Mon-Khmer Studies

VOLUME 45

The journal of Austroasiatic languages and cultures

Author: *Curiously BAREH*
Title: ***Phonological Correspondences between Jowai- and Narwan-Pnar.***
Pages: 1-13

Copyright for this paper vested in the author
Released under Creative Commons Attribution License

Volume 45 Editor:
Sujaritlak Deepadung

ISSN: 0147-5207
Website: http://mksjournal.org

Published by:

Mahidol University (Thailand)

SIL International (USA)

MON-KHMER STUDIES is the peer-reviewed, publication of record for research in Austroasiatic linguistics, founded in 1964. Since 2012 the journal is distributed online under a Creative Commons license.

SCOPE OF THE JOURNAL

The journal specializes in Austroasiatic (Mon-Khmer and Munda) linguistics, and also welcomes high-quality articles dealing with Mainland Southeast Asian languages and cultures. We encourage submissions that advance the study of a range of topics such as (but not limited to): linguistic description, cultural description, comparison, bibliography, historical development, sociolinguistics, stylistics, orthography, and paleography.

EDITORIAL BOARD (at September 2015)

Robert Bauer
Isara Choosri
Doug Cooper
Sujaritlak Deepadung
Ellie Hall
Mathias Jenny
Brian Migliazza
Carolyn Miller
Kirk Person
Naraset Pisistpanporn
Suwilai Premsrirat
Felix Rau
Paul Sidwell
Sophana Srichampa
Mayuree Thawornpat

Editorial Assistant: Prachitporn Pokmanee <monkhmerj@gmail.com>

CONTACT MON-KHMER STUDIES

Research Institute for Languages and Cultures of Asia (RILCA)
Mahidol University at Salaya
Salaya, Nakhorn Pathom 73170 Thailand
Telephone: 66-2-800-2324.
Fax: 66-2-800-2332
Email: <monkhmerj@gmail.com>
Homepage: http://www.mksjournal.org/

Phonological Correspondences between Jowai- and Narwan-Pnar

Curiously BAREH
Central University of Kerala, India

Abstract
This paper attempts to compare and highlight the phonological differences of the varieties; Jowai-Pnar (spoken in West Jaintia Hills) and Narwan-Pnar (spoken in East Jaintia Hills). Preliminary analysis of these two varieties reveals that there are correspondences which are regular and uniformly found in almost all the cognate words. For instance, the long vowel of one dialect corresponds to a diphthong in the other; the [e] of Jowai-Pnar corresponds to the [ɛ] of Narwan-Pnar and the [ɛ] of Jowai-Pnar corresponds with the [e] of Narwan-Pnar in the environment when they precede [-ʔ], [a] <> [ɔ], [o] <> [ɛ], [o] <> [ɛu], etc. However, this pattern of corresponding different segments is seen only with the vowels and not with the consonants with the exception of one case where the coda of Jowai-Pnar [-ʔ] corresponds to the [-c] of Narwan-Pnar. In most cases, if there is any consonantal difference among the varieties of Pnar, it is usually a result of deletion or insertion.[1]
Keywords: Pnar, phonology, vowel correspondences
ISO 639-3 language codes: pvb

1. Introduction[2]

Pnar, also known as Jaintia (Spencer 1967) or earlier as Synteng (Grierson 1928), is a Khasian language spoken in the East and West Jaintia Hill District of Meghalaya and in a few pockets of Cachar Hills and North Cachar Hills districts of Assam. According to the People's Linguistic Survey of India (2014), the population of Pnars stands at 3,92,853. [3] As is attested in other Austroasiatic languages, Pnar also is subject to a regional variations, and these can noticeable even within a distance of 3-4 kilometres. As a matter of fact, this is applicable to all the Khasian speaking areas. The most noticeable variants of Pnar can be classified according to their regional locations; in most cases the regional variants take their names from village names. However, there are cases where certain villages share one common variety with slight variation in form or accent. Over the last few years I have made an attempt to study the sound systems of the languages of the Khasian[4] group. My preliminary research suggests that Pnar includes all the varieties mentioned below and at this point of time I can only provide the major varieties named after the names of the villages.

---

1 Word list of Jowai-Pnar, Narwan-Pnar and Standard Khasi is given as an appendix at the end of the paper.

2 I would like to thank UGC for providing me the grant to conduct research on the Khasian languages, under the UGC Scheme for Award of Post Doctoral Fellowship to SC/ST candidates. I would also like to thank Paul Sidwell for his remarks, advice and suggestions. Many thanks also to the anonymous reviewers for their comments on previous versions of the paper. However, as a normal disclaimer, errors are of course of the author.

3 People's Linguistic Survey of India, Volume 19, Part II, The languages of Meghalaya. The Census of India 2001 puts the number of Pnar speakers in India at around 243,441 and the total number of Pnar speakers around the world at 247,000 (Ethnologue, languages of the world).

4 The term *Khasian* was used by Diffloth (2005) to specify its position under the Khasi-Khmuic branch of the Austro-asiatic language family. According to him, there are four languages under this term *Khasian*. In the earlier classification (Diffloth 1974) he groups the Khasi language and its dialects directly under Mon-Khmer along with Palaungic, Monic, Khmuic, Vietmuong, Katuic, Bahnaric, Pearic, Khmer, Semang, Sakai and Semelaic. And in the latter edition (1982) (as cited in Ruhlen 1991), he regroups Khasi language along with Palaungic-Khmuic and Vietmuong under the North branch of the Mon-Khmer. Sidwell (2009, 2011), on the other hand, classifies Khasian along with Palaungic within Austoasiatic. Both these classifications of Austroasiatic only specify the position of the Khasian group but not the subgroups under this branch. However, Pnar can be classified along with the other languages, viz, War and Khasi and Lyngngam under the Khasian group. Recent research (Nagaraja et al., 2013) has shown that both Pnar and Khasi share more cognate words as compared to War and Lyngngam. War shows more dissimilarity in terms of vocabulary and sound system.

BAREH, Curiously. 2016. Phonological correspondences between Jowai- and Narwan-Pnar.
Mon-Khmer Studies 45:1-13

The original data for this paper for Narwan-Pnar has been collected from my two informants in East Jaintia Hills; Mrs Gracia Shadap and Mrs Mary Langstang and recording was done with Mrs. Mary Langstang. Two field trips were made to East Jaintia Hills for collecting Narwan-Pnar data. Data for Jowai-Pnar is self-generated. Cross checked data of Standard Khasi has been done with Dr. Barika Khyriem, a native speaker and researcher of the Khasian group of languages.

