent in closed and an open syllable in CVC, CCVC and CV structure respectively in all the three positions.

Initial	Medial	Final
/a:r/ 'two'	/sa:r/ 'sweep'	/ʒa:/ 'rice'
	/ma:r/ 'husband'	/ʒa:/ 'tea'
	/ta:m/ 'to pick something'	

/o/ is a mid- back vowel, it is produced with the back of the tongue lowered and the lips rounded. It occurs in an open and closed syllable in word initial, medial and final positions.

Initial	Medial	Final
/oŋ/ 'say'	/soŋ/ 'wrap'	/bo/ 'grandmother'
/ot/ 'cut'	/ʃroʔ/ 'monkey'	/sŋo/ 'hear'
/oʔ/ 'carve'	/ʒop/ 'win'	/do/ 'bear'

/u/ is produced with the back of the tongue advancing towards the central position. It is called the high back rounded vowel. It occurs in an open and closed syllable in VC, CVC, CCV and CCVC structures in all three positions.

Initial	Medial	Final
/ur/ 'fall'	/buʔ/ 'keep'	/ʒu/ 'sour'
/um/ 'water'	/ʒut/ 'weed'	/klu/ 'peacock'

/ə/ is produced with the back of the tongue towards the central position and is lowered. It is a centralized vowel. The lips are spread. It is found to occur in closed syllables in disyllabic words.

- /pərsa/ 'son/daughter in law'
- /pərda/ 'curtain'
- /tərsim/ 'nail'

IV. CONTRAST BETWEEN VOWELS

The following are the phonemic vowels in Shella which are established following the principle of contrastive distribution.

The following minimal pairs show the phonemic contrasts between similar vowels.

- i /i/ and /e/
 - /iʔ/ 'ripe' /tip/ 'know' /k^hliʔ/ 'head'
 - /eʔ/ 'difficult' /tep/ 'to bury' /k^hleʔ/ 'open'
- ii /e/ and /a/
 - /peʔ/ 'to winnow' /beʔ/ 'blow'
 - /paʔ/ 'to make a sound' /baʔ/ 'to carry at the back'
- iii /i/ and /u/
 - /im/ 'live' /diʔ/ 'drink' /biʔ/ 'poison'
 - /um/ 'water' /duʔ/ 'lose' /buʔ/ 'keep'
- iv /e/ and /o/
 - /eʔ/ 'difficult' /dem/ 'bend' /t^heʔ/ 'to pour'
 - /oʔ/ 'to carve' /dom/ 'angry' /t^hoʔ/ 'write'
- v /u/ and /o/
 - /ur/ 'fall' /dum/ 'dark'

/ot/ 'cut'

/dom/ 'angry'

It is to be noted that like Standard Khasi, Shella vowel length is found to be present but they are not contrastive, except for the low-open vowel /a/, that is, /a:/. This can be shown in the example below:

vi /a/ and /a:/
 /sam/ 'pierce' /tam/ 'exceed'
 /sa:m/ 'to distribute' /ta:m/ 'to pick something'

V. DIPHTHONGS

A diphthong may be referred to a vowel which has the quality of two sounds or two vowels. In other words, it is when two vowels are being pronounced at the same time as a single vowel.

A diphthong consists of two half vowels, the first of which undergoes a rapid transition into the other. One of the members of the vowel sequence will always dominate over the other. The vowel movement must be performed with a single impulse of breath, if there is more than one impulse of breath, the ear perceives two syllables.

Shella has two diphthongs. They are ia, iə. These diphthongs are falling diphthongs.

VI. DESCRIPTION OF DIPHTHONGS

/ia/: For the articulation of this diphthong, the tongue starts at a position required for the articulation of the vowel /i/ and moves towards the vowel /a/. /ia/ may be described as a glide from the front, unrounded vowel in the close position to a front unrounded vowel in the open position. /ia/ is found to occur in the medial position.

Medially
 /ksiar/ 'gold'
 /p^hria/ 'hail stone'

/iə/: For the articulation of this diphthong, the tongue starts at a position required for the articulation of the vowel /i/ and moves towards the vowel /ə/. /iə/ may be described as a glide from the front, unrounded vowel in the close position to a central unrounded vowel between half close and half open position. /iə/ is found to occur only in the medial position.

