# The Phonetics and Phonology

of

Biate, Hrangkhol, Khelma, Onaeme, Purum, Liangmai and Yimchunger

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Centre for Endangered Languages Tezpur University The Phonetics and Phonology of Biate, Hrangkhol, Khelma, Onaeme, Purum, Liangmai and Yimchunger: Produced by the Centre for Endangered Languages, Tezpur University, Assam, India.

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### **Coordinator's Note**

One of the mandates proposed by the University Grants Commission (UGC) for the Centre of Endangered Languages set up in nine Central Universities in India is to produce and publish reading materials, dictionaries, and books. Keeping in line with the UGC mandate, the Centre for Endangered Languages (CFEL), Tezpur University, is ready to publish three volumes on the phonology, morphology, and syntax of the seven endangered, lesser-known, and lesser researched languages of Assam, Manipur, and Nagaland. These languages are Biate, Hrangkhol, and Khelma from Dima Hasao district of Assam; Onaeme from Senapati and Purum from Kangpokpi districts of Manipur and Liangmai from Tening Peren and Yimchunger from Tuensang districts of Nagaland. Out of the seven languages, four languages, namely Biate, Hrankhol, Khelma, and Purum, belong to the Kuki-Chin group, and the other three languages, namely Onaeme, Liangmai, and Yimchunger, belong to the Naga group of languages. Yimchunger belongs to the Central Naga group, Liangmai to the Zemeic group, and Onaeme to the Naga group of languages.

The idea to bring out the three volumes focusing on one grammatical aspect of the languages was primarily to highlight the typological features of the two language families, namely the Kuki-Chin and Naga group of languages that we have documented. Six field trips, three data verification workshops, and a number of workshops and seminars on various grammatical aspects and features of these two language families have finally helped in the shaping of these three volumes.

Credit for the shaping of these three volumes goes to the seven language communities and the informants who associated themselves with our Field Assistants (FAs), Research Associates (RAs), and the faculties of CFEL, TU. The FAs, RAs, and faculties of CFEL and the linguistic faculties of the department need a special mention. Their diligent work has given the final shape of the three volumes. A very special thanks to the Tezpur University authority and administration, who has supported us in our endeavor since the inception of CFEL in 2014.

The three books: Phonetics and Phonology Volume 1, Morphology Volume 2, and Syntax Volume 3 is the contribution of CFEL, TU to the seven communities, researchers, and scholars working on Tibeto-Burman languages of Northeast and to the readership at large who has a keen interest in documentation of lesser-known, lesser researched, endangered languages.

Madhumita Barbora

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Coordinator

Centre for Endangered Languages

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#### Foreword

(New insights into the languages of the Indo-Myanmar borderlands)

Northeast India is a treasure trove for linguists, with at least 100, and very possibly twice that many, languages spoken here. With the exception of a few large languages with official status, almost all the languages must be considered potentially endangered; although most are still spoken by children in the communities, the rapid encroachment of modern life poses an existential threat to any small minority language. Very few of these languages have anything close to adequate documentation and description, and the majority are virtually, or completely, undocumented. (The fact that we cannot give a convincing estimate of the number of languages is a clear reflection of this situation). Except for a few Indo-Aryan, Austroasiatic, and Tai languages, almost all of the indigenous languages of the Northeast belong to the great Trans-Himalayan or Tibeto-Burman family, which stretches from western China and Myanmar across the Himalayas into northwest India. It has been evident for years that the resolution of many fundamental problems in comparative Trans-Himalayan linguistics requires data from Northeast India, which until quite recently was all but nonexistent. Still today our knowledge of these languages is thin and fragmentary.

These three volumes outline the basic Phonitics and phonological, morphological and syntactic facts of seven previously under- or undescribed languages of Assam, Nagaland and Manipur. Four of these – Biate, Hrangkhol,Khelma, and Purum – belong to the little-known "Old Kuki" or Northwestern South Central subgroup of the Kuki-Chin branch of Tibeto-Burman, a historically important group recognized long ago in the *Linguistic Survey of India*, but for which we are only now beginning to have serious documentation. (The label "Old Kuki", inherited from the *LSI*, is offensive to many communities and should be abandoned). The other three – Liangmai, Onaeme, and Yimchunger – represent three of the language groups which have been called "Naga" since the *LSI*, although the current consensus is that this is not a genealogical unit or branch within Tibeto-Burman. Once again, this uncertainty about the classification of the "Naga" languages is symptomatic of our ignorance about them; we do not know how to classify them because we do not know enough about them. Thus, these volumes represent a substantial contribution to our knowledge of the woefully neglected indigenous languages of the Northeast.