In the present study, traditional approach of phonetic transcription has been used to capture minute details of sound and its phonological features. Both ear perception and machine analysis has been used. Transcription and recording were done simultaneously in the field. 700 cognate words were collected and recorded using a Zoom H2n Handheld Audio Recorder

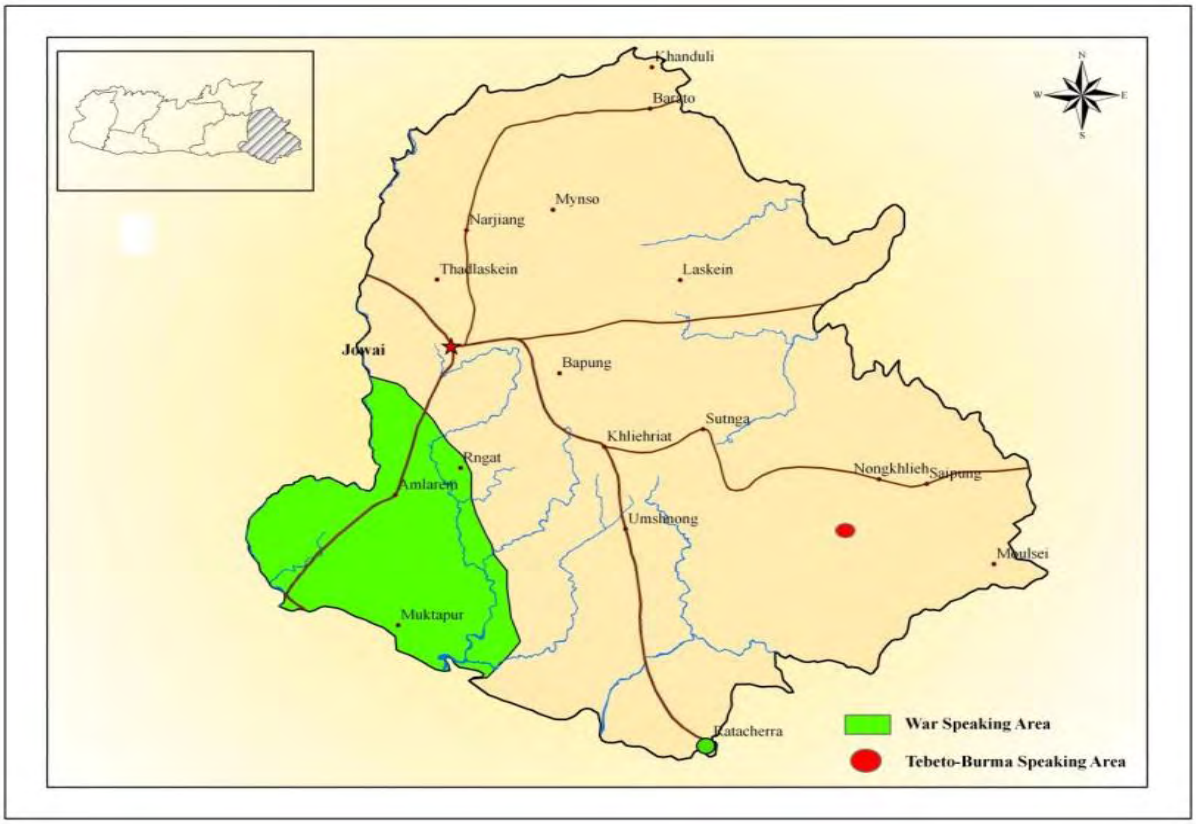

Figure No. 1. Map of Jaintia Hills (Pnar speaking area) for illustration of the selected villages of Jaintia Hills. [5]

According to Daladier (2010) (as cited in Ring 2015) there are twelve Pnar dialects spoken within East and West Jaintia Hills Districts. However, my analysis shows that some of the dialects identified by her are not particularly similar to Pnar. For example, Daladier (ibid) shows both Umlatdoh and Ummat dialects of Lakadong to be similar to Pnar. But based on my data collection and analyses, it is observed that both these dialects share more similarities with Pasadwar, a War Jaintia variety. Daladier adds that the varieties spoken in the entire Narpuh area are more similar to Pnar. However, in this present paper, I will show that the varieties spoken in Narpuh area from Lumshnong onwards are closer to the War-Jaintia variety. Another claim made by her is that Shangpung and Raliang are separate dialects. If one is to agree with this claim, one will have to consider each village a dialect. This is because Shangpung and Raliang are villages situated close to each other (a distance of 6 kms.) and linguistically, they are very similar to each other. The followings are the varieties of Pnar:[6]

[5] This map is for the sake of illustration alone; not to scale. The Pnar-speaking area is the area within the district boundaries unmarked as either War or Tibeto-Burman.

[6] I merely attempt to provide an approximate distinction of these varieties. The variant forms are readily identified from village to village.

(a) Rymbai-Pnar:

Rymbai-Pnar is spoken in Rymbai and a few nearby villages like Shilliang-Umshong, Deinchalalu, Umsatai, etc. This variety is different from the other varieties in the consistent correspondence of the /-ɛ/ with /-aj/ of the other varieties.

Rymbai-Pnar		*The rest of Pnar*	
[$c^hlɛ$]	<>	[c^hlaj]	'overflow'
[$lɛ$]	<>	[laj]	'to go'

Deletion of the initial consonant of the minor syllable in sesquisyllabic words is a regular phonological process in this variety.

Rymbai-Pnar		*The rest of Pnar*	
[$ɨnt^hɛ$]	<>	[$kɨnt^haj$]	'female'
[$ɨnrɔʔ$]	<>	[$kɨnrɔʔ$]	'wall',
[$ɨnte$]	<>	[$kɨnte$]	'to winnow'
[$ɨnroʔ$]	<>	[$kɨnroʔ$]	'to shake'
[$ɨlla$]	<>	[$kɨnla$]	'to change, to alter'
[$ɨrbɛʔ$]	<>	[$kɨrbɛʔ$]	'to tremble, to vibrate'

It is to be noted that in no way do these villages (Rymbai, Shilliang-Umshong, Deinchalalu, Umsatai, etc.) speak the same way or with the same accent. Each village has its own accent and there is always a noticeable variation among them.