Medially
 /t^hiəʔ/ 'sleep'
 /tiər/ 'utensils'
 /hiəm/ 'good'

VII. CONSONANTS IN SHELLA

There are twenty two phonemic consonants in Shella out of which seven are stops, four nasals, one trill, three fricatives, two approximants and one lateral. They are –

p, p^h, b, b^h, t, t^h, d, ɟ, ɟ^h, k, k^h, ʔ, m, n, ɲ, ŋ, l, r, s, ʃ, h, w, j.

Table: Consonantal Chart in Shella

	Bilabial	Labio-dental	Dental	Alveolar	Palatal	Velar	Glottal
Plosive	p p ^h b b ^h			t t ^h d	ʃ ʃ ^h	k k ^h	ʔ
Fricative				s	ʃ		h
Trill				r			
Nasal	m			n	ɲ	ŋ	
Lateral				l			
Approximant	w				j		

VIII. DESCRIPTION OF CONSONANTS AND THEIR OCCURRENCES

/p/ is produced when the lower lip touches the upper lip. In the production of this sound, the two articulators come closely in contact with each other, and when the articulators are separated, the air escapes suddenly (like an explosion). There is no vibration of the vocal cords when /p/ is produced. Thus, /p/ can be described as an unaspirated voiceless bilabial stop. It occurs in the initial, medial and final positions. The examples are as follows:

Initially	Medially	Finally
/prom/ 'wound'	/kpi/ 'necklace'	/lastep/ 'tomorrow'
/paʔ/ 'to make a sound'	/dpe/ 'fire place'	/lap/ 'rain'

/p^h/ shares the same articulatory features with /p/. It differs only in aspiration, that is, /p^h/ is released with a single puff of air. Thus, /p^h/ can be described as an aspirated voiceless bilabial stop. It occurs only in the initial position. This can be illustrated below:

Initially
/p^hla/ 'to confess'
/p^hŋoj/ 'yolk'

/b/ is produced when the lower lip touches the upper lip. In the production of this sound, the two articulators come closely in contact with each other, and when the articulators are separated, the air escapes suddenly. There is vibration of the vocal cords when /b/ is produced. Thus, /b/ can be described as an unaspirated voiced bilabial stop. It occurs in the initial and medial positions. The examples are:

Initially	Medially
/bilom/ 'late'	/tbat/ 'cling'
/ba/ 'father'	/kba/ 'paddy'

/b^h/ shares the same feature with /b/. It differs only in aspiration, i.e. in the production of /b^h/ the release is simultaneous with extra air. It occurs only in the initial position.

Initially

/b^haʔ/ 'share'

/t/ is produced when the blade of the tongue touches the alveolar ridge. In the production of this sound, the two articulators come closely in contact with each other, and when the articulators are separated, the air escapes suddenly. There is no vibration of the vocal cords when /t/ is produced. Thus, /t/ can be described as an unaspirated voiceless alveolar stop. It occurs in the initial, medial and final positions. These are as follows:

Initially

/trej/ 'work'

Medially

/kte/ 'hand'

Finally

/kjet/ 'leg'

/t^h/ shares the same feature with /t/. It differs only in aspiration. In the production of /t^h/, a single puff of air is released. Thus /t^h/ is described as an aspirated alveolar stop occurring in the initial and medial positions. The examples are as follows:

Initially

/t^hala/ 'plate'

Medially

/kt^haŋ/ 'bitter'

/d/ is produced when the blade of the tongue touches the alveolar ridge. In the production of this sound, the two articulators come closely in contact with each other, and when the articulators are separated, the air escapes suddenly. There is vibration of the vocal cords when /d/ is produced. Thus, /d/ can be described as an unaspirated voiced alveolar stop. It occurs in the initial and medial positions. The examples are

Initially

/dem/ 'bend'

Medially

/kdu/ 'point'

/j/ is produced when the front of the tongue touches the hard palate. In the production of this sound, the two articulators come closely in contact with each other, and when the articulators are separated, the air escapes suddenly. There is vibration of the vocal cords when /j/ is produced. Thus, /j/ can be described as an unaspirated voiced palatal stop. It occurs in the initial, medial and final positions. The examples are given below:

Initially

/jɛr/ 'fishing net'

