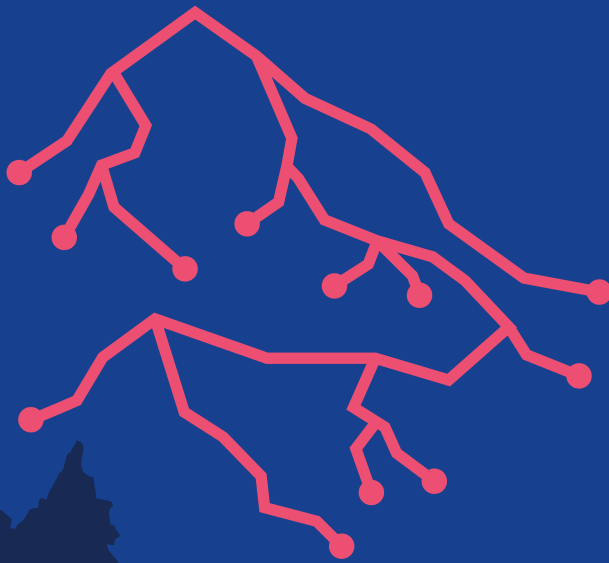


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Documenting Bhutanese Lhop and Monpa languages using an interdisciplinary approach

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INTRODUCTION

This paper discusses the currently on-going language and associated cultural practices documentation project among the Lhop and Monpa communities in Bhutan. Both communities are indigenous minority groups with their languages as well as cultural practices being highly endangered and underdescribed to date. The research is carried out in an interdisciplinary approach with the linguist Dr. Gwendolyn Hyslop and socio-cultural anthropologist Mareike Wulff working jointly, and Wulff being the main ethnographic data collector in the field and presenter of this paper for that matter. Drawing on practical examples from the field, the paper shows how ethnographic and language documentation enhance each other. By providing language data and analysis, the anthropologist benefits in form of a more precise understanding of cultural practices, and by providing data of highly specialized indigenous cultural practices the linguist benefits by a more sophisticated body of language deep into the life worlds of the people.

Lhokpu and Monkha languages

Both Lhokpu, spoken by the Lhop, and Monkha spoken by the Monpa community, are considered highly endangered isolates within the Trans-Himalayan/Tibeto-Burman family. We estimate Lhokpu has less than 700 speakers dispersed over seven villages in the very South-West of Bhutan. Van Driem (1995) mentions three varieties of Monkha: 'Olekha (e.g. Hyslop 2016) and North- and Southeastern. The four villages in this project, Phrumzur, Jangbi, Wangling and Kubdra, fall under the North-Eastern variety which is spoken by less than 250 speakers. The main anthropological goal is to document and analyse 'indigenous cultural practices' of the two communities within the Bhutanese nation state.

Interdisciplinary Documentation: Content and Methods

Following best practices suggested by Seyfeddinipur and Rau (2020) for language documentation, we use video recordings with additional microphones whenever possible, ensuring mimicking, gesturing and spatial configurations of the speakers made visible and the sound quality is as best as possible. Involving an anthropologist as main ethnographer there is a focus on visually documenting spoken language interconnected with cultural practices. This means concretely the doc-

umentation is extended to additionally visually covering (bodily) action of the speakers as well as material culture used, and highly specialized language accompanying the documented practices. In her presentation, Wulff will focus on the practical aspects of documenting language and cultural practices. She discusses the needs of data collection required for both disciplines, but also the challenges in achieving this. While for video recordings used for language analysis the visual quality is not of major importance for instance, having good recording of how the tools used look like or being able to see the exact procedure of how a basket is woven might be of major importance to the anthropologist. A recording in which a group of people works jointly to prepare a shaman altar for ritual purposes, might be of importance for the anthropologist in order to understand labour division and materials used for the altar, but of no use for the linguist if no word is spoken.

Case Examples: the Lhop's traditional bamboo houses and the Monpa's botanical knowledge

In an attempt to collaborate with the communities by incorporating their interests and needs, and following the data to where it is richest into the community members' knowledge base, the documentation works evolve entirely different in the two field sites. Both communities offered comparable preconditions, being small subsistence agricultural /foraging communities living in close attunement with the surrounding jungles, and practicing non-mainstream cultures (Giri 2004, Sharma 2005) and languages within the mainly Buddhist state of Bhutan. We started with the same topic of inquiring natural yarn-making practices from natural fibres in both places initially. But soon it became apparent that, while the Monpa have an interest to share their huge botanical knowledge, the Lhop are eager to work on their core cultural features such as the traditional house construction. Taking the knowledge about plants to be foraged from the jungle as a starting point, Wulff conducted elicitation sessions with multiple groups of up to five Monpa showing them hundreds of plant images covering most of the flora species found in their direct environment. The community members engaged in lively discussions about the local names, appearance, use in the past and present, and specifics of the plants. These sessions turned out to be windows into the main areas of life of the Monpa, covering topics such as subsistence and agricultural knowledge, medical knowledge, trade, relations with neighboring communities, ritual, housing, household items and tools. Following up on these, we started documenting cultural practices such as collecting and processing plants from the forest for food, yarn-making, or basket weaving, and their usage during community shaman rituals. The traditional single-room Lhop house on stilts is the pivot of Lhop culture and unites all major areas of Lhop life considered essential. Equipped with the most fundamental functions of a home, it is the main place of residence holding an open fireplace for cooking, providing space for sleep and gathering as well as being the store for foods and belongings. Entirely constructed from renewable resources, such as several different types of bamboo and cane as the main building materials, it represents the close connection of the Lhop with their direct natural

environment. As Lhop practice matrilineality and matrilocality, the house is the seat of the female head of household being the main holder of the clan lineage. It is also the central location where the Lhop connect to their clan deities. We documented how Lhop construct a traditional house, how they make and explain about traditional household items and conduct household rituals in the house.

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Unusual allophony in Lhokpu coda plosives

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Lhokpu is a Trans-Himalayan language spoken by approximately 2,500 people across two non-contiguous areas in South-Western Bhutan (Bodt 2012). Though under-researched, it appears to be more closely related to the geographically proximal Toto language and the more distant Dhimal language, which have previously been argued as being closely related (Grollman and Gerber 2018). The Lhokpu phonology has thus far eluded complete and precise description. In particular, the tone and prosody in the languages remains underdescribed, both in this project and in previous unpublished documentation work by George van Driem, Gwendolyn Hyslop, Selin Grollmann and Pascal Gerber (Bodt 2012, Hyslop p.c. 2023), as well as the phonemic statuses of some marginal phones. This presentation focusses on one set of these uncertain phones, short final nasals. It suggests that they are not contrastive, but exist as lenited allophones of voiceless plosives in coda position.

Data for this presentation were collected primarily in a 2023 visit to Singye chiwog, one of the two village blocks in the larger of the two Lhokpu-speaking enclaves in Samtse district, Bhutan. This trip was primarily focussed on the documentation of grammatical forms, as reported in Anonymised (2023). Further data were made available by Hyslop (Field Notes, 2012), and another trip is planned for May 2024 to collect further phonological data on the language.

Lhokpu tentatively shows a two-way voicing distinction present across not only obstruents, but also in sonorants in both onset and coda positions, cf. *kurtin* ‘fingernail’ and *tiŋ* ‘see’, *liŋ* ‘leech’ and *liŋtaŋ* ‘ankle’. This contrasts with the three-way voicing distinctions seen in the other languages of Bhutan. At first glance, there also appears to be a length or glottalization distinction in final voiced nasals, cf. *-yaŋ* PST.INTER and *-yaŋʔ* PST.DECL, however a wider view of these forms suggest that they are more likely to be allophonic variations of final voiceless plosives. In particular, both [pak] and [paŋʔ] have been attested for ‘pig’, with the plosive form appearing in more careful speech. Additionally, the clear borrowing *cik* ‘only’ from Dzongkha (and more generally Tibetic) *gcik* ‘one’ is attested as [tɕiŋʔ], showing that, at the very least, forms with codas that can be reconstructed to borrowed voiceless plosives are realised in Lhokpu with this short nasal.

This presentation will explore this allophonic variation, discussing the specific distribution of the sound change within the Lhokpu phonology. It will also discuss the distribution of this sound change across Lhokpu-speaking villages in Bhutan. Finally, it will discuss the possible historical development of the allophony in consideration of the lack of equivalent sound changes in the potential sister languages of Dhimal and Toto and the geographically neighbouring languages Dzongkha (TH, Tibetic) and Nepali (IA), and the phonetically similar phonemes sound in more

geographically distant languages such as Bodo (TH, Brahmaputran).

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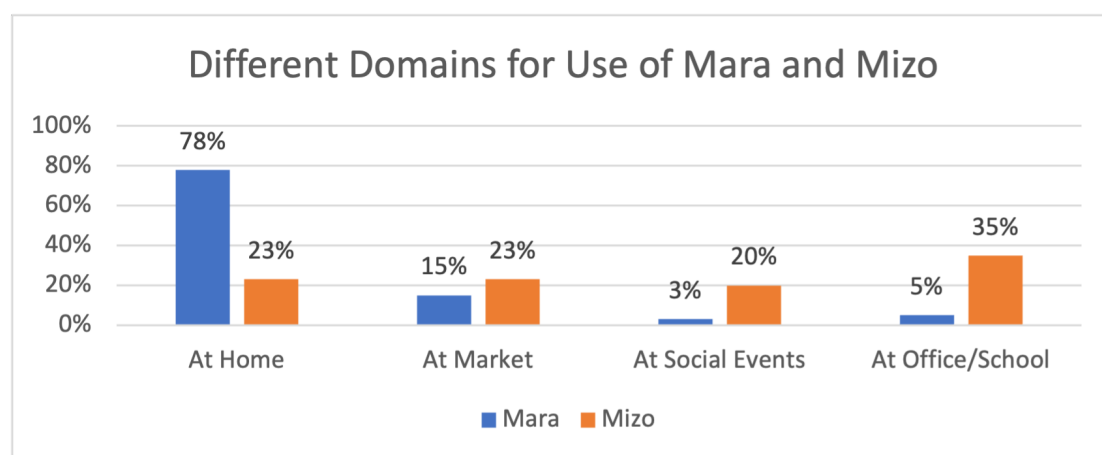
Language Contact in Siaha - Mara and Mizo

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In this study, Mara language contact with Mizo is explicitly examined in relation to the town of Siaha, the administrative centre of the southernmost district of Mizoram. Considering the number of languages and dialects spoken in Mizoram, the Maras are one of the tribes who had protected and continued using their languages on a day-to-day basis. However, despite being a Mara-dominated district (56,574 speakers in the 2011 census) with its own administrative structure under the Mara Autonomous District Council (MADC), the people of Siaha are undoubtedly familiar with Mizo (formerly known as Lushai). With 8,50,000 speakers in India in the 2011 census, the Mizo language significantly influences the state's media, entertainment, education, and social environments. The geographical seclusion and Inner Line Permit (ILP) shield the state from other languages, enhancing its influence. The blending of tribes and the need for a common language have led to Mizo becoming the lingua franca. As a result, this contributes to the Siaha district's designation as a bilingual society type II, in which every individual speaks more than one language (according to Appel and Muysken's (1987) division of types of bilingualism).

In order to have a better knowledge of the linguistic interaction or contact situation, this study is evaluated based on an objective type questionnaire that was provided to forty participants, separated into three age groups namely 15 to 24, 25 to 39 and 40 and above. To have a better understanding of the rise or fall in language use, the participants are divided into three age groups. However, the number of participants does not remain constant, with 20 participants from the 15-24 age range, 12 from 25-39, and 8 from 40 and up. This study is also limited to the town area of Siaha where the speakers are more multilingual compared to that of the surrounding villages. Nonetheless, this study is valuable in demonstrating the state of linguistic contact, as well as the attitude and overall social status of the Mara language.

The questionnaire is analysed with focus on the study of language use in different domains such as, 1) at the level of language use among family and friends, 2) formal and informal events such as offices, church, cultural festivals, etc., 3) personal activities such as praying, counting of money, etc., and 4) social media and entertainment. An overview on these studies shows the current condition of language contact in Siaha where it can be seen that the use of Mara is still very prominent in-home domains with 78% of the total participants using it on a daily basis and the least of its use in social events with only 3%. The most popular domain for using Mizo is offices/schools with 35% and more equally divided in the rest of the domains namely home domain (23%), market place (23%), and social events (20%).



In addition to a study on these areas, the missionaries' contributions and influence are discussed as they have a significant influence on the current status of the Mara language and its culture. Along with the attitude towards code-switching between Mara and Mizo, a quick synopsis of the speakers' linguistic attitudes is also given, with specific gender-based overlooks. The possible causes and effects of the language contact as well as the works of the local organizations and the government for the protection and promotion of the Mara language is also briefly discussed. One of the major causes of language contact is that the Maras, living in intermix communities, often use a specific language for communication, business, and practical situations. Other factors, such as the need to convey secrets, the need to fit in with a specific group, the desire for better self-expression, the desire to demonstrate solidarity with a specific group or express group identification, or simply a force of habit, all contribute to the Maras' use of other languages in an intermix society. The investigations end with the overall conclusion that Mara people are mindful of external factors such as media, intermarriage, educational pressure, and economic migration, demonstrating a positive attitude towards their language. This is the fundamental explanation for why, despite their small population and residence in a state ruled by a larger group, their language and culture have survived and flourished. Regardless of intense pressure from nearby communities and languages, their origins have been preserved and passed down to the future generation.

Keyword: Language Contact, Mara, Siaha, Mizo, Language Attitude.

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Classifier marking in Assamese: A nominalization perspective

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INTRODUCTION

This study raises two issues found in the previous studies on classifiers in general (Allan 1977, Aikhenvald A.Y. 2019) and in Assamese in particular (Chowdhary 2012, Borah 2012). Firstly, classifier marking is generally treated as a category, which operates (classifies) on the head noun. Secondly, the studies in Assamese (Borah (2012: 292)) claim classifiers to be “numeral classifiers” that “individuate the noun to facilitate numeral quantification”. Adopting the framework of nominalization on classifier marking proposed by Shibatani (2017, 2019), this study, however, argues that (i) Assamese classifiers (numeral) do not classify the referent of a head noun, which may not exist, such as *bɔg a-kʰɔn mɔ-ɪ* (white-CLF 1SG-GEN) ‘The white one is mine’ is possible, but **bɔga-kʰɔn gaɪi mɔ-ɪ* (white-CLF car 1SG-GEN) ‘The white car is mine’ is not possible, (ii) they do not only operate on numerals, but on other structures, which have nothing to do with counting. Instead, they are actually the markers of classifying grammatical nominalizations which nominalize numerals along with other structures such as demonstratives, genitives, adjectives, and participials which form a constituent with them and at the same time classify what is denoted by each relevant structure; e.g., *du- zɔn* ‘two-HUMANS’, *ei-tɔ* ‘this-ROUND (thing)’, *tar-kʰɔn* ‘his-FLAT(thing).

FINDINGS OF THE RESEARCH

In support of these two arguments, this paper reports the findings of a survey conducted on the use of Assamese classifiers with the structures mentioned above in their two usage patterns - NP use, where the relevant structure plays a referential function by heading a noun phrase, such as *du-kʰɔn lag-e* ‘two-FLAT (thing) want-3’ (I want two) and modification (Mod) use, where the same structure restricts or identifies the denotation of the head noun by serving the modification function, as *du-kʰɔn kitap lag-e* ‘two-FLAT book want-3’ (I want two books), across the dialects and different stages of Assamese. The survey reveals that Assamese classifiers apply to a continuous segment of the hierarchy proposed by Shibatani (2021): **NUM** > **DEM** > **GEN** > **ADJ** > **V-based nominalizations** (**NUM**=numerals, **DEM**=demonstratives, **GEN**=genitives, **ADJ**=adjectives, **V-based** (participial) nominalizations), which means that Numerals are most susceptible to classifier marking, followed by Demonstratives, Genitives, and so on in this order. The optional marking of classifiers with numerals and demonstratives in the two usage patterns, but not with the structures to the right of the hierarchy

in the early Assamese demonstrates the fact that Assamese classifiers started to nominalize NUM and DEM first and then gradually spread to the right of the hierarchy, as reflected in the modern dialects.

Early Assamese:

NP use: OPTNUM > OPTDEM > *GEN > *ADJ > *V-based nominalization

Mod use: OPTNUM > OPTDEM > *GEN > *ADJ > *V-based nominalization

Nalbariya dialect (Modern):

NP use: NUM > DEM > *OPTGEN > *OPTADJ > *OPTV-based nominalization

Mod use: NUM > OPTDEM > *GEN > *ADJ > *V-based nominalization

Barpetia dialect (Modern):

NP use: NUM > DEM > *OPTGEN > *OPTADJ > *OPTV-based nominalization

Mod use: NUM > **OPTDEM > **OPTGEN > *ADJ > *V-based nominalization

Standard dialect (Modern):

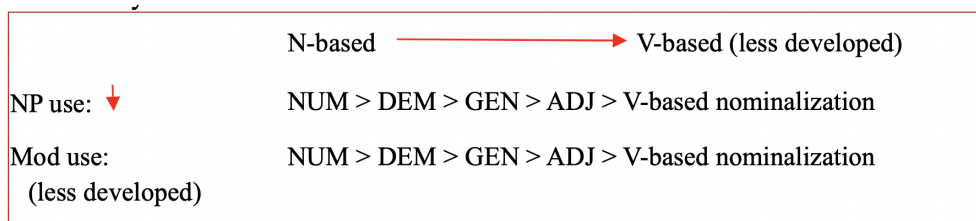
NP use: NUM > DEM > *OPTGEN > *OPTADJ > *OPTV-based nominalization

Mod use: NUM > **OPTDEM > **OPTGEN > *ADJ > *V-based nominalization

(No mark=CLF marking obligatory; OPT=optional CLF marking; *OPT=CLF marking if the referent is definite; no marking for indefinite referents; **OPT=CLF marking if two referents stand in contrast; *= CLF marking impossible)

CONCLUSION

This systematic spreading of classifier marking over the continuous segment of the hierarchy and the two usage patterns across the modern dialects and the diachronic stages largely reflects Shibatani and Shigeno's (2013) claim that nominalization marking starts out in the NP-use context of N-based nominalizations, which subsequently spreads to the modification context of N-based nominalizations (a), as well as to NP-use (b) and to modification use (c) of V-based nominalizations. The more developed pattern of CLF marking in NP-use found across the dialects of Assamese shows that it is the point of the innovation, contrary to the prevailing views in general (Greenberg 1974:19) and in Assamese in particular (Chowdhary 2012: 274) that the CLF construction in NP-use is arising from the Mod-use by deleting the head. Furthermore, the variation of the spread in both NP- and Mod-use found across the dialects and the historical stages reflects the predictions made by Shibatani's proposals : (i) Historically, older forms of a language show a less developed pattern of CLF marking both horizontally along structural dimension of the hierarchy and vertically along the functional dimension than newer forms of the language, (ii) Cross-dialectally, it is expected to find dialectal distributional patterns of CLF marking reflecting the above diachronic development patterns—some (conservative) dialects (e.g., Nalbariya dialect) are less developed than some (progressive) others (e.g., Barpetia and standard dialects) in a similar



way the older forms of the language (Early Assamese) are less developed than the newer counterparts (Modern Assamese dialects), as schematically shown below.

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Egophoricity, Status and Formality in Kathmandu Newār

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INTRODUCTION

In this paper, I explore the interaction between egophoricity and status (thus formality) in Kathmandu Newār. Egophoricity is a grammatical category observed to mark origo in several aboriginal languages (Roque et al., 2018). In the case of Kathmandu Newār, the speaker (S) in declaratives serves as the origo, while in interrogatives the addressee (A) does (Hargreaves, 2018). Here, I demonstrate that its marking can be manipulated to encode formality as well.

Egophoric and Non-egophoric marking:

For example, in the domain of volitional verbs (Hargreaves, 2018), past egophoric marking in 1st person declaratives and 2nd person interrogatives manifests with an ‘ā’ inflection:

(a) Decl: **S = Origo**

Ji mhigaḥ ana wan-ā
 1.SG yesterday there.DEM go-PST.EGO
 ‘I went there yesterday.’

(b) Interrog: **A = Origo**

Cha mhigaḥ ana wan-ā lā?
 2.SG yesterday there.DEM go-PST.EGO Q
 ‘Did you go there yesterday?’ (informal)

Conversely, a perfective non-egophoric marking ‘a’ is used when origo does not coincide with the speech-act participants:

(c) Decl: **S ≠ Origo**

Wa mhigaḥ ana wan-a
 3.SG yesterday there go-PFV.NONEGO
 ‘S/he went there yesterday.’

(d) Interrog: **A ≠ Origo**

Wa mhigaḥ ana wan-a lā?
 3.SG yesterday there go-PFV.NONEGO Q
 ‘Did s/he go there yesterday?’ (informal)

EGOPHORICITY, STATUS AND FORMALITY:

Close examinations of social interaction in Kathmandu Newār, however, indicate that when S and A are of equal status (S=A) or when S is higher in status than A (S>A), the canonical pattern of egophoric marking may not be observed. Instead,

an imperfective inflection that affects reduced status and formality (2a.) and reduced distance and formality (2b.), is possible in interrogative contexts:

(a) Interrog: S = Origo

Cha mhigaḥ ana waṃ lā?
 2.SG yesterday there.DEM go.IMPV.EGOØ Q

(b) Interrog: S = Origo

Cha mhigaḥ ana waṃ lā?
 2.SG yesterday there.DEM go.IMPV.EGOØ Q

‘Did you go there?’ (informal, patronizing) ‘Did you go there?’ (informal, palsy)

S > A (landlord to servant)

S = A (childhood friends)

Arguably, the imperfective marking is not non-egophoric, for origo coincides among the speech act participants. Instead of addressee A, however, it is speaker S that holds the origo affecting nuanced forms of informality – a patronizing one as between landlord and servant in (2a.) and a palsy one as among childhood friends in (2b.). I posit that the non-canonical patterns in these interrogatives, with the ‘ego Ø’ marking, have S claim the origo from A, or nullify it.

In contrast, for the domain of (tactile) temperature predicates in Kathmandu Newār (Hargreaves, 2018), non-egophoric marking is expected in interrogatives. However, when S_iA, the auxiliary can be marked as egophoric, as observed in (2d.):

(c) Interrog: A ≠ Origo

Cha-ṃ tāṃnwaḥ cā-la lā?
 2.SG-ERG Hot.IMPV feel-PFV.NONEGO Q

‘Did you feel hot?’ (Informal)

S=A (colleagues)

(d) Interrog: A = Origo

Chi-ṃ tāṃnwaḥ cāy-e diy-ā lā?
 2.SG.FRML-ERG Hot.IMPV feel-INF be.AUX-EGO Q

‘Did you feel hot?’ (Deferent)

S < A (employee to boss)

Here, the unexpected absence of egophoric marking as in (2a.) and (2b.) decreases A’s status and distance from S, while its unexpected presence in (2d.) increases A’s status and distance from S. This shows that egophoricity may serve as a (secondary) strategy to mark formality in Kathmandu Newār, and supports the view that rather than encoding A’s status as an individual, grammar may encode the properties of their mind Wiltschko (2024).

The paper thus enhances the empirical domain for what can contribute to formality marking, beyond coverage in recent literature (Portner et al., 2019). Furthermore, it sheds new light on the nature of egophoricity – a third domain of auxiliaries described in Hargreaves (2018) is observed as not sensitive to status. I thus propose the domain to have been misanalysed as a domain for egophoric marking.

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Causativization in Simte

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This paper investigates the causative structures in Simte. Simte is one of the Kuki-Chin sub-group of the Tibeto-Burman family, consisting a population of 6728 as per the Census of India, 2011. The speakers of this language are mainly concentrated in Pherzawl and Churachandpur districts of Manipur, India. Previous studies on this language by Lal (2011) discusses only the morphological causatives, highlighting the suffix *-saʔ* being attached to the verbal root to express the notion of causation. Besides this, Champeon (2019) briefly discusses the presence of both morphological causatives, precisely a prefix *su-* and suffix *-saʔ* to express causative meaning. While these studies add treasure to the literature of Simte causatives, their findings are seen as only one aspect, without describing their distribution in detail. This paper attempts to fill the gap by describing the different kinds of causatives and their distributions in the syntactic aspect of causatives.

Causatives in Simte are broadly classified into two, namely lexical and morphological. As for lexical causative, Simte exhibits a limited set of lexical items which expressed the semantic notion of cause in the verb itself (see Payne, 1997; Singh, 2019). It is irregular and unproductive because it can occur to some selected verbs only that too triggered by their semantic notion. Considering example (1), the verb ‘*si*’ is an intransitive verb which requires only a subject, but not necessary an object. In fact, the verb does not carry the semantic notion of causing event. The case is different in example (2) where the verb ‘*t^hat*’ carries the semantic notion of ‘cause to die’. Hence it is a transitivized verb which requires the subject as well as the object.

(1) *mi hausa -pa si*

Person rich MASC die

‘The rich man dies’.

(2) *k^huppi -in vompi k^hat t^hat*

Khuppi ERG bear one kill

‘Khuppi killed one bear’

Two kinds of morphological causatives are identified in this language: a prefix *su-* and a suffix *-saʔ*. The occurrence of these causative markers are ‘semantically and syntactically conditioned’ (Infimate, 2022:148). It is pertinent to note that

the causative prefix *su-* is found in intransitive verb especially in static verbs, but it cannot occur in action or motion verbs. Semantically, the causer is directly responsible for the caused event. The following examples are illustrative.

(3) *mɔmɔi -in nau a su- iʔmu*

Momi ERG child 3SG CAUS sleep

‘Momi made/let her child to sleep’

* (4) *a nau su- -pai*

3SG child CAUS walk

‘He made his child walk’

The morphological causative suffix *-saʔ* is regular and productive as compared to lexical causative. This causative suffix can occur in all forms of the intransitive and transitive verb. Example (5) explains the causative suffix *-saʔ* being added to the intransitive verb. In a derived causative construction, the additional argument functions as a causer and the subject of its non-causative counterpart becomes the causee argument. The addition of an agent argument as causer denotes the erstwhile intransitive subject to a cause argument which appears to function as a syntactic object of the causativized verb, forming a transitive construction. When a causative suffix *-saʔ* is attached with the transitive verb, it produces di-transitive construction making the additional A argument as a causer. The A argument in the non-causative form and the original object both functions as the objects of the causative construction. It is illustrated in example (6).

(5) *houtu -pa -in homework gelʔ -te a pai -saʔ masa*

Teacher MASC ERG homework write PL 3SG go CAUS first

‘The male teacher let the students go first who have done their homework’

(6) *ka pu -n keŋtop^ha ʔ huŋ lei -saʔ*

1SG grand father ERG shoes COP buy CAUS

‘My grandfather bought me a shoes’

Both the causative prefix *su-* and suffix *-saʔ* can occur simultaneous in a transitive verb (sentence). Though not productive, it is mostly found in motion verbs. When both the causative affixes are attached to the verb, there is an addition of the glottal stop ‘ʔ’ in the causative prefix, hence *su-* becomes *suʔ-* (exemplified in (7)). This is due to the influence of the glottal sound in the rhyme of *-saʔ*

occurring in the final position of the sentence.

(7) *a pa -in pencil a zup -na lama? su?-tan -sa?*
3SG.POSS father ERG pencil 3SG sharpen NMZ CONJ CAUS break CAUS

‘while his father was sharpening his pencil, he let it break’.

The agent ‘*ke -n*’ is the one who sent someone, and have that same person give money for someone else. The causative marker - *sa?* is attached to the verb ‘*pia*’. Example (8) is illustration of the argument.

(8) *ke -n ama? -nu sum pe- sa? dijin ama? -pa ka sol hi.*
1SG ERG 3SG FEM money give CAUS PURP 3SG MASC 1SG send COP
‘I made him give money for her’ [Lit. For him to give money, I have sent him]

KEYWORDS:

Simte, Kuki-Chin, Lexical causatives, morphological causatives.

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On the typology of Serial Verb Constructions in Hmar

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This paper explores the phenomenon of serial verb constructions (SVC) in Hmar, a South-central language belonging to the Tibeto-Burman language family. Despite Hmar being spoken by approximately 98,550 (as per Census of India, 2011) speakers across various states in Northeast India, there is a notable scarcity of literature on linguistic studies in Hmar (Baruah & Bapui, 1996: Subbarao, 2012: hiek, 2013: Singh, 2014: Ngurte et al, 2016: Infimate, 2019), more specifically on SVC, a grammatical process productively found within the verb phrase of the language. This study addresses this gap by providing a preliminary analysis of the types and function of SVC present in the language.

In the paper, we identify that the SVC in Hmar are characterized by their strictly contiguous (Aikhenvald, 2006) nature, i.e., no intervening elements can occur between the verbs. The paper studies both symmetrical and asymmetrical (Aikhenvald, 2006) constructions within the verb phrase, providing insights into the syntactic and semantic nuances of SVC in the language. The constructions in Hmar exhibit a wide range of semantic relationships, including sequence, direction, action-result, cause-effect, aspectual, and modal information. This is demonstrated in the examples of SVC in (1) and (2) below. In the symmetrical SVC, exemplified by (1), the verbs maintain syntactic and semantic independence, conveying a sequential progression of actions. On the contrary, asymmetrical SVC, illustrated in (2), involve a modification process where the second verb, often semantically bleached, provides aspectual information to the main verb. For instance, in (2), the verb *zo* 'finish' modifies *tiem* 'read' to indicate completion of action.

Symmetric SVC

1. *ká sín-tho-ná tiəŋ ká kír ŋʰá:l diŋ á ní lèiín,*
 1Sg.GEN work-do-NMZ DIR 1Sg return ADV FUT 3Sg COP because
sánde sikùl-á? ká miŋ zìek lùt dál rɔ?
 Sunday school-LOC 1Sg.GEN name write enter NEG IMP
 'Since I will soon be leaving towards my work place, do not register my name for the Sunday school classes/Lit: Do not write my name and enter it for the Sunday school classes'

Asymmetric SVC

2. *tiem thèi pópò ká tiem zò*
 read able QUAN 1Sg read finish
 'I've covered all the reading resources available'/Lit: I finished reading everything there is to read'

Interestingly, the study reveals that while Hmar typically exhibits a tendency for serial verbs to remain syntactically distinct, functioning as a unified predicate, there are instances, as demonstrated in examples (3) and (4), where the serial verbs occur as a single phonological unit.

1. *ì - mí - ríŋ.zò ám?*
2Sg 1Sg believe.finish QM
'Do you trust me?'

2. *á-n-pèk.zò tàlúo*
3Sg-VR-give.finish EMP
'S/he is really committed/devoted'

Overall, this paper sheds light on the productive grammatical process of SVC in Hmar, provides a deeper understanding of its structural properties and variation. and, more broadly, informs the ongoing discourse on the typology of serial verb constructions in Tibeto-Burman languages.

Key Words: Tibeto-Burman, South-Central, Hmar, Serial Verb, Symmetric, Asymmetric

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The grammaticalization of the selective conjunction *so*²¹ in Tujia language

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The Tujia language belongs to the Tibeto-Burman languages. Nowadays, the Tujia people, who speak the Tujia language, are mainly located in the Xiangxi Tujia and Miao Autonomous Prefecture of Hunan Province, China. According to Narrog et al. (2021) “grammaticalization is the development from lexical to grammatical forms and once the grammatical form has evolved, the development of further grammatical forms” (p. 1). Drawing on the principles of grammaticalization theory, this study investigates the evolutionary trajectory of the Tujia selective conjunction ‘*so*²¹’ within the context of the Tibeto-Burman language family.

In the Tujia language, the selective conjunctions ‘*so*²¹’ and ‘*xo*²¹’ are extensively found across diverse sub-dialectal regions of its northern dialect. (Tian Desheng 1986, p. 84; Chen Kang 2006, p. 116; Li Maoli 2019, p166; Xu Shixuan et al. 2017, p. 28; Tian Yang 2023) The principles of layering and persistence play crucial roles as fundamental laws within the grammaticalization process. (Hopper 1991, p. 22; Narrog & Heine 2021, p. 46) This analysis is further enriched by examining the coexistence of forms in Tujia. The grammatical evolution of ‘*so*²¹’ in Tujia unfolds as follows:

	peripheral pronoun	interrogative pronoun	interrogative modal particles	conjunction
evolutionary trajectory:	<i>so</i> ⁵⁵ >	<i>a</i> ⁵⁵ <i>so</i> ²¹ >	<i>so</i> ²¹ >	<i>so</i> ²¹
Coexistence forms:	Cognates in the Tibeto-Burman languages	<i>a</i> ⁵⁵ <i>xo</i> ²¹	<i>xo</i> ²¹	<i>xo</i> ²¹

1. The cognates ‘*so*⁵⁵’ in Tujia Language

‘*so*⁵⁵’ is a cognate within the Tibeto-Burman language family, characterized by analogous pronunciation, semantics, and usage patterns. Below are some examples:

Language:	Tujia	Yi	Lisu	Lahu	Jino	Tibetan
others:	<i>so</i> ⁵⁵	<i>so</i> ²¹ / <i>su</i> ⁵⁵	<i>su</i> ⁴⁴	<i>su</i> ³³	<i>su</i> ⁴²	<i>so</i> ⁵⁴ <i>so</i> ⁵⁴

Tujia: *thai*⁵⁵ *pi*²¹ *so*⁵⁵ 'the person opposite'; *khe*⁵⁵ *xau*⁵⁵ *so*⁵⁵ 'people on the col';

Yi: *ku*³³ *su*³³ 'fool'; *ga*⁵⁵ *su*³³ 'rich man'; *kho*³³ *su*³³ 'hero';

Lisu: *ne*³¹ *mo*³³ *su*³³ 'necromancer'; *do*⁴² *teua*⁵⁵ *su*³³ 'poisoner'.

2. The first evolution

Interrogative pronouns in Tujia language have evolved from adjunctive pronouns, with two coexisting forms: a⁵⁵ so²¹ and a⁵⁵ xo²¹. This evolutionary form exhibits similar instances in other languages of the Tibeto-Burman family.