(b) Shangpung-Mookaiaw-Pnar:

This variety stretches throughout the eastern border of West Jaintia Hills along with the border of Assam to the north. The stretch starts immediately after Phramer village and includes Shangpung, Raliang, Mookyndeng, Mookaiaw and some other smaller villages. In rough approximation, one can assume that this variety is spoken within the two *elakas*;[7] Nartiang and Shangpung. With the same caution, all villages using this variety vary from each other and the variation is enough to identify the villages of the speakers. To compare the difference between Shangpung and Mookaiaw is quite easily noticeable, but it is difficult to categorize some of the villages in between them. *Shangpung-Mookaiaw-Pnar* may not be treated as a final sub-branch of Pnar, however, I simply use this term for the sake of analyses in this paper. Some of the regular correspondences are *ej* <> *e*:, *a* <> *e*.

Shangpung-Mookaiaw-Pnar		*The rest of Pnar*	
[*mej*]	<>	[*me:*]	'second person masculine singular'
[*ac*]	<>	[*eʔ*]	'to leave, to abandon'etc.

(c) Tuber-Pnar:

This variety spreads all over the western part of East Jaintia Hills and it is believed that these villages speaking this variety emerged from Tuber Elaka/Village. Villages towards the north western parts of the present East Jaintia Hills District are all included under these sub-branch and extends to Dkhiah and Jalyiah villages. As it is observed in the other varieties, the Tuber-Pnar variety too is no exception to variation. Any Pnar speaker settled near these villages can easily be identified by the variety they speak. Moolamanoh, Moolang and Musniang are apparently particularly close to each other (approximately not more than three kilometres in between and Moolang is in between the two) but reportedly can be distinguished by difference in intonation.[8]

(d) Bataw-Pnar:

This variety is originally spoken in Bataw village of East Jaintia Hills District.The variety spoken at Suchen is similar to Bataw-Pnar with slight variations, with the one spoken in Suchen

[7] 'Elaka' refers to the tradition subdivision and boundary headed by the local chief known as *Doloi* under the king of Sutnga kingdom or the Hima Jaintia Chieftain.

[8] E.g. the question intonation varies as follows: Moolang - low-rise, Musniang - high-rise, Moolamanoh - high-high-rise.

having more nasalized vowels (though they are not phonemic). Bataw-Pnar is spoken largely outside Meghalaya. In the earlier days, many Pnars migrated to other states like Assam and Mizoram and are engaged in cultivating betel leaf and areca nut. One of the notable features of this variety is the omission or absence of the coda in some words and the rhyme [-aj] of some of the cognate words in Pnar regularly corresponds with the vowel [a] in Bataw-Pnar.

Other varieties		*Bataw-Pnar*	
[*laj*]	<>	[*la*]	'to go'
[*daj*]	<>	[*da*]	'to sell'

(e) Sutnga-Pnar:

This variety is spoken throughout the Elaka of Sutnga and Nohkhlieh and surprisingly stretches to Kwator village and Amlari village right in the heart of the War speaking area. One of the noticeable variants of this variety is that the low-mid back rounded vowel [*-ɔ:*] always corresponds with [-aw] of Jowai-Pnar or other varieties.

Other varieties		*Bataw-Pnar*	
[*ksaw*]	<>	[*ksɔ:*]	'dog',
[*ladaw*]	<>	[*ladɔ:*]	'banana'etc.

The list of these varieties can go on and on. Here are the list of some of the other varieties which are noticeable; *Chiehruphi-Pnar* (includes the villages; Nongthymme, Khliehriat, Byndihati, Kairang, Nongsning etc.), *Iapmala-Rangad* (Spoken in Iapmala, Lumskhen, Rangad, Lumputhoi, etc.), *Mynsoo-ChiliangMyntang, Nongbah,* etc. The variant forms of these varieties are often noticeable within the syllabic rhyme. The only case where correspondence is observed in the onset of the syllable is in Rymbai-Pnar. Rymbai-Pnar is different from the rest of the other varieties, in that it exhibits onset deletion (as discussed in Section 1 (a)).

2. An overview of Pnar Phonology

2.1 Jowai-Pnar

Jowai-Pnar is considered the standard in the sense, that this variety is spoken in and around the head quarter of undivided Jaintia Hills District and everyone finds it intelligible and therefore a common platform for communication. Villages of Ummulong and Wahiajer share this variety with a slight variation in the accent which is just enough to differentiate the variants in these varieties. Some work has been done in this variety particularly, the phonological analysis of Jowai-Pnar (Bareh: 2007 & 2014, Ring: 2012 & 2015, Khyriem: 2013, Spencer: 1967). For the purpose of this paper, the consonantal phonemes of Pnar are presented in Table 1 where many of the above works agree to some extent:

Table 1: Consonant Chart of Jowai-Pnar

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

In Bareh (2007) I analyzed the Consonants of Pnar, include the voiced aspirated stops /b^h, d^h and $ɟ^h$/. According to my analysis, these sounds occur mostly in borrowed words with a few exceptions where native words like Pnar like /$ɟ^h$an/ 'hurry', /$ɟ^h$eʔ/ 'wet' are attested. However, Khyriem (2013) treats these sounds as a cluster of the voiced plosive and the glottal fricative /h/. Ring (2012) does not consider the palatal aspirate /$ɟ^h$/ as phonemic. He acknowledges the existence of the two palatal stops /c/ and /ɟ/ that are realised as affricates [ʧ] and [ʤ] respectively when they occur in the onset of a syllable. In his unpublished thesis (2015) he treats /ʧ/ and /ʤ/ as two different phonemes that are realised as [c] and [ɟ] respectively in the syllable coda.

Jowai Pnar has *eight* vowels,[9] of which *seven* are monopthongs and one is a diphthong. Of the seven monopthongs, there are two high vowels, two mid-highs, two mid-lows and one low vowel. Vowel length is not phonemic in Jowai-Pnar, however, all vowels that occur in the final position of a word tend to be longer than the ones in any other environments. The only phonemic diphthong of Jowai-Pnar is /ia/, which occurs in both open and closed syllables. Syllable-final appearance of glides /j/ and /w/ is not treated as a closing diphthong in this analysis. The followings are the vowel phonemes of Jowai-Pnar.