Medially

/kjam/ 'cold'

Finally

/k^hoʝ/

/j^h/ shares the same feature with /j/. It differs only in aspiration. In the production of /j^h/ the release is simultaneous with extra air. Thus, it can be described as aspirated voiced palatal stop occurring only in the initial position. This can be illustrated as follows:

Initially

/j^hiʔ/ 'wet'

/j^het/ 'no desire'

/k/ is produced when the back of the tongue touches the soft palate. In the production of this sound, the two articulators come closely in contact with each other, and when the articulators are separated, the air escapes suddenly. There is no vibration of the vocal cords when /k/ is produced. Thus, /k/ can be described as an unaspirated voiceless velar stop. It occurs in the initial, medial and final positions. The examples are as follows:

Initially

/kuʔ/ 'meat'

Medially

/ske/ 'deer'

Finally

/suk/ 'easy'

/k^h/ shares the same feature with /k/. It differs only in aspiration. /k^h/ is produced with single puff of air. Thus, it is called an aspirated voiceless velar stop occurring in the initial and medial positions. The examples are given below:

Initially	Medially
/k ^h om/ 'tie'	/rk ^h ei/ 'laugh'

/ʔ/ In the production of this sound, there is closure and sudden release of air in the vocal cord. There is no vibration of the vocal cords when /ʔ/ is produced. Thus, /ʔ/ can be described as a glottal stop. It occurs in the medial and final positions. The examples are given below:

Medially	Finally
/ʃʔi/ 'bone'	/ʃroʔ/ 'monkey'

/m/ is produced when the lower lip touches the upper lip. During the closure the velum is lowered to allow the air to pass through the nasal passage. There is vibration of the vocal cords when /m/ is produced. Thus, /m/ can be described as a voiced bilabial nasal. It occurs in the initial, medial and final positions. The examples given are:

Initially	Medially	Finally
/maʔ/ 'look'	/tmaŋ/ 'beard'	/prom/ 'wound'

/n/ is produced when the blade of the tongue touches the alveolar ridge. In the production of this sound, the two articulators come closely in contact with each other, and when the articulators are separated, the air escapes suddenly. There is vibration of the vocal cords when /n/ is produced. Thus, /n/ can be described as a voiced alveolar nasal. It occurs in the initial, medial and final positions. The examples are given below:

Initially	Medially	Finally
/ner/ 'guts'	/ʃnoŋ/ 'village'	/mlen/ 'gums'

/ɲ/ is produced when the front of the tongue touches the hard palate. In the production of this sound, the two articulators come closely in contact with each other, and when the articulators are separated, the air passes through the nasal passage and there is vibration of the vocal cords. Thus, /ɲ/ can be described as a voiced palatal nasal. It occurs in the initial, medial and final positions. The examples are as follows:

Initially	Medially	Finally
/ɲet/ 'wipe'	/ʃɲuʔ/ 'hair'	/sʔɲ/ 'ginger'

/ŋ/ is produced when the back of the tongue touches the soft palate. In the production of this sound, the two articulators come closely in contact with each other, and when the articulators are separated, the air passes through the nasal passage and there is vibration of the vocal cords. Thus, /ŋ/ can be described as a voiced velar nasal. It occurs in the initial, medial and final positions. The examples as follows:

Initially	Medially	Finally
/ŋam/ 'deep'	/ŋe/ 'far'	/lŋoŋ/ 'short'

/r/ is produced when the blade of the tongue rapidly touches the alveolar ridge. The air passed through the narrow passage. There is vibration of the vocal cords when /r/ is produced. Thus, /r/ can be described as a voiced alveolar trill. It occurs in the initial, medial and final positions. The examples are as follows:

Initially	Medially	Finally
/rk ^h ɛŋ/ 'dry'	/prej/ 'vomit'	/mar/ 'spouse'

/l/ is produced when the blade of the tongue is raised towards the alveolar ridge. In the production of this sound, the two articulators come closely in contact with each other so as to allow the air to escape through the sides of the tongue. There is vibration of the vocal cords when /l/ is produced. Thus, /l/ can be described as a voiced alveolar lateral. It occurs in the initial and medial positions. The examples are:

Initially	Medially
/loj/ 'go'	/blaŋ/ 'goat'