Language	Tujia	Yi	Lisu	Lahu	Jino	Tibetan
who	a ⁵⁵ so ²¹	a ²¹ se ³³	a ³¹ so ⁴⁴ ma ⁵⁵	a ³³ su ¹¹	khɔ ³³ su ⁴⁴	su ⁵⁴

- (1) ni³⁵ a⁵⁵ so²¹/ a⁵⁵ xo²¹
 2sg who
 Who are you? (你是谁?)

3. The second evolution

In the Tujia language, interrogative pronouns manifest in two forms: ‘so²¹’ and ‘xo²¹’.

- (2) ŋa³⁵ ni⁵⁵ khan²¹ khu⁵⁵ kha²¹ wa=i⁵⁵, ni³⁵ ye=i³⁵ so²¹/ xo²¹
 1. pl mountain firewood carry=FUT, 3sg go=FUT Q
 We're going to the mountain to carry firewood, will you go? (我们要去背柴, 你去吗?)

4. The third evolution

Two choice conjunctions, ‘so²¹’ and ‘xo²¹’, coexist, with Tian Desheng (1986) having early identified ‘so²¹’ as an interrogative modal word (p. 80). Dai Qingxia (2010) selected choice conjunctions from 28 Tibeto-Burman languages for research, pointing out that many choice conjunctions originate from interrogative modal words (p. 229).

- (3) ŋa³⁵ ni⁵⁵ khan²¹ khu⁵⁵ kha²¹ wa=i⁵⁵, ni³⁵ ye=i³⁵ so²¹/ xo²¹ yei²¹ tha⁵⁵
 1pl mountains firewood carry=FUT, 2sg go=FUT CONJ go=FUT NEG
 We're going to the mountains to carry firewood, are you going to go? (我们要去背柴, 你去不去?)

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Digital Archiving of Traditional Knowledge Systems with reference to Dimasa

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Traditional knowledge can be defined as “knowledge, know-how, skills and practices that are developed, sustained and passed on from generation to generation within a community, often forming part of its cultural or spiritual identity”-WIPO (World Intellectual Property Organisation). That is, traditional knowledge (TK) carries cultural information as practices and skills, and thereby connects the identity of a given community. With the era of modern tools available to preserve traditional knowledge systems, Mukurtu, a web platform has been especially designed to preserve and promote indigenous heritage of world cultures. The entire focus of the digital archiving using Mukurtu follows “community-based research model” (Czaykowska-Higgins 2009) and involves participation from community members as an archive (Shilton and Srinivasan 2007) to digitally preserve the oral traditions and cultural practices.

Dimasa, a Bodo-Garo language from Tibeto-Burman language family with 262,413 speakers (2011 Census of India) inhabiting mainly in Assam and Dimapur in Nagaland, has used Mukurtu for digital archiving of traditional knowledge systems such as food, dress and ornaments, tools and instruments, folk songs, dance, oral history, to name a few. The language is vulnerably endangered based on the UNESCO vitality report (2003); in spite of the introduction of Dimasa as an optional subject in school education, it has scanty documentation, limited or no textbook materials promoting traditional practices and lack of wider use in the other social domains.

The Mukurtu platform used for Dimasa digital archiving is an open access portal and is named under the platform Bodo and Dimasa Heritage Digital Archive (<https://bododimasaarchive.org>); it has been designed to include 3 C's (Community, Categories and Cultural Protocol). The Categories has 3 key features in the customized portal: cultural heritage items, heritage dictionary and blogs. Cultural heritage items document the lexemes having ethnographic as well as any other culturally relevant information with media files, heritage dictionary covers the existing and archaic lexical data from the speech varieties of the language, and blogs is additionally used for longer, detailed documentation of the cultural narratives.

The present study firstly focuses on the “cultural heritage items (also digital heritage items)” for the purpose of language documentation and digital archiving in Dimasa. The paper will show how Dimasa data are catalogued and annotated

in this web platform and how community as curators can be engaged in archiving and using the heritage information. For instance, a given DH item (digital heritage item) has 3 main components: a) the media content (audio-video, image, pdf files), b) metadata field and c) text content (for documentation and description).

It will further analyse the etymological and ethno-semantic aspects of lexical items under the DH items such as, tools and instruments, names of rituals, and other noun categories in this language. For example, the tool khudrang (spade) has been documented in 'tools and instruments' category inside the text content such as 'summary' as in, its purpose and use in tilling the field, 'description' as in the purpose and structure, shape and demonstration in the video, and 'cultural narrative' as in the use in Dimasa rituals, folk songs with the mention of khudrang, as well as the text to text translation.

The traditional knowledge of such cultural artifacts and objects, different verbal art and names and modules of folk design are gradually becoming less common and less re-learned among the younger generation of the Dimasa community. The paper will, thus, finally focus how the DH items using Mukurtu help in the promotion of different traditional knowledge systems of the Dimasa community and create scope for language and culture revitalization.

Keywords: digital archiving, traditional knowledge systems, Dimasa

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Switch Reference in Malto

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Switch Reference (SR) refers to a phenomenon where the grammar encodes information about the identity of two arguments and whether they refer to the same entity or not. Unlike binding, which indicates the co-referentiality in terms of antecedent-anaphor relation, SR encodes the information through morphological means by indicating if two different subjects of adjacent clauses are co-referential or not. In the study of switch reference, recent approaches including McKenzie (2012), Baker & Camargo Souza (2020), Clem (2022), Arregi & Hanink (2018, 2022) consider the phenomena to involve agreement. An empirical evidence in support of these approaches comes from Malto, a Dravidian language spoken by the pahariya tribe in the Indian subcontinent. Unlike many other switch reference languages, Malto exhibits a rare φ -inflectional endings when the subject in its own clause is referentially same as the one in the adjacent clause (1). However, when the subjects of two adjacent clauses are different, the switch reference is encoded by a default *-ko* (2) (Kobayashi 2012).

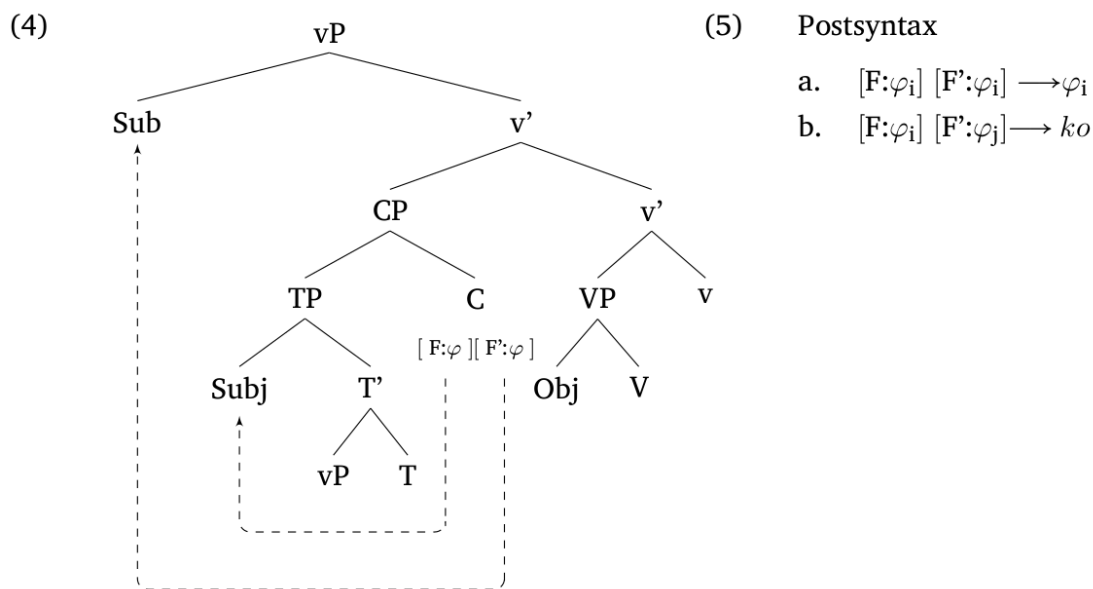
- (1) a. Geeta:d_i bərc-ki *pro*_i ca:-en bita:d
Geeta return-SS.3SGF 3SGF tea-ACC make.PST.3SGF
'After Geeta returned, Geeta made a tea.'
- b. e:n_i bərc-ken *pro*_i ca:-en bita-ken
1SGM return-SS.1SGM 1SGM tea-ACC make-PST.1SGM
'After I returned, I made tea.'
- (2) a. Geeta:d_i bərc-ko e:n_j ca:-en bita-ken
Geeta return-DS 1SGM tea-ACC make-PST.1SGM
'After Geeta returned, I made a tea.'
- b. e:n_i bərc-ko Geeta:d_j ca:en bita:d
1SGM return-DS Geeta tea-ACC make.PST.3SGF
'After I returned, Geeta made a tea.'

Given that φ -inflection and default marker are core empirical properties of agreement, it is evident from (1) and (2) that Malto switch reference system also involves agreement. This fact can be further confirmed by the agreement blocking effects caused by the dative case. When one of the subjects is dative case, the switch reference is encoded by default *-ko* despite both the subjects having the same reference (3).

- (3) a. $\text{e}\eta\text{ga}_i$ meru korc-ko e:n_i $\text{ə}\text{ɖa-k}$ bərc-ken
 1SGM.DAT sick get-DS 1SGM home-DAT return-PST.1SGM
 ‘After I got sick, I returned home.’
- b. e:n_i $\text{ə}\text{ɖa-k}$ bərc-ko $\text{e}\eta\text{ga}_i$ meru korca:d
 1SGM home-LOC return-DS 1SGM.DAT sick.3SGF get.PST.3SGF
 ‘After I returned home, I got sick.’

Therefore, these pieces of evidence suggest that switch reference system in Malto is a narrow syntactic phenomenon that necessarily involves agreement.

Following Arregi and Hanink (2022), we propose an analysis in terms of Hiraiwa’s (2001) Multiple Agree approach to account for Malto facts. More specifically, we consider that SS and DS are morphological reflection of the C head in the adjunct clause that has two sets φ -features F and F’ such that F probes downward and F’ probes upward as illustrated in (4). When F probes downward, it agrees with the subject in the adjunct clause and when F’ probes upwards, it agrees with the subject of the main clause. We assume that agreement for φ implies agreement for index features as well. Thus, the result of both Agree operations will have an output with C having either φ match or φ mismatch between F and F’. As shown in (5), the match results in corresponding φ inflection getting inserted and the mismatch results in default -ko getting inserted at postsyntax.



An advantage of the proposed analysis is that it can also straightforwardly account for the blocking effects that we have seen in (4). In these cases, φ -features in F and F’ do not match despite both the subjects having the same set of φ -features and indices. The dative case of one of the subjects prevents the probe from accessing the φ -features and indices. Consequently, the probe remains unvalued because of the failed agreement and its unvalued features do not match with the other probe

whose features are valued. This results in the configuration like (5b) that only allows for *-ko* to occur.

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Associated motion in Ghale, a Tamangic language in Nepal

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1. INTRODUCTION

This paper describes the grammatical category of associated motion (AM) in Ghale (ISO 639-3: ghe), a Tamangic language of the Trans-Himalayan language family spoken in the Gorkha District of Nepal. AM is a verbal grammatical category “whose function is to associate, in different ways, different kinds of translational motion (spatial displacement / change of location) to a (generally non-motion) verb event” (Guillaume & Koch 2021: 3). AM in Trans-Himalayan has only recently begun to be described (Genetti et al., 2021; Jacques et al., 2021).

2. AM IN GHALE

This section describes AM in Ghale focusing on the four parameters proposed in the literature on AM, that is, the direction of the motion, the temporal relation, the grammatical relation of the figure, and degree of event integration (Guillaume & Koch, 2021; Jacques et al., 2021). Ghale has four AM markers: *-rΛ*, *-ri*, *-pΛ*, and *-kɥi* as shown in the table below.

AM marker	Gloss	Temporal relation	Direction of motion	GR of the figure	Degree of event integration
<i>-rΛ</i>	COME&DO	P	cislocative	S/A	low
<i>-ri</i>	DO&COME	C, S	cislocative	A and P	low
<i>-pΛ</i>	GO&DO	P	translocative	S/A	low
<i>-kɥi</i>	DO&GO	C, S	translocative	A and P	low

2.1. The direction of the motion

Cislocative and translocative AM are distinguished in Ghale. Cislocative AM is marked with *-rΛ* or *-ri*. The suffix *-ri* has the allomorph *-sji* in imperative mood as in . Translocative AM is marked with *-pΛ* or *-kɥi* . The suffix *-pΛ* has the allomorph *-ji* in perfective aspect.

2.2. The temporal relation

The temporal relations of prior, concurrent, and subsequent motion can be expressed by those markers. The suffixes *-rΛ* and *-pΛ* express prior AM. The suffixes *-ri* and *-kɥi* express concurrent or subsequent AM. The following examples express prior, concurrent, and subsequent AM, respectively.

- (1) $\eta e^{33}=te$ ne^{21} $tjane^{33}$ $k\Lambda\eta^{25}$ $ts\Lambda^{33}-r\Lambda-te$
 1SG=ERG 2SG.GEN near meal eat-COME&DO-PST
 ‘I came to have meal at your place.’
- (2) $\eta e^{33}=ne$ $ladum^{33}$ $tel^{33}-sji$
 1SG=LOC present hold-DO&COME.IMP
 ‘Bring me a present.’
- (3) $\eta e^{33}=te$ ηu^{33} $tjane^{33}$ $k\Lambda\eta^{25}$ $tse^{21}-ri-te$
 1SG=ERG 3SG.GEN near meal eat-DO&COME-PST
 ‘I had meal at his place and came back.’

2.3. The grammatical relation of the figure

The grammatical relation of the figure is the subject (S/A) in prior or subsequent AMs, while it can be either the subject (S/A) or both the A and the O in concurrent AMs expressed with the suffixes *-ri* and *-kɥi*.

2.4. Degree of event integration

Degree of event integration is related to the separability of the motion event and the main action. It was tested by the scope of negation, conditionals, and complementation. The examples – show that the main action can be negated separately from the motion. They show that event integration is low in prior, concurrent, and subsequent AMs, respectively.

- (4) $khjon^{25}$ $tu^{33}-ji-te$ $tw\Lambda^{33}$ $\Lambda m^{33}-pre^{55}$
 friend meet-GO&DO-PST meet.INF NEG-get
 ‘I went to meet my friend, but I could not meet him.’
- (5) $\eta e^{33}=te$ $ladum^{33}$ $\Lambda n^{33}-tel^{33}-ri$
 1SG=ERG present NEG-hold-DO&COME
 ‘I came without bringing a present.’
- (6) $\eta\Lambda^{33}$ $japan$ $kujile^{21}$ $p\Lambda^{55}m\Lambda^{33}$ $\Lambda n^{33}-tu^{33}-ri$
 1SG Japan go.PST parents NEG-meet-DO&COME
 ‘I went to Japan, but I came back to the village without meeting my parents.’

3. DISCUSSION AND CONCLUSION

This paper describes the AM system in Ghale, a Tamangic language in Nepal. This language has four affixal AM markers: *-r\Lambda*, *-ri*, *-p\Lambda*, and *-kɥi*. According to Jacques et al. (2021), affixal AM markers are uncommon in Trans-Himalayan outside of Gyalrongic and Kiranti. Genetti et al. (2021) show languages of Tani,

Karenic, Karbi, Magaric, and Qiangic groups have affixal AM systems. This study is the first to describe an AM system in a Tamangic language. The AM system of Ghale is moderately rich compared to other languages in this family. Outside of Kiranti, many languages in Trans-Himalayan have a simple system with two makers with the opposition of ‘go’ and ‘come’. Ghale has four markers with the two binary oppositions of the temporal relation and the direction of motion.

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Personal Pronouns of Nalbariya Dialect: A Descriptive Analysis

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INTRODUCTION

This study explores the varied personal pronominal system of Nalbariya dialect, a dialect of Assamese language which belongs to the Indo-Aryan language family. It is spoken primarily in the Nalbari district of Assam. Different variations of the same pronoun form are used in different locations across the Nalbari district. This paper aims to investigate the usage of these variations. Focusing on the geographical spread of one form, the research aims to recognize regional variations in personal pronoun usage and explain the possible historical underpinnings that have led to these divergences.

To date, the data has been collected from different areas within the Nalbari district, taking into account the claims of native speakers regarding the variances in their linguistic expressions. The selected areas for investigation encompass Belsor, Tihu, Nalbari town, Rampur, Nilpur, Bori, Solmara and Barkura, thereby providing a comprehensive representation of the linguistic landscape within the district. Furthermore, to enhance the cross-dialectal and comparative analysis, some parts of the adjacent regions including Pathsala, Tamulpur, Bongaingaon and Barpeta have been incorporated into the study. This methodological approach aims to establish a robust foundation for scrutinizing the linguistic distinctions and nuances prevalent among native speakers across diverse geographical and sociolinguistic contexts.

DESCRIPTION OF PERSONAL PRONOUNS

This dialect features a three-way distinction in personal pronouns: first, second, and third person. All the personal pronouns, viz., first, second, and third person pronouns exhibit number distinctions. For instance, the first person singular form is *moi* 'I,' and the first person plural form is *ami* 'We.'

Second person pronouns are further differentiated based on honorificity, namely, honorific, familiar, and inferior. There are three forms of the second person singular pronouns, namely, *tumi* 'you' (familiar), *toi* 'you' (inferior), and *apni* 'you' (honorific). These forms remain consistent across all areas.

The second and third person plural forms are derived by affixation and also distinguish honorificity. However, different geographical areas use different forms. The second person plural familiar form is *tu-hun* 'you' in Belsor, *tu-nha* or *tu-hna* 'you' in Nalbari town area, and *tumi-ahun* 'you' in Rampur area. Again, the

second person plural inferior form is also *tu-hun* ‘you’ in Belsor, but *tɔ-nd^he* ‘you’ in Nalbari town area. As data have been collected from neighbouring dialects of Western Assamese, similar pronominal forms are seen to be used in those dialects as well.

The divergence in pronominal forms within the same dialect likely traces its origins to historical developments. Exploring historical motivations underlying the variations mentioned above entails a comparative analysis between contemporary pronominal forms and their Old Assamese counterparts, namely “*tɔ-hʊɛntʃe*,” “*ɛ-hʊɛntʃe*,” and “*te-hʊɛntʃe*.” These forms are compared with contemporary variants in the dialect, such as “*tu-hun*,” “*tu-hunte*,” “*tɔ-nd^he*,” “*tu-nha*,” “*tumi-hun*,” “*e-nd^he*,” and “*e-hun*.” Based on the analysis, potential explanations are posited regarding the evolution of these variations over time. It is plausible that all variations of second and third person pronouns stem from Old Assamese forms. These variations are cross-dialectally attested but as this study is in its preliminary stage, the cross-linguistic variations and changes are yet to be explored. Comparing the variations suggests a possible directional change sequence, such as “*tɔ-hɔnte*” > “*tu-hunte*” > “*tu-hun*” > “*tu-hna*” > “*tu-nha*.” Initially, the vowel undergoes a shift from low to high (i.e., /ɔ/ > /u/). Subsequently, the final syllable is omitted, followed by syncope, resulting in the elimination of the /u/ sound, necessitating the addition of an /a/ vowel to compensate for the deleted middle vowel. Then, the phenomenon of metathesis occurs. Another conceivable directional change sequence is from “*tɔ-hɔnte*” > “*tɔ-nt^he*” > “*tɔ-nd^he*,” wherein the middle syllable “*-hɔ/-*” is elided. The /t/ sound aspirates to /t^h/, a common phonological phenomenon in Western Assamese, and the voiceless consonant “/t^h/” becomes a voiced sound /d^h/ due to its positioning between two voiced sounds. These proposed sound changes contribute to a more nuanced understanding of the diachronic evolution of the second person plural forms within the dialect, warranting further scholarly inquiry.

CONCLUSION

To conclude, this study delves into the diverse personal pronominal system of the Nalbariya dialect, focusing on regional variations in pronoun usage across different areas of Nalbari. Through comprehensive data collection and analysis, the research reveals distinctions in first, second, and third person pronouns. The inclusion of various locations within and adjacent to Nalbari enhances the study’s robustness, offering valuable insights into the historical evolution of language in the region. Overall, this research contributes to the understanding of linguistic diversity in Nalbari, opening more scopes for future studies in the dialect and its evolution.

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Complexity of Chepang argument indexation

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This paper aims at giving an overview of the argument indexation complexity attested in Chepang, a Trans-Himalayan (a.k.a. Tibeto-Burman, Sino-Tibetan) language spoken in Nepal. When seeking to understand its verbal morphology, the following functional domains come into play: person, number, clusivity, tense, inverse, direct, transitivity, and socio-pragmatics. I show that the interactions between these domains shaped the historical evolution of such a non-canonical direct-inverse system which questions once again (Filimonova 2005; Bickel 2008; Cristofaro 2013; Rose 2015; Gildea & Zúñiga 2016; Arkadiev 2020) the functional validity of a referential hierarchy (Silverstein 1976; DeLancey 1981; Comrie 1980; Comrie 1981; Klaiman 1991; Nichols 1992; Corbett 2000; Song 2001; Siewierska 1998; Siewierska 2004; Zúñiga 2006; Bickel 2008; Lockwood & Macaulay 2012).

A direct-inverse system is defined as marking both the syntactic role and hierarchical ranking of the participant indexed on (di)transitive verbs through the presence of indexation markers and inverse morphology (Comrie 1980; DeLancey 1981; Nichols 1992; Givón 1994; Zúñiga 2006; Bickel & Nichols 2007; Zúñiga 2014; Jacques & Antonov 2014).

The following examples show unexpected constructions with regards to direct-inverse systems. While inverse morphology is attested in 3>1 scenario (1), only 2nd person indexation is present in 3>2 scenario (2). In 2>3 scenario, both 2nd person and the marking of 3rd person O or direct morpheme occur on the verb (3, 4). Direct morphology, which has two different morphemes in non-past (=u) (3) and past (=n~nΛ) (4), is also used in 2>1 scenario (5, 6), along with other constructions (7, 8), where a dedicated 2>1 morpheme =tɕi occurs with the marking of A for person. In 1>2/3 scenario, only 1st person is indexed in absence of direct marker (9, 10), and in 1>2 scenario, another construction features as well a dedicated 1>2 morpheme =ne~tɕe (11, 12).

Such a level of complexity in both the distribution of indexation markers, direct/inverse morphology, and in the presence of multiple constructions within a single scenario is the result of an array of historical developments triggered by socio-pragmatic pressures still under investigation. Beyond the marking of syntactic roles, epistemicity (which conveys the speaker's attitude towards the information expressed) is an example of socio-pragmatic effect found for instance in 2>1 scenario. In 2>1, regardless of the overt expression of 2nd person, when the speaker acknowledges or reminds the addressee their intention or action towards them through an assertion, constructions do not feature the specific 2>1 morpheme (6); in a question, the speaker seeks to clarify the addressee's intention (5). By contrast, when the speaker expresses the addressee their desire for the process to happen or that they are positive that the process will happen through an assertion,

the dedicated 2>1 marker is present (8); in a question, the same morphology expresses that the speaker's request be fulfilled already or that the speaker needs specific details (7).

- (1) *ŋa=kaj dʒe=na=ta=ŋ dʌhja.*
 1SG=DAT eat=NPST=INV=1 maybe
 ‘(The Meme spirit) will maybe eat me.’
 (CTW_YMC_TAP_102420_1_Tantula_ra_Meme_Lan)
- (2) *ama=i naŋ=kaj kas=te=na.*
 mother=ERG 2SG=DAT feed=2=NPST
 ‘Mother feeds you.’
 (MKW_BMB_BAN_090118_3_Mum_to_child_childhood)
- (3) *naŋ juʔ to=o, doh tɛiʔ=te=na=u ?*
 2SG mouse tell_say=NMZ:REL what know=2=NPST=DIR/3O
 ‘You who is said to be a mouse, what do you know?’
 (CH_CTW_BBC_GUN_102620_1_Cing_Lan)
- (4) *ŋa=ko tɛar bʌhjni-tɛoʔ mak=te=ka=n,*
 1SG=GEN four y.daughter devour=2=2/3.PST=DIR/3O
 ‘You devoured my four younger daughters,’
 (CH_CTW_JMC_PYK_101920_Cing_Lan)
- (5) *ŋa=kaj naŋ=i p^he=te=na=u p^he=te=u=lu ?*
 1SG=DAT 2SG=ERG leave=2=NPST=DIR/3O leave=2=DIR/3O=NEG
 ‘Are you going to leave me or not?’
 (MKW_BMB_BAN_090118_6_Love_and_marriage)
- (6) *ŋa=kaj ŋa=ko ahm=te waj=a=ka=n !*
 1SG=DAT 1SG=GEN rice=2 throw=PST=2/3.PST=DIR/3O
 ‘You threw my rice at my face!’
 (CH_MKW_DBC_MAI_1_020320_The two brothers)
- (7) *naŋ=i gu=tɛuk sʌmman maja dʒahŋ=te=na=tɛi ?*
 2SG=ERG INT=QTY up.to love do_make=2=NPST=2>1
 ‘How much do you love me?’
 (CH_MKW_SC_SIL_122619_2_Dhobini_rani)
- (8) *naŋ=i ŋa=kaj tuʔm=te=na=tɛi.*
 2SG=ERG 1SG=DAT kiss=2=NPST=2>1
 ‘You kiss me.’
 (CTW_SC_POL_102521_E)

- (9) *law* *naŋ=kaj* *ŋa=i* *juin-raj* *ta=na=ŋ,*
 EXPR 2SG=DAT 1SG=ERG story tell.story=NPST=1
 ‘Okay, I’m going to tell you a story,’
 (CH_MKW_SC_SIL_122619_6_Agreement)
- (10) *law,* *kjan* *waʔn=alaŋ* *da,*
 EXPR dish bring=1SG.PST PART
 ‘Here, I brought some dish, alright,’
 (CH_CTW_JMC_PYK_101920_Cing_Lan)
- (11) *djah* *naŋ=kaj* *tho=ne=na=ŋ.*
 now 2SG=DAT beat=1>2=NPST=1
 ‘Now, I’m gonna beat you.’
 (MKW_KMC_SK_082918_2_The old Sune and the tigers)
- (12) *ŋa=i* *jat* *kura* *to=tee=na=ŋ* *kja !*
 1SG=ERG one thing say_tell=1>2=NPST=1 PART
 ‘I’ll tell you one thing, okay!’
 (CH_CTW_BBC_GUN_102620_1_Cing_Lan)

ABBREVIATIONS

1 first person, 2 second person, 3 third person, 3O third person object, DAT dative, DIR direct, ERG ergative, EXPR expressive, GEN genitive, INT interrogative, INV inverse, NEG negation, NMZ:REL nominalizer:relativization, NPST non-past, PART discourse particle, PST past, QTY quantity, SG singular

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A Phonetic and Phonological Sketch of Bugun vowels

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INTRODUCTION

Bugun, also known as Khowa is a member of the Kho Bwa sub-group of the Tibeto-Burman language family and is primarily spoken in the West Kameng District of Arunachal Pradesh, India. Bugun is an endangered language in Arunachal Pradesh, with approximately 1700 native speakers. The study will describe a preliminary sketch of an aspect of the language: (descriptive) phonetics and phonology of vowels in Bugun language.

Literature Review

Barbora (2015) mentioned the urgent need to save Bugun language from extinction. She also mentions about a linguistic feature loss as the replacement of bilabial fricatives [ɸ] and [β] into [f] and [v] respectively, due to the impact of Indic languages namely, Hindi, Assamese, and Nepali. While Bugun is surrounded by several other languages like Sherdukpen, Duhumbi, Hrusso, Khispi, Monpa, and Sartang, their influence on Bugun appears to be limited, mainly due to differences in vocabulary despite geographical proximity. Lieberherr & Bodt (2017) shows Kho-Bwa languages i.e., Western Kho-Bwa, Bugun, Puroik share higher percentages of core cognate vocabulary along with shared phonological and morphosyntactic feature such as presence of adjective prefix a- and preverbal negation. Sri Rinchin Don-drup (1990), a Language Officer authored a guide book of the Bugun language namely, '*Bugun Language Guide*'. Portnoy (2012) did a preliminary research on the phonetics, phonology and morphology of Bugun language.

RESEARCH OBJECTIVE AND METHODOLOGY

This study will present the phonetic vowel inventory of Bugun and a phonemicization, which will be supported by acoustic analysis of vowel formants and extensive examples respectively. The results of the study shows that the Bugun spoken in Singchung, Arunachal Pradesh has eight monophthongs i.e., /a, ə, i, ε, o, ɔ, u, ʉ/. It also has phonetic nasalised counterparts but only /õ/ showed phonemic features. This data is based on audio recordings of extensive wordlist from four native Bugun speakers (two males and two females) having (C)V(C) structure in both isolation and phrasal context for analysis.

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Internal Phylogeny of Kurtöp

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INTRODUCTION

East Bodish is a family of languages found predominantly in Bhutan with sparse presence in parts of Arunachal Pradesh (NE India) and Tibet. The term East Bodish was first propounded by Shafer (1954) which was further reinforced by Michailovsky and Mazaudon (1994) with new data and lexical evidence. van Driem (1998) presented eight East Bodish languages; and subsequently research has corroborated the existence of the small family as distinct, if not closely related to and/or highly influenced by Tibetan (Hyslop 2013, 2014).

Kurtöp is an East Bodish language spoken in North Eastern Bhutan. van Driem (1998) had suggested 10,000 speakers while Hyslop (2013) had estimated an even higher number of speakers, putting it at 15,000. Kurtöp is spoken across several villages under 3 *gewogs* (blocks) under Lhuentse *dzongkhag* (district) in Eastern Bhutan. Based on phonological, morphological, and lexical observations, six dialects have been identified as Dungkar, Zhamleng, Shawa, Nê, Gangzur and Tangmachu. This research aims to propose an internal phylogeny of Kurtöp.

PHONOLOGICAL COMPARISON

The Kurtöp phonemic inventory was first described by Michailovsky & Mazaudon (1994) and elaborated further in the recent decade and a half by Hyslop (2008, 2009, 2017). The inventory, across all the six dialects, contain fifteen stops, three fricatives, two affricates, four nasals, two laterals, one rhotic, two glides and a glottal aspirate. There is a three-way voicing contrast made among stops (voiceless unaspirated, voiceless aspirated and voiced) and two-way voicing in affricates and dental fricatives.

All the five vowels (front closed /i/, close-mid front /e/, open front /a/, back close-mid rounded /o/ and back close rounded /u/) are also observed in all the dialects and four diphthongs /au/, /iu/, /ui/ and /oi/ as well.

MORPHOLOGICAL COMPARISON

I looked at different forms such as the hortative *iki~ki~ci*; the perfective *sala~wala~pala*, *sana~wana~pana* and *para/pera*; the polite imperative *le~e~ye*; and the informal imperative *lu~u~yu*. For each morpheme discussed, I have attributed a colour circle, which is then used in an attempt to group dialects into an internal phylogeny

based on shared allomorphy.

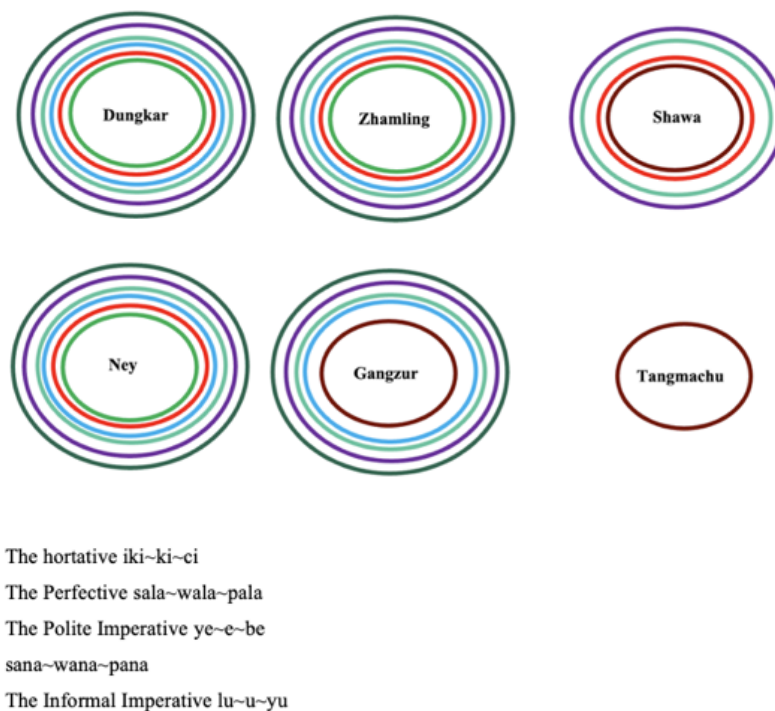


Fig. 1: Shared allomorphy comparison among the dialects

LEXICAL COMPARISON

A lexical comparison was also carried out to compare the uniqueness/similarity among the Kurtöp dialects. 30 words that stood out in one or two of the languages as compared to the others were picked and compared. I chose words that are used commonly in the community and home setting to ensure that the comparison is fair and consistent. Through this lexical comparison as well, Dungkar, Zhamleng and Nê were observed to share greater similarity. However, unlike in the morphological observation Shawa is also observed to share more common words to Dungkar, Zhamleng and Nê while Tangmachu was the least common, followed by Gangzur.

In both the above observations, Tangmachu was the most unique or stood out from the rest of the dialects, followed by Gangzur. This is expected as Tangmachu shares geographical boundaries with speakers of Chocangaca on all sides and thus it can be hypothesized that Tangmachu is influenced by Chocangaca and has many borrowings from this language. For example, the word for seed in Dungkar, Zhamleng, Nê and Shawa are /sawan/ but /sagon/ in Tangmachu and Gangzur and it is /sagon/ in Chocangaca too. Similarly /prowa/ in the other dialects is /drobja/ in Tangmachu and its /drowa/ in Chocangaca. The word for jump is /ling/ in the other dialects compared to /chong/ in Tangmachu which is again the same in Chocangaca. Likewise, almost all the words unique to Tangmachu are

either borrowings or influenced by Chocangaca such as /tiwa/, /chong/, /dorba/, /itshan/, /prangpo/, /kamu/, /mutuma/, /cangba/ etc.