Table 2: Jowai-Pnar Vowel Phonemes

i				u
e				o
	ɛ		ɔ	
		a		
ia				

2.2 Narwan-Pnar:[10]

Narwan falls under the Saipung Block of East Jaintia Hills. It is situated about 36 kilometres from Jowai by road. There is no linguistic work done in this variety. Grierson (1904) worked extensively on the varieties of Pnar, however, Narwan-Pnar is missing from his work. The present sound system of Narwan presented in this analysis is based on my personal field work and analysis.

Narwan-Pnar shares the same number of consonant phonemes with Jowai-Pnar, and there is hardly any difference in their distribution. However, there are phonetic and phonological differences in the vowels:

- The low /a/ of Narwan-Pnar is more centred, while it is more fronted in Jowai-Pnar.
- Narwan-Pnar has diphthongs /ie/, /uɔ/, in addition to /ia/.
- The Narwan-Pnar inventory includes /ə/ in stressed syllables.
- The Narwan-Pnar final glides are more prominent, and are written as phonetically [i, u] in this paper.

3. Vocalic Correspondences

'Two sound segments correspond when they occur in cognate words of genetically related languages' (Kondrak, 2002). This statement refers to a set of cognate sounds; the sounds found in the related words of cognate-sets which correspond from one related language to others because they have descended from a common ancestral sound. A sound correspondence is assumed to recur in various cognate sets. Campell and Poser (2008) mention that sound correspondences is the third criterion or source of evidence for language affinity. Shortly after Sir William Jones (1786) successfully linked the relationship between Greek and Latin with Sanskrit, the trend of comparative study became more advanced in the 18th century. The concept of 'sound correspondence' too is widely used in the comparative and dialectal study of language.

Phonological correspondence may also be regarded as the phonological comparative approach or dialectal comparison as studied by many dialectologists. This study offers a systematic paradigm of sound correspondences in two directions; sound correspondences between Jowai-Pnar and Narwan-Pnar and an attempt has also been made to compare these Pnar varieties with Standard Khasi. Many hold the view that Pnar (often, comparisons have been made with Jowai-Pnar) and Standard Khasi are the most closely related varieties of the Khasian group. This may be true when compared with Jowai-Pnar but it becomes more complicated when we compare Khasi with the other varieties of Pnar.

---

9 [ɨ] is not treated as phoneme in this analysis as its occurrence is predictable. It always occurs in the minor syllable that precedes the nasals and the liquids.

10 I would like to acknowledge two of my informants; Mrs Gracia Shadap and Mrs Mary Langstang for their valuable time in providing information and data of the Narwan-Pnar variety.

It may be appropriate to justify the use of the term 'correspondence' rather than certain sound change from one variety to the other or sound in variety *X* becomes something else in variety *Y*. At this point of time, I have no intention to discuss or reconstruct the protolanguage, and hence the basic objective of this paper is to present the regular sound correspondence of the two varieties: Jowai- Pnar and Narwan-Pnar. It is to be noted that though the aim is to find out the sound change among these varieties, I do not focus on which sound changes to what. I do not make any claims that variety X is the earlier form than Y, nor Y than X, as the reconstruction of the Pnar sounds is still under process. Though certain sounds clearly indicate that Y emerged from X in some environment, yet lots of other sounds need to be further carefully investigated upon. In the present analysis, I find that in most cases, vowels are often subjected to change in the different varieties. And no vowel is left unchanged at least in one environment. The variant forms of these varieties are often noticeable within the syllabic rhyme. The following are the corresponding sets between Jowai-Pnar and Narwan-Pnar:

3.1 [e] ~ [ɛ]/_ʔ#

The occurrence of *mid-high [e]* and the *mid-low [ɛ]* in Narwan-Pnar (henceforth NP) and Jowai-Pnar (hence after JP) are mutually exclusive in the environment when they precede the [ʔ] in the final position. If [e] occurs in JP, then in NP it corresponds to [ɛ]. This can be illustrated with the following examples below:

Jowai-Pnar		*Narwan-Pnar*	
[e]	~	[ɛ]	
[k^hleʔ]	~	[k^hlɛʔ]	'head'
[eʔ]	~	[ɛʔ]	'to abandon/ to leave'
[leʔ]	~	[lɛʔ]	'white'
[sneʔ]	~	[snɛʔ]	'skin'

However, consider the following examples

Jowai-Pnar		*Narwan-Pnar*	
[ɛ]	~	[e]	
[k^hlɛʔ]	~	[k^hleʔ]	'to mix'
[lɛʔ]	~	[leʔ]	'to do'
[hɛʔ]	~	[heʔ]	'big'
[ɛʔ]	~	[eʔ]	'hard'

Based on the examples shown above, it is seen that the occurrences of [e] and [ɛ] in JP and NP is mutual only in the environment of [ʔ] that is when the two vowels, [e] and [ɛ] precedes a glottal stop [ʔ]. For instances, cognate words like [heʔ] 'big' of NP corresponds to [hɛʔ] of JP and [eʔ] 'hard' corresponds to [ɛʔ]. This paradigm is well-attested in all words having these sounds.

3.2 [e] ~ [ɛ]/ _ʔ#

Similarly those cognate words in JP where [e] preceding [_ʔ] regularly corresponds with [ɛ] of NP. This can be seen as interchanging of these vowel sounds in these two varieties. This can be illustrated through the following examples:

Jowai-Pnar		*Narwan-Pnar*	
[k^hleʔ]	~	[k^hlɛʔ]	'head'
[sneʔ]	~	[snɛʔ]	'skin'
[ɟ^{h}eʔ]	~	[ɟ^{h}ɛʔ]	'wet'

The above examples (3.1 & 3.2) clearly indicates that Jowai-Pnar is closer to Standard Khasi and Narwan-Pnar considerably differs from the two especially in the examples where *[ɛ]*of Jowai-Pnar corresponds to [e]of Narwan-Pnar in the environment where it precedes glottal stop in the final position {*[ɛ]of JP ~ (corresponds) to [e]of NP* _ʔ#}. Both Standard Khasi (henceforth SK) and JP have [k^hlɛʔ] 'to mix', [lɛʔ] 'to do', [hɛʔ] 'big', [ɛʔ] 'hard' etc. In the first set of examples where *[e]of JP corresponds [ɛ]of NP*_ʔ#, the [e] of JP is again closer to SK as compared to NP. [e]

of JP always corresponds to [e:] of SK whenever it precedes the glottal stop in the final position as in the examples below (Khyriem, 2013);