/s/ is produced when the blade of the tongue is raised towards the alveolar ridge. In the production of this sound, the two articulators did not come in contact with each other, and the air is squeezed through a very narrow passage and creates vibration in the vocal cords. Thus, /s/ can be described as a voiceless alveolar fricative. It occurs in the initial and medial positions. The examples are:

Initially	Medially
/sŋo/ 'hear'	/ksuŋ/ 'pus'

/ʃ/ is produced when the front of the tongue is raised towards the hard palate. In the production of this sound, the two articulators come in contact with each other, and when the articulators are separated the air escapes simultaneously through a narrow passage. There is no vibration of the vocal cords when /ʃ/ is produced. Thus, /ʃ/ can be described as a voiceless palato-alveolar fricative. It occurs only in the initial position.

Initially
/ʃroʔ/ 'monkey'
/ʃɛt/ 'dance'

/h/ is a voiceless glottal fricative occurring only in the initial position.

Initially
/her/ 'fly'

/w/ is produced when the lips come in contact (not closely) with each other, and the air escapes gradually. There is vibration of the vocal cords when /w/ is produced. Thus, /w/ can be described as a voiceless bilabial approximant. It occurs in the initial, medial and final positions. The examples given are as follows:

Initially	Medially	Finally
/wan/ 'come'	/kwaʔ/ 'thirsty'	/dpew/ 'biscuit'

/j/ is produced when the front of the tongue is raised toward the hard palate. There is vibration of the vocal cords when /j/ is produced. Thus, /j/ can be described as a voiced palatal approximant.. It occurs in the initial, medial and final positions.

Initially	Medially	Finally
/jam/ 'weep'	/kjuʔ/ 'afraid'	/trej/ 'work'

IX. CONSONANT MINIMAL PAIRS

The following pair of words illustrates the contrast between consonants:

Aspirated vs Unaspirated

/p/ and /p^h/

/paʔ/ 'to make a sound' /p^haʔ/ 'send'
'bag' /p^hla/ 'to confess'

/b/ and /b^h/

/baʔ/ 'back ride' /b^haʔ/ 'share'

/t/ and /t^h/

/taʔ/ 'apply' /t^haʔ/ 'ice'
'təlle/ 'classifier' /t^həlle/ 'empty'

/ʃ/ and /ʃ^h/

/ʃur/ 'extreme' /ʃ^hur/ 'vegetable'

Voiceless vs Voiced

/p/ and /b/

/poʃ/ 'operate' /boʃ/ 'itch'
'por/ 'time' /bor/ 'power'

/t/ and /d/

/tuʔ/ 'steal' /duʔ/ 'lose'
'tiʔ/ 'dig' /diʔ/ 'drink'

Contrast between nasals

/m/ and /n/

/krem/ 'cave' /kren/ 'speak'

/m/ and /ɲ/

/maʔ/ 'look' /ɲaʔ/ 'drive'
'mut/ 'mean to' /ɲut/ 'weed'

/m/ and /ŋ/

/krem/ 'cave' /kreŋ/ 'forest'

Contrast between voiceless alveolar and voiceless palatal fricatives

/s/ and /ʃ/

/suʔ/ 'fruit' /ʃuʔ/ 'beat'
'soŋ/ 'pack' /ʃoŋ/ 'sit'

Contrast between bilabial and palatal approximants

/w/ and /j/

/weŋ/ 'remove' /jeŋ/ 'stand'

X. CONSONANT CLUSTER

A consonant cluster is the sequence of two or more phonemes occurring at three positions i.e. initial, medial and final. The geminates are those identical sounds which occur adjacent to each other at a position. In Shella the consonant cluster occurs only in the word initial position. The clusters always consist of two consonants; a cluster with more than two consonants is not permissible in the variety. Below are the examples of consonant cluster in Shella:

Consonant cluster in word initial position

Stop+ stop

/pdət/	'throat'
/tdəŋ/	'tail'
/kdup/	'embrace'
/ktaʔ/	'mud'
/btəŋ/	'cloth for carrying baby'

Stop+ nasal

/phŋəi/	'yolk'
/tnat/	'branch'
/knup/	'rain hat'
/bɲet/	'teeth'

Stop+ fricative

/ksew/	'grandchild'
/bseŋ/	'snake'