CONCLUSION

In terms of phonology, Kurtöp dialects show remarkable coherence. There is minimal difference between them in terms of presence versus absence of coda, and this difference can be used to distinguish the Tangmachu, Shawa and Gangzur dialects (coda -s present), on the one hand, from Dungkar, Zhamling, and Nê (vowel length on preceding vowel), on the other.

Kurtöp dialects exhibit more variation in terms of morphology than in terms of phonology. Morphologically, my hypothesis at this stage is that the Proto Kurtöp perfective aspects, for instance, is *pala and I concur with Hyslop, 2011 that /p/ > /w/ is a result of assimilation to velar place of articulation and following /r/ and /l/ as a result of assimilation in sonority.

Through lexical comparison Dungkar, Zhamling and Nê were observed to share greater similarity. However, unlike in the morphological observation Shawa is also observed to share more common words to Dungkar, Zhamling and Nê while Tangmachu was the least common.

In summary, it is evident, through phonological, morphological and lexical comparisons that Dungkar, Zhamling and Nê share more similarities in all aspects of the comparison and that Tangmachu stands out as the most distinct. The following picture represents the proposed internal phylogeny of Kurtöp, as it stands today. Only phonological and morphological change occurrences are noted due to the difficulty in representation but as mentioned above a lexical comparison of the dialects also support the proposed internal phylogeny at this stage.

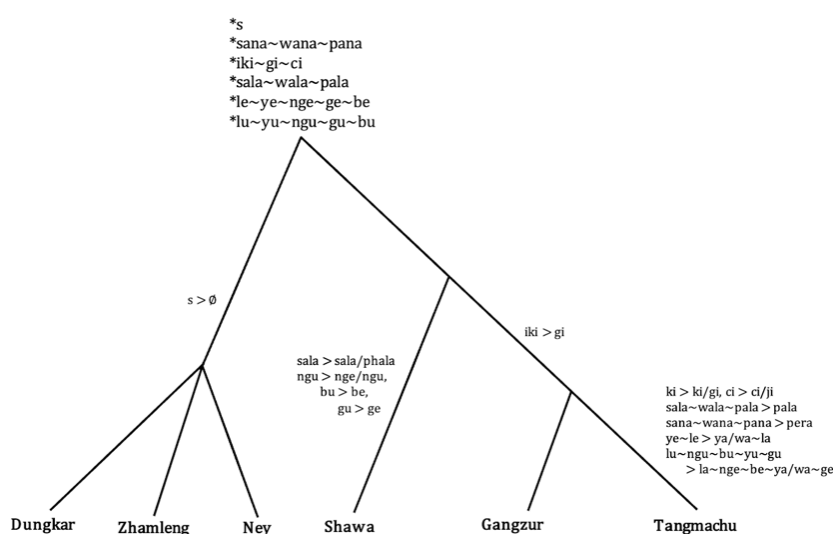


Fig. 2: Internal Phylogeny of Kurtöp

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Ensuring Inter-Annotator Reliability in Manual Annotation of a Dimasa Corpus

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Textual annotation projects are common among language documentation and description efforts. Annotated corpora provide linguists with a unique opportunity to conduct quantitative queries over large amounts of data, allowing them to address research questions that would be otherwise unanswerable. However, a common problem that arises in textual annotation projects is how to ensure inter-annotator reliability (IAR). IAR refers to the level of consistency within different annotators who are annotating the same text. Fuoli & Hommerberg (2015) note that manual annotation allows for much richer and more detailed annotation than automatic annotation is usually capable of; however, manual annotation is often a complex and subjective task. Unless the specific annotation guidelines used for a project are made clear and available to the public, linguistic analyses based on manual annotation are in danger of being opaque and unreplicable. In this presentation, we describe our workflow for manual annotation of linguistic corpora. Our annotation guidelines are iterative, growing and adapting to our increasing knowledge of the language. In addition, we prioritize community decision making and frequent inter-annotator collaboration.

Our project, which is funded by the US National Science Foundation, investigates Differential Marking (DM) in Dimasa, a Tibeto-Burman (TB) language in the Boro-Garo language family (ISO=dis, Glottolog=dimal251). Dimasa is spoken by approximately 110,000 native speakers in Assam and Nagaland (Evans & Langthasa, 2023). DM refers to a type of morphological patterning whereby nominals in the same grammatical role or position may not always be morphologically encoded in the same way (see volume 34.2 of *Linguistics of the Tibeto-Burman Area*). An example of DM in Dimasa is given below. In Example (1), *mishi* (tiger) is marked with the accusative marker, *khe*. In this context, *khe* is optional; however, speakers cannot easily pinpoint the difference in meaning that arises from the use or non-use of *-khe*.

- (1) Ani nobra jon dada mishi gede-ba **khe** gaw-thai-ba.
1SG.GEN husband wait and tiger big-NMZ ACC shoot-kill-PST
“My husband waited and killed the big tiger.” (Evans & Langthasa (2023), p. 156)

The syntactic and semantic parameters that predict *khe* marking are not immediately apparent through studying individual clauses. Thus, our project examines a corpus of annotated texts for explanatory patterns of *khe* marking. Our chal-

lenge is to annotate these texts consistently for semantic and pragmatic features relevant to DM.

Our presentation will focus on our annotation process and the decisions we have made as a team to promote inter-annotator reliability. First, we review **custom tier sets created in ELAN** language software (The Language Archive, 2024) to annotate for nine features on each noun phrase (definiteness, accessibility, topicality, individuation, animacy, NP shape, thematic role, agency, and affectedness), four features on each verb (valence, stativity, durativity, and telicity), and six clause-level features (situation, mood, aspect, surprise, sentence type, tense). Second, we describe how **30 interlinear glossed texts** were provided in ELAN for annotation by our team of four annotators. Third, we review challenges to inter-annotator consistency. The first challenge was that our annotators did not have previous knowledge of Dimasa grammar. Therefore, we needed to use our collective knowledge to gain proficiency in **constituent analysis**. We will provide examples of clause complexity in Dimasa serial verb and light verb constructions to illustrate the difficulty of the task. A subsequent challenge was that, though an **annotation manual** previously created by other members of the Differential Marking project was available to our annotators, further discussion was often needed to ensure that we interpreted definitions and assigned linguistic labels in the same way. To exemplify this difficulty, we will provide discussion of (a) thematic role assignment and (b) labeling of verbal aspects in our presentation.

We conclude that corpus-based study for lesser-described languages like Dimasa is feasible if a team of annotators utilizes appropriate structures (annotation guide, predefined tier-sets, annotated texts) and takes advantage of community decision making via frequent group meetings, and the resulting iterative improvement of annotation. We submit that collaborating and adjusting one's annotation practices based on the discoveries and difficulties of the group is a necessary practice, rather than doing the bulk of the work separately and only coming together to compare our annotations at the end of the process. We lay out our workflow so that it can be replicated for semantic and pragmatic annotation of similar corpora.

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The Expression of Spontaneous motion events in Nepali

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The focus of this presentation is to show how spontaneous Motion events are expressed in Nepali, an Indo-Aryan language (Grierson, 1916; Dahal, 1974 *inter alia*) spoken in Nepal by c. 12 million speakers (CBS, 2023). Spontaneous Motion events refer to the movement of a Figure (a human FIGURE in our case) with respect to a reference place (GROUND) along the Path, which consists of Source, Median or Goal (Ishibashi, 2015; Vuillermet & Kopecka, 2019), as in the examples (1) and (2).

The aim of this presentation is twofold. First, we will show the type of events (e.g., Source- vs. Goal-oriented) and then we will explore how Path is distributed in Nepali.

In order to investigate these issues, we used the ‘Trajectoire’ video stimulus set designed by Ishibashi et al. (2006) within a cross-linguistic project namely, ‘Trajectoire’ to elicit descriptions of spontaneous Motion events across typologically and genetically distinct languages. The stimulus set consists of 76 video clips, each 8 to 14 seconds long. Of these 76 video clips, 55 are target (Path) video clips showing the Motion of a protagonist (FIGURE, adult or child), 19 are fillers, and 2 are warm up clips. Several parameters are taken in to consideration in the design of these stimuli. These include: the FIGURE, the PATH, and the GROUND among others (Talmy, 2000: 25- 26). The data were collected with 17 native speakers of Nepali, 9 men and 8 women, aged between 20 and 50 in Parbat and Kathmandu districts, Nepal. In total, the corpus consists of 949 Motion descriptions.

The results reveal that of the total descriptions (N=949), 37.8% (359 descriptions) express Median-oriented events, 20.5% (195 descriptions) convey Goal-oriented events, 17.9% (170 descriptions) Source-oriented events, 7.5% (71 descriptions) convey Median-Goal-oriented events, 7.1% (67 descriptions) express Source-Goal-oriented events, and some other types. As regards the distribution of Path, it can be distributed in different morphosyntactic loci. It can be expressed in one morphosyntactic locus as in (3) up to 6 morphosyntactic loci as in (4) in a clause. The Path is expressed in one morphosyntactic locus that is only the verb as in (3). Nevertheless, our results also reveal that in some cases, it can be distributed either in the postposition alone (e.g., -tir ‘toward’ or in the case marker alone (-ba ‘from’). In the case of (4), however, different morphosyntactic resources (for example, adverbials, case marker, postposition, and verbs) interact to encode Path in 6 different loci.

In this presentation, we will provide a detailed account of this domain of expression in Nepali and investigate similarities and differences in the types of events and the distribution of Path. Keywords: spontaneous Motion events, ‘Trajectoire’,

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Language Identity for Ethnolinguistic Vitality: Miju and Digaru

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This study examines the identities of Miju and Digaru language speakers within the Mishmi language group, emphasising the need of sustaining their ethnolinguistic vitality. As ethnolinguistic vitality involves components such as continuous intergenerational transmission of language and cultural traditions, stable demographics, active social structures, social cohesion, and emotional commitment to its collective identity, this study has also tried to include these elements while noting its endangerment challenge (as classified by UNESCO WAL 2021 map) and relating its complex language identity as Mishmi or Miju/Digaru. The present study explores how members of these communities communicate and interact in various language contexts, aiming to assess the continuity of intergenerational transmission and the preservation of their collective identity as Miju and Digaru. In this context, two types of spoken data are collected. The first is casual conversation among native speakers of both languages, and the second is interviews - semi-structured and unstructured interviews. The study focuses on casual conversation, and unstructured and semi-structured interviews to ascertain participants' awareness of their mother tongue usage as well as their cognitive perspectives on identification themselves as indigenous language speakers. In this research, the group vitality¹ aspect of the vitality theory paradigm has been applied, to explore both objective and subjective dimensions² of group vitality, aiming to discern the language identity analysing diverse language contexts while understanding the status of ethnolinguistic vitality of the two endangered languages under investigation.

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¹ a commonly utilized concept in the examination of minority language preservation and interethnic relationships (Smith et al. 2017).

² The term objective vitality includes status, institutional support, and demography, all of which affect how strong a group is in comparison to other groups in an intergroup setting. On the other hand, subjective vitality was developed to show how various groups have similar emotive and cognitive perceptions of the same items (Smith et al. 2017).

The grammar of Limbu revisited

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The first grammar of the highly conservative Phedappe dialect of Limbu was published in West Berlin in 1987. The unaesthetic state of the art in much of academic publishing in the 1980s had resulted from the convergence of low-resolution dot matrix printers, what are now legacy fonts and the then new exigency of having to deliver a camera-ready manuscript to some publishers. Moreover, the author of *The Grammar of Limbu* was at the time a novice, and this book represented his very first grammar of a hitherto undocumented language. By the time of the doctoral defence, he already wanted to refine wording here and there and even to modify a few of the analyses, although naturally not alter any of the language data. However, the manuscript had already been sent to the press, and no more changes were permitted. Decades of working to survive the vagaries and vicissitudes of academic life, whilst embarking upon perhaps a bit too many other delightful new research projects, effectively prevented any thought of ever producing an improved edition of the grammar. In addition, the second edition of the grammar of an indigenous language of the Himalayas does not, under most circumstances, represent an economically viable proposition either. This year, however, at the request of members of the Limbu community and thanks to a generous publication subvention by the Swiss Embassy at Kathmandu as well as the original publisher Mouton de Gruyter's consent to a contract amendment, a revised, improved and augmented second edition of *The Grammar of Limbu* is being published in Nepal and made available throughout South Asia at a token price. Some of the improved analyses in this new revised edition will be presented, and some of the new information on the Limbu language and the history of the Limbu people will be shared.

Tibetan Loan Words In Naxi Manuscripts

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1. INTRODUCTION

The Naxi manuscripts in southwestern China, as a typical religious scripture in the Bon system, have been closely related to the Zhangzhung civilization and Bon faith on the Qinghai- Tibet Plateau since their inception. In addition, Naxi and Tibetan belong to the Tibeto-Burmese language family, so it is still unclear whether the relationship between the Bon and Naxi manuscripts is homologous or influential. It is an undeniable fact that the language recorded in the written documents written in Naxi Dongba script is Naxi language. Therefore, there are bound to be a considerable number of Tibetan loanwords in Naxi manuscripts, which are related to various aspects of religious beliefs and become the core elements connecting Naxi religious Manuscripts with Tibetan language and Bon faith. Naxi manuscripts continuously absorb useful Tibetan religious terms, thus greatly enriching and developing the vocabulary of the written literature. These Tibetan loanwords are clearly distinguished from the Tibetan loanwords used in Naxi spoken language, and their time levels are also significantly different. The sources of Tibetan loanwords in this literature and in spoken language, namely dialect points, are also different, requiring detailed analysis.

1.1.

Based on a comprehensive review of Tibetan loanwords in Naxi written literature and a comparison of Tibetan loanwords in Naxi spoken language, this study reveals the similarities and differences between Tibetan translated loanwords in Naxi written literature and Tibetan loanwords in Naxi spoken language, with a focus on analyzing the transliteration and free translation modes of Tibetan translated loanwords in Naxi written literature.

1.2.

Tibetan words entering the vocabulary system of Naxi language must undergo various modifications in Naxi's pronunciation, grammar, and word formation rules to conform to Naxi's pronunciation habits, grammar, and vocabulary rules. The lack of consonant endings in Naxi language makes the transformation of Tibetan words in Naxi language more complex than borrowing words from other languages, yet unique and creative.

1.3.

In summary, the ways in which Naxi language uses Tibetan words are mainly as follows: a) Transliteration: Using Naxi phonemes with similar pronunciations to translate Tibetan words, this Tibetan loanword used for transliteration no longer has its original meaning and has undergone semantic substitution, retaining only its pronunciation and combination form. b) Half transliteration, half free translation: This method is mainly used for compound words in Tibetan and Naxi languages, usually using transliteration in the first half and free translation in the second half. Or transliterate the first syllable of Tibetan words, use Naxi native morphemes for the second syllable, and use Tibetan morphemes for the third and fourth syllables, which appears very special. c) Transliteration with Naxi language morphemes: The most commonly used loanwords are single syllable and double syllable translated words from Naxi language morphemes. One type is transliterated morphemes with additional Naxi language morphemes; Another type is Tibetan morphemes that are transliterated from Naxi language morphemes. d) Sound and meaning balance: That is, using Naxi language morphemes that are close to the meanings of Tibetan words for transcription. e) Borrowing translation: Translate directly according to the morphological structure and word formation principles of Tibetan words.

1.4.

In short, Tibetan words borrowed from Tibetan in Naxi manuscripts are usually generated through four methods: transliteration, free translation, phonetic semantic translation, and transliteration with affixes and borrowing. After entering the Naxi written manuscripts and spoken language, these words have undergone a certain degree of Naxi transformation, basically integrating into the Naxi language's literature and oral vocabulary system and pragmatic expression system.

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Phonemic and Phonetic variation in Mundari

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In this paper we analyse the phonemic and phonetic variation attested in Mundari dialects (Hasda and Naguri) spoken in Jharkhand. Mundari belongs to Kherwarian group of the North Munda branch of the Munda language family. It is mainly spoken in Jharkhand and also by scattered populations found in neighbouring states like Madhya Pradesh, Chhattisgarh, Odisha, West Bengal, as well as in Assam and Tripura. Mundari has four alleged dialects: Hasda, Naguri, Tamaria and Kera Mundari (Hoffman, Vol.1, 1930-78:6). The first two do appear to have some systematic differences; this is unclear for the last two. In this paper we will discuss three points: First, what lexical and phonological differences are there between the Hasda and Naguri dialect? Second, phonological variation is extremely frequent in the speech of individual speakers of the two dialects. We correlate these variations with social parameters such as age, gender, and the influence of education and migration (Dorian 2001, 2010). We examine what degree of idiosyncratic variation pops up with homogeneous and heterogeneous speaker populations in rural vs. urban settings of the individual dialect speakers. Third, we examine ways in which the variation presents a challenge for consistent transcription and orthography design, development of standardized educational and reference materials and so on.

With respect to point one, we have observed noticeable dialectal differences between Hasda and Naguri which include the phonological form and syllable structure of certain cognate lexemes and aspiration of initial voiceless consonants. For example, some Hasda monosyllabic words whose structure is CV in Naguri is realized as CVhV (1). However, the intervocalic ‘-h-’ in some tokens is old within Munda doho ‘keep’ and boho ‘head’ but in other contexts it is a secondary development (e.g., san vs. sahan ‘firewood’), so there is no simple explanation for these correspondences. Santali also shows irregular correspondences to the Naguri forms, but these do not match the Hasda forms consistently either. Moreover, Kherwarian languages and dialects are not sufficiently documented so at this point we are unable to give secure information about the historical changes and paths of development to explain these correspondences. Also, aspiration is attested in monosyllables and in both the first syllable or second syllable in disyllabic words and second syllable in trisyllable words (2). Here, interesting fact is that aspiration is not contrastive and systematic in these two dialects, and only partly reflects Indo-Aryan borrowings or contact influence but there is no systematicity to the appearance of aspiration in Naguri, thus it appears to be a random strengthening of voiceless obstruents to make them more perceptually salient. In addition, we have noticed significant variation between younger and older generations of consultants across and among the two different ‘dialects’. For example, we find variation

between final -b and final -m in Naguri monosyllables, the latter of which results in a neutralization of the phonemic contrast -b -m that is otherwise still an extant and salient opposition in all Mundari varieties (3). There is significant variation in the speech of consultants representing both dialects with respect to the treatment of glottal stop in word-final position, which varies with pronunciations entailing a copy vowel in both underlyingly monosyllabic and disyllabic words, creaky voice, amplitude dips or simply loss of the glottal segment entirely, which are thus variably realized as disyllabic and trisyllabic, respectively (4). These changes of course impact the phonetic realization of individual lexemes and do not effect phonemic structure per se. Nevertheless, both types of changes impact standardization and preparation of educational or reference materials, as decisions would have to be made as to what the citation form to be included in dictionaries or textbooks should be, since the variation is both largely unpredictable as to when and who uses which variant and moreover is widespread across generations (Dorian 2001, 2010). Data for the study were recorded in four contexts in isolation, in a sentence frame, in an out of focal frame and a contrastively focal frame and also Hoffmann (1930-78). We also examine in this presentation the variation that occurs due to both individual speech and/or due to the potential adjustment of the sounds in the other contexts of elicitation.

(1).	<u>Hasda</u>	<u>Naguri</u>	<u>meaning</u>
a.	baa	baha	'flower'
b.	maa	maha	'last year'
c.	san	sahan	'firewood'
d.	do(o)	doho	'to put down'
e.	i(i)m	ihim	'liver'
f.	iil	ihil	'feather'
g.	bo(?)	boho(?)	'head'

(2) aspiration

<u>Hasda</u>	<u>Naguri</u>	<u>meaning</u>
tol	t ^h ol	'to tie'
tʃaba	tʃ ^h aba	'finish'
tʃaka	tʃak ^h a	'to taste'
madukam	mad ^h ukam	'mahua (Madhuca indica)'

- (3) Naguri neutralization of -b#/-m# > -m#; but -b : -m preserved in Hasda monosyllables
 ub 'hair' > um 'to bathe'
 sab 'catch' > sam 'level ground'
 hab 'gnaw' > ham 'old man in Ho Language'

- (4) Potential Re-syllabification, creaky voice or glottal loss
 ti? > tiʔi 'hand'

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Inter-genetic Contact Induced Changes in Dhimal

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1. INTRODUCTION

Dhimal or Dhemal (ISO 639-3: dhi) is a Tibeto-Burman language spoken in both the countries, Nepal and India. The same language of the two countries has developed into two different varieties due to the geographical difference and different linguistic surroundings. UNESCO (2010) marks Dhimal as a “severely endangered” language. Dhimal refers to both the language and the community. There is hardly any detailed linguistic study on Indian variety of Dhimal. Though Nepali variety of Dhimal has received some academic attention. There is a grammar on Dhimal of Nepal variety by King (2009). The present paper discusses the contact-induced changes found in Indian variety of Dhimal. The contact induced changes are interesting in the case of Dhimal because they are inter-genetic. Dhimal in India is spoken in Darjeeling district of West Bengal. Major languages of this area are Bangla and Nepali both of which are Indo-Aryan languages. Due to major influence of Bangla, massive borrowing of lexical items of every word class from Bangla to Dhimal can be witnessed. These borrowings have not only effected the open class of words but also have brought change in the morpho-syntactic pattern of the language. The present study is based on primary data collected from the Dhimal speakers of India.

1.1. LINGUISTIC BACKGROUND

Dhimal has SOV word order. Indian variety of Dhimal has around 10 primary vowels and 22 consonants. Neither tone nor vowel length was identified in this variety. The phonology of the language has been highly contaminated due to close contact with Bangla (BN). Lots of borrowings can be witnessed in body part, festival and food related terms. Nouns generally take inflection for case and classifier in Dhimal (DH). Dhimal does not have gender or number markers which are compensated by the classifiers.

2. BORROWING IN DHIMAL

In Dhimal direct loan and loan-blend can be found. Direct loan is when a word is borrowed as it is with or without minor phonological changes (e.g. /ul/ (BN) to /uli/ (DH)). Loan-blend is when one part is the borrowed lexical item and the other part is the native word, e.g. *prvtibe: n* (Parvati-Female); /*prviti/* is a Bangla/Hindi

- a. *kaŋ-ko* *sa* *pahar-ko* *ruṭa*
 I-GEN house hill-GEN top
 My house is on top of the hill.

Verbs in Dhimal take marking for person and Tense, Aspect and Mood (TAM). Suffixal inflection is identical for all the verbs and expresses TAM, evidentiality and person agreement with the noun phrase.

- b. *ka* *hanaŋ-ka*
 I go-1SG.PRS.CON
 I am going.

name of a female Goddess which has been borrowed but the word /be:n/ is a Dhimal word used for females (Lahiri 2018).. In Dhimal the word /prvti/ never occurs in isolation but is used as /prvti-be:n/ which means, the female Goddess Parvati. As it is known that open word classes (nouns, verbs, adjectives, adverbs etc.) are more easily borrowed than closed word classes, in Dhimal direct loan words can be categorized as nouns, verbs, adjectives and adverbs. Words which are borrowed due to acculturation of the community carries cultural aspects of the donor language to the recipient language and these are called Cultural borrowing (Appel & Muysken 2005). Lots of such borrowing from Bangla in Dhimal can be found. Borrowed words when used in Dhimal sentences get attached to Dhimal affixes. Like the following example, where the root verb is Bangla but it is attached to Dhimal affix for third person agreement and mood. It is also interesting to note that the following (“elk lgi-ke”) is a conjunct verb (Noun + Verb) construction where the noun is in Dhimal but the verb is Bangla root with Dhimal suffix.

- c. *um* *elka* *lgi-k^{he}* (*laga* in Bangla)
 rice like feel-3.HAB
 (He/she) like rice.

We also find similar sentences with ECV constructions where one part is in Bangla but other part is in Dhimal. The present study is not only focusing on the fact how Dhimal is replacing its lexicon with Bangla items but also exploring the structures where contact can bring changes easily in endangered languages while there are structures which are retained for a longer time, like here the affixes are retained but the roots are being replaced.

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Linguistic Attitudes of Assamese speakers: an inter-dialectal study

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1. INTRODUCTION

Speakers of the four dialects of Assamese— a major Indo-Aryan language spoken in north-eastern India, viz., Standard Assamese, Central Assamese, Kamrupi, and Goalparia are mutually intelligible. However, there seems to be an asymmetry in the rates of mutual intelligibility between the speakers of the two western dialects of Kamrupi and Goalparia and the Standard and Central Assamese dialects. Functionally, the speakers of the western dialects are less intelligible to the speakers of the Standard Assamese, spoken in eastern Assam, and Central Assamese dialects than vice-versa. What, then, are the linguistic attitudes of the speakers of each of these dialects towards the speakers of the other dialects? Are the dialects mutually intelligible in the opinions of their native speakers? This study attempts to find an answer to this question.

1.1 METHODOLOGY

This study conducts an inter-dialectal Opinion intelligibility testing of the speakers of Assamese. Opinion intelligibility testing involves “asking the informant” as opposed to “testing” them and enables a quick understanding of listeners’ subjective ideas about a language. In this study, 12 varieties of Assamese (3 from each dialect) spanning from the east to west of Assam were considered, and 24 speakers (1 male and 1 female speaker from each dialect) recorded ‘texts’ in their native varieties of Assamese. These included a) words, b) sentences, c) connected speech samples, and d) free speech samples. As part of the Opinion intelligibility testing, 132 listeners from the four dialects were asked to listen to these recorded texts and rate the speakers on i) Ease of understanding, ii) Quality of pronunciation, and iii) Quality of voice. They were also asked to score the speakers on the Overall listening experience. For each speaker, 11 listeners belonging to a non-native variety of Assamese listened to their recorded texts.

1.2 FINDINGS

The collected data showed that native speakers of Assamese rate the speakers of the Standard and Central Assamese dialects higher than those of the Kamrupi and Goalparia dialects—both dialects with variations from the accepted standard dialect, on all the four features. In their opinion, speakers of the Standard and

Central Assamese dialects were more intelligible. The results also pointed towards some linguistic biases that seem to exist amongst the speakers of the different dialects of Assamese. There was an observed bias against the speakers of the two western dialects i.e., Kamrupi and Goalparia, not only amongst the speakers of the Standard Assamese and its neighbouring Central Assamese dialect but amongst the native speakers of these dialects themselves. Moreover, the native speakers of Assamese seemed to be of the opinion that female speakers of the language were more intelligible than the male speakers.

KEYWORDS:

Assamese, Dialect, Opinion intelligibility testing, Language attitudes, Linguistic bias, Sociolinguistics

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Contrasting ‘kintu’ as Discourse Connective and Pragmatic Marker in Assamese: A Relevance Theoretical Account

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INTRODUCTION

Relevance theory provides a framework for understanding the process of interpretation of utterances. It is a cognitively based theory based on the maximization of relevance. This means that a listener will look for the maximum improvement in their overall representation of the world (Sperber & Wilson, 1995). In a traditional sense, languages have broadly content words and functional words. However, there are also words within a language, mainly in a vernacular variety, which still need to be classified as either. The words within a language encode either a concept or a procedure. It means words in any language can be distinguished based on the meaning they encode. According to Sperber and Wilson (1993) a conceptual linguistic expression can include any open-class words like blue, table, or sky, which are consciously accessible to the speaker and the hearer. On the other hand, there are words which guide the process of interpretation by imposing procedural constraints on the construction of intended contexts and cognitive effects. In English, discourse connectives such as ‘after all’, ‘but’, and ‘so’, among others, are linguistic devices that do not encode concepts but provide a directive or instruction on how the propositional contents that they connect are to be deployed within the inferential process of deriving implicatures, e.g. as a premise in the case of ‘after all’, as a conclusion in the case of ‘so’. (Carston, 2016)

THE ISSUE: KINTU

For this paper, the analysis element is ‘kintu’ in Assamese. It is a conjunction to show contrast, and ‘but’ in English can be considered its equivalent. The meaning, function, and interpretation of ‘kintu’ will be given for its two manifestations, i.e., as a traditional conjunction or discourse connective in an utterance and as a pragmatic marker that occurs as a sentence-final particle or medially within an utterance. Consider the following,

- 1) *moi ghoroloi zam kintu etija nohoi*
1SG home-DAT go.FUT but now not
I will go to home but not now.
- 2) *moi ghoroloi zam kintu*

1SG home-DAT go.FUT PM¹

I will go home

3) moi **kintu** ghor-loi zam

1SG PM home-DAT go

I will go home

Although the realizations of both forms of ‘kintu’ are the same phonologically, the interpretation of both forms differs. In (1), ‘kintu’ acts as a discourse connective which encodes a procedural meaning of elimination of an assumption given previously. In (2), ‘kintu’ encodes the speaker’s desire for the hearer to fully recognize the informative intention behind the utterance, which guides the hearer to construct certain higher-level explicatures. Explicatures are defined as developments of the logical form of the phrase or sentence uttered. Higher-level explicatures are explicatures developed on the basic-level explicature, for example, by embedding it under a speech-act description (Allott, 2010). Thus, considering (2) again, it can be paraphrased to express a meaning like “I am certain that I will go home.” Similarly, (3) can be paraphrased as “I will surely go home.”

THE RESOLUTION

According to the communicative principle of relevance, “Every act of ostensive communication communicates the presumption of its own optimal relevance.” (Sperber & Wilson, 1995). In spoken communication, utterances have ostension and underlying assumptions. The act of verbal expression itself implies a guarantee of relevance, making the listener readily accept the conveyed information. When someone speaks, the audience typically trusts the implicit significance and relevance of the utterance. Following the analysis of ‘yo’ in Japanese by Matsui (2000), the paper argues that the two manifestations of kintu as a pragmatic marker convey meaning procedurally, i.e. kintu does not encode any conceptual meaning but is a procedural constraint on utterance interpretation. Also, kintu contributes to a higher-level explicature by constraining the speaker’s attitude.

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Relativization Processes in Assamese and Manipuri

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A Relative clause is a type of complex clause construction where there are two clauses in a sentence- main clause and subordinate clause. One type of subordinate clause is a relative clause. Our work aims to analyze the syntactic and morphological features of the Relative Clause Constructions (RCC) in two distinct languages, Assamese and Manipuri; Assamese, spoken in Assam is a language that belongs to the Indo-Aryan language family. The Manipuri language, also known as Meitei or Meiteilon is a Tibeto-Burman language that is spoken in Manipur.

The two languages follow distinct processes of relativization and the present paper is an attempt to –

i. Analyse relative and correlative construction in Assamese. Assamese relative clauses are always in [-finite] form and main clause carries the tense, whereas in the correlative constructions both the clauses are [+finite]. Assamese main and subordinate clauses in correlatives employ relative pronouns in both the clauses, and they are found to be co-indexed.

ii. Show that in Manipuri the verb undergoes a process of nominalization to form a relative clause. The fundamental relativization pattern is same throughout the TB language family: relativization is a subspecies of clausal nominalization (Singh, Madhubala, 2018)

1.1 Relative Clause Construction in Assamese

Non-Finite relative clauses are available in all Indo-Aryan languages (Bhatt, 2003). The majority of Indo-Aryan languages, including Assamese, employ both relative and correlative clauses. Relative clauses are always pre-nominal in Assamese. As suffixes to the verb, the language uses the non-finite (NF) markers /-a/ and /-i/ to form a simple or non-finite relative clause, and no relative pronoun appears in sentences that have NF relative clauses.

1. **Nilā sula pind^h-a suali-dʒɔni d^hunia**
blue dress wear-NF girl-CLF beautiful
'The girl who is wearing a blue dress is beautiful.'

In the example (1) *nila sula pind^ha* 'who is wearing a blue dress' is a non-finite relative clause that is relativizing the head noun /suali-dʒɔni/ 'girl'. In this case, the relative clause has a NF marker /-a/ suffixed to the verb /pind^h/ 'wear' and the main clause is carrying the tense.

1.2 Relative Clause Construction in Manipuri

The Manipuri language uses the nominalized markers /-pə/ and /-bə/ as suffixes with the nominalized verb, and it has been observed that these markers are phonologically conditioned. However, in Manipuri prenominal & postnominal both relative clauses are possible.

- (2.a) Tombə-nə kolom əmə ləy-rək-pə du məcanupi-nə ləw-khre
Tomba-NOM pen one buy-DTC-NZR DET daughter-SPEC take-ASP
'The pen that Tomba bought was taken by his daughter.'

In (2.a), the head noun /kolom/ 'pen' is internal to the relative clause. The embedded verb /ləy/ 'buy' has been nominalized in this relativization process and is followed by two suffixes. The nominalization marker /-pə/ comes after the directive marker /-rək/.

- (2.b) suməŋ -də sanəri-bə əŋəŋ ədu əigi icanupi ni
courtyard-LOC play-NZR child DET my.GEN daughter-COP
'The child playing in the courtyard is my daughter.'

In (2.b) *suma-dəsan-bə* 'that is playing in the courtyard' is the relative clause that is modifying the head noun / əə/ 'child'. In this case, the embedded verb /san-bə/ 'playing' undergoes the nominalization process where nominalized marker /-bə/ is suffixed to it.

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A Sociolinguistic Account of Avoidance Speech in South-Dravidian

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This paper intends to study avoidance speech or avoidance registers, mainly focusing on South-Dravidian languages (Tamil, Malayalam, Telugu, and Kannada). South-Dravidian languages do not have the presence of near-homophone avoidance as observed in Datooga (Mitchell, 2015); however, they do mark the presence of hlonipha, similar to the Zulu and Xhosa sociolinguistic landscape as discussed in (Prabhakaran, 1998). Firstly, this paper attempts to expand on the presence of hlonipha by drawing parallels from examples of all four languages. Various sociocultural categories like kinship, caste, and gender across these languages are analysed, and their subsequent relevance to this linguistic phenomenon is discussed. Simultaneously, the concept of avoidance relationship (Mitchell, 2015) in the languages above is explored and discussed in opposition to the idea of jocular relationship and their influence on avoidance vocabulary. The study is divided to maximize the data utility by incorporating various relationship asymmetries. To analyse generational variations in avoidance registers, three distinct agegroup divisions are made: 18-30, 35-55, and 60-above. The five-year gap between the age groups helps neutralize overlapping generational dialects. Twenty subjects are equally balanced by gender within each age group to account for variations dependent on gender. The total number of participants for the main study is 60 for Malayalam and Tamil. The participants are given a questionnaire that tests their lexical repertoire for avoidance relationships. For avoidance registers concerning life events, such as verbalization of death, the data elicitation relies primarily on the existing literature and spoken records of native speakers. The pilot study included a sample size of 20 speakers from all four Dravidian languages. The participants were predominantly Tamil and Malayalam speakers; Telugu and Kannada speaking demography was relatively lesser in number due to the speaker availability. A questionnaire was prepared to elicit avoidance registers in in-law relationships. The participants were between 18 and 30 years of age. However, the data elicited comprised variables in the daily speech of their parents, who were between 40 and 60 years old—the survey aimed to access details of intergroup behaviour prevalent in the linguistic sphere. The data elicited displayed strong evidence for respect markers in marital relationships and name avoidance in in-law relationships. Such avoidance behaviour is predominantly restricted to the social positioning of women and is expected to transcend to a much larger demography. In the last segment, the different types of avoidance speech are introduced and discussed, along with observing some semantic, morpho-phonological, and lexico-grammatical changes. The data collection and analysis will reference cross-generational and urban-rural distinctions. There is an attempt to ascertain and theorize how such patterns are conventionalized as they can be carried across dialects or even much larger

demography conditional to the communicative repertoire and the sociolinguistic diversity. Some brief comments on the ideologies that help construct avoidance registers and the discourse on the social function of avoidance speech in the said languages follow and round up the discussion.