Jowai-Pnar	~	*Standard Khasi*	
[k^{h}leʔ]	~	[k^{h}leːʔ]	‘head’
[eʔ]	~	[eːʔ]	‘to abandon/ to leave’
[leʔ]	~	[leːʔ]	‘white’
[sneʔ]	~	[sneːʔ]	‘skin’

3.3 [e] ~ [a] /_ɲ#

In the environment where [e] of JP precedes the palatal nasal [ɲ], it regularly corresponds with the low vowel [a] of NP. Cognate words like [c^{h}ʔeɲ] ‘bone’ in JP corresponds to [c^{h}ʔaɲ] in NP. Similarly in words like

Jowai-Pnar		*Narwan-Pnar*	
[deɲ]	~	[daɲ]	‘tree’
[lɨmmeɲ]	~	[lɨmmaɲ]	‘tooth’

Another feature that differentiates Standard Khasi from the Pnar varieties is the correspondence between /-ɲ/ of Pnar and /ŋ/ of Standard Khasi whenever followed by /e/, for instances, [e] of JP and [e:] of SK as in the examples below:

Jowai-Pnar		Narwan-Pnar	
[deɲ]	~	[deːŋ]	‘tree’
[c^{h}ʔeɲ]	~	[ʃʔeːŋ]	‘bone’
[teɲ]	~	[teːŋ]	‘scare’
[leɲ]	~	[leːŋ]	‘boat’

3.4. [a] ~ [ɔ:] /_C#

[-nasal]

The correspondence shown in 3.4 illustrates that [a] in JP corresponds to [ɔ:] in NP when [a] is followed by a non-nasal consonant. This can be illustrated with the examples below:

Jowai-Pnar		Narwan-Pnar	
[ar]	~	[ɔːr]	‘two’
[ŋap]	~	[ŋɔːp]	‘cheek’
[kap]	~	[kɔːp]	‘to walk’
[c^{h}at]	~	[c^{h}ɔːt]	‘to dance’

3.5. [a] ~ [ɔ] /_ C #

$$\left\{ \begin{bmatrix} +\text{nasal} \\ \begin{bmatrix} -\text{cont} \\ -\text{ant} \\ +\text{cor} \\ -\text{vcd} \end{bmatrix} \end{bmatrix} \right\}$$

The above correspondence in 3.5 shows that [a] in JP corresponds to [ɔ] in NP when followed by a nasal consonant or voiceless palatal stop in the word final position. This can be illustrated with the following examples below:

Jowai-Pnar		*Narwan-Pnar*	
[tmaŋ]	~	[tmɔŋ]	‘moustache’
[tan]	~	[tɔn]	‘to pull’
[snam]	~	[snɔm]	‘blood’
[sŋac]	~	[sŋɔc]	‘fat’
[dac]	~	[dɔc]	‘to bite’

When comparing with SK, it is observed that the two sets (3.4 & 3.5) of examples above show that JP and SK are closer to each other than to NP. A regular correspondence between JP and SK is the vowel length (in 3.4). The two sets of JP data above correspond to SK words having long vowel with the exception of [dac] ‘to bite’ (both JP and SK attest a short vowel /a/). Another regular correspondence between these two (JP & SK) is that the /c^{h}/ of JP always corresponds with /ʃ/ of SK as in word [c^{h}at] ‘to dance’ corresponding with [ʃa:t].

3.6. [ɔ] ~ [o] _ʔ#

It is interesting to note that JP also has words containing the mid-low back rounded vowel [ɔ] which is followed by the glottal stop in the coda position. This vowel consistently corresponds to the NP mid-high back rounded vowel [o] in this position:

Jowai-Pnar		*Narwan-Pnar*	
[kpɔʔ]	~	[kpoʔ]	‘stomach’
[k^{h}rɔʔ]	~	[k^{h}roʔ]	‘frog’
[kʔɔʔ]	~	[kʔoʔ]	‘cough’

In comparison to SK, cognate words of JP having the sequences of sounds like [kpɔʔ] ‘stomach’, [k^{h}ɔʔ] ‘cone basket’, [t^{h}ɔʔ] ‘to write’, [sbɔʔ] ‘manure’ etc. are pronounced exactly the same. However, the other two examples are altogether different lexical items; [k^{h}rɔʔ] ‘frog’ of JP and [ɟakɔc] ‘frog’ of SK and similarly [kʔɔʔ] ‘cough (N/V)’ and [ɟɨrhɔʔ] ‘cough (N/V).

3.7. [o] ~ [ɛ]/ _ʔ#

We certainly witness the process of vowel shift in these varieties and hence, but at this point of time is the nature of shifting; that is, the source and target of shifting. In the previous section there is regular correspondences between the [ɔ] of JP and the [o] of NP whenever they preceded the _ʔ#. In the same environment, JP variety also has the sound [o] precedes the glottal stop (_ʔ#) but in this case it corresponds with the NP [ɛ] as in the following examples below:

Jowai-Pnar		*Narwan-Pnar*	
[c^{h}roʔ]	~	[c^{h}rɛʔ]	‘side/ribs’
[t^{h}oʔ]	~	[t^{h}ɛʔ]	‘to search’
[doʔ]	~	[dɛʔ]	‘poor’

3.8. [ia] ~ [i:]/ { _ C# ; _ # }

The above representation illustrates that [ia] corresponds to [i:] when it is followed by another consonant in the word final position. An exception is that when followed by velar nasal consonant, the vowels are not lengthened in NP. It is to be mentioned that vowel length is not phonemic in both the varieties – JP and NP. However, it is found that in open syllables, vowels are phonetically lengthened in both JP and NP. The correspondence can be illustrated by the following examples below:

Jowai-Pnar		*Narwan-Pnar*	
[ia]	~	[i:]	
[pariam]	~	[pari:m]	‘finger’
[k^{h}ɨnnia]	~	[k^{h}ɨnni:]	‘congested’
[t^{h}iaʔ]	~	[t^{h}i:ʔ]	‘sleep’

3.9. [ia]~[ie]/_ŋ#

The only diphthong [ia] of JP corresponds to two sounds of NP: in all environments; the diphthong [ia] corresponds to the long vowel [i:] as in the examples 3.8 and when it precedes the velar nasal [ŋ] it corresponds to diphthong [ie]. This can be illustrated through the following data:

Jowai-Pnar		*Narwan-Pnar*	
[ia]	~	[ie]	
[pliaŋ]	~	[plieŋ]	‘plate’
[siaŋ]	~	[sieŋ]	‘spoon’
[sniaŋ]	~	[snieŋ]	‘pig’

Interestingly, NP has a diphthong [ia] in the environment when it precedes [r] in word-final position. In such case the [ia] of NP regularly corresponds to [ɛ] of JP ([ɛ] ~ [ia]/ _r#).