To take one important example, the scant earlier work on languages of this region is sorely lacking in reliable phonological description. This Phonology volume gives us descriptions which can be taken as exemplary by future researchers, with full attention to vowel systems, phonotactics, and, especially, tone. Tone is often ignored entirely in basic descriptive work on languages of Northeast India. Here we now have clear phonetic descriptions, with minimal pairs, of the tone phonemes of each of these languages, giving us unprecedented insight into the distribution of tone systems in this region.

Beyond their immediate value in contributing to the documentation of the languages of the Northeast, these volumes present data which is of great potential value to comparative Trans-Himalayan linguistics and to the broader field of linguistic typology. To begin with, the data here clearly support the classification of Biate, Hrangkhol,Khelma, and Purum as belonging to the same NW Kuki-Chin ("Old Kuki") group, and just as clearly fail to support the idea of a higher-order Naga group including the other three. Consider, for example, the morphology of adjectives. In most Tibeto-Burman languages the adjective stem is used in predicate function, where it is inflected as a verb, but its use as a nominal modifier requires a nominalizing affix. Two such nominalizers, \*gV- and \*a-, are widespread across the family, but many individual languages have innovated a new construction. In the languages here we see the \*a- prefix used in all four NWKC languages (although it appears to be being lost in Hrangkhol). We see it also in Yimchunger, but Liangmai uses \*gV- (ka-) combined with the nominalizing suffix -bu (in a construction very similar to that of Meitei, while Onaeme has an innovative suffix -do.

In other ways as well, the languages described here neatly illustrate the basic morphological distinction between the Kuki-Chin and Naga languages. The former has complex paradigmatic morphology, while the latter lack paradigmatic patterns, while, like other languages of Northeast India, showing considerable syntagmatic complexity. In the NW Kuki-Chin languages in these volumes we see remnants of the older postverbal agreement paradigm retained in the negative conjugation, while the rest of the paradigm is built on the characteristic Kuki-Chin proclitic series. This supports the classification of the Kuki-Chin languages of Dima Hasao with their close cousins in Manipur, including Purum, and also Aimol, Anal, Lamkang, Monsang, Moyon, Tarao, and others.

Most or all of the languages described in these volumes illustrate morphosyntactic phenomena which are common in languages of the Northeast, but less so in languages of the world in general, and thus of great interest to linguistic typology and theory. One typical Tibeto-Burman feature which we see abundantly illustrated in these volumes is the use of the productive clausal nominalization construction for nominal modification. Tibeto-Burman languages in general do not have "relative clauses" in the classical Indo-European sense, but many descriptions try to squeeze these languages into an Indo-European model (whether based on English or on Sanskrit) and treat the use of nominalizations as nominal modifiers as distinct from other functions of nominalization. It is past time that we return to the older practice of describing these languages in their own terms.

To give one example of a very current "hot topic" in linguistics which emerges from this work, we see many instances of "optional" ergative marking, where a transitive subject may or may not be marked with ergative case. (This is distinct from split ergative marking, where the presence or absence of ergative case is obligatorily determined by aspect or by the person of the transitive subject). This is a phenomenon which has only been noted in the

linguistic literature for the last 15 years of so and is the subject of much current research. We see from these descriptions that the languages of the Northeast have much to offer for the study of this topic. (It is worth noting that, based on these descriptions, optional ergative marking in the Northeast is occurs in all genealogical units, a fact which has previously not been clear).

Documentation of the 100 or 200 or whatever languages of Northeast India is a huge task and will require the efforts of a great many linguists over many years. It is an inescapable fact that, if these 100 or 200 are all to ever be properly documented, the bulk of the work will have to be done by scholars working in the Northeast. Important contributions have been and will continue to be made by scholars from elsewhere in India and abroad, but these are only a small part of the work which needs to be done. There will never be sufficient participation from outside the Northeast to complete, or even make a serious dent in, the task before us. It is heartening to see local scholars stepping up shouldering the load.

Scott DeLancey University of Oregon 19/02/2020

#### **Editorial Note**

The prime objective of descriptive studies in phonetics-phonology is to investigate the phonological regularities observed in language-specific inventories of sounds and sound patterns. The findings of such investigations are useful to define phonological units starting from syllable to intonational phrase through the phonological word in terms of prosodic phonology and also to conceptualize the terminologies to be further analysed within related fields like cognitive science, computational linguistics, metrical theory, linguistics evolution, anthropology, dialectology, language geography, etc.