KEYWORDS: Avoidance Speech, Avoidance Registers, Avoidance Relationship, Hlonipha, Taboo Motivated Language Change, Pragmatic Constraints.

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Bodo adjectives: A structural analysis

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Bodo language is one of the 8th schedule languages of India and mainly spoken in the North- Eastern parts of India as well as in neighboring countries like Nepal and Bhutan. The language is originated from Tibeto-Burman group of greater Sino-Tibetan language family and the people belong to Mongoloid family. The term 'Bodo' is used to mean the language as well as the group of people. The Bodos regarded as Plains Schedule Tribe in India. They have their beautiful traditional culture. According to the Census Report of India, 2011 the total Bodo population is 14,82,929 and the largest Tribal group in Assam.

In this paper structure of adjectives will be discussed. The term Adjective is used in the grammatical classification of words to refer to the main set of items, which specify the attributes of nouns. (Crystal 2008:12) The adjective covers a large area in Bodo vocabulary. There are many adjectives in Bodo, which are used very frequently by the speakers. Bodo adjectives are different to that of Indo-Aryan languages. Generally, in Aryan languages the adjectives are primary in form. But maximum Bodo adjectives are derived either from verbs or from noun. There are only a few adjectives which are primary or basic in form. In this paper, an attempt has been made to discuss the structure of adjective thoroughly with necessary examples. For better discussion the process of adjectivalization can be discussed under two heads- a. Basic or Primary Adjectives b. Derive Adjectives

BASIC OR PRIMARY ADJECTIVES

The basic or primary adjectives are those which can indicate the quality of noun independently. In Bodo, there are only a few numbers of primary adjectives e.g.- mza (good), gazri (bad), aduwa (fool), lasi (slow), siri (silent), zrkha (particular) etc. which are very limited in comparison to derive adjectives.

DERIVE ADJECTIVE

The derive adjective are those adjectives which are derived from either noun or verb and this can be done either prefixation or suffixation. There are lots of derived adjectives in Bodo. For better discussion the derived adjectives are categorized into two categories- a. Denominal Adjective b. Deverbal Adjective

DENOMINAL ADJECTIVE

The denominal adjectives are those which are derived from nouns by suffixation only. The -ari, -ri, -i, -dakha, -bra, -brɔ, -su are the denominal adjective denoting suffixes which comes with a limited number of nouns. E.g.-

(a) *be sɔlɔ-wa zarimin-ari*
this story-NOM history-ADJLZ

(*This story is historical.*)

(b) *haina-ri sik^hla-ja musa-duŋ*
beauty-ADJLZ girl-NOM dance-CONT
(*The beautiful girl is dancing.*)

(c) *mansi-ja zubur udk^har-i*
man-NOM very tyranny-ADJLZ
(*The person is very tyrant.*)

DEVERBAL ADJECTIVE

The deverbal adjectives are those adjectives which can be derived from verbs either by prefixation or suffixation. There are lots of adjectives which can be derived by prefixation in Bodo. The only prefix is g- and it takes different form due to regressive vowel assimilation i.e.- ge-, gi-, gu-, ga-, g-

gɔ-p^hur > gup^hur

gɔ-law > gulaw

gɔ-der > geder

gɔ-ham > gaham

gɔ-lir > gilir

There are many deverbal adjective denoting suffixes in Bodo. These suffixes are- -sula -suli, -lu, -sia - dia, -khe, -khr, -brm, -rm, -ru, -ra, -re, -khr, -thaw, -kh, -thi, -gb, -geb, -kheb, -khreb, -the, -tha -thu, -thab, -d, -gew, -db, -dem, -dm -de, -phru, -brud, -haw, -br, -bra, -thu, -sib, -le, -slid, -dla -dli, -lu, - phd, -sla, -g-thi -kh-thi, -ga and -na. e.g.-

- (a) *sik^hla-ja* *zubur* *t^hɔgai-suli*
girl-NOM very deceive-ADJLZ
(The girl is very deceiver.)
- (b) *seŋgra-ja* *ba-dula*
Youth-NOM be idle-ADJLZ
(The youth is idle.)
- (c) *sanduu-a* *sa-se* *baw-dia* *mansi-mun*
sanduu-NOM CLF-one forget-ADJLZ man-was
(Sanduu was an absent-minded man.)

From the above discussion it is clear that there are only a few primary adjectives, and the rest are derived. The derived adjectives are derived either from noun or verb. The number of denominal adjectives are less than that of deverbals. Therefore, adjectives can be discussed under verbal head in Bodo. Though the Bodo adjectives are structurally verb but functionally they are nominals. They can take case suffixes, plural suffixes and other nominal suffixes. This paper will clarify the structure of adjective in Bodo as well as its use in the language.

Language Ideologies and the Decline of Expressives: An Ethnographic Study in Urban Shillong

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INTRODUCTION

Expressives are one of the most salient features of the world languages, with minor exceptions in a few dominant European languages (Nuckolls 2010). Khasi, a language spoken in the northeastern state of Meghalaya, India, is one of the many Indian languages that exhibit a rich inventory of context-specific expressives. For instance, there are almost fifty-nine words related to the mannerisms of walking in Khasi (Abbi 2020). While discussing expressives with people in Shillong, a similar pattern was observed in responses concerning an apologetic stance over one's selective knowledge of expressives. As evident in the following excerpt: "No, I am sorry for myself that I don't know, I should learn, I should know them, I should know these words especially. . . . I don't take interest to make my own language rich" (S, personal communication, December 15, 2023). I did not know how to reply to this statement when S, a 56-year-old lady, expressed her concerns about unfamiliarity with few expressives during one of our many conversations throughout the course of fieldwork in Shillong. The motivation for this research lies in the fact that expressives are still part of everyday interaction in smelling and speaking verbs despite being either reported as declining in the extant literature (Abbi 2020; Nagaraja 2002) or conceptualised as a separate aesthetic component of grammar (Diffloth 1979). Similar anthropological and sociolinguistic studies in African and Amazonian contexts indicate socio-economic and cultural shifts due to Western influence on indigenous languages and the loss of rural/traditional lifestyles (Childs 1996; Nuckolls 2010). Expressives remain ubiquitous in dominant Indian languages like Hindi, Bangla, and Tamil (Badenoch & Choksi 2020), as well as other Austroasiatic languages of eastern India like Mundari and Santali (Badenoch et al. 2019). However, unlike these languages, Khasi suggests a different scenario with a reported decline of expressives among younger generations. To understand how Khasi speakers view expressives as 'folk-theorists' (Kroskrity 2022), I explore the various ways they perceive these words, ranging from everyday language use to metapragmatic beliefs. Consequently, this research interprets one's conceptualisation of expressives from the language ideology framework by analysing the iconic (Irvine & Gal, 2000) link between expressives and certain social types. Given the multilingual setting of Shillong, this study incorporates and extends the contact-induced language ideologies framework (Kroskrity 2022) to explore why urban Khasi speakers subscribe to the standard Sohra variety when encountering unfamiliar expressives. This particular framework exhibits the identification process

displayed by multilingual practices such as compartmentalisation. For instance, urban Khasi speakers compartmentalise the knowledge of expressives and other aesthetic words as a separate aesthetic component; they attribute it to the old, rural, illiterate and monolingual settings. This reifies Diffloth's (1976) argument for aesthetic grammar to study expressives as a separate word class from prosaic language based on its distinct linguistic properties. To understand why Khasi speakers consciously categorise expressives as a separate component of language and attribute it to a narrative of loss in cultural value, this study draws on Meek's (2007) idea of linguistic competencies being assessed on one's social positioning reinforced by one's authority over indigenous knowledge. Subsequently, the impact of Sohra as a standard variety and its iconic association with expressives in the urban context seems to stem from the role of literacy in the reduction of the regional varieties (Muhlhausler 1996) in those societies which saw a transition from a rich oral tradition to one marked by a single standard variety used for the Christianisation of the masses. Moreover, within the intricate ideological landscape of Khasi expressives, various conflicting ideologies position these words as both indexical of rural contexts and iconic of the Sohra variety. Although spoken in urban settings, Sohra is considered emblematic of rural and 'pure' Khasi. This presents a disjuncture between everyday linguistic practices and their ideological reconstructions, which informs our understanding of the sociolinguistic dynamics of a given landscape.

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The Multifaceted Uses of Language as a Tool in Assessing Cognition

*Language Variations, Psychiatric Illnesses, Linguistic Levels, Cognition,
Language Rating Scales, Therapy Tool*

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1. INTRODUCTION

The interdisciplinary engagement of linguistics with that of neuroscience is an intriguing area of study where language and cerebral activities are analysed in detail. Earlier, the major focus was given to the structure of language. But today, the range of language and its application has opened plenty of opportunities in the field. The technological advancements aided in studying language more scientifically i.e. language comprehension and production inside the brain. Thus, enabling Listening, Speaking, Reading and Writing (LSRW) activities to be electronically represented using various technologies like EEG, fMRI, and MEG. It is in this context that language anomalies due to brain injuries, internal or external, are studied. This paper elaborates our investigation into the intricate mechanisms of dysfunctional cognition following language errors, and language is used as a tool to identify the cognitive capacities of an individual.

1.2. FORMATION OF LANGUAGE INSIDE THE BRAIN

Barbara Lust (2006) says that ‘the acquisition of our first language is a silent feature.’ Since it is silent in nature, children without any major issues (mental or physical challenges) are born with an inherent capacity to produce complex constructions. The primary sections inside the brain named ‘Broca’s area and Wernicke area’ are revolutionary discoveries in the field. Both of these parts particularly deal with language and its functions. The region, known as ‘Broca’s area’ is critical for language production and comprehension. It helps to determine the importance of motor movements that permit speech (Stinnett, T. J., Reddy, V., & Zabel, M. K., 2018). ‘Wernicke area’ pertains to the comprehension of written and spoken language (Javed, K., Reddy, V., Das, J. M., & Wroten, M., 2023). These discoveries have established the association between language and the brain. The investigation of illnesses that involve broken language is an extensive field of study that has piqued the curiosity of scientists and scholars. This topic entails a thorough examination of how language and psychological well-being interact, providing invaluable insights into the intricacies of psychiatric illnesses by using language as a clinical marker.

1.3. LANGUAGE AND PSYCHOLOGICAL RESILIENCE

People suffering from disorders like Aphasia ³, Dementia ⁴, Traumatic Brain Injuries ⁵, and Parkinson's Disease ⁶ always struggle with their communication. The incapacities of such people are reflected in their thoughts, speech, listening, and writing. While the causes of these diseases are different from each other, the effect on language is the same. All of them fail to maintain effective communication which makes their daily lives difficult. This is where we try to put forth the possibilities of language as a clinical marker as well as a therapy tool. Here, the language used by various patients is examined and the common errors that occurred at the linguistic levels are found and later compared with the errors made by non-patients. Finally, we attempt to come up with a language-specialised tool (common patterns that are exclusively followed by patients) to detect the degree of cognitive skills the individual possesses and thereby help them in language re-acquisition.

1.4. RESEARCH OBJECTIVES

The below-mentioned statements are further studied and analysed in the course of understanding language as a universal tool to detect neurological aberrations and evaluate cognitive levels.

- The intervention of language as a clinically supported system.
- The role of therapeutic communication in the field.
- The need for a native language rating scale.
- A language rating scale based on distinct variables (age and gender).
- The inclusion of multidisciplinary approaches/techniques that combine Linguistics and Psychology.

1.5. Conclusion

The comprehension and production of language at various linguistic levels (Phonology, Morphology, Syntax, Semantics, and Discourse) are graphically scrutinised using advanced technologies. Language and the way it operates inside the brain (activity) can be studied as we listen, speak, read, or write. Along with other functionalities, language has a clinical attribution which could be utilised

³ Difficulty in creating words and grammatically correct sentences

⁴ Weaker verbal expression along with semantic deficiency

⁵ Poor verbal communication

⁶ Dysarthria

by medical professionals ⁷. Therefore, patients with impaired language, exhibiting different linguistic errors, are studied.

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⁷ The nature of language is multifaceted. Other than the structural faculties (phonetics, morphology, syntax, semantics, and pragmatics) of the language, the application of language in various fields is now in demand. For instance, computational linguistics, cognitive linguistics, neurolinguistics, etc.

The West Bengal Variety of Bodo: A preliminary contrastive study

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1. INTRODUCTION

This paper presents a preliminary contrastive study of the variety of Bodo spoken in West Bengal, specifically in the district of Alipurduar, and the Standard variety of Bodo spoken mainly in Kokrajhar, Assam. Bodo, also known as Boro, belongs to the Bodo-Koch group within the Tibeto-Burman or Trans-Himalayan languages (Burling 2003). Bodo speakers are mostly found in the Bodoland Territorial Region (BTR), Assam. However, small pockets of Bodo speakers are found across the state, in the neighboring states of Meghalaya, Arunachal Pradesh and West Bengal, and across the national borders in the neighboring countries such as Bangladesh and Nepal.

2. PREVIOUS WORK ON BODO DIALECTS

Existence of different geographical speech varieties of Bodo is well known among the speakers as well as linguists who worked on the language. Previous literature on Bodo suggests different numbers of dialects. Bhattacharya (1977) and Baro (1990) have each suggested four distinct dialects of the language: (i) the speech variety of Goalpara and southern Kamrup (Southwest variety), (ii) the speech variety of Kokrajhar, Bongaigaon and Chirang (Northwest variety), (iii) the speech variety of Darrang and Lakhimpur (North-central), and (iv) the speech variety of Nowgaon, Dima Hasao and Karbi Anglong (Southern variety). Basumatary (2006) proposed three dialectal varieties: Western (spoken in Kokrajhar, Dhubri, Bongaigaon and Chirang), Eastern (which stretches from Barpeta in lower Assam to Lakhimpur and Sibsagar in the upper Assam), and Southern (spoken in Goalpara and parts of Kamrup district). Aside from Basumatary (2006), there is no extensive work on the comparison of dialects of Bodo. Basumatary provides phonological, lexical and morphological comparison of the three dialects mentioned. However, Basumatary's work was limited to the speech varieties of Assam. The speech varieties outside Assam were not considered. This study investigates the speech variety of West Bengal and compares it with the speech varieties of Assam, in particular the Standard variety spoken in Kokrajhar, Bongaigaon and Chirang. This paper looks into phonological, lexical, morphological and syntactic variations between the dialects.

3. THE WEST BENGAL VARIETY

The variety of Bodo under consideration is spoken in the district of Alipurduar, West Bengal. The speakers call themselves Mech, which is also how other communities refer to them. However, they call their language Bodo. There is not much work on this variety. Kiryu (2008) mentions this variety in his work on Meche of Nepal and observes that this variety is more similar to the Meche variety of Nepal than to the Bodo varieties of Assam. Samy (2011) provides a brief grammar sketch of the variety. Muchahary (2014) presents some lexical variations between the Standard variety and the West Bengal variety. Data is collected from a village called Uttar Mendabari. Two more Mech villages are located nearby, namely Dakshin Mendabari and Sathali. The Mech population in these villages will be around 1600 people. They speak Mech as their first language and use it among themselves to communicate. They are also fluent in Bengali, which they use for wider communication. A wordlist and narratives are collected for this study.

4. SOME OBSERVATIONS

The variety of Bodo spoken in West Bengal is found to be quite intelligible and very similar to the Standard Bodo. However, it stands out from the varieties of Bodo in Assam in several ways. In terms of phonology, it has many distinctive features, such as contrast between /s/ and /tʃ/, post-alveolar [ʃ] realization of [s], a retroflex series of consonants, and a prominent glottal stop. In terms of the lexicon, it also has many distinct lexical items, such as boʔdol ‘bat’ (badamani in Standard) and bip^ha baθul ‘step father’ (bip^ha godai in Standard). It also has many interesting grammatical features. One such feature is the affirmative interpretation of what would be interpreted as negative in the Standard as shown in (1). The suffix -ak^hui is a negative perfect in the Standard, whereas it is interpreted as affirmative in the West Bengal variety.

- (1) *aŋ* *baθun-ak^həun* *de-jak^hui-mun*
 1SG chutney-ACC grind-PRF-PST
 I had grinded some chutney. [brx-240112-02-narrative:31:59]

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Microvariation in the distribution of /o/ in the varieties of Odia

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1. INTRODUCTION

This paper revisits the claim by Mohanty (1987)¹ that the back mid-round vowel /o/ has disappeared in Northern Odia. In this paper, we claim that the vowel /o/ shows distinction not just in the Northern variety but also in other varieties of Odia. For the current study we are considering Katki (Kt) and Sambalpuri (Sb). Both the varieties show the same vowel repertoire of /i, e, a, ə, o, u/ (Pandey 2006, Sahu 2001). We are looking at the distribution of /o/ in case of disyllables in Kt and Sb. In case of Kt, the initial syllable licenses /o/, whereas in Sb, /o/ is restricted to the final syllable.

Katki:

V	CoCV	CVCo
u	go.ru 'animal'	-
ɔ	go.ɔ 'leg'	-
a	go.ra 'fair'	-
e	jo.ɔ 'pair'	-
i	go.ri 'fair.F'	-
o	-	-

Sambalpuri:

V	CoCV	CVCo
u	-	bu.ro 'a kind of berry'
ɔ	-	sɔ.po 'slurping sound'
a	-	pa.lo 'a dish'
e	-	ge.bo 'stupid'
i	-	si.o 'apple' ²
o	-	-

2. Cognate observations

A comparison of cognates between the two varieties shows that Kt [o] in initial syllable corresponds to Sb [u] and Sb [o] in the final syllable corresponds to Kt [u].

Katki	Sambalpuri
go.ra	gu.ra
Sambalpuri	Katki
³ se.o	se.u

The expected [u] in Sb surfaces as [ɔ] when followed by a [u]. This shows that in addition to the constraint *oo (do not have two consecutive o-s), Sb also has an active constraint *uu (do not have consecutive u-s).

Katki	Sambalpuri
goru	gɔru

3. Theoretical Analysis

3.1. Rule-based analysis

In assuming the underlying representation (UR) to be [o]⁴ for the above words, we are assuming that the cognates in the two varieties have a common UR for our comparative study.

UR	SR		Rule	Environment		Process
	Kt	Sb		Hypothesis 1	Hypothesis 2	
seo	seu	seo	o → u	Final σ	Non-initial σ	Raising
gora	gora	gura	o → u	Non-final σ	Initial σ	Raising
goru	goru	gɔru	o → ɔ	(C)u		Lowering

3.2. Constraint-based analysis

Markedness:

*o]_{σ1}: do not have [o] in the initial syllable

*o#: do not have [o] in the final syllable

*u-u: do not have consecutive [u]

*o-o: do not have consecutive [o]

Faithfulness:

Ident-[high]: The specification of the feature [high] of the input must be preserved in the output.

Ident-ATR: The specification of the feature [ATR] of the input must be preserved in the output.

Kt:

Input	Winner	Loser	*o-o	*o#	Ident-high	*o] _{σ1}	*u-u	Ident-ATR
seo	seu	seo		W	L			
gora	gora	gura			W	L		
goro	goru	goro	W	W	L			

Sb:

Input	Winner	Loser	*o-o	*o] _{σ1}	Ident-high	*o#	*u-u	Ident-ATR
seo	seo	seu			W	L		
gora	gura	gora		W	L			
goru	gɔru	guru					W	L

4. Discussion

The six-vowel repertoire of Odia (Pandey 2006) is asymmetrical with a two-way height distinction at the front between [i] and [e], corresponding to a three-way height distinction at the back between [u], [o] and [ɔ].

	Front-unrounded	Central-unrounded	Back-rounded
High	i		u
High-mid	e		o
Low-mid			ɔ
Low	a		

The current study proposes that the destabilizing [o] makes the repertoire more symmetrical with 2-way distinction in both front and back by neutralizing to its high or low counterparts.

5. Experiment

Design: A pilot Syllable transposition game is conducted followed by a judgement task wherein the participants were asked to confirm if the resultant transposed word is a potential word in their respective varieties. Following is the design of the experiment:

Familiarity set		Game Set			
CVCV		CVCV		CVCVCV	
CaCi	CiCa	CuCo	CoCu	CuCaCo	CoCaCu
CuCi	CiCu	CiCo	CoCi	CeCaCo	CoCaCe
CiCe	CeCi	CeCo	CoCe	CiCaCo	CoCaCi
CeCa	CaCe	CaCo	CoCa	CaCaCo	CoCaCa
CaCu	CuCa	CoCo		CoCaCo	CuCuCo

The experiment has 2 aims:

- Confirm if the raising/lowering is synchronically productive.
- As lexical trisyllabic words are either morphologically or phonologically derived, the experiment explores how the process applies to trisyllables.

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(Ir)reality through indicative and imperative: The case of Tangut
within Gyalrongic

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As with many Qiang languages (Sun 1982, 2001), Tangut is known to rely on a system of orientational preverbs to encode orientation, along with a complex association of linguistic parameters including aspect, mood, and reality.

The reality system, in particular, displays a split between two series of preverbs, which resembles binary patterns seen in North American or Austronesian languages (Elliott 2000, von Prince 2022). Despite doubts regarding the relevance of this “category” (Bybee 1998, de Haan 2012), reality status is quite “real” in Tangut and presents many typological parallels with unrelated languages that have a similar distinction - overview in (1) and (2).

(1) Tangut – Trans-Himalayan, Central Asia (Beaudouin 2023)

慨 覩 義 後 尅 祥 辨 藪

nioow¹ ·jir¹ ·we² sə¹thu¹ djij²-tšhj¹-lhew²
after ask Wei situ PFV:IRR-EXPR-liberate

翕 翕 藪 藪

kɯ²də² dja²-lhew²
answer PFV:R-liberate

“Did you free the situ of Wei?” He answered “Yes (I freed him).” (12R, 132.01.07)

(2) Caddo - Caddoan, North America (Chafe 1995) “Have you seen him?”

sah[?]-yibahw-nah
2nd.agent:IRR-see-PFV

Furthermore, it exhibits contexts reminiscent of Gyalrongic languages (Sun 2007), which are linked to the characteristics of the modal interpretation of the preverbs contextually, either perfective or imperative.

This peculiarity, resulting in constructions such as postponed imperatives or jussives, may shed light on the understanding of how languages handle realis/irrealis distinctions. The distribution of the opposition, usually understood in terms of “realized” vs “unrealized” events or state of affairs, seems to call for another explanation.

Following an introduction to the Tangut preverb system and its history, the presentation discusses the areal specificities of the encoding of reality in Gyalrongic. Finally, it offers typological comparisons within and outside the Trans-Himalayan region, aiming to propose a new working definition of reality status.

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On Conditionals in Assamese

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INTRODUCTION

Conditionals can be defined as sentential constructions where one event is dependent on the other event within the same sentence. They are called so because the main event is conditional on the dependent clause. For e.g.:

- (1) *If he comes, (then) I'll go.*

In (1), the action of going in the second clause is dependent on the action of a person's coming, i.e., the event of going is dependent on the event of coming. Conditionals constructions like (1) comprise of two clauses- the antecedent clause, which expresses the condition and the consequent clause, which expresses the result. Just like the English '*If... then...*', languages have various methods via which conditionals are expressed.

CONDITIONALS IN ASSAMESE

In Assamese, an IA language from Northeast India, whose closest sister language are Bangla and Odia, conditionals are expressed in two ways:

- (2) (a) The antecedent clause uses a correlative clause (which is seen across IA)
(b) The antecedent clause uses the particle *-le*

- (3) *zodi rame k^ha-i (tente) moi-u za-m*
if Ram-ERG eat-PRES.3 then 1S.NOM-EMPH go-FUT.1
'If Ram eats, I'll eat too.'

- (4) *ram-e k^ha-le moi-u k^ha-m*
Ram-ERG eat-COND 1S.NOM-EMPH eat-FUT.1
'If Ram eats, I'll eat too.'

(3) is the correlative construction seen in Assamese, which falls into the same paradigm with IA languages and is uniform across the family. (4), on the other hand *-le* is specific only to the eastern group of IA languages (Masica, 2005). Devi

(2002) discusses the conditionals in Assamese while comparing them to Bangla and Kannada. Sharma (2020) discusses the form, function and distribution of conditional constructions which are used to describe a condition.

CHARACTERISTICS OF CONDITIONALS IN ASSAMESE

Some of the notable characteristics seen across these two types of conditionals in Assamese are: (i) although the correlative conditional construction has the option of using two overt elements for both the antecedent and the consequent clauses, the ones that marks the consequent (i.e., *tente*) is usually dropped; (ii) for both the constructions, i.e., for both correlative and the ones with the particle *-le*, the consequent clause bears future tense marking, as in (3) & (4); (iii) Scrambling is allowed in the antecedent clause containing the correlative conditional (5) & (6) but in case of the construction with *-le/-ile*, scrambling usually happens at the clausal level, as in (7) & (8); (iv) in case of the correlative conditional the antecedent clause bears present tense marking but in case of the conditional clause with *-le*, the tense and agreement ‘seems’ to be unmarked, as in (4), (9) & (10).

THE DATA:

(5) *ram zodi k^ha-i (tente) moi-u k^ha-m*
 Ram if eat-PRES.3 then 1S.NOM-EMPH eat-FUT.1
 ‘If Ram eats, I’ll eat too.’

(6) *ram-e k^ha-i zodi moi-u k^ha-m*
 Ram-ERG eat-PRES.3 if 1S.NOM-EMPH eat-FUT.1
 ‘If Ram eats, I’ll eat too.’

(7) *moi-u k^ha-m ram-e k^ha-i zodi*
 1S.NOM-EMPH eat-FUT.1 Ram-ERG eat-PRES.3 if
 ‘I’ll also eat, if Ram eats.’

(8) *moi-u k^ha-m ram-e zodi k^ha-i*
 1S.NOM-EMPH eat-FUT.1 Ram-ERG if eat-PRES.1
 ‘I’ll also eat, if Ram eats.’

(9) *moi-u ram-e k^ha-le k^ha-m*
 1S.NOM-EMPH Ram-ERG eat-COND eat-FUT.1
 ‘I’ll also eat, if Ram eats.’

- (10) *moi-u k^ha-m ram-e k^ha-le*
1S.NOM-EMPH go-FUT.1 Ram-ERG eat-COND
'I'll also eat, if Ram eats.'

THE CONDITIONAL -LE IN ASSAMESE

The conditional -le is a particle that falls in parallel with the combination of the past tense and the third person agreement marker.

- (11) *ram-e b^hat k^ha-l-e*
Ram-ERG food.ACC eat-PST-3
'Ram had food.'

- (12) *ram-e k^ha-le moi-u k^ha-m*
Ram-ERG eat-PST-3 1S.NOM-EMPH eat-FUT.1
'If Ram has food, I'll have too.'

The -le in discussion here is different from the past tense and third person agreement marker, the evidence for which comes from the fact that -le remains the same for all the persons in case of a conditional construction.

- (13a) *moi/ami k^ha-le ram-e-(u) k^ha-b-o*
1S.NOM/1PL.NOM eat-COND Ram-ERG-EMPH eat-FUT-3
'If I/we have food, Ram will also have food.'

- (13b) *moi/ami k^ha-l-u*
1S.NOM/1PL.NOM eat-PST-1
'I/we had food.'

- (14a) *tumi/tumaluk-e k^ha-le ram-e-(u) k^ha-b-o*
2S.NOM/2PL-ERG eat-COND Ram-ERG-EMPH eat-FUT-3
'If you have food, Ram will also have food.'

- (14b) *tumi/tumaluk-e k^ha-l-a*
2S.NOM/2PL-ERG eat-PST-2
'You had food.'

(15a) *xi/tai/ram-e/xihot-e* *k^ha-le* *ram-e-(u)* *k^ha-b-o*
3SM.NOM/3SF.NOM/Ram-ERG/3PL-ERG eat-COND Ram-ERG-EMPH eat-FUT-3
'If you have food, Ram will also have food.'

(15b) *xi/tai/ram-e/xihot-e* *k^ha-l-e*
3SM.NOM/3SF.NOM/Ram-ERG/3PL-ERG eat-PST-2
'He/She/Ram/They had food.'

From (13)-(15), it can be seen that the particle *-le* is homophonous with the tense and third person agreement marker, but there is a clear distinction between them. (13)-(15) show that the conditional particle is the same for all the persons, which ultimately proves that it is not the tense and third person agreement marker.

A DIACHRONIC VIEWPOINT

Both *zodi... (tente)* and *-le* have been present in the language since its modern stage. Starting from the Saptakanda Ramayana, compiled by Madhav Kandali, Shankardev and Madhavdev, Prahlad Charit by Hem Saraswati, which date back to the early fourteenth century AD, to the writings of Lakshminath Bezboruah, the presence of both these conditionals are seen. This further strengthens the claims about the presence of these conditionals in the language.

INTERACTION OF TENSE WITH CONDITIONALS

In case of the conditional *zodi... (tente)*, the antecedent clause is always seen to bear present tense and the consequent clause bears future tense. On the other hand, the antecedent clause with the particle *-le* bears no overt tense marking, and the consequent clause, as usual bears future tense marking. Two facts are of interest here: (i) how does the present tense marking on the antecedent clause of the *zodi... (tente)* refer to an event in the future time; (ii) where is tense encoded in the conditional clause with the particle *-le*. An attempt will be made to forward an account for these facts.

CONTEXT AND CONDITIONALS

The emphatic marker *-u* in Assamese can also give rise to a conditional interpretation depending on the context (16).

(16) *tumi-u* *k^hu-a* *moi-u* *k^ha-u* (*tetia*) *b^hat-khini* *xex* *ho-b-o*
2S.NOM-EMPH eat-PRES.2 1S.NOM-EMPH eat-PRES.1 then food-CLF.NOM finish happen-FUT-3
'You also eat, I shall also eat, the food will be over (then).'
Lit: 'If both you and I eat together, the food will be over.'

However (16) is based on context and its interpretation as a conditional also provides evidence for context playing its part in the formation of conditionals. An attempt will also be made to address the interaction of conditionals and context taking emphasis in particular.

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Allocutivity in Bhojpuri

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This paper aims to analyse allocutivity or addressee agreement (Bhattacharya, 2016) in Bhojpuri, a western Magadhan-Prakrit language. Bhojpuri, an eastern Indo-Aryan language, is spoken in western Bihar, eastern Uttar Pradesh, parts of Jharkhand, Odisha, West Bengal, Assam and Nepal. Bhojpuri has a very complex and peculiar agreement system. It is an SOV language with a varied system of agreement pertaining to phi-features very different from Hindi which has its roots in Sauraseni-Prakrit as opposed to Bhojpuri, a Magadhan-Prakrit language. Allocutivity, coined by Louis-Lucien Bonaparte (Bonaparte 1862 in Antonov 2015), is used to describe the characteristic of certain languages to systematically encode the addressee in all declarative finite verb forms even when the addressee is not the argument of the verb. Addressee agreement is the verbal morphology overtly present to show the honorific level of the addressee. In simpler terms, addressee agreement is nothing but 2nd person inflection marker (Bhattacharya, 2016). Bhojpuri has three levels of honorificity but peculiarly enough it shows allocutivity only at the Mid-Honorific level.

1. NH subject
candu jaat raha-l-as
Chandu.MASC.NH go.PROG stay-PST-3.NH
'Chandu was going.'
2. MH subject
 - a) Neutral
candu jaat raha-l- \emptyset
Chandu.MASC.MH go.PROG stay-PST-3.MH
'Chandu was going.'
 - b) NH/MH addressee
candu jaat raha-l-e
Chandu.MASC.MH go.PROG stay-PST-3.MH.NHA/MHA
'Chandu was going.'
 - c) HH addressee
candu jaat raha-l-an
Chandu.MASC.MH go.PROG stay-PST-3.MH.HHA
'Chandu was going.'
3. HH subject
candu jaat rahanii
Chandu.MASC.HH stay.PROG stay.PST.3.HH
'Chandu was going.'

Here in 1 and 3, the verbal morphology does not change irrespective of the honorific level of the addressee. However, when the nominative subject has the MH level, the overt verbal morphology shows inflection pertaining to the honorificity of the addressee.

Using a standard syntactic framework as in Adger (2003), addressee agreement in this paper is shown as a feature deriving out of the SAP (Speaker-Addressee Phrase) (Bhattacharya, 2016; Alok, 2021) having a valued feature [Add:NH/MH/HH] which agrees with T which should have a [uAdd:_] feature valued and interpreted at the spell-out, assuming the Hierarchy of Projection (HoP) for the Bhojpuri to be the following:

HoP (Bhojpuri): (SAP)>CP>TP>(NegP)>(PerfP)>(ProgP)>vP>VP

Several questions arise, for example, regarding the nature of Agree assumed, the role of the C head, and how is the derivation to prevent lack of addressee agreement in 1st and 3rd persons. The paper attempts to deal with these issues by proposing a restricted Agree model and proposes a refined featural character of addressee agreement than simply terming it as Phi-feature agreement.