Consider the examples:

Jowai-Pnar		*Narwan-Pnar*	
[ɛ]	~	[ia]	
[snɛr]	~	[sniar]	‘intestine’
[hɛr]	~	[hiar]	‘to fly’
[p^{h}ɛr]	~	[p^{h}iar]	‘different’

3.10. [a:] ~ [ɔ:]/ _#

As noted in 3.7, in an open syllable, vowels of both these varieties tends to become longer, therefore, the [a:] of JP corresponds with the [ɔ:] of NP.

Jowai-Pnar		*Narwan-Pnar*	
[t^{h}la:]	~	[t^{h}lɔ:]	‘blunt’
[ŋa:]	~	[ŋɔ:]	‘I’
[k^{h}la:]	~	[k^{h}lɔ:]	‘tiger’

3.11. [a] ~ [ɔi] /_j#

In JP, [a] when followed by [j] corresponds to diphthong [ɔi] of NP. This can be illustrated through the following data:

Jowai-Pnar		*Narwan-Pnar*	
[rupaj]	~	[rupɔi]	‘chest’
[kɨnt^{h}aj]	~	[kɨnt^{h}ɔi]	‘female’
[blaj]	~	[blɔi]	‘God’

It is to be noted that the approximant [j] occurring in the word final position is common in many of the Khasian varieties (see Rabel 1961; Henderson; Bareh 2007 & 2014; Khyriem2013, and personal discussion with Diffloth 2013).

3.12. [o:] ~ [ɛu]/ _#, [o:] ~ [u:]_ C[+son]#

The vowel [o:] of JP corresponds to the diphthong [ɛu] in an open syllable. It also corresponds to the high vowel [u:] when it precedes the consonantal sounds (nasal [m] and trill [r]).

Jowai-Pnar		*Narwan-Pnar*	
[so:]	~	[sɛu]	‘red’
[k^{h}lo:]	~	[k^{h}lɛu]	‘forest’
[k^{h}lo:r]	~	[k^{h}lu:r]	‘star’
[lo:m]	~	[lu:m]	‘mountain’

3.13. [e:] ~ [ei] _#

The front high-mid [e] vowel of JP consistently corresponds with the diphthong [ei] of the NP in the open syllable.

Jowai-Pnar		*Narwan-Pnar*	
[e:]	~	[ei]	
[k^{h}ɨnde:]	~	[k^{h}ɨndei]	‘nine’
[swe:]	~	[swei]	‘lazy’
[k^{h}ne:]	~	[k^{h}nei]	‘rat

4. Conclusion

Language variation is a natural and common phenomenon found among Khasian languages, as it is among all living languages. In most cases, vowels are the most affected sounds. From the on-going discussion, it is found that the vowel sound correspondences in JP and NP are quite regular and predictable, and reflect the most important differences between varieties. As far as the consonantal sounds are concerned, there is not much difference among the varieties investigated. This may be true of other varieties as well or highlight further possibilities for investigation within the Khasian group. There are only a few cases where different consonants corresponded such as [na] ~ [la] ‘from’. However, the findings in this paper do not claim to be conclusive as research work is still in progress in this particular area of comparative phonology. Though this paper discusses the differences in varieties between two points in space, yet it could also throw some light on the differences in varieties between the two points in time.

References

Bareh, Curiously. 2007. “A Descriptive Analysis of the Jowai and Rymbai Dialects of Khasi” (PhD unpublished Thesis). Shillong: North Eastern Hill University

_____. 2014. *Pnar: A Descriptive Grammar*. Guwahati: Eastern Publishing House.

Campbell, Lyle and William J. Poser. 2008. *Language classification: history and method*. Cambridge: Cambridge University Press

Diffloth, Gerard. 1974. Austro-Asiatic Languages. Encyclopedia Britannica. Chicago/London/Toronto/Geneva, Encyclopaedia Britannica Inc. Pp. 480–484.

_____. 2005. “The contribution of linguistic palaeontology to the homeland of Austroasiatic.” In Laurent Sagart, Roger Blench and Alicia Sanchez-Mazas, eds., The Peopling of East Asia: Putting Together the Archaeology, Linguistics and Genetics, pp. 77-80.

Grierson, G. A. 1928. *Linguistics Survey of India*. Vol. II. New Delhi: MotilalBanarsidass.

_____. 1995. *Language of North Eastern India: A survey*. Vol.1. Delhi:Gyan Publishing House.

Khyriem, Barika. 2013. A comparative study of some regional dialects of Khasi; a lexical and phonological study (PhD unpublished Thesis). Shillong: North Eastern Hill University

Nagaraja, K. S., Paul Sidwell and Simon Greenhill. 2013. “A Lexicostatistical Study of the Khasian Languages: Khasi, Pnar, Lyngngam, and War”, Mon-Khmer Studies 42 (2013): 1-11

Ring, Hiram. 2012. A phonetic description and phonemic analysis of Jowai-Pnar. *The Mon-Khmer Studies*, VOL 40.

_____. 2015. Pnar. In *The Handbook of Austroasiatic Languages Vol. 2* Jenny, Mathias & Paul Sidwell (editors). Leiden: BRILL

Ruhlen, Merritt. 1991. *A Guide to the World’s Languages. Vol 1 : Classification (with a postscript on recent development).* London : Edward Arnold.

Sidwell, Paul. 2009. *Classifying the Austroasiatic languages: history and state of the art*. LINCOM studies in Asian linguistics, 76. Munich: Lincom Europa.

_____. 2011. The Austroasiatic central riverine hypothesis. JournalofLanguageRelationship, 4:117–134.

_____. 2011. Proto-Khasian and Khasi-Palaungic. Journal of theSoutheast Asian Linguistics Society 4.2:144–168.

Spencer, L.E. 1967. Note on the Jaintia Dialect. *Journal of the Asiatic Society, IX (2): 1-6* .