North-East India is home to many ethnic groups with diverse ethnic cultures inhabiting together since time immemorial. India's remote region comprising of eight states: Assam, Manipur, Tripura, Nagaland, Mizoram, Meghalaya, Arunachal Pradesh, and Sikkim,has often been known as a hotspot for linguistic research. A large number of languages belonging to four language-families of the world, viz., Indo-Aryan, Tibeto-Burman, Austro-Asiatic, and Tai Kadai, are spoken in this region. There are also a few communities that are native speakers of Dravidian languages. The many Tibeto-Burman speakers in the North East include the Boro, Garo, Dimasa, Mising, Tiwa, Deori, Nagas, Kuki-Chin, Mizo, Kokborok, Bugun, Monpas, the Tani languages, etc. Under the Austro-Asiatic group, Khasi is the sole candidate. Yet again, under the Tai-Kadai family, native speakers of 6 languages - Tai Ahom, Tai Khamti, Tai Khamyang, Tai Phake, Tai Aiton, and Tai Turung are found. The Assamese, Nepali, and Hindi are the languages under the Indo-Aryan family. In addition to these languages, there are also many more languages that are unclassified in this region.

The Centre for Endangered Languages, Tezpur University, has taken up specific steps to safeguard some of this region's lesser-known languages from becoming endangered. Language description and Language documentation are the primary focus of researches undertaken by the centre. It has already published six Learner's Book for the communities of Biate, Hrangkhol, and Khelma in the state of Assam, Onaeme and Purum in Manipur, and Liangmai and Yimchunger in the state of Nagaland. All these languages belong to the Kuki-Naga-chin sub-group, which falls under the Tibeto-Burman family. The present book describes the sound system of Hrangkhol, Biate, and Khelma languages spoken in Assam, Onaeme, and Purum in Manipur, and Yimchunger in Nagaland. Every language has its own characteristic features. The phonetic and phonological properties of these lesser-known languages discussed in this volume would undoubtedly help in the linguistic analysis of these languages and contribute to preserving their heritage, language, and culture.

This book provides a detailed description of the phoneme inventories of each of the seven languages mentioned above. Furthermore, we also attempted to compare and highlight the contrasts on some of these languages' phonetic and phonological features. In the complex cultural landscape of North-East India, languages tend to preserve certain phonological

features. Still, at the same time, these languages borrow other features to accommodate their native phonology. Due to close contiguity, social and political cohesion among various language communities over a long time, language contact or linguistic convergence among various languages has occurred. A brief descriptive sketch of the phonetic and phonological properties of seven (07) lesser-known and endangered languages of the central part of North East India belonging to the Kuki Chin Naga group of Tibeto-Burman family – Biate, Hrangkhol, Khelma, (Dima Hasao, Assam), Onaeme, Purum (Manipur), Liangmai and Yimchunger (Nagaland) has been attempted in this volume. The common features of the papers are descriptions of consonant and vowel phonemes, phonotactic constraints on the segments and clusters, distribution and allophonic variations of the segments, distribution and allophonic variation of segments, canonical syllable structure. In addition to these aspects, the papers address some other relevant issues oneach language's sound patterns.

In their paper, **A Phonological Description of Biate**, Daimalu Brahma, and Raju Ram Boro present the Biate phonemic inventory. They argue that there are two retroflex affricates, aspirated  $\sqrt{tg}^h$  and unaspirated  $\sqrt{tg}^h$ , which are considered as phonemes in the language. They have substantiated their claim with the help of acoustic evidence and a minimal set of words.

Bipasha Patgiri, in her paper **Phonetics and Phonology of Hrangkhol: A Case of Voiceless Nasals**, discusses the sound system and syllable structure of Hrangkhol. The paper presents an interesting Proto Kuki Chin feature retained by only a few Tibeto-Burman languages, including Hrangkhol - the presence of voiceless sonorants. The author also presents a series of contrast between the voiceless and voiced sonorants.

In **An Overview of Khelma Phonetics and Phonology**, Pushpa Renu Bhattacharyya and Barshapriya Dutta, while describing the language's phonetic and phonological features, indicate that the Khelma shares some similar affinities with other neighboring Kuki Chin languages like Biate, Hrangkhol, and Purum. They claim that there is a presence of two contrastive lexical tones.

Bobita Sarangthem, in her paper An Introduction to the Sound System of Onaeme, examines the Onaeme sound system by introducing segmental phonemes and the presence of two tones in this unclassified language that also reflects the similarities and dissimilarities within the cognate Naga groups.

In his paper the **Phonetics and Phonology of Purum**, Elangbam Manimohon Meiteigives a descriptive account of the phonemes and syllables present in the language. The author claims the presence of two lexical tones in the language.

In their paper the **Phonetics and Phonology of Liangmai**, Charengna Widinibou and Amalesh Gope present the sound inventory of the Liangmai language along with a few

phonological processes. The results of two different production experiments are presented to provide a detailed acoustic analysis of vowels and tones present in this language.

Amalesh Gope and I. D. Raguibou, in their paper **The Phoneme Inventory and Tonal Contrasts in Yimchunger**, describe the phonemes present in Yimchunger and present the findings of a controlled production experiment to explore the tonal contrasts observed in this language. The findings of the production experiment are well complemented with statistical evidence. This study establishes the presence of three distinct tones viz., mid-rising, high-falling, and low-falling in Yimchunger.

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