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Abbreviations:

CP:	Complementizer Phrase
HH:	High-Honorific
HHA:	High-Honorific Addressee
HoP:	Hierarchy of Projections
MASC:	Masculine
MH:	Mid-Honorific
MHA:	Mid-Honorific Addressee
NegP:	Negative Phrase
NH:	Non-Honorific
NHA:	Non-Honorific Addressee
PerfP:	Perfect Phrase
PROG:	Progressive
ProgP:	Progressive Phrase
PST:	Past Tense
SAP:	Speaker-Addressee Phrase
SOV:	Subject-Object-Verb
VP:	Verb Phrase

Lambani and Kannada vowels in contact: An acoustic phonetic analysis

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1. INTRODUCTION

Lambani is an under-resourced Indo-Aryan language spoken by a nomadic tribe known as the ‘Banjara people’ across central and southern states of India, like Rajasthan, Gujarat, Maharashtra, Tamil Nadu, Andhra Pradesh, Telangana, and Karnataka. Being a nomadic tribe, influence of the other major Indian languages that they have come into contact with, has resulted in distinct varieties of Lambani depending on where it is spoken. As such, the language varies in vocabulary and in phonemic inventory from area to area (Grierson, 1928; Trail, 1970; Boopathy, 1972; Barikeri, 1982; Zeenat, 2020). In Karnataka, Lambani comes in contact with the Dravidian language, Kannada, resulting in several linguistic influences, the phoneme inventory being one of them. In view of this language contact situation, this study compares the acoustic features of Lambani vowels with those of Kannada vowels in an attempt to explore the phonetic influences of the major language Kannada on the minor Lambani language, if any.

1.1. LAMBANI AND KANNADA VOWELS

Regarding the vowels of Lambani, as spoken in the state of Karnataka, Trail’s (1970) report mentions the presence of six distinct phonemes in the Gulbarga variety.

Whereas, Barikeri (1982) reports five distinct vowels in the Bijapur variety. Dihingia et al. (2023) reports the presence of six phonemes with length differences in five in the Bagalkot variety. Similarly, studies have reported different phoneme inventories for Lambani spoken in Tamil Nadu (Boopathy, 1972) and Telangana (Kumar & Duli, 2014), as seen in Table 1. Standard Kannada has five vowel phonemes with length distinctions: /i, e, a, o, u/. However, Krishnamurti reports the addition of the /æ/ vowel to Modern Kannada through borrowings from English.

1.2. METHOD

The Lambani speech data was collected from 2 male and 2 female native Lambani speakers from Bagalkot region of Karnataka. Kannada speech data from 1 male and 2 female speakers was extracted from All India Radio (AIR) bulletin broadcasts from the Shrutilipi dataset. The speech data was segmented at the phoneme

	Front			Central			Back	
	High	High-mid	Low-mid	High	Mid	Low	High	High-mid
Gulbarga	i	e			ə	a	u	o
Bijapur	i, i:	e, e:				a, a:	u, u:	o, o:
Tamil Nadu	i, i:	e, e:	ɛ		ɪ	a, a:	u, u:	o, o:
Telangana	i, i:	e, e:	ɛ, ɛ:			a, a:	u, u:	o, o:
Bagalkot	i, i:	e, e:			ə	a, a:	u, u:	o, o:

Table 1: Vowels in Lambani as reported in different studies.

level using the Praat 6.2 software. The first three formant frequencies in Hertz at the mid-20% of the vowel duration were estimated. Formant frequencies are normalized using the Lobanov method for speaker-intrinsic effects. One-way ANOVA tests were performed to compare the mean F1 and F2 values of the vowels in the two languages.

1.3. RESULTS

Results show that the five vowels in Lambani and Kannada occupy similar positions in the vowel space, however, the convex hulls show that Kannada has a bigger vowel space than Lambani. A reason for this could be the comparatively larger number of Kannada vowel tokens as well as larger standard deviation of the vowel formant frequencies. Data from more speakers and in different contexts will confirm these distributions. Nevertheless, the results indicate that Lambani vowels have been phonetically influenced by Kannada due to the prolonged contact situation between the two languages.

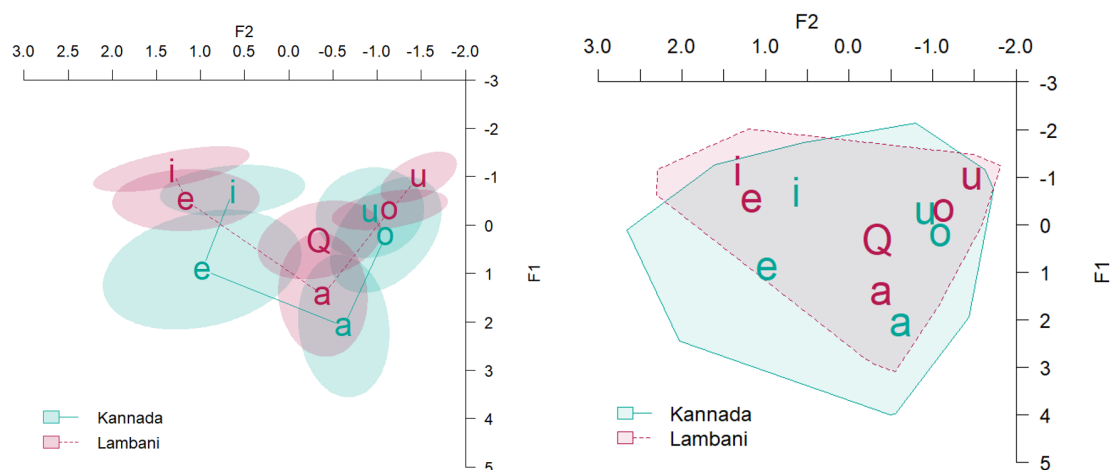


Figure 1: Vowel spaces of Lambani and Kannada showing 1 standard deviation ellipses(left) and convex hulls (right)

The speech data of both Lambani and Kannada used in this study comes from a larger dataset collected for an ongoing speech-to-speech translation project. Hence the data used in this study has certain methodological limitations like vowel context, position of vowels, number of speakers, Kannada data from Bagalkot area,

etc. Despite these limitations, the authors believe that the current study is a step forward in the understanding of a hitherto understudied contact situation between the two languages.

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A Sociolinguistic Analysis of Internet Memes in Kumauni

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1. INTRODUCTION

There has been a huge growth in the online presence of regional languages in India. Reports⁸ and articles⁹ point towards a growing demand for online content in regional languages. They also state that people prefer content in their regional languages and find it more reliable. This is quite a contrast from the initial apprehensions that came from folkloristics (Alan Dundes, (2005, 385) which feared that the masses moving onto the newer, digital means of communication and entertainment (like emails, SMSs, social media etc.) meant no more folklore and saw the internet as a threat to minority/endangered languages (UNESCO, 2003, p. 11). While not unwarranted, these fears failed to consider human ingenuity and linguistic creativity which on the contrary brought folklore and the vernacular online. So much so, that the internet now not only is one of the largest repositories of folk cultures, but also gave birth to digital folklore and internet language/lingo. While previously only true for dominant languages, this now applies to minority languages like Kumauni as well. Dedicated online forums, social media accounts, memes etc. all show a growing presence of Kumauni online.

This paper focuses on Kumauni memes and presents a sociolinguistic study of memes in Kumauni language, culture and worldview. Memes due to interesting linguistic features make a great subject for research. And due to their highly prolific nature they also are: 1. a great source of entry into the existent online culture and social milieu of the online Kumauni community; 2. a great source of information on not just the factual information, but the reigning ‘feels’ and perspectives considering the constantly changing nature of our socio-political fabric.

2. DIFFERENT TYPES OF MEMES IN KUMAUNI AND THEIR LINGUISTIC FEATURES

This study looks at the different types of memes that are found in Kumauni language or on Kumauni culture. The study will also attempt to categorize the types and examine the linguistic features Kumauni memes, such as: unconventional

⁸ Google’s annual ‘Year in Search’ report: Here’s what India searched online in 2020 (dnaindia.com)

⁹ From Meesho To Dunzo To Netflix, The Rise Of Vernacular Advertising On Digital In India - Forbes India

orthography, misspellings and different pronunciations; linguistic lapses such as incorrect quantifiers, inappropriate negative prefixes, grammatical omissions, exaggerations of linguistic interference of one language onto others. For example, in the case of Kumauni/Garhwali, we often see that the sentence structure may be done in a typically local manner (different from Hindi sentence structure). Or there might be certain insertions/omissions, like exaggerated use of words like ‘bal’ or ‘tehra’ from Kumauni to show the person is Kumauni.

3. SOCIOCULTURAL IMPACT OF MEMES ON THE KUMAUNI FOLK CULTURE

With features of storytelling, narratives, and conversations, memes are a powerful tool for communication and information sharing. The paradigms of Tartu-Moscow semiotics, biosemiotics and cybersemiotics describe information as relation-systemic and not isolated 1 Google’s annual ‘Year in Search’ report: Here’s what India searched online in 2020 (dnaindia.com) 2 From Meesho To Dunzo To Netflix, The Rise Of Vernacular Advertising On Digital In India - Forbes India units (Cannizzaro 2016: 571-572). If memes fall within this definition, they are also relational in nature (also proven by the necessity of knowledge of frame of reference and context on the part of all participants). This allows the consumer/producer to have greater agential roles, in contrast to the ideas of memetics wherein consumer/producer has a rather passive ‘vehicular’ role and the intentionality of the ‘folk’ is reduced. This paper also looks at the ways in which memes can and do have a larger cultural impact because of their relational nature.

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Stylized intonation in a tone language – evidence from Northern Ghale (Gorkha district, Nepal)

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Even if the call used by parents summoning a child home, as in

John-- Din--
ny-- ner--

(from Ladd 1978: 517), is typically characterized by steady level pitch, Ladd (1978) convincingly shows that this intonation “is not essentially a calling intonation, a warning intonation – or, more metaphorically, a ‘distance’ intonation – but rather a ‘stylized’ intonation whose function is to signal a certain element of predictability or stereotype in the message (Ladd 1978: 520).

So for instance, stylized intonation on a warning such as

Look out for the broken ste--
ep--

(from Ladd 1978: 520) is only appropriate if it serves as a reminder (e.g. about a step that has been broken for months), but not in emergencies.

Accordingly, stylized intonation in lists such as

- (41) A. Hey, these cookies are good. What's in 'em?
B. Oh, nothing special, you know
- flour-- sugar-- butter--
and and and, uh...

(from Ladd 1978: 529) implies that “the items enumerated ... are not individually informative, but rather are intended to suggest a loose grouping which the hearer can fill out for himself” – In other words, by marking each item with steady level pitch, the speaker of (41) wants to express that there is really no special ingredient in the cookies.

If the items listed are individually meaningful, as in

(from *ibid.*), stylized intonation is inappropriate.

While I am unaware of any cross-linguistic study of stylized intonation, the phenomenon has been described for various languages including German (Pirker et

(40) milk eggs butter bread
 I need and and and

al. 1998; Dombrowski 2012), Brazilian Portuguese (de Moraes and Rilliard 2018), Hungarian (Varga 1989), and Kammu, an Austroasiatic language spoken mainly in Laos (Karlsson 2018). However, it does not seem to have been described for a tonal language, which is done in the present paper.

Before and after recording more than twenty stories in Kutang last summer, I recorded just as many stories also in the lower Budhi Gandaki valley, where Northern Ghale (e.g. Hammarström et al. 2023) is spoken. While Kutang and Northern Ghale are very closely related, tone seems to be contrastive only in the latter variety. In Northern Ghale stories from both Salleri and Uiya, there were moments when I thought that the narrators had just started singing – which is not uncommon in Himalayan languages, of course, that parts of narratives are sung. However, my consultant, a native speaker of Kutang who is perfectly familiar also with Northern Ghale, having lived in that area for more than ten years, did not think that the narrators were singing. Translating the passages for me, it became clear what they were doing instead. In the passage illustrated in Figure 1, the narrator (from Uiya) says that – for some reason – the protagonist suddenly ‘was unable to see, unable to speak, unable to walk, unable to (use) her hand, unable to hear, unable to see, etc.’ The speaker pronounces this with a stylized intonation, keeping the second part of each of the six items of the list at a mid-high pitch level, and stepping on this level either from a higher or a lower pitch level (pitch is indicated also numerically in the third tier of Figure 1), depending on whether the noun in the first part of a phrase had a high (ur ‘mouth’, tup ‘foot’, and naa ‘ear’) or a low tone (myak ‘eye’ and lyak ‘hand’). Stylized intonation thus involves three pitch levels here, and the higher (H) and the lower level (L) are about a third interval away from the mid-high pitch (M). By means of the stylization, the speaker implies that he could go on listing body parts which the protagonist wasn’t able to use, and hence, that his entire body had ceased to work.

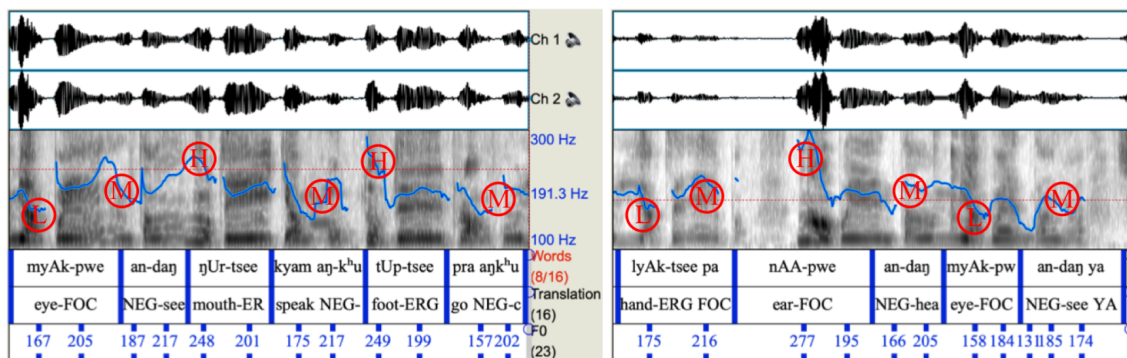


Figure 1: Stylized intonation in a Northern Ghale story from Uiya

Apart from illustrating what stylized intonation may look like in a tone language, these observations suggest that such lists could be of use in determining whether a language has tone or not, and if it has, in assigning tones to the lexical items used in these lists. As many varieties of the Kaike-Ghale-Tamangic (KGT) family (Hammarström et al. 2023) have been described with and without tones (see Hwang et al. 2019), lists may thus help us investigate the question of whether Proto-KGT had word tone (Mazaudon 1978; Hildebrandt 2003), or whether this feature independently arose in the different varieties due to contact with Tibetic varieties.

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Types and functions of adjectival reduplication in Manipuri

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1. INTRODUCTION

In this paper, we focus on the morphosemantic aspects of adjectival reduplication in Manipuri (also known as Meeteilon). In Manipuri, productive reduplication includes partial reduplication here roots are reduplicated along with the attributive maker- attr-ADJrt- attr-ADJrt-nmlz. The so-called attributive particle /ə/ is responsible for which an adjectival form that carries it should be placed before a noun which it modifies. Pattern 1 shows the fact. In Meeteilon, disyllabic roots don't carry this attributive particle (pattern 2). Such reduplications generate a wide variety of semantic functions, such as pluralization, iteration, distribution and concessive, antonym, etc.

1.1. Types of adjectival reduplications

The following morphological patterns are the ones responsible for adjectival reduplications generating their corresponding semantic functions.

Pattern 1:	Attributive Particle – ADJroot	Attributive Particle – ADJroot –nmlz
Examples:	ə-p ^h ə	ə-p ^h ə-bə
	ATTR-good	ATTR-good-NMLZ
	“Good ones”	
	ə-ŋəu	ə-ŋəu-bə
	ATTR-white	ATTR-white-nmlz
	“White ones”	
Pattern 2:	ADJroot	ADJroot-nmlz
Examples:	p ^h əzə	p ^h əzə-bə
	Beautiful	beautiful-NMLZ
	“Beautiful ones”	
	niŋthi	niŋthi-bə
	handsome	handsome-NMLZ
	“Beautiful/handsome ones”	
Pattern 3:	distributive prefix-ADJroot	ADJroot-nmlz
Examples:	i-tət	tət-pə
	DSTR-tear	tear-NMLZ
	“Being torn everywhere”	
	i-nəu	nəu-bə
	DSTR-new	new-NMLZ
	Being new everywhere”	

Pattern 4:	distributive prefix-ADJroot	ADJroot-concessive
Examples:	i-pik pik-ləbəsu	
	DSTR-small small-CONC	
	“Although (it is) the smallest one”	
	i-mot mot-ləbəsu	
	DSTR-dirty dirty-CONC	
	Although (it is) the dirtiest one”	
Pattern 5:	ADJroot-nmlz	ADJroot-neg-nmlz
Examples:	t ^h i-bə t ^h i-də-bə	
	ugly-NMLZ ugly-NEG-NMLZ	
	“Ugly or not”	
	ŋəu-bə ŋəu-də-bə	
	white-NMLZ white-NEG-NMLZ	
	“White or not”	

1.2. Semantic functions of adjectival reduplications

As seen in the previous section, pattern 1 & 2 carry a pluralisation interpretation while pattern 3 is associated with an interpretation involving spatial distributivity. All these three pattern structures precede their respective head nouns as shown in the following examples below:

- | | | |
|-----|---|--|
| (1) | ə-p ^h ə ə-p ^h ə-bə mi-siŋ | |
| | ATTR-good ATTR-good-NMLZ man-PL | |
| | “many good men” | |
| (2) | p ^h əzə p ^h əzə-bə ləikon-siŋ | |
| | Beautiful beautiful-NMLZ garden-PL | |
| | “many beautiful garrdens” | |
| (3) | i-tət tət-pə k ^h uŋgau-siŋ | |
| | DSTR-tear tear-NMLZ pant-PL | |
| | “Pants torn in different parts” | |

Pattern 4 where a concessive morpheme appears carries a concessive interpretation.

- | | | |
|-----|---|--|
| (4) | nupa ədu-nə i-pik pik-ləbəsu məhak jamnə siŋ-ŋi | |
| | Man Dem-NOM DSTR-small small-CONC he very wise-DECL | |
| | “Although the man is the smallest one, he is very wise.” | |

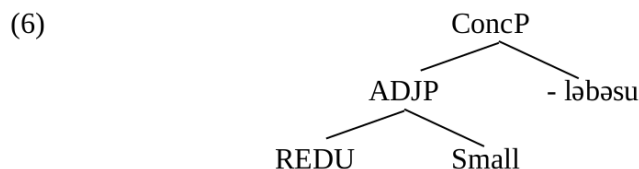
Pattern 5 works in a different way that the second member carries a negative morpheme, which is responsible for the antonym of the first member. It also provides a sense of choice between the two items.

- | | | |
|-----|---|--|
| (5) | phəzə-bə phəzə-də-bə məhak-nə əmə khən-gə-ni | |
| | beautiful-NMLZ beautiful-NEG-NMLZ he-NOM one select-POT-COP | |
| | Either beautiful or not, he will select one. | |

We follow the theory of Distributed Morphology (DM) proposed by Halle and Marantz (1993, 1994) representing the interaction between different grammatical

components (Bobaljik 2015; Embick and Noyer 2007; Halle and Marantz 1993, 1994; Harley and Noyer 1999). In DM theory, word-formation processes like affixation and reduplication of morphemes are distributed (hence the name) and occur at different points in morphosyntactic derivation.

Although the surface meaning of adjective reduplication seems to be pluralization of the modified noun, as in example (1 & 2) there are certain functional morphemes that project the whole phrase such as ConcP as shown in (4) above,



Similarly, other adjectival reduplications occur in different environment such as within a Noun Phrase, Concessive Clause, Negative and Nominalization sequence which results in an antonym formation in this language.

2. CONCLUSION

We have so far introduced some novel data on adjectival reduplication patterns along with their semantic functions in Manipuri. In this paper we shall provide a formal analysis of these patterns in the framework of the Distributed Morphology theory to capture the similarities of the different patterns in Manipuri adjectival reduplication.

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Tai Phake Language: Unlocking Compounding Dynamics

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The process of compounding, within morphological analysis, entails the amalgamation of two or more autonomous morphemes to generate a novel lexical unit. This linguistic phenomenon involves the juxtaposition of disparate meanings, either in full or in part, resulting in the formation of compounds. These compounds exhibit semantic relationships that are derived from the constituent morphemes while also manifesting as distinct lexical entities.

The research paper titled “Tai Phake Language: Unlocking Compounding Dynamics” aims to elucidate the compounding process observed in Tai Phake, a critically endangered language predominantly spoken in the regions of Assam and Arunachal Pradesh. Among the limited repository of works that has been conducted on this language, Stephen Morey’s “The Tai Languages of Assam: A Grammar and Text”, Biju Moran’s “Tai Phake Bhasha Aru Sanskriti” etc. are worth-mentioning. Through an initial investigation, it became apparent that compounding plays a pivotal role in word formation within this language and stands out as the most frequently occurring morphological process. Notably, given the predominantly monosyllabic nature of words in Tai Phake, the manner in which two morphemes are fused to convey novel ideas or concepts is of particular interest. Moreover, compounding emerges as a prevalent morphological feature not only in Tai Phake but also across other Tai Kadai languages.

The forthcoming study aims to provide an in-depth analysis of the diverse compounding processes employed within Tai Phake, with a particular emphasis on both semantic and structural dimensions. We can observe various semantic types: endocentric compounds, where the meaning of the whole reflects its parts; exocentric compounds, where the compound takes on a distinct meaning and copulative compounds, joining similar or contrasting concepts. This paper will explore these semantic categories alongside syntactic compounds, where the resulting compound functions as a single grammatical unit within a sentence, even if the individual roots retain some semantic meaning. Preliminary examination of available linguistic data indicates a notable prevalence of noun compounding structures within Tai Phake, surpassing other types of compounding processes in frequency. This observation underscores the significance of investigating the intricate dynamics of compounding in Tai Phake, shedding light on its linguistic richness and morphological complexity.

The following examples highlight the complexity and richness of semantic compounding in language, which will be further explored in the paper.

Endocentric Compound

- i) k^hai + nau > k^hai nau
 ‘egg’ ‘rotten’ ‘rotten egg’

Exocentric Compound

- ii) muŋ + kaŋ > muŋ kaŋ
 ‘country’ ‘middle’ ‘earth’

Copulative Compound

- iii) kun mi + kun p^han > kun mi kun p^han
 ‘rich man’ ‘poor man’ ‘rich man and poor man’

Syntactic compounds in the language may exhibit various structural patterns, including noun-noun compounds, adjective-noun compounds, and verb-noun compounds. By examining syntactic compounding alongside semantic compounding, this paper aims to provide a comprehensive understanding of the multifaceted nature of compounding in the Tai-Phake language.

Nouns in Tai-Phake, are formed through diverse syntactic structures such as Noun + Noun > Noun, Noun + Verb > Noun, Verb + Noun > Noun, Noun + Adjective > Noun, Noun + Verb + Noun > Noun, among others. Verbs are also formed through compounding, revealing the language’s remarkable versatility following intricate patterns such as Verb + Noun > Verb and Verb + Verb > Verb. For eg.,

Noun + Adjective > Noun

- iv) nin + nam > nin nam
 ‘soil’ ‘black’ ‘coal’

Noun + Verb + Noun > Noun

- vi) ʈak + k^hut + nin > ʈak k^hut nin
 ‘machine’ ‘to dig’ ‘soil’ ‘bulldozer’

In conclusion, this study will present a holistic exploration of compounding in Tai-Phake, encompassing its morphological, semantic, syntactic, and cultural dimensions. By offering insights into the structural complexity, linguistic creativity, and cultural significance of compounding in Tai-Phake, an attempt will be made to contribute to the broader understanding of language diversity and complexity, with the aim that the findings will not only enrich scholarly discourse but also inform language preservation efforts and contribute to the revitalization of endangered languages like Tai-Phake.

However, Tai Phake also features a complex tonal system where pitch variations significantly influence meaning. A single root might have different tones depending on its position within the compound (initial, medial, final), and these

tones can significantly alter the resulting compound's final tone and meaning. Due to this complexity, a separate, dedicated analysis is warranted to fully understand the interplay of tones in Tai Phake compounding. Therefore, this paper will focus solely on the core meaning-creation processes within compounding itself, leaving the fascinating realm of tone interaction for future exploration. This approach allows for a clearer focus on how meaning is constructed through the semantic relationships between the constituent roots within Tai Phake compounds.

Keywords: Compounding, Semantic, Syntactic, Tai-Phake, Endangered Language

An Acoustic Analysis of the Diphthongs in Khasi

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Khasi is a Mon-Khmer language, a branch of Austroasiatic language family primarily spoken in the state of Meghalaya, in northeast India. A sizable number of speakers are also found in the neighbouring states of Assam, Mizoram, Tripura, Arunachal Pradesh and West Bengal. Completely unique to the area, Khasi is the only language of Mon-Khmer subgroup found in India. According to Census 2011, Khasi is natively spoken by 1,037,964 in India. Khasi has a good deal of dialect variation in the language, out of which the Sohra dialect is considered to be the Standard one.

There has been some detailed work done on Khasi language and its sound system in general (eg., Pryse 1855, Roberts 1891, Rabel 1961, Henderson 1967, Abbi 1979, 1987, Sten 1996, War 2004, Khyriem 2012). Different views have been put forward by different scholars regarding the number of diphthongs available in Khasi. For example: Pryse is of the view that Khasi has 17 [ai, ei, oi, au, ae, ay, eu, ey, ew, ia, ie, io, ia, iy, oe, ou, oy] diphthongs, Roberts describes that Khasi has 13 [ai, ái, aw, áw, ei, ew, iw, íw, ie, oi, ói, ui, úi] diphthongs, Abbi in her studies mentions only 6 [au, ei, ou, iu, eu, ia] phonetic diphthongs in Khasi, Sten lists 11 [ie, ia, io, iu, ei, ai, oi, ui, eu, au, ou] diphthongs and War also mentions 13 [ia, eu, eu, au, a:u, ei, a:i, oi, o:i, iu, ui] diphthongs in Khasi. Whereas Khyriem mentions that Khasi has only one [ia] diphthong.

The present paper attempts to investigate the diphthongs available in Standard Khasi supported by acoustic analysis. The data for this study was recorded from ten Standard Khasi speakers from Shillong. The wordlist included words in isolation and also in a sentence frame. The data was recorded with Zoom H4n recorder connected with Audio Technica AT2040 microphone and the recordings were done in a noiseless environment. The analysis was done using Praat 6.3.11 focusing on the onset and offset formant measurements as well as the duration of the glide. The analysis of this study provides an accurate description of Khasi diphthongs and a basis for further research.

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Phonological Analysis of Final Enunciative Vowels in South Dravidian Languages

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1. INTRODUCTION

Similar to Japanese (Ito and Mester, 1995), Malayalam has been shown to have concentric lexical sets that show degrees of phonological grammaticalization (Joseph, 2023). This paper contradicts this perspective of lexical set formation and shows that the nouns in South Dravidian languages Tamil, Malayalam, and Kannada are divided into two pairs of disjunctively ordered sets. The first pair of specific-general ordered sets comprises Native Dravidian with non-productive morpho-phonology (Set-S1) which is contrasted with a productive general set including native, loans, and neologisms (Set-G). In the second pair, the same Set-G is preceded by a lexical set of predominantly Sanskrit loans (Set-S2).

This proposal is based on the alternation patterns of “word-final enunciative vowel”, henceforth FEV (Krishnamurti, 2003), across the lexical sets. All the vowels in the phonological repertoire of the three languages do not appear in the word-final position. Of the words that are shared across South-Dravidian languages, the vowels that do occur in the word-final position is based on the lexical set that the word belongs to. The following subsections describe the realization of these FEVs¹⁰ across the three languages.

1.1. FEV in Kannada

In Modern Kannada, the words do not end in consonants. There are three word-final enunciative vowels. The Set-S1 and Set-S2 are realized with the written vowel [e] and unwritten vowel [a] respectively. Both these FEVs are faithfully retained in the suffixation context. The FEV in Set-G is productively realized as [u] which fails to surface in suffixation context.

Lexical Set	FEV		
	Vowel	Example	Suffixed
Set S1	written [e]	ತಲೆ /t̪ale/ head	/t̪ale-ja/ head-GENITIVE
Set S2	unwritten [a]	ಪುಸ್ತಕ /puṣṭaka/ book	/puṣṭaka-ḍa/ book- GENITIVE
Set G	written [u]	ಹಾವು /ha:vu/ snake	/ha:v-ina/ snake- GENITIVE

¹⁰ We consider /am/ to be a vowel because (i) South-Dravidian orthography lists it as a vowel (ii) the labial nasal in the vowel /am/ is the only consonant that is allowed in word-final positions in Malayalam, and it occurs only along with the vowel /a/, not with any other lexical vowel, and (iii) suffixation patterns are the same as in Kannada Set S2 where the FEV is /a/

1.2. FEV in Malayalam

In Modern Malayalam too, there are three FEVs. While the unwritten vowel is always realized as [a] in Set-S1, there are two realizations of the written FEVs. It is realized as the syllable [am] in Set-S1 and the vowel [ə] in Set-G.

Similar to Kannada, both the specific sets retain the FEV with suffixation while the Set-G does not. Unlike Kannada, the [am]¹ FEV modifies and retains only the vowel.

Lexical Set	FEV		
	Vowel	Example	Suffixed
Set S1	unwritten [a]	തല /t̪ala/ head	/t̪ala-jude/ head- GENITIVE
Set S2	written [am]	പുസ്തകം /puṣṭagaṃ/ book	/puṣṭaga-t̪inde/ book- GENITIVE
Set G	written [ə]	പാമ്പ് /pa:mbə/ snake	/pa:mb-inde/ snake -GENITIVE

1.3. FEV in Tamil

Tamil too has three FEVs corresponding to Set-S1, Set-S2, and Set-G. Set-S1 is phonetically realized as [ə], but is written with the diphthong [ai] which also surfaces in suffixation contexts. Similarly, Set-G is overtly written with the vowel [u] or a diacritic but phonetically realized as either [ə] or [i]. Set-S2 corresponds to the syllable [am] which is modified in suffixation contexts, similar to Malayalam.

Lexical Set	FEV		
	Vowel	Example	Suffixed
Set S1	written [ai] spoken [ə]	தலை /t̪alə/ head	/t̪alai-o:də/ head- GENITIVE
Set S2	written & spoken [am]	புத்தகம் /puṭṭagaṃ/ book	/puṭṭaga-t̪to:də/ book- GENITIVE
Set G	written [u]/diacritic spoken [ə] or [i]	பாம்பு /pa:mbə/ snake	/pa:mb-o:də/ snake -GENITIVE

2. DISCUSSION

In this paper, we build a narrative of the FEV realization history of South Dravidian and check whether it confirms the well-known reconstructed Proto-South Dravidian history (Caldwell, 1857; Krishnamurti, 2003; Masica, 2005) that claims that Kannada broke away from the Proto-Dravidian about 1000 years before Malayalam and Tamil separated. As noted, Kannada's Set S2 is no longer spoken/written with the /am/ vowel, although this vowel is available in the language. Further, both Tamil and Malayalam use a spoken /ə/ for Set G, but Tamil continues to write the same with an /u/, as in Kannada. We postulate that Set G originally used the FEV /u/, and this remains so in Kannada (in both spoken and written forms). The written form remains in Tamil, but like Malayalam, the /u/ has shifted to /ə/ in the spoken form. The suffixations also reflect comparable patterns in the three South-Dravidian languages.

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Classifiers in Apatani: NP-internal Word Order Differences

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Introduction

Classifiers are semantic denotations of the referent nouns with respect to their characteristics (Aikhenvald, 2000). Tibeto-Burman languages are known to have a larger number of nominal classifiers as compared to other major language families in India. This paper focuses on the syntactic ordering of numeral classifier constructions (Post, 2022) in a select Tani sub-group of languages. Tani languages are spoken in Arunachal Pradesh, Assam and some neighbouring regions. While our main focus is Apatani, we have also attempted to show a pattern of change in the classifier position within the NP in Nyishi.

1.1. *Specific Classifiers*

Apatani has a number of so-called specific classifiers, such as those listed in (1), each of which highlights a certain salient feature of the modified noun.

- | | |
|---------------------------------------|--|
| (1) a. <i>dor</i> - animals and birds | b. <i>pu</i> - small, globular objects |
| siti dor-nye | takũ pu-ŋoe |
| elephant CL-two | peach CL-five |
| ‘two elephants’ | ‘five peaches’ |

1.2. *Generic Classifier*

All Tani classifier systems are said to lack a generic classifier akin to the Mandarin *ge* (Post & Sun, 2017, pp.328). However, Apatani uses a generic classifier *-ta* which seems to have been borrowed from its neighbouring Indo-Aryan languages over repeated contact (Post, 2022). A similar phenomenon is likewise exhibited in Nyishi.

The canonical order for the numeral classifier construction in Apatani seems to be [Noun Classifier + Numeral] where the classifier is affixed to the numeral and the CL-NUM complex is preceded by the noun, as shown in 2(a). However, in the case of the generic classifier, it is observed that the order changes to [N NUM CL] and [NUM CL N] where neither the classifier nor the numeral is affixed, as shown in 2(b) and 2(c).

- | | | |
|-------------------|---------------|---------------|
| (2) a. aki dor-pe | b. mju aŋe ta | c. aŋe ta mju |
| dog CL-four | person two CL | two CL person |
| ‘four dogs’ | ‘two persons’ | ‘two persons’ |

Nyishi has an indigenous generic classifier *gu* and its variant *go*, as seen in (3)b and c, which show a similar alteration:

Furthermore, these languages also seem to have reduplicated classifiers (partial or total), which being affixal, do not admit any word order alteration:

- (3) a. taki po-ji b. ji aju gu c. akin go ji
 squirrel CL-two person five CL one CL person
 ‘two squirrels’ ‘five people’ ‘one person’
- (4) a. alo lo-ŋoe (Apatani) b. nam nam-ji (Nyishi)
 day CL-five house CL-one
 ‘five days’ ‘one house’

In all the above classifier constructions, discourse words like topic and focus markers cannot be inserted inside the NP, as shown in the following schema, where DM stands for discourse marker:

- (5) (DM) [N CL-Num/ N Num CL/ Num CL N] (DM)

1.3. Syntactic movement within the NP

When there are alternative orders, it is observed that the underlying base structure (examples (2)c and (3)c) is [NUM CL N(P)]. The derived order [N(P) NUM CL] as seen in (2)b and 3(b) emerges under certain conditions based on the speaker’s intended meaning such as, in denoting a partitive function or in the usage of demonstratives.