Stop+ palatal

/kʲet/	'leg'
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Stop+ trill

/prei/	'vomit'
/trei/	'work'
/kren/	'speak'
/brət/	'throw'

Stop+ lateral

/pla/	'bag'
/tlət/	'weak'
/kləŋ/	'bottle'
/blaŋ/	'goat'

Nasal+ trill

/mra:t/	'animal'
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Trill+ stop

/rbən/	'thick'
/rk ^h ei/	'laugh'

Fricative+ stop

/spaʔ/	'wealth'
/stɪŋ/	'light'
/ske/	'deer'
/sdei/	'axe'

Fricative+ nasal

/sna:t/	'comb'
/sŋə/	'hear'
/ʃɲuʔ/	'hair'

Fricative+ lateral

/ʃlur/	'brave'
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Lateral+ stop

/lbəŋ/	'thigh'
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Lateral+ nasal

/lŋəŋ/	'short'
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Geminates :-

There are three geminates in Shella. They are dental, bilabial nasal and lateral sound /tt/, /mm/ and /ll/

/tt/	/satte/	'ring'
	/p ^h ettuʔ/	'elope'
/mm/	/təmmən/	'old'
/ll/	/pəlleŋ/	'egg'
	/k ^h əllai/	'kidney'

Based on the analysis on phonemic inventory, of Shella phonology includes 22 consonants, they are /p, p^h, b, b^h, t, t^h, d, ɟ, ɟ^h, k, k^h, ʔ, m, n, ɲ, ŋ, l, r, s, ʃ, h, w, j/. Vowel sounds include 7 monophthongs-/i, e, a, a:, u, o, and ə/. The analysis of vowels of Shella shows the presence of two diphthongs, they are /ia/ and /iə/.

The main purpose of this research paper is to share the factual information and demonstration of one of the important aspects of the language to the native speakers, who unconsciously may not know the inherent structure of their own variety in particular and the Khasi speakers in general. It is to be noted that in this research work the phonological analysis is done only at the phonemic level. Therefore, there is a need for further research at the phonetic/acoustic level. In addition to that; it will also serve the purpose of providing reference for future research enthusiasts and scientists working in the same domain. However, the limitation of this paper is it highlights small portions of linguistic research and is limited only to the classification and description of the sounds spoken in this variety. There is a need for further venturing on topics related to this field. It is to be noted that the introduction and overview of Shella as a whole can be found in another paper with the topic "Syllable structure of Khasi with special reference to Shella" by the same author.

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REFERENCE

1. Bareh, C. 2007. *Descriptive Analysis of the Jowai and Rymbai Dialects of Khasi*.
2. Unpublished Ph.D Thesis: North Eastern Hills University.
3. Carr, P. 1993. *Modern Linguistics, Phonology*. London: The Macmillan Press Ltd.
4. Catford, J.C. 1988. *A Practical Introduction to Phonology*. Oxford: Oxford University Press.
5. Clark, J. and Yallop, C. 1990. *An introduction to Phonetics and Phonology*.
6. Oxford: Basil Blackwell Publishers.
7. Crystal, D. 1991. *A Dictionary of Linguistics and Phonetics*. Oxford: Basil Blackwell Publishers.
8. Gegerich, H. 1992. *English Phonology- An introduction*. Cambridge: Cambridge University Press.
9. Dkhar, E.W. 2001. *Ka Hima Shella ka Synshar ka Bishar ki Dustur ki Riti* . Shillong: Shandora Press.

10. Grierson, G.A. 1928. Vol II *Linguistics Survey of India, monkher and Siamese-Chinese families (including Khasi and Tai)*. Delhi: Motilal Barnasidas.
11. Gopalakrishnan.R. 2002. *Meghalaya Land and People*. New Delhi: Omsons Publications.
12. Grierson, G.A. 1907. *The Khasis*. Delhi: Cosmo Publishers.
13. Henderson, E.J.A. 1967. *Vowel Length and Vowel Quality in Khasi*. University of London: BSOAS.
14. Rodborne, T. 1980. *Ki khanatang na ri War*. Shillong: Shandora Press.
15. Synrem, S. 1982. *Ka history lyngkot ka Hima Shella, in ka War Shella Socio-cultural Organizatio, Souvenir*. Shillong: Shandora Press.