Appendix

Word list of Jowai-Pnar, Narwan-Pnar and Standard Khasi

	Jowai-Pnar	Narwan-Pnar	Standard Khasi	English gloss
1.	[ar]	[ɔ:r]	[a:r]	'two'
2.	[ɛʔ]	[eʔ]	[ɛʔ]	'hard'
3.	[eʔ]	[ɛʔ]	[e:ʔ]	'to abandon/ to leave'
4.	[blaj]	[blɔi]	[blej]	'God'
5.	[bnaj]	[bnɔi]	[bnaj]	'moon'
6.	[bneŋ]	[bnaŋ]	[bneŋ]	'heaven'
7.	[bo:]	[bɛu]	[hep kɨnsi]	'younger sister /brother in-law'
8.	[c^{h}at]	[c^{h}ɔ:t]	[ʃa:t]	'to dance'
9.	[c^{h}ariŋ]	[c^{h}ariŋ]	[ʃariŋ]	'cliff'
10.	[c^{h}eʔ]	[c^{h}ɛʔ]	[ʃiaʔ]	'thorn'
11.	[c^{h}it]	[c^{h}it]	[ʃit]	'hot'
12.	[c^{h}laj]	[c^{h}lɔi]	[ʃlej]	'over flow'
13.	[c^{h}raj]	[c^{h}rɔi]	[bitar]	'angry'
14.	[c^{h}reŋ]	[c^{h}raŋ]	[k^{h}leŋ]	'fat (n.)'
15.	[c^{h}ʔeŋ]	[c^{h}ʔaŋ]	[ʃʔe:ŋ]	'bone'
16.	[c^{h}ʔiap]	[c^{h}ʔi:p]	[ʃʔiap]	'sand'
17.	[c^{h}roʔ]	[c^{h}rɛʔ]	[ʃruʔ]	'side/ribs'
18.	[kap]	[kɔ:p]	[ka:m]	'to walk'
19.	[kpɔʔ]	[kpoʔ]	[kpɔʔ]	'stomach'
20.	[kʔɔʔ]	[kʔoʔ]	[ɟɨrhɔʔ]	'cough'
21.	[kɟam]	[kɟam]	[k^{h}riat]	'cold'
22.	[krɛm]	[krem]	[krɛm]	'cave'
23.	[kteʔ]	[ktɛʔ]	[kte:ʔ]	'mud'
24.	[kti:]	[kti:]	[kti:]	'hand'
25.	[kɨnt^{h}aj]	[kɨnt^{h}ɔi]	[kɨnt^{h}ej]	'female'
26.	[k^{h}illɔŋ]	[k^{h}illuɔŋ]	[k^{h}illɔŋ]	'to tighten hair at the back
27.	[k^{h}illaʔ]	[k^{h}illaʔ]	[k^{h}illaʔ]	'weird'
28.	[k^{h}illo:t]	[k^{h}ɨnrɛu]	[samla]	'teenager[11]'
29.	[k^{h}illiap]	[k^{h}illi:p]	[k^{h}illiap]	'to close, or to roll up like mat'
30.	[k^{h}iŋɟɔʔ]	[k^{h}iŋɟoʔ]	[k^{h}aɟɔʔ]	'to stretch high up on the top'
31.	[k^{h}ɨnde:]	[k^{h}ɨndei]	[k^{h}ɨndaj]	'nine'
32.	[k^{h}ɨnnia]	[k^{h}ɨnni:]	[k^{h}apŋiaʔ]	'congested'
33.	[k^{h}injeŋ]	[k^{h}injaŋ]	[kɨnɟiŋ]	'to raise on tip toe'
34.	[k^{h}ɨnrɔŋ]	[k^{h}ɨnruɔŋ]	[tɨnrɔŋ]	'to half-stand, to lift something for someone'
35.	[k^{h}ɨnrup]	[k^{h}ɨnrup]	[kɨnrup]	'to jump and snatch away'
36.	[k^{h}ɨnnaʔ]	[k^{h}ɨnnuaʔ]	[k^{h}ɨnnaʔ]	'young person/child'
37.	[k^{h}ɨnbo:]	[k^{h}ɨnbɛu]	[k^{h}illuŋ]	'baby'
38.	[k^{h}ɨndɔŋ]	[k^{h}ɨnduɔŋ]	[k^{h}ɔŋdɔŋ]	'heel'
39.	[k^{h}ɨndaw]	[k^{h}ɨndau]	[k^{h}ɨndew]	'earth, soil, clay'
40.	[k^{h}ɨnro:]	[k^{h}ɨnrɛu]	[samla]	'teenager'
41.	[k^{h}ɨndaŋ]	[k^{h}ɨndaŋ]	[k^{h}illit]	'to forcefully open'
42.	[k^{h}awaʔ]	[k^{h}awaʔ]	[k^{h}ɔʔwaʔ]	'calf'
43.	[k^{h}ian]	[k^{h}ien]	[rit]	'small'
44.	[k^{h}la:]	[k^{h}lɔ:]	[k^{h}la:]	'tiger'
45.	[k^{h}leʔ]	[k^{h}lɛʔ]	[k^{h}le:ʔ]	'head'
46.	[k^{h}leŋ]	[k^{h}laŋ]	[k^{h}le:ŋ]	'eagle'
47.	[k^{h}lɛʔ]	[k^{h}leʔ]	[k^{h}lɛʔ]	'to mix'

[11] Note that NP and SK don't distinguish gender lexically for this age group, while JP does. In JP [k^{h}illo:t] specifically refer to young girl and [k^{h}ɨnro:] to 'young boy'.