Syntactically, there are broadly two ways of arriving at any given order, as shown in (6):

Syntactically, there are broadly two ways of arriving at any given order, as shown in (6):

- (6) a. [NUM-CL] N(P) t_{NUM-CL} (raising of the NUM-CL complex across the N(P))
 b. N(P) [NUM-CL] t_{N(P)} (raising of the N(P) across the NUM-CL complex)

Analysis

Given that discourse markers cannot interrupt an NP, as shown in the schema (5), this paper shows that these languages clearly present evidence of the head-noun/NP movement across the [Numeral Classifier] complex within the Noun Phrase, as in Bhattacharya (1999), indicating [Noun Numeral Classifier t_{NUM-CL}] above to be the correct derivation of NPs in Apatani and Nyishi. It is further proposed that the feature responsible for the said displacement is [PART] representing a noun (N) marked as partitive for such a derivation.

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The Syllable Structure of Jaunsari: An Optimality Theory Analysis

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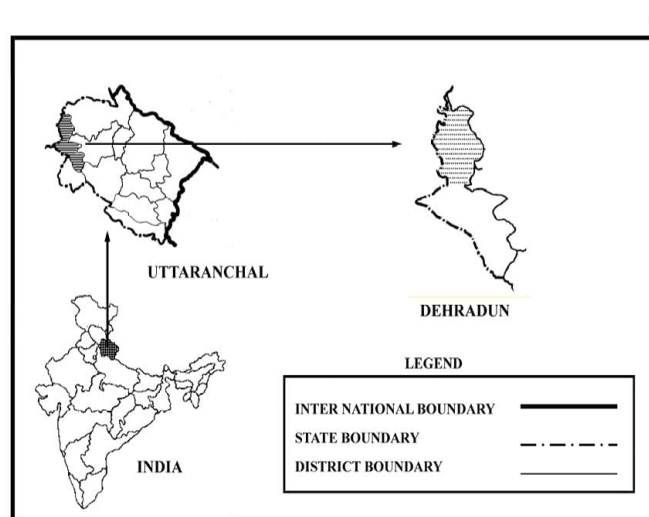
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Jaunsari is one of the lesser-known tribal languages spoken in Jaunsar-Bawar region of Dehradun district in Uttarakhand state. It also has 4 major varieties (Satish, 1990), all attested in Uttarakhand and a part of Himachal Pradesh. This Indo-Aryan language belongs to the western Pahari group of Pahari languages (Grierson, 1916). In this research, an extensive corpus study is used in order to determine the frequency of occurrences of different consonant clusters. The analysis is presented with Optimality Theory (OT), following the stratification of the lexicon by Ito and Mester.

For this study, a field survey on the Jaunsari language community was conducted to investigate the phonological patterns of this particular Himalayan language with a special focus on consonant clusters and syllable structure. A total of 35 Jaunsari speakers including both men and women from different age groups were interviewed through a questionnaire designed to gather data on various aspects of phonology. All responses were recorded.

Though the possible consonant clusters and syllable structure in Jaunsari is already reported by Satish in 1990, we have tried to go a little further in the light of Optimality theory to organize the phonotactics of the language. By applying OT, we analyzed how the markedness and faithfulness constraints interact to yield the observed syllable structure and consonant clusters in this language of Garwal, - Jaunsari.



MAP — 1 LOCATION OF JUANSARI SURVEY AREA

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An Introduction to the verbal categories of Champang

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1. INTRODUCTION

This paper is the first description of the verbal categories of Champang, which is a Tangsa Naga language of the Sino-Tibetan family, spoken in the mountainous villages of the Patkai ranges running along the Indo-Myanmar borders. Champang is a highly endangered language with only approximate 200 speakers living scattered in a couple of villages. The data used for this paper is the result of my extensive fieldwork in Yopakan, one of the villages where the highest concentration of Champang population is found.

1.1. Verbs in Champang

Champang verbs are agglutinative in nature as various morphemes get together to express a verb complex. The verbs are marked by copious affixes denoting tense, aspect, polarity and deixis. Mood markers are not found in the language; however, modality is understood from the contextual evidence. In addition to the presence of auxiliary verbs and copulas in the language, a considerable number of verbal affixes (mostly suffixes), such as, complementizer, conditional, purposive, emphatic, completive, etc. are found. Few examples are given for reference. Example (1) shows an intransitive verb root *ʒup* ‘sleep’, prefixed by the nominalizer *ə-*, and suffixed by the COMPL morpheme *-dzɔnni*. The stem is then followed by the past tense verbal operator *wawə*. Example (2) shows a transitive verb root *nɔk* ‘like’, which is suffixed by the present tense morpheme *-wə*. Example (3), on the other hand, exhibits a ditransitive verb root *tm* ‘send’ suffixed by the present tense morpheme *-wə*. Example (4), furthermore, illustrates how negative polarity is expressed in the language, with the transitive verb root *dzuk* ‘drink’, by adding the negative suffix */-lə/*.

1) *ŋe ə-ʒup-dzɔnni wawə*
1SG-Ø NOMZ-sleep-COMPL PST
‘I fell asleep.’

2) *ŋe-ŋeʔ piʔ-nəŋ nɔk-wə*
1SG-ERG 3SG-ACC like-PRES
‘I like him.’

- 2) *ŋ'e-ŋeʔ* *piʔ-nəŋ* *nək-wə*
 1SG-ERG 3SG-ACC like-PRES
 'I like him.'
- 3) *piʔ-ŋeʔ* *ŋ'e-mə* *sitʰi* *təvm-wə*
 3SG-ERG 1SG-POSS letter send-PRES
 'S/he has sent me a letter.'

1.2. The verbal stem

A verb stem in Champang may consist of a single root or two or more roots. In addition to root(s), a verb stem may also contain adverb-like morpheme(s) preceding and following the verb root(s). Example (5) demonstrates a verbal stem formed by a single root, whereas example (6) shows the stem formed by two roots.

- 5) *menrin* *nuduŋ-ŋeʔ* *nəŋ-nəŋ* **ram** *kaʔwə*
 PN mother-ERG 2SG-ACC call PRES
 'Menrin's mother calls you.'
- 6) *jə* *ŋəm̩m̩ŋ ləmlu-kə* *ŋ'e* *kaʔ-təet* *kaʔ-ni* **ge-nək**
 DEM PN about-ACC 1SG speech-one speech-two say-desire
 'About this Ngammong, I desire to speak one two words.'

CONCLUSION

To summarize, this paper is a detailed discussion of the verbal categories of Champang. This is a preliminary analysis of the formation of verbs in this language, which posits that Champang is a verb-final language where the verbs are specified for tense, aspect, polarity and deixis. The verb stem in Champang is formed by one or more roots. And, in addition, the stems are commonly followed by verbal operators in the language.

Multilingualism in Indian Society in the light of Census of India 2011

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This paper attempts to examine the nature of multilingualism in India in the backdrop of Census of India 2011. In this paper, bilingualism and trilingualism taken together is being considered as multilingualism. Census data does not take into account competence in more than three languages. The knowledge of three languages known is inclusive of the knowledge of one's mother tongue. The major thrust is upon the relation between the number of multilinguals in different educational levels as enumerated by the Census of India of the Indian Government. The number of multilinguals in different age groups is also being taken into account very briefly. An explanation for varying multilingual trends at the level of whole India and also in some of the states are being examined. Let us take a brief look at the all India level data

All India Total			
Speaker Type	Total Multi-linguals	Rural Multilinguals	Urban Multilinguals
Illiterate	4,61,46,126	3,24,38,084	1,37,08,042
Literate but below primary	3,30,78,720	2,02,38,699	1,28,40,021
Primary but below middle	5,72,06,840	3,34,25,301	2,37,81,539
Middle but below matric/secondary	5,38,60,011	3,09,67,922	2,28,92,089
Matric/Secondary but below graduate	12,71,03,294	5,68,49,254	7,02,54,040
Graduate and above	6,91,04,592	1,68,52,531	5,22,52,061
Literate without formal Education	1,44,98,767	72,53,683	72,45,084
Literate	35,48,52,224	16,55,87,390	18,92,64,834
Total	40,09,98,350	19,80,25,474	20,29,72,876

At the country level maximum number of multilinguals are from the matric level. The trend prevails in many of the states. More knowledge, explanation and utility are to be found in the paper.

An attempt is made in this paper, to take a brief look at multilingualism as per age which will lead to further research on the formulations of the Critical Period Hypothesis.

Let us take a brief look at the all India level data.

Age Group	Total Number of Bi/Trilingual Persons	Rural Bi/Trilinguals	Urban Bi/Trilinguals
5-9	1,74,93,300	99,64,749	75,28,551
10-14	4,17,42,827	2,45,99,472	1,71,43,355
15-19	5,50,51,316	3,11,07,354	2,39,43,962
20-24	5,41,78,740	2,78,71,585	2,63,07,155
25-29	4,67,81,216	2,26,22,367	2,41,58,849
30-49	12,39,10,754	5,61,13,054	6,77,97,700
50-69	5,06,46,143	2,10,39,995	2,96,06,148
70+	99,16,886	41,70,525	57,46,361
Age not stated	12,77,168	5,36,373	7,40,795
Total:	40,09,98,350	19,80,25,474	20,29,72,876

If one has to look at the educational benefits of multilingualism, then one has to foster more multilingualism in the formative age groups of 5 – 29. The India level shows the maximum number of multilinguals from 30 – 49 years age group. Considering India’s linguistic diversity and the importance and benefits of multilingualism coupled with the importance of Critical Period Hypothesis, such an outline bears relevance in areas like education, particularly in present times when one notices a shift in importance from the international link language called English to the local languages. The analysis of multilingualism in relation to educational qualifications underscores the importance of language education in promoting literacy and language proficiency. The finding that multilingualism is associated with greater literacy levels emphasizes the educational benefits of multilingualism.

The study is based on the latest census data to analyze the prevalence of multilingual speakers across different age groups and educational qualifications. This provides valuable insights into language acquisition patterns and sheds light on the role of sociocultural factors in shaping language proficiency.

The validity of the Critical Period Hypothesis is being tested by comparing the distribution of multilingual speakers across age groups.

A Morphological Study of Compounding in Yimkhiung

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INTRODUCTION

This paper deals with the study of compound words and its different types found in Yimkhiung. It focuses solely on the morphological aspect. Bauer (2003), defines compound as ‘the formation of a new lexeme by adjoining two or more lexemes.’ According to O’Grady and Guzman (1996), “Compounding is the combination of some lexical categories (nouns, adjectives, verbs or prepositions) to create a new word”.

In simple words, compounding can be defined as combination of some lexical categories such as adjectives, nouns, verbs, or prepositions, in purpose of constructing a larger unit of word or we can put it as, ‘a compound is a word which consists of two or more words.’

Yimkhiung (previously Yimchunger) is one of the non-scheduled languages of India spoken mainly in Nagaland in the North Eastern states of India. Yimkhiung tribe together with other tribes as members of the mongoloid race linguistically belongs to Tibeto- Burman family. As per Census of India 2011, the total population of Yimkhiung is 83,259.

For example;

1. /k^huŋarə-ŋakɿə/
baby- guard [glossing]
‘babysitter’
2. /ataŋasən-puŋ/
play place [glossing]
‘playground’

[2] 1.1 Types of Compounding; there are two types of compounding a) formal compounding and b) semantic compounding.

[2] 1.1.1 Formal Compounding; the formal compound has two sub types;

a) Root Compounding; it is also known as the primary compound.

For example;

1. /k^hinu - ajin/ [glossing]
moon-light
‘moonlight’

2. /təpuʔ - ɔ/

shoulder-bone	[glossing]
‘collarbone’	

b) Synthetic compounding: it is also known as deverbal compound. In the synthetic compounding, the second lexeme is derived from verb and the first lexeme is an argument of the verb.

For example;

1. /məzan-məʃupe/

nail - apply	[glossing]
‘nail polish’	

2. /nəkʰən-pʰitkʰi/

ear - hole	[glossing]
‘ear- piercing’	

[2] 1.1.2 Semantic Compounding; there are four types of semantic compounding.

a) Dvanda/Copulative compound; this compound word has two semantic heads, and it is also known to be dual headed.

For example;

a) Dvanda/Copulative compound; this compound word has two semantic heads, and it is also known to be dual headed.

For example;

1. /akʰəʔ-əpuŋ/

bitter sweet	[glossing]
‘bitter-sweet’	

2. /aʃe-aɣaŋ/

death-life	[glossing]
‘death and life’	

b) Tatpurusha/endocentric compound; it consists of a head lexeme and a categorical part that contains the basic meaning of the whole compound word.

For example;

1. /ke-ʒo/

water fall	[glossing]
‘waterfall’	

2. /ləʔ-kiʃ/

Gun shoot	[glossing]
‘gunshot’	

c) Bahuvrihi/exocentric compound; it does not have any semantic head.

1. /ho-məʃak/
stomach - scratch [glossing]
'bad temper'
2. /tʰe-ʃiʔ/
afraid [glossing]
'chicken-heart'

For example;

d) Avyayibhava/ adverbial compound; it consists of an adverb root paired with a noun.

For example;

1. /kim-kʰərə/
time- some [glossing]
'somehow'

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Phonological Processes and Correspondences in Zeme, Liangmai, and Rongmei

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Zeme, Liangmai, and Rongmei are closely related lesser-known languages of Northeast India mainly spoken in Assam, Manipur, and Nagaland. They share common cultural traits, traditions, and linguistic affinity. Therefore, they are together known as Zeliangrong. They belong to the Western Naga sub-group of Tibeto-Burman language family (Post and Burling, 2017) and share several exciting phonological processes and sound correspondences across these languages. More specifically, there are regular consonants alternation from the voiceless alveolar fricative /s/ of Liangmai to the voiceless aspirated alveolar stop /t^h/ in Rongmei and conversely, Rongmei /s/ to Liangmai /t^h/ as such:

	<u>Liangmai</u>		<u>Rongmei</u>
	/siam/	→	/t ^h iam/ ‘small’
	/sou/	→	/t ^h ou/ ‘who’
	/kəsan/	→	/kət ^h an/ ‘new’
And conversely,	<u>Rongmei</u>		<u>Liangmai</u>
	/sam/	→	/t ^h am/ ‘hair’
	/saŋ/	→	/t ^h aŋ/ ‘bark’
	/seŋ/	→	/t ^h eŋ/ ‘long’

Likewise, consonant alteration from Zeme // to Liangmai /s/

	<u>Zeme</u>		<u>Liangmai</u>
	/tsi/	→	/si/ ‘know’
	/tsou/	→	/sou/ ‘who’
	/kətsu/	→	/kəsou/ ‘three’
And conversely,	<u>Liangmai</u>		<u>Zeme</u>
	/tsap/	→	/sap/ ‘stand’
	/tsu/	→	/su/ ‘dig’
	/kətsak/	→	/təsak/ ‘hailstone’

The present paper will focus on the overview of the phonological processes and correspondences in Zeme, Liangmai, and Rongmei in order to reconstruct the proto form of the language group. The study will contribute to understanding the linguistic diversity within the Tibeto-Burman family.

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Syntactic variation within reach: The story of the subject -ke marker in Bhojpuri

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Traditionally, languages have two kinds of case systems Ergative-Absolutive and Nominative-Accusative, where the former is $S=O \neq A$, and the latter $S=A \neq O$, respectively, where S = intransitive subject, A =transitive agent, and O =transitive Object. In Bhojpuri, a postposition is generally used to denote all case relationships except the nominative. (Tiwari, 1960). Out of all the case markers in the language, *ke* marks genitive, accusative, and dative. Bhojpuri falls in the Nominative-Accusative system, as can be seen in the following

- | | |
|--|--|
| 1) CirΔi uRΔl
Bird fly.pst
“Bird flew” | 2) Ram ego lΔika-ke dekhΔ-l-Δn
Ram one.cls Boy-ACC see-PST-MH (Masc)
“Ram saw a boy” |
|--|--|

However, with regards to the *-ke* marker, this apparent neat typological categorisation seems to be somewhat destabilised; thus, along with its appearance with the O argument, the paper highlights its use with subject arguments S and A . Thus, in some of the varieties of the language (i.e. Northern standard and Gorakhpuri) *-ke* occurs with some pronominals at the subject position. This particular use of the marker is found only in the Bhojpuri of Ballia (UP) and Saran (Bihar) districts and is not present in other varieties like the Madhesi variety spoken in Nepal (Lohar; 2020) and the Bhojpuri spoken in the Bhabhua region of Bihar, along with other regions. This paper identifies these two subtypes as the KE-dialect and the non-KE-dialect, respectively, and provides a syntactic account of the same.

Below are some examples from different regions to show the differences, where this special use of the *-ke* marker is glossed as KE:

Bhojpuri spoken in Saran (Bihar)

- | | |
|--|---|
| 3. hΔmni-ke am k ^h Δini-san
1PL-KE mango eat-PST.HH-PL
“We ate mangoes” | 4. tohΔni-ke am k ^h ΔilΔ-san
2PL.NH-KE mango eat-PST.NH-PL
“You ate mangoes” |
| 5. uha~ke/iha~ke am k ^h Δini
3SG.HH-KE mango eat-PST.HH
“S/he ate mangoes” | |

6. okɫni-ke/ekɫni-ke am kʰɫilɫ-san
3PL.NH-KE mango eat-PST.NH-PLmkr
“Those people/these people ate mangoes”

Bhojpuri spoken in Ballia (UP)

7. hɫmni-ke ja tani-ja
1PL-KE go.PRES.HH-PL
“We are going”
8. okɫni-ke/ekɫni-ke/iɫɫni-ke am kʰɫilɫ-san
3PL.NH.Fem-KE mango eat-PST.NH-PLmkr
“Those people/these people ate mangoes”
9. toɫni-ke am kʰɫilu-(hɫ)-san
2PL.NH-KE mango eat-PST.Fem.NH-PLmkr
“You ate mangoes.” (immediate past)

The next set of data show a lack of *-ke* marker on the A and S subjects:
Bhojpuri spoken in Nepal (Madhesi)

10. hɫm-ni am kʰa-ini
1SG.NOM-PL mango eat-PST.H
“We ate mangoes.”
11. tu-ni kʰet-e ja-il-ɫ
2SG.NOM-PL farm-LOC go-PP-2.PST.MH
“You went to farm.”
12. u-ni am kʰa-il-ɫn
3SG.DIST.NOM-PL mango eat- PP-3PL.PST.MH
“They ate mangoes.”
13. uɫa~ka a-ini
3SG.NOM.H-DEF come-PST.H
“S/he came.”

(Lohar (2020): 233)

Bhojpuri spoken in Bhabhua (Bihar)

As is visible throughout the data, it seems that it appears almost exclusively with the plural form of the pronominal subjects (apart from the 3rd person demonstrative in HH). Following the process of verbal agreement establishment

14. haṃni	jat	bani-(ja)
1PL	go.Prog	be.PRES.HH-(PLmkr)
“We are going”		

for Magadhan languages as in Bhattacharya (2016), honorificity seems to be a matter of a higher syntactic head, like the speech act head, at least in case of the so-called addressee agreement in these languages. However, when it comes to non-addressee honorificity agreements, this paper proposes that this is done lower in the structure, within the VP. Thus, the agent determining head of *v*, is responsible for KE-marking on the subject argument, naturally resulting in a non-Nominative case. It is assumed further that the singular Ns being better candidates for additional sentiency-related features, escape the VP to a higher position, receiving zero nominative.

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Practices in Naga: A Sociolinguistic Study

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Naming practices in different cultures present an interesting study into how the set up and norms of any community becomes an important aspect of establishing their identity and being. The science of onomastics studies names in all their aspects. The subfield that studies personal names is anthroponym. Studies in anthroponym reveal that personal naming conventions in different languages vary around the world, each presenting a rich outlook into their world view and customs.

The paper is an attempt at studying the personal names from a socio-onomastic view of the Naga in Nagaland, India with a focus on Changki. Changki is a sub-tribe of the Ao residing in the Mokokchung district of the state. The study looks into how the tradition of personal naming passes on cultural and ethnic identity to their children. The community attaches ethnic pride and individual acceptance of one as a member through personal name. Within the community, a person's name besides being the carrier of one's identity is also an indicator of one's clan and roots. Clans are an important level of moiety among the community. When a child is born a name is given by the third day as that signifies giving the child its rightly existential identity and rightful membership of the clan. Elders from the family or clan members give the name after consultations among them. The clan members are considered as members of the extended family. As such, there can be no intermarriage within the clan members and so each person within the clan has a different name and there cannot be another person with the same name within the same clan. Another person from another clan can have the same name but what will differentiate them is the clan name. Moreover, the names can be passed on down the line within the clan members after one's death.

It is a descriptive study based on meeting people from different Naga tribes. Help from elders of the speakers of the language in focus was taken after collecting the names for interpretation. Then an analysis was arrived at taking the structures and current trends in its patterning and usage.

The common structures of the name are as follows:

- | | | | |
|-------------------------|------------------|----------------------|-------------------------|
| <given name > | <clan name > | - Tekalong Longkumer | |
| or < father's initial > | <given name > | <clan name> | - L. Tekalong Longkumer |
| or <one's initial > | <clipped name > | <clan name > | - T. Along Longkumer |
| or <given name > | <father's name > | - Tekalong Sunep | |
| or <given name > | | - Tekalong | |

People from the same community on meeting each other can trace the lineage or family belongingness drawing on the clan name or father's name. In addition to

Name	Gloss	
Tekalong	‘bitter stone’	Attaching the word ‘Bitter’ is believed to put an end to whatever evil/unfortunate events the family has been experiencing.
Ongtinaro	‘ <i>ongti</i> flower’	<i>Ongti</i> is an important hill in the village. It translates to one’s beauty and glory.
Talisunep Toshilila/ba Tiakala/ba	‘More peace’ ‘live in praise’ ‘lucky man/woman’	Names like these depict how one should live and what one should strive for.
Tsudipang	‘ <i>Tsudi</i> ’s mouth’	<i>Tsudi</i> is the name of a river. The mouth of the river represents flow of blessings and prosperity.

these, married women have the liberty to use husband’s surname or clan name after their given personal names.

The names carry much of history and culture and give an insight into the ecology of the place and the community. One can interpret the names as having connotations of significant aspects related to family fame, pride, wealth and set up. They also exhibit senses related to flora and fauna of the place, past significances, myths and superstitions, beliefs, landscape and geography, natural environment, emotions etc.

Names are not gender specific and can be the same. What differentiates them is the suffixing of ‘ba’ for men and ‘la’ for women in the name. For instance, a man would be ‘Toshiliba’ whereas the woman would be ‘Toshilila’.

After the coming of Christianity around the nineteenth century, personal names depicting biblical characters are also used signifying their religious affiliations in recent times. Also unlike other Indian cultures, where there is usually a middle name and surname that differentiates a clear-cut caste and occupation etc, the ethnic personal name besides marking affinities and identities which are representative of their credence and surrounding tribal environments does also exhibit interesting sociolinguistic interpretations through a study of the patterning and connotation of the name.

Thus we see that naming practices are not random but a reflection of existing

social norms and ethnic cultures and customs. The practice as we see in different communities exists in varied ways and the community too has its unique way of showing significance in their naming practices depicting an ethno-cultural construction.

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Case System in Dimasa and Ranglong

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This paper aims to present a comparative case system for Dimasa and Ranglong. The Dimasa language belongs to the Bodo-Garo group under the Tibeto-Burman sub-family of the Sino-Tibetan language family. Lewis, Simons and Fenig (2013) classified Dimasa under the Bodo sub-group of the Jingpho-Konyak-Bodo group of languages following Burling (1983) (Longmailai 2014:p.22). The term 'Dimasa' means 'sons of the great river' where 'di' means 'water', 'ma' means 'big' and 'sa' means 'sons' (Singha 2007:1). Dimasa is closely related to Bodo, Kokborok, Garo languages and they are mutually intelligible with each other. Dimasa is mainly spoken in Dima Hasao, Karbi Anglong, and Cachar districts of Assam, and Dimapur district of Nagaland. According to the 2011 census report, Dimasa people have a population of 262,413. An ethnic group known as the Ranglongs speak Sino-Tibetan and are descended from the ancient Kuki Chin. It belongs to the Tripura Halam community as one of its sub-tribes. They are Mongoloid in ethnicity, and their language is a member of the Tibeto-Burman language family's Kuki-Chin subgroup (Grierson, 1903). The Ranglong language has close affinities with Aimol, Chiru, Kharam, Darlong, Molsom, Hrangkhoh, Bongcher, Kuki, Mizo, etc. The speakers of Ranglong are mainly found in Dharmanagar, Khuwai, and Dholai districts of Tripura. They are also found in small, scattered groups in Mizoram, Cachar, and Karimganj, Districts of Assam. The population of the Ranglong tribe cannot be ascertained from the Census report of India, as they are not reflected in the same because of their negligible numerical strength, having a total population of approximately 12 thousand Ranglong individuals (Ranglong: 2018). Both languages are endangered languages. Therefore, it's a preliminary work of the common case makers used in the Dimasa and Ranglong languages of North East India, which have been extensively studied. Case agreement systems fall into one of two categories: nominative-accusative case systems and ergative-absolutive case systems. Dimasa follows the nominative-accusative pattern. The Ranglong language follows the ergative-absolutive pattern.

Examples are given below:

1. Ergative-absolutive case systems in Ranglong

Ranglong follows Ergative-absolutive case systems. In some cases ergative case is optional as shown in eg 2 below.

(i) *koi – in ball ka pir*
1SG – ERG ball 1SG kick
'I kick the ball'

(ii) *koi ball kei pir*
1SG ball 1SG kick
'I kick the ball'

(iii) *ama chu-bazar-a ase-zei*
3sg ABS-bazar-LOC go-PRF
'H/she has gone to the market'

From the above examples it can be seen that Ranglong follows Ergative-absolutive case system. Eragtuve case is marked by -in and absolutive is -*chu*.

2. Nominative-accusative case systems in Dimasa

The nominative case in Dimasa is always unmarked as shown below:

(iv) *aŋ-∅ era-ha pei-ba*
i-NOM here-LOC come-past
'I came here'

(v) *aŋ-∅ bu-khe gari dik^hlai-ri-ba*
1SG-NOM s/he-ACC car move-causative-past
'I made him move the car.'

Examples(iv) and (v) shows that Dimasa follows nominative-accusative case system. Nominative is -∅ unmarked and ACC is marked with -*khe*.

The paper will try to represent the similarities and dissimilarities in the Dimasa and Ranglong case systems, as well as a few different concepts involved in case system in these languages, will be analyzed and discussed in the study¹¹. As both of these languages belong to different sub-family of TB languages, the present paper will try to attempt the different case strategies of both the languages; this will also shows the various grammatical functions used by these

¹¹ Dimasa and Ranglong data presented in the paper is collected by the author Bishal Barman from the Assam university Silchar and Cachar district of Assam.

languages.

Different case markers of Dimasa and Ranglong are shown in the following table

Case	Markers in Dimasa	Markers in Ranglong
Ergative	-	-in
Absolutive	-	∅, -chu
Nominative	-∅	-∅
Accusative	-kh e	-ra
Dative	-ne	-∅
Genitive	-ni	-ta
Instrumental	-dʒa	-le
Ablative	-pra	a-ta
Locative	-ha	-a,-na
Comitative	-dʒa	-le,-bila

Keywords: Bodo-Garo, Case, Dimasa, Kuki Chin , Ranglong.

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A Hybrid POS Tagger For Telugu

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1. INTRODUCTION

Natural Language Processing (NLP) is a branch of computer science and Artificial Intelligence (AI) that enables machines to comprehend human language effectively and assist with linguistic tasks. The initial step in every NLP task is Part-of-Speech (POS) tagging, which assigns a tag to a word based on its meaning and context. The present paper discusses the development of a hybrid POS tagger for the Telugu language. Telugu is a highly inflectional and agglutinative language widely spoken in the southern part of India (mainly in the states of Andhra Pradesh and Telangana). The Language belongs to the Dravidian Family and follows S-O-V, i.e., subject-object-verb structure. The hybrid POS tagger for the Telugu language integrates two statistical algorithms, i.e., Hidden Markov Models (HMM) and Conditional Random Fields (CRF).

1.1 Need for Hybrid Approach

The hybrid approach is a combination of two or more approaches. This paper uses Hidden Markov Model (HMM) and Conditional Random Fields (CRF). In the first stage, the HMM POS tagger can effectively handle words with more than one POS tag by examining the probability of each tag based on trained data and the surrounding words. Later, the output of the HMM POS tagger is fed to the CRF tagger to address the tagging errors of the HMM tagger. Combining two POS taggers will help in understanding the language features more effectively than using only the HMM tagger. The accuracy obtained using a hybrid POS tagger was more significant than the individual POS taggers. The figure below represents the method followed for the present study.



1.2. Collection of Corpus

The Telugu corpus has been collected mainly from online resources for the present study. To understand the language features and tag the test corpus, the study uses an annotated corpus of 15,000 words and a tag set of 17 tags.

Keywords: Telugu Corpus, Hidden Markov Models (HMM) tagger, Conditional Random Fields (CRF) tagger, BIS tag set.

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A Journey through the History of Linguistic Research in the Himalayan Region

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The Himalayan region, characterized by its unparalleled linguistic diversity and cultural richness, has captivated the attention of linguists, anthropologists, and scholars for centuries. This comprehensive review traces the evolution of linguistic research in the Himalayan region, offering insights into the historical, theoretical, and methodological developments that have shaped our understanding of language diversity in this unique geographical setting. Beginning with the early colonial encounters and missionary endeavours, this paper navigates through the emergence of structural linguistics, ethnolinguistic surveys, and contemporary approaches informed by advances in technology and interdisciplinary collaboration. By synthesizing historical trends, theoretical frameworks, and empirical findings, this paper offers a comprehensive overview of the history of linguistic research in the Himalayan region. It underscores the significance of interdisciplinary approaches and cross-cultural dialogues in advancing our understanding of language diversity and its implications for human society.

Keywords: Himalayan region, linguistic research, language diversity, ethnolinguistic surveys, conservation efforts.

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Acquisition of the Semantics of English Verbs and Aspects by Malayalam Speakers of English

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1. INTRODUCTION

Understanding the meanings associated with verbs makes it easier for second language learners to learn and use verb aspects. Second language learners find it difficult to comprehend the semantic concept associated with verbs as it is not transparent. The Aspect Hypothesis claims that language learners are influenced by inherent semantic aspects of verbs and predicates while using tense-aspect morphology (Anderson and Shirai, 1994). Learners tend to show a definite pattern. They are inclined to associate past markers with inherently telic verbs and progressive markers with inherently atelic verbs. A study conducted by Bardovi-Harlig and Reynolds (1995) on second language learners of English found that the learners used past markers with semantically telic verbs. Numerous studies have been conducted on first and second language learners who showed a similar developmental pattern of aspect acquisition (Bardovi-Harlig and Bergstrom, 1996; Shirai and Kurono, 1998). Results of several studies supported the claims of the Aspect Hypothesis. The present study investigates the learners' awareness of the semantic aspect of verbs and whether the results support the Aspect Hypothesis.

1.1. Background of the Study

Comrie (1976) defines aspects as the different ways of viewing the internal temporal constituency of a situation. The function of aspects can be distinguished as - grammatical aspect and lexical aspect. The grammatical aspect is independent of its relation to any reference time. It is marked using the auxiliaries and the inflections present in the given language. The grammatical aspect is also known as the viewpoint aspect (Smith 1983). The progressive aspect in English and the perfective aspect in Spanish are examples of grammatical aspects. The lexical aspect of verbs, also known as Aktionsart and semantic aspect (Comrie 1976), is an inherent part of a lexical item that expresses a situation or action. Many scholars have categorised verbs based on their semantics. Vendler (1957) categorises verbs into stative, activity, accomplishment and achievement. Smith (1991) adds another category of verb along with Vendler's (1957) semantic verbal categories- semelfactive. Comrie (1976) categorises verbs based on binary distinctions of punctual/durative, telic/atelic and state/dynamic. Vendler's (1957) semantic classification of verbs and Comrie's (1976) binary distinction will form the base of this study.

1.2. Aim of the Study

The study primarily aims to analyse the acquisition of the semantics of English verb-aspect by Malayalam speakers of English. It investigates the learners' use of past and progressive markers across the four semantic categories of verbs. The study tests the data with the Aspect Hypothesis to check whether the results are in congruent with the claims proposed by the hypothesis.

1.3. Methodology of the Study

A total of 30 respondents participated in the study. The respondents are native speakers of Malayalam, learning English as their second language. These respondents are categorised based on their proficiency level as beginner level, intermediate level and advanced level. The study has selected stative, activity, accomplishment and achievement verbs for the test. The respondents were given 8 sentences with one blank each. Each item was a single sentence with no connection to the rest of the sentences. All the aspects markers were removed from the sentences. Respondents were instructed to fill in the blanks with the appropriate verb form with the help of the hints provided in brackets.

1.4. Results and Analysis

The figures above show that the learners at each level predominantly associated past marking with telic verbs and progressive marking with atelic verbs. Figure 1 shows that a large section of the learners at Level 1 associated progressive marking with activity verbs. However, it may be noted that a major section at this level associated progressive marking with accomplishment verbs as well. The Aspect Hypothesis claims that the learners initially will begin to attach progressive marking with activity verbs later extending it over to accomplishment and achievement verbs. It may be interpreted that the results partially support the claims of the Aspect Hypothesis. A noticeable section at all the three levels can be seen incorrectly overextending progressive marking to stative verbs as opposed to the claims of the hypothesis. Figure 2 shows that the learners predominantly associated past marking with accomplishment and achievement verbs, supporting the claims of the hypothesis. The Aspect Hypothesis claims that the learners will begin to use past marking with accomplishment and achievement verbs later extending it over to activity and stative verbs. A large section of the learners at Level 2 and 3 associated past marking with achievement verbs. The findings of the data partially confirm the claims of the Aspect Hypothesis. The learners appear to be not aware of the semantic features associated with the verbs. The learners might be associating the grammatical aspects with verbs without comprehending the semantic characteristics of the verbs. The hypothesis claims that the learners use grammatical aspects based on the inherent semantic aspects associated with the verbs. However, one cannot be sure of the learners' understanding of meaning associated with the verbs. Learners might be imitating a pattern from their textbooks or

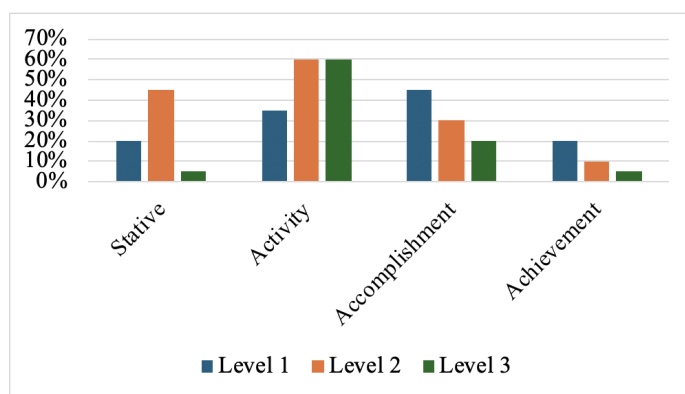


Figure1. Distribution of progressive marking across each verb category by learners at three levels

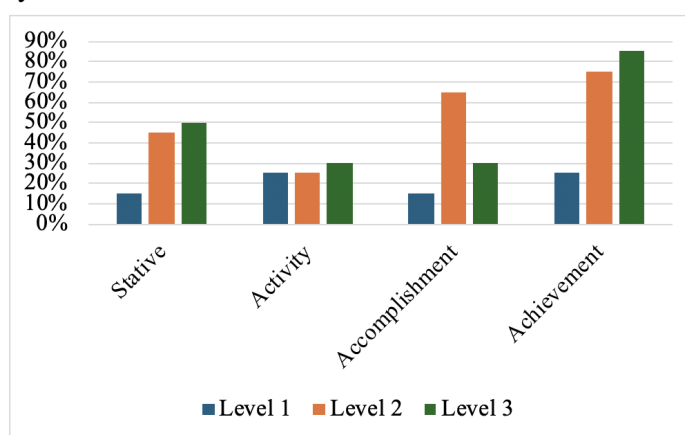


Figure2. Distribution of past marking across each verb category by learners at three levels

might be merely an instinctive attempt or it may be a reflection of acquisition of aspect through drilling. However, the present study has various limitations. The number of participants and application of different tests may provide with more concrete and generalizable results. This study implies that how learning semantics of verbs can make it easier to learn the structure of verbs and aspects. The study will be beneficial in understanding how learners acquire the English grammatical aspects and the inherent semantic aspects of verbs and in turn provide the learners with a more comprehensible acquisition pattern.

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Verb stem Alternation in Saibol and Narum

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The Kuki Chin languages are known for their characteristic Verb Stem Alternations (VSA) (Matisoff 2003:468; VanBik 2009:13) wherein verbs have two allomorphs – Form I and Form II. While Form I is used for main clauses, Form II is for the subordinate clauses (VanBik 2009:13), and have specific functions based on criteria such as transitive and intransitive, or the presence of negative, imperative or question marker etc. VSA is attested in most South-Central languages, although there is variation in how pervasive it is (see King 2009, Davis 2017, Peterson 2020). Saibol and Narum are two eastern Maring villages located in Tengnoupal district of Manipur, India (Kanshouwa 2023). They belong to the Mongmi Maring subgroup (see Thouman 2012, 2022; Konnerth 2022). These two languages exhibit VSA based on the syntactic and semantic environments. While stem-I is the simple form, stem-II is derived from stem-I mostly by the process of suffixation or sometimes by onset aspiration. In Saibol, stem-I occur with sentences that are declarative, propositive, and negative. Whereas stem-II mostly occurs in a causative construction. In Narum, stem-II occurs in both causative and negative constructions. However, in a negative construction, there is a change in the vowel of the verbs, In the first example below, *sa* ‘eat’ changed to *sak* in causative construction, and to *su* in negative construction. Likewise, in the second example, the verb *na* ‘sick’ changed to *nat* and *nu*

Stem I	Causative	Negative
<i>kai p^uu kasa-rəp-paŋ-ŋe</i>	<i>kai əmu-rə bu kəsak-iŋ-ŋe</i>	<i>kai p^uu su-m-oŋ-je</i>
1SG food eat-PROG-1SG	1SG 3SG-ACC food eat-1SG-DECL	1SG food eat-NEG-1SG-DECL
‘I’m eating food.’	‘I made him eat food.’	‘I did not eat food.’
<i>kai-nu kəna-e</i>	<i>kənai kai-nu-rə mə-nat-te</i>	<i>kai-nu nu-mok-ke</i>
1SG-mother sick-DECL	cold 1SG-mother-ACC CAUS-sick-DECL	1SG-mother sick-NEG-DECL
‘My mother is sick.’	‘The cold made my mother sick.’	‘My mother is not sick.’

Thus, VSA in Saibol and Narum are of two types. In the first type, verbs are innovated simply by suffixing *-t* and *-k*, whereas in the second type, the verb simply changed its form by altering its vowel, as in the case of Narum. This paper will discuss in detail the VSA found in Saibol and Narum, previously undocumented languages. The study will be crucial for enhancing the existing body of knowledge on VSA, which is a prominent area of current research in the Trans-Himalayan languages.

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Acoustic Analysis of Vowels in Idu Mishmi

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INTRODUCTION

Idu Mishmi is an endangered Sino-Tibetan language spoken in 5 districts of Arunachal Pradesh, but mainly in the Dibang valley and Lower Dibang valley region. The number of Idu Mishmi speakers reported by Lewis et. al. (2015) is estimated at 11,000, covering multiple dialects (Reinohl,2022). The main reasons for its endangered status are social, economic, and political in nature, with (Arunachali) Hindi and English as prestige varieties that people shift to (Kaland et. al.,2021). Blench and Lingi's (2008) phonological analysis of Idu Mishmi reveals a vowel inventory comprising six vowels: /a, i, e, o, u, ə/. Notably, /a, i, o, e, u/ have nasal counterparts, introducing a contrast in length. Additionally, creaky vowels, namely [a̰], [ḛ], and [ḭ], have been documented. The vowel chart in Blench and Lingi (2008) also notes the presence of retracted back vowels [ɔ̰], [ɔ̰], and [ṵ]. However, this current study focuses on a detailed analysis and comparison specifically between the modal vowels and their nasal counterparts. The vowel /ə/ was omitted from this analysis due to low frequency of tokens.

METHODS

The data was recorded by the authors in collaboration with IMCLS (Idu Mishmi Cultural and Literary Society) in 2020 to build a dictionary app with audio pronunciations. A total of 1000 randomly selected frequently used words were recorded, spoken by 1 male and 1 female native speaker. Audio recording setup involved using a Sennheiser CX 80S Wired noise-canceling microphone with a sampling rate of 44kHz. During the session, the participants were first presented with the Idu Mishmi word paired with its corresponding English translation to provide contextual understanding. This presentation took place within a web application custom built by the author running locally on the author's laptop. The participant then pronounced the words three times consecutively within a 7-second time-frame. The second pronunciation was selected for analysis due to its consistent pattern. However, the current study includes around 20 tokens of each vowel category except /ə/. The recorded sound files were then analyzed in Praat (Boersma et. al.,2001) and the vowels were manually annotated. A Praat script was then used to extract the F1 and F2 values at the mid-point of each vowel segment.

RESULTS

The mean F1 and F2 (speaker normalized) values extracted from the oral and nasal vowels are plotted in Figure 1. The results show that for mid and the low vocalic region, the oral vowels and the nasal counterparts are positioned close to each other in terms of their F1 and F2 values. However, for the high vowels [i] and [u], the nasal counterparts are positioned much lower and more front, indicating a difference in the oral and nasal vowel space.

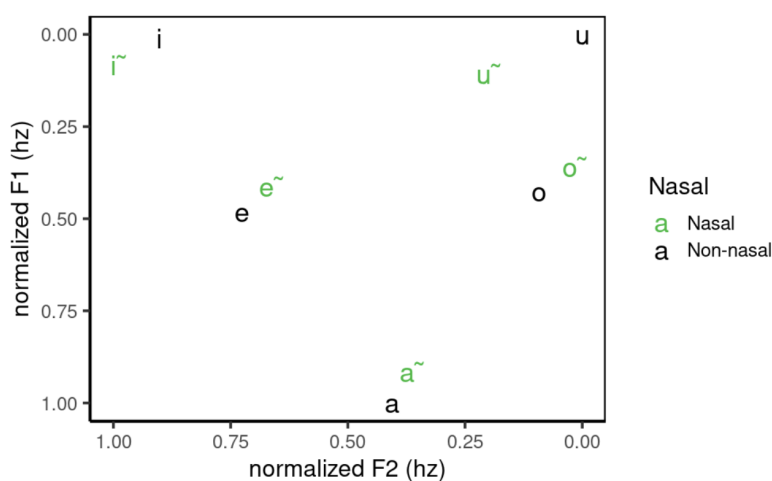


Figure 1: Mean F1 and F2 of oral and nasal vowels in Idu Mishmi

CONCLUSION

In conclusion, our findings demonstrate the distinctions between oral and nasal vowels, particularly in the high vowels [i] and [u]. Although minimal differences were observed in the mid and low vowel regions, the nasal vowels exhibited a lower and more front quality for the high vowels. This prompts further inquiry into the statistical significance of these differences by addition of more data to this analysis. This study remains dedicated to continued exploration of these distinctions and arrive at broader implications of these variations in oral and nasal vowel characteristics.

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A first look at Oinam language, a dialect of Poumai Naga (Poula)

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1. INTRODUCTION

This paper presents a report on Oinam language, a variety of Poula. Though the Oinam variety of Poula is considered to be a dialect of Poula, speakers of one Poula dialect may be completely unintelligible to the other dialect speaker. Information about the language is based on the author's own research, conducted between October 2022 and April 2023 at Oinam village funded by ELDP. Oinam belongs to the Angami-Pochuri clade of the Trans-Himalayan family. Poumai Naga and Oinam are not mentioned in most classifications of Sino-Tibetan languages (Benedict 1972, Matisoff 1978, Bradley 2002 and van Driem 2014). Poumai Naga is mentioned in Eberhard, David M et al. (2020) as a member of the Angami-Pochuri subgroup of the Tibeto-Burman (or Trans-Himalayan) family. To my knowledge, no linguistic work is done on the Oinam variety. However, in Poumai Naga (Poula) a few studies are available (Veikho 2014, Veikho & Khyriem 2015, Veikho & Sarmah 2018, Veikho 2021). It is unclear for now how the Oinam became extremely distinct from Poumai Naga, though Oinam village is one of the Poumai Naga villages; for a comparison, a few lexical words in Oinam and Poumai Naga is given in appendix B. One probable reason could be due to the contact with Tangkhulic languages, as Oinam village borders the Tangkhul villages ¹² .

2. CONSONANTS

Consonants in codas are lost, except the velar nasal. All the eighteen consonant phonemes may occur at the onset position, however only the phoneme /ŋ/ occurs in coda position (in a few words). This suggests that Oinam's phonology lacks coda (or has lost coda). Lack of coda in the phonology is also reported in other Angami-Pochuri languages like Poumai Naga or Poula (Veikho and Khyriem 2015) and Sumi (Teo 2014).

3. VOWELS

There are seven monophthongs. Except with the consonant [h] and [s], the phoneme /i/ occurs after all the consonants. The phoneme /u/ is phonetically

¹² However, the villagers believe that their language 'Oinam' is a sacred gift from God in order to perform the art of Pottery making.

realized as close mid rounded vowel [ɯ], and restricts to occur after the consonant [s]. The phoneme /o/ can occur after all the consonants, except with the consonant [ɕ]. Phonetically, the mid close front phoneme /e/ is in free variation with the vowel [ɛ], and it restricts to occur after the consonant [n], [s] and [z]. The phoneme /ə/ restricts to occur after the consonant [b], [m], [n] and [ɕ]. The phoneme /æ/ restricts to occur before [ɲ], [ɕ], [z] and [h] consonants. While the phoneme /a/ may occur after all the consonants.

There are four diphthongs. The diphthong /ai/ restricts to occur with the consonant [ɲ] and [ɕ]. Except with the consonant [s], the diphthong /ao/ may occur after all the consonants. The consonant [ɕ] and [h] restrict to occur before the diphthong /əu/. While the diphthong /əi/ restrict to occur with the consonant [b], [d], [ɲ], [ɕ] and [h]. In addition, there is a rare vowel sequence, io, which occurs only with the consonant [n] in the morpheme -nio ‘perfective marker’; the innovation of the morpheme -nio is uncertain for now. The perfective marker -nio is used in the passage given in the appendix A.

To illustrate acoustic properties of the vowels, the minimal pairs are recorded from a male, native speaker for three iterations in both isolation and sentence frame; using the frame X *ano* X *dano vailo* ‘X, I said X’ (where X is the target word). After manually segmenting the data in Praat, the F1 and F2 values (in Hertz) are extracted at the mid-points for monophthongs and at 30% and 70% for diphthongs, using a Praat script. The extracted formant values are used to plot the vowels spaces using the Norm suite available online (Thomas & Kendall 2007).

The acoustic result shows that the seven vowels are distinct. The vowel formants are indicated with ellipses inside the plot for each vowel in isolation and sentence frame. The result shows that the F2 of the vowel /u/ is slightly higher than the F2 of the vowel /ə/, indicating the phoneme /u/ is phonetically realized as a close central vowel [ɯ]; similarly, Poula also lacks the vowel [u] as a monophthong (Veikho & Sarmah 2018). The vowel /ə/ is not strictly in the central location as its F1 is (unexpectedly) lower, almost similar to the F1 of the vowels /e/ and /o/. Similarly, the vowel /æ/ is more central, as the F2 value is much lower than the F2 of the vowel /e/. Considering the two open vowels (/æ/ and /a/), the F1 of the vowel /æ/ is observed higher than the F1 of the vowel /a/ (more open), and the F2 of the vowel /a/ is observed very low when compared to F2 of the two front vowels /i/ and /e/.

There are four diphthongs. The F1 of the first vowel for all the vowel sequences is less than the second vowel; the diphthong /ai/, the diphthong /ao/, the diphthong /əu/ and the diphthong /əi/. Because the F1 value (at 30%) for the vowel /ə/ is above the close-mid central vowel, the glide of the vowel /ə/ to the vowel /u/ is short.

4. SYLLABLE STRUCTURE

The syllable canon in Oinam is (C1) V1 (V2)(C2), where C1 can be any of the consonants, V1 can be any vowel, and V2 can be any of the three vowels (/i/,

/o/ and /u/). The canonical Oinam syllable minimally consists of an obligatory nucleus and a tone. It may also contain up to three optional elements in the following linear structure. All the consonantal phonemes occur at the onset position. At V1 slot, all the seven vowel phonemes may occur, but at V2 slot only vowels /i/, /o/ and /u/ are permitted. As mentioned above, the phoneme /ŋ/ is the only consonant that occurs at coda position. It is observed that the phoneme /ŋ/ occurs only after three vowels at coda: /a/, /əu/ and /əi/. A few examples are ləŋ 'boil', laŋ 'cooking', and ləiŋ 'pressing'. While there are a few environments that show no difference in meaning (free variation) for pronouncing with or without the phoneme /ŋ/; the word for 'bear' can be either pronounced vəu or vəuŋ and the word for 'writing' can be either pronounced səu or səuŋ. Every syllable carries one of the four tones: High-falling, Rising-falling, Mid and Low¹³.

5. TONE

Maximally, there are four distinctive tones; a few minimal pairs are given below.

Word	Gloss	Word	Gloss
mí	'people'	pó	'father'
mǐ	'rice pounding stick'	pǒ	'yellow'
mi	'dark'	po	'more'
mì	'hair'	pò	'rice pounding'

The acoustic results show two clear types of tones: contour tone and register tone. For the analysis, one male native (with the same language consultant recorded for vowels) is recorded. The minimal pairs are recorded, for three iterations in both isolation and sentence frame using *X ano X dano vailo* 'X, I said X' (where X is the target word). Considering the pitch track, tone in [mì] is a high-falling, tone in [mǐ] is a rising-falling, tone in [mi] is mid, and tone in [mì] is low.

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Motion Verbs and its Applications
from Concrete to Abstract domain in Assamese and Bangla

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This study aims to seek insight on the conceptual usage of motion in the premises of the two Indo-Aryan Languages, Assamese and Bangla, and its systematic grammatical representation and constructions. Motion indicates movement, that is, a motion event refers to the participant's change of position "from one place at one time to another place at a later time" (Radden, 2007). This also involves temporal as well as spatial changes. For example-

1) *He went to Guwahati.*

This above sentence denotes a motion event where an entity has moved from one place to another, temporally as well as physically. Thus, motion event also evokes the Source Path Goal (SPG) Schema, which acts as a mental framework in understanding how we plan and navigate in languages. It breaks down purposeful actions into core components, the starting point (source), the destination (goal) and the steps we take in between (path). This framework goes beyond physical movement, influencing how we approach planning, storytelling, and even our use of language. Such motion events are indicated through language with the help of motion verbs such as run (John is running), fly (the birds are flying), climb (he climbed up the stairs) etc., indicating that motion verbs are used to express any concrete experiences involving motion.

However, it is not exclusively used for concrete experiences but can also be applied in abstract domains such as emotions, metaphorical expressions etc. For instance, in Assamese,

2) *Ram premət poril*

ram	prem-ət	por-il
ram	love-LOC	fall-PRF

"Ram fell in love"

The verb 'por' used in the above example goes beyond its literal meaning to express the sudden change in emotions that comes with love. It captures both the act of falling itself (happening schema) and the experience of love (experiencing schema), similar to how a physical fall can be sudden and unexpected. Just like the action of falling, in this case, it adds a layer of powerlessness, suggesting love's irresistible force.

Similarly, Bangla happens to have the same type of construction with the verb "por" i.e., fall.

3) *Ram prem-e porlo*

"Ram fell in love"

Furthermore, the conceptual metaphor of LOVE IS A JOURNEY, TIME IS A

ram	prem-e	por-l-o
ram.NOM	love-LOC	fall-PST-3P

MOVING OBJECT etc., also invokes motion where certain motion verbs are used to indicate these metaphors. For instance, in Bangla-

4) or *shomoi efe geche*

or	shomoi	eje	ge-l-o
3.GEN	time	come	go-PST-3P

“His/Her time has come”

Thus, this paper looks into the fascinating phenomenon of motion verbs being used beyond the realm of physical actions, i.e., how motion verbs are employed not only to describe concrete experiences but also to represent abstract concepts. Furthermore, this study seeks to unravel the reasons behind this intriguing phenomenon.

Abbreviation: 3- 3rd person, 3P- 3rd person agreement marker, LOC- locative, NOM- nominative, PST- past, PRF- Perfective

Keywords: motion verbs, concrete, abstract, SPG schema

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Family Language Policy and Language Maintenance: A Preliminary Study of Purum

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1. Introduction

Family Language Policy is defined as the explicit or implicit planning of language within the home and among family members (King, et. Al. 2008). Spolsky (2004) formalized the notion of FLP through a 3-component language policy model. The three components of Spolsky's language policy model are Language Practice, Language Ideology and Language Management.

1.1. *Language Practice:*

"...the habitual pattern of selecting among the varieties that makes up its linguistic repertoire."■

1.1. *Language Ideology:*

Language ideologies are conceptualised as "the values and statuses" assigned to particular languages or language varieties (Kheirkhah, 2016). They are usually considered to be the underlying forces in language management and practices (King, et al., 2008).

1.1. *Language Management:*

Language management refers to "any specific efforts to modify or influence" language practices within a speech community. Language management deals with the authority and power over the language practices and ideologies of other members of one's speech community (Spolsky, 2009).

This study explores Spolsky's 3-component language policy model with regards to Purum, an endangered language of Manipur. Purum is one of the thirty-three (33) scheduled tribes of Manipur. The Purum community can be classified as a critically endangered tribe as the total population is 503, according to the 2011 Census and there are only two villages; Purum Khullen and Purum Likli. The language Purum is not taught or used as a medium of instruction in the academic sector. Even in the media sector, the language is not used as a medium of broadcast. Purum is an extremely understudied language.

2. Aim

This study seeks information regarding language use and language preferences of the Purums at various domains and aims to learn the language ideologies of the parents, the older members and the young members of the Purum families.

3. Methods

The data was elicited between January and March 2023 via questionnaires from the villagers of Purum Khullen and Purum Likli. All eligible participants were invited on a self-selective basis. The target population were divided into five age groups: Below 11 years of age, 11-20 years, 21-40 years, 41-60 years and Above 60 years. The questionnaire was divided into two sections. The first section was Profile questions and the second section had the survey questions. Most of the questions were set in a five-point Likert-scale along with a few 'Yes/No' questions. The objectives of the questionnaire were:

- to learn the language preference of the adult members of the family
- to learn the language dynamics of the adults and children in the family
- to learn the language(s) the community at various domains are exposed to
- to learn the language attitude of an individual in the community towards Purum and the other languages they are exposed to

4. Findings

The results show that the Purum community is constantly exposed to other languages from the region and have frequent language contact. Kom or Meiteilon is often used as the language of communication among themselves and the use of Purum language seems to be limited to the home domain and more specifically among elders. Meiteilon is the language of choice when it comes to communication with people outside of the community and in various domains like the academic sector, media and business transactions. Even on social media they tend to follow Meiteilon, English contents and sometimes Hindi. Having said this, the Purums have a strong positive attitude towards their native language. They consider Purum as an important part of their identity. The community, however, makes language choices that are suitable for gaining economic opportunities and social benefits as they live in a multilingual society. The findings allude to a gap between their language ideology and their language practices. This study shows the need to make conscious language choices and language management efforts such as FLP in order to maintain the language. The positive attitude shown by the Purums to their native language shows that they are willing to take up steps towards the maintenance and revitalisation of the language. Hence, a successful FLP can be employed by the community members at the micro level, i.e., the family.

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Poi-Tangkhum and Standard Tangkhum: A Comparative analysis

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1. Introduction

Poi, a Tangkhum village, is located in the northeastern region of Ukhrul district in Manipur, India. This village is home to the Poi people of the Tangkhum Naga tribe and is situated close to the Indo-Myanmar boundary. According to the 2011 census, the village has 253 households and 1595 residents. Many villages of Ukhrul district (central-northern region) like Chingai, Challou, Kuingai, Vahong, Kharasom, Namrei, Marangphung, Ngahui, Huishu, Khamasom, Khayang, Chattrick, Kajophung, and settlements in Myanmar like Ngachan, Henkok, Phungdret, Kongkailong, Maiyalong, Panshat, and Phaphao have genealogies that originate from Poi. Poi is also one among the last villages that accepted Christianity (1952).

As one of the oldest settlements from which many villages have migrated, we consider Poi to play an important role in understanding the relationship between the Tangkhumic languages. In this paper, a brief description of Poi is laid out, and based on the description, similarities and contrasts between Poi-Tangkhum and Standard Tangkhum is shown at the lexical, phonological and morphological level. Huishu, which is closely related to Poi, has also been compared wherever necessary.

The data for Poi has been collected from 4 native Poi speakers by eliciting 900 (approx.) words based on an extensive wordlist by Mortensen (et. al) and SPPEL (CIIL, Mysuru). The speakers (Male/Female, 65 to 78 years) are residents of Poi and Ukhrul and come from different occupational backgrounds. The Standard Tangkhum data is taken from the many publications and corroborated by the first author, who is a native speaker. The data for Comparing Huishu is gathered from Mortensen (2003).

2. Literature Review

While no linguistic research has been done on the Poi variety of Tangkhum Naga, there are many works on Standard Tangkhum and its varieties: Brown's (1837) concise vocabularies titled "North Tangkhum," "Central Tangkhum," and "South Tangkhum", Pettigrew's (1918) Tangkhum-Naga Grammar and Dictionary, Bhat's (1969) "Tangkhum-Naga Vocabulary", "Review of Tangkhum-Naga Vocabulary" by James A. Mattisoff (1972), "Tangkhum-Naga Phonetic Reader," and "Tangkhum-Naga Grammar" by S. Arokianathan (1980), Mortensen et al. (2011) on Sorbung, and Mortensen & Picone (2021) on East Tusom. Mortensen's 'Comparative Tangkhum', (2003) is an important work on the reconstruction of Proto-Tangkhum, which is based on three daughter languages- Standard Tangkhum, Kachai and Huishu. We refer to Mortenson's work in the comparison of Poi with the other

varieties.

4. Some differences

At the lexical level, it is no surprise that there are a number of words inculcated into Poi's lexicon from standard Tangkhul as the standard dialect is used in schools, public gathering, churches and most importantly, the Bible is translated in the standard variety. But still, we see substantial difference in their lexical items which is unintelligible to non-native speakers.

	Std. Tangkhul	Poi	Huishu	Gloss
i.	kəp ^h ùŋ	kəp ^h úŋ	ʔakəp ^h ùŋ	Mountain
ii.	kəpí	kəpí	-	Sleep
iii.	áwón	pùpùpə	ʔávəvəŋve	Flower
iv.	fɛ	təhâwk	ʔāhuk	Dog

In (i) and (ii), we see no lexical alterations except for a slight tweak in the tone of Poi and an additional prefix in Huishu. However, for words in (iii) it is difficult to draw a relation from the Standard Tangkhul words to Poi and Huishu. Huishu and Poi may display similarities as seen in (iv), as they are neighbouring villages and close by villages may show dialectal similarities.

In Poi-Tangkhul, only the unaspirated voiceless stops and nasals can occur in the coda, while in standard Tangkhul, the alveolar tap /ɾ/ can also occur in the coda. However, in Huishu, /t/ is absent in the coda. The affricate /tʃ/ in Poi-Tangkhul corresponds to /c/ in standard Tangkhul, and /ts/ in Huishu.

Poi	Std. Tangkhul	Huishu	Gloss
/mətʃək/	/məcí/	/ʔamətsik/	Salt

Tangkhul is a highly agglutinating language and many of the words are built through affixation. The 'ʔa-' of standard Tangkhul which marks as a "bulk-provider" with nouns, (Mortensen, 2003) corresponds to 'pə-' in Poi.

Standard Tangkhul	Poi	gloss
ʔamət ^h ín	pəmət ^h àn	liver
ʔavɛ	pəjei	Mother

'pə-' is obligatory with body parts in Poi but '-ʔa' can be dropped in Standard Tangkhul.

Standard Tangkhul	Poi	gloss
kui ~ʔakui	pəkaw	head
mik ~ʔamik	pəmak	eyes

5. Conclusion

In this paper, we give a detailed comparative analysis of Poi with respect to the other Tangkhulic varieties.

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Parallel Processing: Investigating Temporal Processing in Deaf and Hearing Signers

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1. Introduction

This experimental study examines the temporal processing abilities of deaf signers compared to hearing signers. The research aims to elucidate potential differences in temporal processing speed between these two groups when presented with linguistic stimuli in signed and written modalities. Participants from both groups will be presented with two passages—one written and one signed—designed to assess their temporal processing capabilities. Importantly, the content of the passages will be identical for both deaf and hearing signers to control for linguistic comprehension differences. By comparing the temporal processing speeds of deaf and hearing signers across different modalities, this study seeks to contribute to our understanding of how sensory experience and linguistic modality influence temporal cognition.

2. Review of Existing Research

The contrast in reaction times between deaf and hearing individuals, as observed in studies by Codina et. al. (2017) and Poizner et. al. (1987), underscores the critical need for temporal processing experiments. Codina's findings reveal significantly faster reaction times among deaf adults in British Sign Language (BSL) tasks, suggesting heightened temporal processing abilities within the deaf community. Additionally, fluency in BSL, even among non-deaf individuals, leads to rapid responses to peripheral stimuli, albeit to a lesser extent. Poizner's study further emphasizes the importance of investigating temporal processing abilities in both deaf and hearing individuals. Despite differences in experience with speech, the absence of significant differences in temporal processing tasks challenges previous assumptions.

3. Experiment

3.1. Task

Set up an experiment on DMDX and test sentences in signs and text with a group of deaf and hearing signers proficient in Indian Sign Language and English. Introduce them to a signed passage in ISL and a different written passage in English. Record the contrast in timing in answering comprehensive questions about each passage.

3.2. *Aim*

The task assesses the contrast in participants' processing speed when presented with both signed passages and written passages. It involves tasks that require participants to quickly identify and comprehend linguistic elements within presented stimuli. The processing speed task aims to gauge participants' efficiency in processing the information in both sign and written languages, providing insights into their cognitive processing speed across linguistic modalities.

3.3. *Procedure*

The participants for this experiment requires an equal number from both the deaf and hearing communities. All participants are required to understand Indian Sign Language and English.

3.3.1 *Stimulus Presentation*

Present linguistic stimuli in both sign and written languages exactly once.

Example of signed passage: Smile, Please!

Example of written passage: The Ant and The Dove

3.3.2 *Processing Speed Instruction*

Instruct participants to answer questions to test comprehension of each passage. The questions may be related to specific keywords such as the ones below:

Keyword in signed passage: Rock/boulder

Keyword in written passage: Bird-catcher

Types of questions asked: True/False, MCQs, one-word answers.

3.3.3 *Response Recording*

Use OpenSesame and DMDX to record participants' response times and accuracy in completing tasks that demand rapid processing of the presented linguistic content.

4. *Intuitive Conclusion*

This research aims to provide nuanced insights into the temporal processing adaptations of deaf and hearing signers when provided information in both sign and written linguistic modalities. The findings may offer a deeper understanding of how temporal processing abilities interact with learning in different modalities, contributing to the broader field of language acquisition and cognitive adaptation. Additionally, the study may inform educational practices for individuals learning new languages, especially in situations involving both signed and written forms of communication.

Keywords: DMDX, OpenSesame, Temporal processing, linguistic modality, Response time, Indian Sign Language

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Echo Formations in Munda Languages as Reflecting Complex Verb Configurations

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Echo formations, a pervasive feature in Munda Languages, illustrate two predominant patterns, (A) repetition of the first word with a phonemic alteration and (B) the pairing of native or borrowed words with related meaning. In the affixation of these echo formations, usually, the suffix is placed on the entire echo construction for all Munda languages, except in the case of Gta? and Gutob, which shows affixation in both the base word and echo word, as illustrated in the example (3) and (4). featureal pattern in how affixation operates in echo formation of each Munda Language and relates it to how it does in corresponding complex verb constructions. This pattern is captured below:

Echo Word Formation (Santali)

- 1.a) *Uni jahana ol-bel-e kusiya giyay*
 3SG something write-ECHO-3SG::SUBJ like be.PRSNT
 'I like writing and the like.'

Serialised Verb Construction

- 1.b) *Makāgu-ed-a-e* (Santali)
 cut bring-IMPRF:A-FIN-3SG::SUBJ
 'He is cutting and bringing.' (Anderson, 2008)

Echo Word Formation

- 2.a) *nen ?/an/Isimai amin bazar-añ 'yer-gi-n-asm* (Sora)
 I want/NEG/:1/NEG.NPST you market-N.SFX go-ECHO-N.SFX-PURP
 'I do not want you to go to market.' (Anderson, 2008)

Conjunct Verb Construction

- 2.b) *naram-jo:n* (Sora)
 catch.NMLZ.catch-fish-N.SFX
 'means of catching fish.' (Anderson, 2008)

Similarly, this pattern is reinforced by the unique affixation on both the base and echo formation found in Gta? and Gutob, a pattern also seen in their corresponding complex verb constructions.

rue cases of affix reduplication are rare in languages, which instead have been re-analysed as cases of stem reduplication (Inkelas & Zoll, 2005). This paper exhibits this 'rare' pattern within Gta and Gutob by reanalysing it as an affixation of vector /serialized verb constructions.

Moreover, as seen in the above examples (2), (3), and (4), Munda languages show

Serial Verb Construction

- 3.b) *aʔ-bbuʔ+aʔ-ccoŋ-ce* (Gtaʔ)
CAUS-REDPL:suck+CAUS-REDPL:eat-ss
 'To feed and suckle' (Mahapatra, 1976)

Echo Word Formation

- 4.a) *Madʒ-nen rone-bone deŋ-gu buron-gu=nen aʔso-gu+nen* (Gutob)
 3-PL happy AUX_PST.I live-PST.I=3PL ECHO-PST.I=3PL
 'They became happy and lived (on that way)' (N. Zide, 1976)

Serial Verb Construction

- 4.b) *bobrig-oʔ Beŋ-oʔ* (Gutob)
 enter-PST.II AUX-PST.II
 'made enter' (Anderson, 2007)

that echo words need not always be a partially reduplicated form of the base word like (1), but instead show a complete lexical change modifying the base word (Anderson, 2008).

Note that the affixation on the entire echo construction for Santali, Sora, Gtaʔ, and Gutob matches the affixation pattern on their respective complex verb constructions. For instance, Gtaʔ, the causative marker /aʔ-/ shows a similar pattern in both echo word construction, as well as in the light word construction, i.e. both the lexical verb and the auxiliary verb carry the CAUS morpheme. This was further demonstrated in Gtaʔ by Mahapatra (1976) and reinstated by Hook (1991) that serialised verb constructions show similarity in behaviour with echo formation.

Since it is also the case that the affix formation in Santali and Sora and the affix-reduplication in Gtaʔ and Gutob takes place only in the case of verbs, the suggested analysis of viewing the process as syntactically motivated seems to make sense. We take Santali as an exemplar and attempt an analysis on this line; Munda Languages, which exhibits this feature of repeated affixation on both the base and echo word, following the pattern for the same in their compound/complex verb constructions.

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A comparative study of numeral system in Kuki-Chin languages

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The paper aims to present the nature of numerals in three languages belonging to the Kuki-Chin sub-group of the Tibeto-Burman language family: Kaipeng, Biata and Thadou. Kaipeng and Biata belong to the Old Kuki sub-group, and Thadou belongs to the Northern Kuki-Chin group (Grierson 1903). Kaipeng is spoken in Tripura by approximately 15000 speakers¹⁴. Biata is spoken in Meghalaya and Assam by 19,000 speakers¹⁵ and Thadou is spoken in Manipur, Assam, Nagaland, Mizoram, Tripura and some parts of the neighbouring country, Myanmar by 350,000 speakers¹⁶. Like other Kuki-Chin languages, these three languages follow the decimal counting system. Table 1 shows the distinction in basic numerals in these three languages.