48.	[kʰlo:]	[kʰlɛu]	[kʰlaw]	‘forest’
49.	[kʰlo:r]	[kʰlu:r]	[kʰlu:r]	‘star’
50.	[kʰmi:]	[kʰmi:]	[ɟumai]	‘earth quake’
51.	[kʰne:]	[kʰnei]	[kʰnaj]	‘rat’
52.	[kʰrɔʔ]	[kʰroʔ]	[ɟakɔc]	‘frog’
53.	[kdɔʔ]	[kdoʔ]	[tɛʔ]	‘to tie’
54.	[dac]	[dɔc]	[dac]	‘to bite’
55.	[daj]	[dɔi]	[de:]	‘to sell’
56.	[deŋ]	[daŋ]	[de: ŋ]	‘tree’
56.	[diŋ]	[diŋ]	[diŋ]	‘fire’
58.	[diʔ]	[diʔ]	[diʔ]	‘to drink’
59.	[doʔ]	[dɛʔ]	[dʊk]	‘poor’
60.	[do:m]	[du:m]	[dʊm]	‘dark’
61.	[dɔr]	[duɔr]	[dɔr]	‘price’
62.	[ŋa:]	[ŋɔ:]	[ŋa:]	‘I’
63.	[ŋap]	[ŋɔ:p]	[ŋap]	‘cheek’
64.	[hɛʔ]	[heʔ]	[hɛʔ]	‘big’
65.	[hɛr]	[hiar]	[hɛr]	‘to fly’
66.	[ɟʰeʔ]	[ɟʰɛʔ]	[ɟʰe:ʔ]	‘wet’
67.	[lac]	[lɔc]	[lac]	‘to escape’
68.	[laj]	[lɔi]	[le:c]	‘to go’
69.	[lɛʔ]	[leʔ]	[lɛʔ]	‘to do’
70.	[le:]	[lei]	[laj]	‘three’
71.	[leʔ]	[lɛʔ]	[le:ʔ]	‘white’
72.	[lɨmmeŋ]	[lɨmmaŋ]	[bniat]	‘teeth’
73.	[lʔɔʔ]	[lʔoʔ]	[lʔɔʔ]	‘cloud’
74.	[madan]	[madan]	[madan]	‘ground’
75.	[maja]	[majɔ]	[e:c]	‘to love’
76.	[mat jasu:]	[mat kʰasu:]	[kʰɔʔsi:w]	‘knees’
77.	[miaw]	[mi:u]	[miaw]	‘cat’
78.	[mɨntʰu:]	[pətʰu:]	[biaʔ]	‘saliva’
79.	[mo:]	[mɛu]	[ma:w]	‘stone’
80.	[na:]	[la:]	[na:]	‘from’
81.	[pariam]	[pari:m]	[ʃɨmpriaʔ]	‘finger’
82.	[peʔ]	[pɛʔ]	[tɔŋ]	‘to fetch’
83.	[pɨrtʰaj]	[pɨrtʰɔi]	[pɨrtʰej]	‘earth, world’
84.	[pʰra:]	[pʰra:]	[pʰra:]	‘eight’
85.	[pʰɛr]	[pʰiar]	[pʰɛ:r]	‘different’
86.	[pʰria]	[pʰri:]	[pʰria]	‘hailstone’
87.	[pliaŋ]	[plieŋ]	[pliaŋ]	‘plate’
88.	[praj]	[prɔi]	[pre:]	‘to vomit’
89.	[rupaj]	[rupɔi]	[ʃadɛm]	‘chest’
90.	[sac]	[sɔc]	[sac]	‘Saturday’
91.	[sac ɟaŋ]	[sɔc ɟɔŋ]	[sac ɟaŋ]	‘Saturday’
92.	[sawar]	[sawɔ:r]	[kɨlluc]	‘spacy’
93.	[snam]	[snɔm]	[sna:m]	‘blood’
94.	[sneʔ]	[snɛʔ]	[sne:ʔ]	‘skin’
95.	[sŋac]	[sŋɔc]	[sŋac]	‘fat’
96.	[sŋi:]	[sŋi:]	[sŋi:]	‘sun’
97.	[sŋoʔ]	[sŋɛʔ]	[sŋu:ʔ]	‘hair’
98.	[siaŋ]	[sieŋ]	[siaŋ]	‘spoon’
99.	[siaw]	[si:u]	[siaw]	‘to whistle’
100.	[slap]	[slɔ:p]	[slap]	‘rain’
101.	[sniaŋ]	[snieŋ]	[sniaŋ]	‘pig’
102.	[snɛr]	[sniar]	[sne:r]	‘intestine’
103.	[swe:]	[swei]	[ɟajpdɛʔ]	‘lazy’

104.	[so:]	[sɛu]	[saw]	‘red’
105.	[so:r]	[su:r]	[sʊʔ]	‘to stich’
106.	[tan]	[tɔn]	[tan]	‘to pull’
107.	[tiʔ]	[tiʔ]	[tiʔ]	‘to dig’
108.	[tbian]	[tbien]	[liŋkɔt]	‘short’
109.	[tmaɲ]	[tmɔɲ]	[tmaɲ]	‘moustache’
110.	[tɨmbuc]	[taŋbuc]	[tɨmbuc]	‘elbow’
111.	[tɨmp^{h}a:]	[təp^{h}a:]	[tɨrpɛŋ]	‘shoulder’
112.	[tɨmpɔŋ]	[təpɔŋ]	[sɨŋkaj]	‘waist’
113.	[tɨrt^{h}o:]	[tɨrt^{h}ɛu]	[tɨrt^{h}aw]	‘bubble/foam’
114.	[t^{h}aɲ]	[t^{h}ɔɲ]	[t^{h}aɲ]	‘to weave’
115.	[t^{h}aʔ]	[t^{h}aʔ]	[t^{h}aʔ]	‘ice’
116.	[t^{h}et]	[t^{h}i:t]	[t^{h}e:t]	‘nerve’
117.	[t^{h}oʔ]	[t^{h}ɛʔ]	[wa:t]	‘to search’
118.	[t^{h}ɔʔ]	[t^{h}oʔ]	[t^{h}ɔʔ]	‘to write’
119.	[t^{h}iaʔ]	[t^{h}i:ʔ]	[t^{h}iaʔ]	‘sleep’
120.	[thɨillec]	[thɨillec]	[thɨille:c]	‘tongue’
121.	[t^{h}la:]	[t^{h}lɔ:]	[lu: ɲ]	‘blunt’
122.	[t^{h}ɨimme:]	[t^{h}ɨimmei]	[t^{h}ɨimmaj]	‘new’
123.	[jam]	[jɔm]	[ja:m]	‘to cry’
124.	[jent^{h}eɲ]	[jet^{h}aɲ]	[ɟɨn.ɛʔ]	‘belch’
125.	[waj]	[wɔi]	[ple:]	‘to go’
126.	[waʔ]	[waʔ]	[waʔ]	‘river’
127.	[wan]	[wan]	[wan]	‘to come’
128.	[wi:]	[wi:]	[wej]	‘one’