Table 1: Basic Numerals in Kaipeng, Biata and Thadou

Kaipeng	Biata	Thadou	Gloss
<i>k^hatka</i>	<i>k^hatka</i>	<i>k^hat</i>	‘one’
<i>nika</i>	<i>inika</i>	<i>ni</i>	‘two’
<i>t^humka</i>	<i>it^humka</i>	<i>t^hum</i>	‘three’
<i>lika</i>	<i>ilika</i>	<i>li</i>	‘four’
<i>rəŋaka</i>	<i>riŋaka</i>	<i>ŋa</i>	‘five’
<i>ruka</i>	<i>iruka</i>	<i>gup</i>	‘six’
<i>sərika</i>	<i>sarika</i>	<i>sagi</i>	‘seven’
<i>riatka</i>	<i>irietka</i>	<i>get</i>	‘eight’
<i>kuaka</i>	<i>ikuakka</i>	<i>ko</i>	‘nine’
<i>səmka</i>	<i>somka</i>	<i>som</i>	‘ten’
<i>rəzaka</i>	<i>rizaka</i>	<i>za</i>	‘hundred’
<i>saŋka</i>	<i>saŋka</i>	<i>saŋ</i>	‘thousand’

It is found that the three languages share a similar numeral system. In Kaipeng and

¹⁴ Data collected from the field visit and interaction with the respondent.

¹⁵ Biata at Ethnologue (25th ed., 2022)

¹⁶ Thadou–Kuki at Ethnologue (25th ed., 2022)

Biate, the classifier -ka is suffixed to the numbers. In Thadou, on the other hand, the numeral classifier is absent. It has distinct lexical items and adheres to a monomorphemic structure. In all three languages, multiple procedures, including additives, multiplicatives, and multiplicatives cum additives are used to produce higher numbers. All the three languages have a decimal numeral system. In this present paper, a comparative analysis of the numeral system in these three Kuki-Chin languages will be presented. The data for Kaipeng was gathered during a field trip from 18th to 28th March 2024 to Teliamura, Khowai district of Tripura. Data for Biate were collected from a research scholar of Assam University, Silchar residing at Fiangpui, Assam and the data for Thadou are provided by the co-author, who is a native speaker of the language.

Keywords: Numerals, Kuki-Chin, Kaipeng, Biate, Thadou

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Expressive Words in Liangmai

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The paper presents an analysis of expressive word constructions that show a non-arbitrary relationship between form and meaning in Liangmai, an understudied language classified under the Zemic group of the Trans-Himalayan family. Following Abbi (2018), I use the label ‘expressive’ as a cover term inclusive of ‘Expressives’ (Diffloth 1972), ‘Ideophones’ (Doke 1935), ‘Onomatopoeics’, ‘Elaborate Expressions’ (Haas 1964) and ‘Echo words’ (Abbi 1990, 1992). Expressives are descriptive expressions characterized by elaboration, rhyme, and alliteration, used to communicate the emotions, states, conditions, and perceptions of speakers. An expressive word in Liangmai modifies verb and it occur post-verbally. It evokes all sorts of sensory events, including sounds, taste, gait, visual effects, texture, smell and so on. Liangmai expressive words are arranged into three groups: (1) Acoustic symbolic words, (2) Articulatory symbolic words and (3) Systematic patterned words. Data used in this study include narratives documented in Tamenglong and Tharon village as well as elicitation.

Acoustic symbolic words are those forms that describe or represent sounds. It includes ideophones and onomatopoeics.

- | | | | | | | |
|----|-----------------------------|--------------------|-------------------|---------|-------------------|----------------------|
| 1. | i | tə ^h tī | t ^h āŋ | ŋūŋ-ŋùŋ | k ^h oŋ | tsiu-we |
| | I | dog | bark | EXP | sound | hear-DECL |
| | ‘I hear a dog barking’ | | | | | |
| | | | | | | |
| 2. | pa | əzaí | ga | mətsam | p ^h ùm | k ^h ai-ne |
| | 3.S | pond | LOC | jump | EXP | put-PERF |
| | ‘He has jumped into a pond’ | | | | | |

The expressive in (3) described the movement of the wind while in (4) it expressed the state of the road.

Systematic patterned words in Liangmai are similar to forms described as ‘elaborate expressions’ (Haas 1964) or ‘echo word’ (Abbi 1990, 1992). It contains four elements occurring in the pattern A-B-A-C.

- | | | | | | | |
|----|--------------------------------|---------|-----------|---------|-----------|------|
| 5. | tsəŋam | kam-zin | kam-za | du | lo | |
| | Work | do-EXP | do-EXP | PROH | IMP | |
| | ‘Don’t do the work carelessly’ | | | | | |
| | | | | | | |
| 6. | hai | ga | tad-wāŋ | tad-méŋ | sui-mak | ge |
| | DEM | LOC | walk-come | walk-go | agree-NEG | DECL |
| | ‘Don’t move around here’ | | | | | |

It is observed that the second syllable of expressive words in Liangmai, with

the exception of systematic patterned words, are pronounced in lower tone than the first syllable as indicated in examples above. A noteworthy characteristic of Liangmai expressive words is the occurrence of consonant clusters, which is not found in other parts of speech. However, this cluster occur only in the first syllable and is gradually dropped in the repeated form, as in *kl̄uŋ-l̄uŋ* ‘describes a sound like a thunder’, *plāk-lāk* ‘sound of water boiling’, *kr̄iŋ-r̄iŋ* ‘chaotic sound’, *pr̄iŋ-r̄iŋ* ‘use to describe glittering things’ and so on.

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The structure of the ditransitive constructions in Lotha

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This paper aims to provide an account of the patterns of di-transitive constructions in Lotha, a Central Naga Tibeto-Burman language spoken in Nagaland, with respect to especially whether or not the base order of ditransitives is (Indirect Object) IO > (Direct Object) DO or DO > IO or is it indeed a language with a dual variable base order.

It is noted that both the DO > IO and IO > DO word orders are possible when both the objects are +(DEF)inite and (-A)nimate with DO as Theme argument and IO as Locative argument in both (1a) and (1b):

put: theta

+DEF(-A)/+DEF(-A)

1. a) a-na edʒə- dʒi okoŋ- dʒi -lo θe-tʃo
 I.SG-NOM egg- DEF plate- DEF -LOC put-PST
 ‘I put the egg on the plate’.
- b) a-na okoŋ- dʒi -lo edʒə- dʒi θe-tʃo
 I.SG-NOM plate- DEF -LOC egg- DEF put-PST
 ‘I put the egg on the plate’.

This is also the case when both objects are +DEF and (H)uman, with IO as Benefactive and DO as Theme in (2a) and (2b).

bless: mhaya

+DEF(H)/+DEF(H)

2. a) potsow-na emilo ŋaro mhaji-tʃo
 GOD-NOM Emilo child bless-PST
 ‘God blessed Emilo with a child’.
- b) potsow-na ŋaro emilo mhaji-tʃo
 GOD-NOM child Emilo bless-PST
 ‘God blessed Emilo a child’.

Also, when both the objects are +DEF and DO is (-A as Theme) and IO is (H as Recipient), the order is DO > IO as shown in (3a) and IO > DO as shown in (3b):

give: pia

+DEF(-A)/+DEF(H)

3. a) a-na okoŋ- dʒi eson- dʒi-khe-lo pi-tʃo
 I.SG-NOM plate- DEF old man- DEF-hand-LOC give-PST
 ‘I gave the plate to the old man’.
- b) a-na eson- dʒi-khe-lo okoŋ- dʒi pi-tʃo
 I.SG-NOM old man- DEF-hand-LOC plate- DEF give-PST
 ‘I gave the old man the plate’.

However, when the objects are both H and the DO (as Theme) is +DEF and IO (as Goal) is +DEF, the word order is DO>IO shown in (4a). This is also the case when the Theme is a possessive NP, then, DO>IO is possible as shown in (4b).

+DEF(H)/+DEF(H)

4. a) a-na ŋaro- dʒi ojo edʒə-tʃo
 I.SG-NOM child- DEF III.SG.mother show-PST
 ‘I showed the child to her mother’.
- b) a-na ompo ŋaro- dʒi ompo edʒə-tʃo
 I.SG-NOM III.SG. child- DEF III.SG show-PST
 ‘I showed her/his child to her/him’.

When both the object is -A and the IO (as Experiencer) is +DEF and DO (as Theme) is -DEF, we get IO>DO as shown in (5a), but, when the order is reversed to DO>IO, the sentence is ungrammatical as shown in (5b).

give: pia

+DEF(A)/-DEF(-A)

5. a) a-na thera-dʒi odʒə pi- tʃo
 I.SG-NOM flower-DEF water give-PST
 ‘I gave water to the flower’.

-DEF(-A)/+DEF(A)

- b)*a-na odʒə thera-dʒi pi- tʃo
 I.SG-NOM water flower-DEF give-PST
 ‘I gave water to the flower’.

When DO is (-A as Theme) and IO is (H as Recipient), the sentence is ungrammatical as shown in (6a). But, when the order is reversed the sentence is grammatical as shown in (6b)..

-DEF(-A)/+DEF(H)

6. a) *a-na khorə abilo pi-tʃo
 I.SG-NOM ash Abilo give-PST
 'I gave ash to Abilo'.

-DEF(H)/-DEF(-A)

- b) a-na abilo khorə pi-tʃo
 I.SG-NOM Abilo ash give-PST
 'I gave Abilo ash'.

In Miyagawa (1997) it is claimed that Japanese shows evidence of a dual base; Bhattacharya & Simpson (2011) use the tests to claim the same for Bangla. Thus, although with one set of data (1-3), Lotha seems to have both orders but with another set of data (4-6) the statement is no longer supported. In fact, (4-6) show that when the IO is [+DEF], the non-canonical order of IO>DO is forced in (5) and (6) where the DO is [-A,-DEF]. In (4), the possessive upgrades the saliency of the [-DEF] IO in both the animacy and definiteness scales. It is therefore proposed that in Lotha, the order of arguments in a ditransitive is a matter of ranking in the animacy and definiteness scales. In line with Diesing's (1990) 'Mapping Hypothesis' (definite and specific objects move out of the VP at LF), this paper claims that a change in animacy hierarchy induces a definiteness effect on an argument which forces an overt syntactic movement out of the VP, resulting in non-canonical IO>DO orders as noted above. Additional new evidence from scope tests to argue for or against a dual base hypothesis for Lotha.

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Discourse Prominence and Differential Object Marking in Bodo

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1. Introduction

This paper presents an analysis of differential object marking (DOM) in Bodo in terms of the notion of discourse prominence. Bodo is one of the Bodo-Koch languages spoken mainly in the Bodoland Territorial Region of Assam, India. This study proposes that the notion of discourse prominence (cf. von Heusinger & Schumacher 2019) is sufficient for accounting the phenomenon of differential object marking in Bodo. This study argues that a direct object overtly marked with the accusative marker can be characterized as discourse prominent, and an unmarked direct object as lacking discourse prominence.

DOM refers to an object marking pattern where not all direct objects are marked the same. For instance, in some languages some direct objects are overtly marked with the accusative marker, while others remain unmarked. DOM is often conditioned by various semantic and pragmatic factors of the object NPs. In general, NPs with human, animate, and definite reference tend to be marked, whereas NPs with non-human and indefinite reference tend to be unmarked. These tendencies are usually expressed in terms of two distinct typological clines: animacy and definiteness. In some languages, the animacy cline captures the pattern well, and in others the definiteness cline captures the pattern better (Bossong 1991, Aissen 2003). One form of the clines can be seen below (from Aissen 2003):

1. Animacy : Human > Animate > Inanimate
2. Definiteness : Personal pronoun > Proper name > Definite NP > Indefinite specific > Non-specific

The higher the object NP is in these scales, the more likely it will be marked. These clines predict that if a direct object at some rank is case marked, then objects which are higher in rank will be case marked.

2. DOM in Bodo

In Bodo, certain classes of NPs are obligatorily marked by the accusative case marker, but object marking is variable for some other NP types. Personal pronouns, proper names, and definite NPs take object marking obligatorily, as illustrated in (1)-(3).

Object marking on indefinite NPs is variable; the indefinite object NP in (4) is unmarked whereas the indefinite object NP in (5) is marked.

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Tutsa Rhymes: A Comparison with Northern-Naga Languages

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1. INTRODUCTION

Tutsa is a lesser-known Tibeto-Burman language spoken in around 40 villages in the Tirap and Changlang districts of Arunachal Pradesh, India 25,000 speakers (Rekhung, 1992). The language belongs to the Northern Naga subgroup of Tibeto-Burman languages (Post and Burling, 2017). The language is listed as Tutsa Naga (ISO 639-3 code: tvt) in the Ethnologue, and its vitality is rated as stable based on the EGIDS (Expanded Graded Intergenerational Disruption Scale). This study is based on primary data in Tutsa language of around 1500 words, collected during 3 field trips in the year 2022-2023 and secondary data of three Northern-Naga languages - Hakhun Tangsa (Boro, 2017), Muklom Tangsa (Mulder, 2020) and Phong (Dutta, 2023). This paper presents an analysis of the rhyme in Tutsa, in comparison to other Northern-Naga languages.

2. PHONEMIC INVENTORY

The language consists of 20 consonants contrasting at 6 places of articulation with 6 manners of articulation as shown in Table - 1, and 5 vowels /i, u, o, e, a/ with phonemic length contrast. In Tutsa, duration is the only distinguishing factor for all the vowel pairs from 1 to 5 shown in Table - 2. Except for Muklom Tangsa, none of the related languages distinguishes between long and short vowels phonemically. Preliminary acoustic results show that there are statistically significant differences in duration between the phonologically long and short vowels in Tutsa.

	Bilabial	Alveolar	Post alveolar	Palatal	Velar	Glottal
Aspirated Stops	p b	t d			k	ʔ
Unaspirated Stops	p ^h	t ^h			k ^h	
Nasals	m	n		ɲ	ŋ	
Affricate			tʃ dʒ			
Fricative		s				h
Approximant		r			w	
Lateral approximant		l				

Table 1: Phonemic inventory of consonant sounds in Tutsa

Vowels		
	Short	Long
1	i	i:
2	u	u:
3	e	e:
4	o	o:
5	a	a:

Table 2: Short and long vowel pairs in Tutsa

3. SYLLABLE STRUCTURE

In Tutsa, the syllable canon is (C)V(C)T, where the vowel and tone are obligatory. The language permits four possible syllable structures - V, VC, CV and CVC. Similar pattern is observed for Muklom Tangsa (Mulder, 2020) and Phong (Dutta, 2023). However, in Hakhun Tangsa, Boro (2017) identifies a total of six syllable types - V, VC, CV, CVC, CGV and CGVC.

4. PRELIMINARY ANALYSIS OF RHYME

In Tutsa, tone is found in both open and closed syllable with sonorant and stop coda. Preliminary acoustic analysis of the recorded data in frame sentence shows that there are 3 tones present in the language - Tone 1 - Low and level, Tone 2 - High and level and Tone 3 - Mid and level.

Syllable type	CV/CVH		CVN		CVS	
	Short vowel	Long vowel	Short vowel	Long vowel	Short vowel	Long vowel
1	+	+	+	+	+	+
2	+	+	+	+	+	+
3	+	+	+	+	+	+

Table 4: Distribution of tones in short and long vowels across different syllable structures

van Dam (2018) identifies four tones in Tutsa, where the first tone is brief and characterized by the presence of final breathiness; the second tone is high and level; the third tone is falling and the fourth tone is a checked tone found only in close syllables with stop coda. Boro (2017) identifies three tones in Hakhun Tangsa, where the first tone is low; the second tone is high; and the third tone is falling and usually longer than the other two tones. There is no tonal contrast found in syllables with stop codas. Similarly, Mulder (2020) identifies three tones in Muklom Tangsa, where the first tone is falling with creaky phonation; the second tone is rising-falling/delayed falling with modal/breathy phonation; and the third tone is level with breathy phonation. The author states that all the stopped syllables in the language are toneless. Moreover, Dutta (2023) identifies three tones in Phong, where the first tone is high level; second tone is high with a slight rise; and the third tone is low level tone in closed syllables. But, in open syllables the tones lack pitch differences and thus phonation is the only cue to identify the tones, where the first tone consists of a glottal constriction; the second tone consists of breathy phonation and the third tone consists of modal phonation.

5. CONCLUSION

In this paper, we establish the tonal categories and vowel length distinctions in Tutsa, and investigate if there is any correlation between the phonemic vowel

length distinction in Tutsa with the type of phonation present in other Northern Naga languages, which acts as a feature of tone in these languages.

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Comparing Scrambling Across Hindi, Bangla, Meitilon, and Lotha

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Scrambling is the phenomenon of a language that allows free word order. South Asian Languages display this phenomenon (Subbarao, 2012). The variability of word order however is not the same across language families. Indo-Aryan languages have a freer word order in comparison to Tibeto-Burman languages. Using Bangla and Hindi as representatives of the Indo-Aryan Languages, and Lotha and Meitilon as representatives of Tibeto-Burman languages we can see these differences in the following examples.

Data: In intransitive sentences, movement of the verb to the front is possible in Hindi and Bangla. In Meitilon this movement is marginally allowed only in a very specific situation, and in Lotha such movements are ungrammatical.

Hindi

1. a. main soyaa thaa
I sleep be.PST
“I slept”
- b. soyaa main thaa
sleep I be.PST

Bangla

2. a. ami ghumiechilam
I sleep.PRF.PST
“I slept”
- b. ghumiechilam ami
sleep.PRF.PST I

Meitilon

3. a. ei tum-e
I sleep.PST
“I slept”
- b. tum-e ei
sleep.PST I

Lotha

4. a. ana yipcho
I.NOM sleep.PST
“I slept”
- b. *yipcho ana
*sleep.PST I

In transitive and ditransitives, the presence of an adverb reduce the gram-

maticity of a fronted verb for Meitilon (possible only in dramatic contexts), and movement of a verb even without an adverb leads to ungrammaticality in Lotha. Such movements are fine in Hindi and Bangla.

Hindi

5. a. Mai.ne tum.ko kal ek kitaab dii thii
 I.ERG you.DAT yesterday one book give be.PST
 “I gave you a book yesterday”
- b. di thi mai.ne tum.ko kal ek kitab
 give be.PST I.ERG you.DAT yesterday one book

Bangla

6. a. ami gotokal tomake ek.Ta boi deichilam
 I yesterday you.ACC one.CLS book
 give.ASP.PST
 “I gave you a book yesterday”
- b. deichilam ami gotokal tomake ek.Ta boi
 give.ASP.PST I yesterday you.ACC one.CLS book

Meitilon

7. a. ei-na lairik ngarang nang-ngon-da pi-ram-mi
 I-CNTR book yesterday you-to-LOC give-evd-nhyp
 “I gave you a book yesterday”
- b. ?pi-ram-mi ei-na lairik ngarang nang-ngon-da
 give-evd-nhyp I-CNTR book yesterday you-to-LOC

Lotha

8. a. ana kakoji nji nii picho
 I.NOM book yesterday you give.PST
 “I gave you a book yesterday”
- b. *picho ana kakoji nji nii
 give.PST I.NOM book yesterday you

Scrambling as we can see is not as evenly shared a feature among the two language families. This pilot study takes a look at data from the four languages and compares the grammaticality judgement of sentences in scrambled position in the four languages to compare scrambling possibilities in the languages. It further conjectures that the possible rationale for such restrictions on movement may not be accidental but rather symptomatic of many other constructions in these languages.

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Tone alternation process in Liangmai

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1. INTRODUCTION

A marginal number of studies have been conducted on the tonal features of North East Indian languages, including Liangmai. However, an investigation on the feature of tone alternation process in Northeast Indian languages is little or nil. This paper attempts to present the preliminary investigation of the tone alternation process (tone sandhi) in language use in Liangmai, a Tibeto-Burman language family member spoken in Manipur and Nagaland. The people of Liangmai reside across a continuous region spanning southern Nagaland and northwestern Manipur states.

2. EARLIER REPORT

Earlier studies on Liangmai tone report the existence of three levels of tone (Moita 2007; Charengna 2011; Raguibou 2015; Pandey 2014; Daimai, 2016; Daimai, K 2020) and four levels of tone (Mataina 2014). According to my knowledge there is no report on tone alternation of Liangmai.

3. METHODOLOGY

The data analysis in the study main involves voices of five native speakers both males and females. Impression of the author's voice as a native speaker was also incorporated to ascertain tone alternation movement. In addition, an informal observation of the voice other speakers using language in normal situation were included. The pitch values were analysed using the Praat. The data were observed taking on a formally prepared and recorded linguistic data meant for observing the tone alternation. The analysed data were word list and elicited sentences. As per the study, tone alternation were caused by two processes i.e. syntactically and morphologically. Firstly, the tone alternation occurs in genitive construction particularly when the genitive and possessed noun stand as a subject of a sentence. Secondly, tone alternation occurs in the compound formation. In either case, an instance of down stepping is common. Up stepping process occurs but comparatively lesser than the down stepping process. With this, I attempt to see if any predictable tone alternation process exists in Liangmai.

Keywords: Liangmai tone alternation

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A Study on the Adverbial Clauses in Phong

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1. INTRODUCTION

This paper is a descriptive account of the structure of the different types of adverbial clauses in Phong. The Phong community is one of the more than thirty-two sub-groups of the larger Tangsa community, who live on both sides of the Indo-Myanmar border. Phong belongs to the “Bodo-Konyak-Jingpho” (Burling, 2003) sub-group of the Tibeto-Burman family and is spoken by around 4000 people spreading across seven villages in the Changlang district, and in nine villages in the Tirap district of Arunachal Pradesh.

1.1. ADVERBIAL CLAUSES IN PHONG

There are six different types of adverbial clauses, viz. manner adverbials, temporal adverbials, reason clauses, purpose adverbials, conditional clauses, and concessive conditionals. The manner adverbials are expressed by adding adverbial morphemes such as, *lemo/lehom* ‘like that’ (depending on the dialect) or the adverbial marker *kule*. In the example (1) below, the adverbial clause is marked by the adverbial marker *kule*.

1. *mi?* *le* [*eksident* *aŋ* *kule*] *ti* *ta?*
 man DEF accident COP ADV DIE PST.3
 ‘The man died in the accident.’

However, negative manner adverbial constructions are marked with the negative *mu/ nu* (based on the dialect) followed by the subordinator *lame* or just the locative =e. Consider the following examples. In example (2), the verb of the subordinate clause *boi* ‘look’ is marked with the negative *nu* which is then followed by the subordinator *lame*.

2. *kom=e* *raŋ* *tee* *r-a* [*hi* *k^hitam=e*
 kom=ERG write PROG PRES-3 DEM book=LOC

boi *nu* *lame*]
 look NEG SUBORD
 ‘Kom is writing without looking at his book.’

Temporal adverbial clauses are expressed by adding different morphemes expressing *ʒak^ho* ‘before’, *di* ‘after’, till, or adverbial marker, *kule*. Some temporal adverbial clauses are also expressed by nominalized clauses. The following example (3) shows a temporal adverbial clause which is expressed by preceding the matrix clause. It is overtly expressed by *di=e* ‘after’ which is marked by the locative.

3. [le p^he di=e] ŋi p^haksa tu
 that distribute after=LOC 1PL eat only
- doŋ so p^haksa? r-e
 FOC DP eat PRES-1PL
 ‘After distributing (the packets), we just eat.’

The reason clauses are marked by the suffix *ʒa* ‘cause’. The reason adverbial clause occurs between the subject and the matrix verb of the matrix clause. In the case of the transitive clause, the adverbial stands between the subject and the object of the matrix clause. These subordinate clauses remain unmarked for tense and agreement. In (4), the suffix *ʒa* ‘cause’ is attached to the adverbial *ku*. The adverbial *ku* roughly expresses the sense of happening something.

4. kom [ram=e ti ku-ʒa] tɛ^ham sa? ta?
 kom hunger=LOC die happen-reason rice eat PST
 ‘Because Kom was hungry, (he) ate rice.’

The purpose clauses are overtly marked by a purpose marker *me*. The example (5) below illustrates a purpose clause marked by the purpose marker *me*.

5. [vektap hon me] sidak sep-tan
 rest house built PURP leaf arrange leaves-cut leaf
- ka ni-ta? tih
 go 3DL-PST HEARSAY
 ‘They two went to arrange leaves to build a rest house in the fields.’

The conditional clauses are expressed by adding the non-final marker *ni?* along with one of the three conditional markers, viz. *si*, *kera*, or *lakka* ‘if’. In some instances, the non-final maker *ni* can also stand alone and express a conditional sense. In (6), the subordinate clause is marked by the conditional marker *si* which precedes the verb *va* ‘come’. The non-final marker occurs after the subordinate clause and precedes the matrix clause binding them together.

6. [hi siŋ vaŋ h-a] niʔ ŋa kat
3SG if come PROX.3SG NF 1SG go
- aŋ-kʰat ta-aŋ
 AUX-PFV FUT-1SG
 ‘If he comes, I will leave.’

The concessive conditionals are marked by the adverbial *kule*. The morpheme *kule* by itself is an adverbial marker used in different adverbial types. The use of this adverbial marker largely depends on the context. In (7), the subordinate clause is marked by the adverbial marker *kule* expressing the meaning ‘even then’.

7. [pʰaksaʔ kot kule] sum le sin mek
 food give ADV salt DEF continue lick
 ‘They gave him food, but he just continued licking.’

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Evidential Clauses as ‘Upgraded’ Embedded Clauses in Assamese

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1. INTRODUCTION

This work delves into the evidentiality in Assamese, specifically focusing on the use of the various evidence particles in the language. The relevant particles under discussion are, *zan-o/-a/-e* (with variations based on the addressee’s honorific status), *bule*, *heno*, *zanu* and *neki* as exemplified in (1) – (5), providing context to clarify the distinctions in evidential meaning.

zано/zана/zане- these forms are decided based on the addressee: *zано* when the addressee is 2nd person non-honorific *toi* ‘you’, *zана* for less honorific 2nd person *tumi* ‘you’, and *zане* for honorific 2nd person *apuni* ‘you’. Context: I have heard that Angmo is going to Delhi, and I am convinced that the information is true and the person whom I am reporting this too is aware of the same.

- 1) Angmo *zано/zана/zане* Delhi goi ase.
Angmo ZANO/ZANA/ZANE Delhi go.IMPV be.PRES.PROG.3
‘(I have heard) Angmo is going away to Delhi.’

bule - I have heard a rumor about Angmo going somewhere but I am not sure whether it is true or false and I am reporting it to someone.

- 2) Angmo *bule* Delhi goi ase.
Angmo BULE Delhi go.IMPV be.PRES.PROG.3
‘(I have heard) Angmo is going away to Delhi.’

heno- I have heard that Angmo is going to Delhi, and somehow the news is affecting me emotionally (either happy or sad or angry depending on the situation). Now I am reporting it to someone.

- 3) Angmo *heno* Delhi goi ase.
Angmo HENO Delhi go.IMPV be.PRES.PROG.3
‘(I have heard) Angmo is going away to Delhi.’

zanu- I have heard that Angmo is going to Delhi. But I am sure that this news cannot be true as I know that she has recently been to Delhi, so she doesn’t have any reason to go there again. I am asking someone about it

- 4) Angmo zanu Delhi goi ase?
 Angmo ZANU Delhi go.IMPV be.PRES.PROG.3
 ‘(I have heard) Angmo is going away to Delhi, is she?’

neki- I know that Angmo has been thinking of going to Delhi at some point. But she isn’t sure when. Today, I saw her with luggage near the airport. I am asking another friend of mine.

- 5) Angmo Delhi goi ase neki?
 Angmo Delhi go.IMPV be.PRES.PROG.3 NEKI
 (Given what I inferred) Angmo is going away to Delhi (is it true?)

2. PUZZLE

Assamese employs distinct evidential markers to convey different evidential meaning in the language. In contrast, Bangla, a closely related language, demonstrates a different approach. Recent work on Bangla evidentiality by Bhadra (2017) indicates that in Bangla, the distinctions in evidentiality are conveyed through the positioning of the particle *naki*. Reportative evidence is indicated when *naki* is in a clause-internal position, while inferential evidence is found when it appears in a clause-final position and is available only in polar questions (shown in 6).

- 6) Bangla: Bhadra (2017)
- | | | | | | |
|----|---|---------|-----------------|-----------------|-------------|
| a) | Mina naki | amerika | col-e | ja-cche | REPORTATIVE |
| | Mina NAKI | America | go-IMPV | go-3P.PRES.PROG | |
| | ‘Mina is going away to America (I hear).’ | | | | |
| b) | Mina amerika | col-e | ja-cche | naki? | INFERENCEAL |
| | Mina America | go-IMPV | go-3P.PRES.PROG | NAKI | |
| | ‘(Given what I hear) Mina is going away to America (is it true)?’ | | | | |

All the particles discussed in (1) to (3) are the forms that can obtain a reportative evidential interpretation in Assamese. These particles can occur either in clause internal position or in the final positions, differing from Bangla crucially in this respect as well (shown in 7).

- 7) Angmo Delhi goi ase zano/zana/zane/bule/heno
 Angmo Delhi go.IMPV be.PRES.PROG.3 ZANO/ZANA/ZANE/BULE/HENO
 ‘(I have heard) Angmo is going away to Delhi.’

Assamese equivalent of the inferential evidence, as in Bangla (6b), can be obtained by using *neki*, which can only be used clause-finally (5) and as an inferential polar question (PQ). This leaves us with the particle *zanu* (4). Unlike *neki*, *zanu* can occur in clause internal as well as clause final positions (8) and unlike the other reportative particles, it is available only in polar interrogatives.

- 8) Angmo Delhi goi ase zanu?
 Angmo Delhi go.IMPV be.PRES.PROG.3 ZANU
 ‘(I have heard) Angmo is going away to Delhi, isn’t she?’

3. PROBLEM AND SOLUTION

The above discussed facts with regards to the Assamese evidentials poses a challenge in terms of fitting it into the existing syntactic analysis found in the literature. In this work, we propose a syntactic analysis taking into consideration the simple semantic and syntactic facts with regards to evidential clauses.

We claim that evidential clauses are ‘erstwhile’ embedded clauses. The various forms of *zan-o/-a/-e* in Assamese and *zan-u* derived from the verb ‘know’. This paper proposes that these particles are really grammaticalized verb acting as an evidential particle in the language. Another reportative particle *heno*, albeit does not derive from the verb ‘know’. But Kakati (1941) mentions that *heno* is a borrowed lexical item from Khasi *hana* which means ‘it is said’ or ‘so they say’. The particle *bule* is also a derived form of the verb *bol* ‘say’. The evidential clauses can be inferred from embedded clauses like (9).

- 9) a) tumi zana (ze) Angmo Delhi goi ase.
 you know that Angmo Delhi go.IMPV be.PRES.PROG.3
 b) Angmo tumi zana (ze) Delhi goi ase.
 ‘You know that Angmo is going away to Delhi.’

Derivation of these clauses necessarily involve topicalization of the initial term (like Angmo here in 9(b)) along with an obligatory deletion of the main clause subject. Following the idea suggested in Bhattacharya (2019), that the PQs in Bangla has a topic-like flavour, and PQs are therefore questions about Topics, we try to derive the properties of Assamese evidential clauses by showing that they require the presence of a TOPIC head in the structure and the obligatory topicalization of the embedded subject is the first move in the derivation. The second move is to be claimed as the obligatory deletion of the main clause subject which is a natural consequence of the embedded clause upgrading itself to the main clause. It is generally the case that epistemic main clauses often prefer a clause internal C when the complement clause is pre-verbal, emphasizing the topicality of the embedded clause. In certain conditions, extreme epistemicity causes that main clause to fade away, influenced by the C-I interface, leaving the erstwhile embedded clause as the main clause. These are like epistemic uses of parentheticals in English (Underhill 1988). Taking this position, this work demonstrates that the Assamese evidential clauses are “upgraded” embedded clauses.

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Tense, Aspect and Modality in A Sütsa
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1. INTRODUCTION

Sütsa is a Tibeto-Burman language spoken by the Sümi tribe in Nagaland, which is located in the North-East region of India. It has an estimate of 256,000 – 300,000 speakers. The people being native to multilingual environments are to the maximum bilingual or multilingual. The majority of the Sümi people reside at Zunheboto district of Nagaland which was previously known as “Sümi country” or “Sümi land”, and now it has nearly 200 villages. Sümi is one Naga tribe that can be seen attested not only in one particular location but also in other districts of Nagaland like Dimapur, Kohima, Mokokchung, Tuensang, Kiphire, Niuland, Chumukedima as well as in the Tinsukia district of Assam. When looking into the grammatical class of verb the two major discussions are the number of arguments a verb can carry and the association of verb to time, completeness, duration, and repeated actions, also stating the attitude in which it is described or expressed, attributing to TAM.

2. ABSTRACT

The aim of this paper is to present the description of tense, aspect and modality in Sütsa which occurs post verbally. Tense in Sütsa can be discussed according to three conditioned time; past, present, and future, however in Sütsa only the future tense has overt markers /*ni*/, and /*nani*/ . The non-future tense i.e., the present and the past tense do not show a clear structure and overlap with the aspectual factor. Overall, tense in Sütsa can be observed as a weakly tensed language.

		Tense	Aspect
Tense	Past	∅	va (PRF)
	Present	∅	ʃe-ni (HAB- NPT) a-ni (EXIST- NPT)
	Future	ni (proximate) nani (distal)	

Table 1: Tense in Sütsa

Aspects in Sütša can be divided into perfective and imperfective. Imperfective can be further divided into habitual, progressive and continuative as shown in table-2.

Aspect	Imperfective	Habitual	ʃe (past)
			ʃeni (present)
	Progressive	a (past)	
			ani (present)
		Continuative	ʃa ~ ʃeni
	Perfective	va	

Table 2: Aspects in Sütša

To express something that is actual/realis to something that is not actual/irrealis can be discussed in the verbal categories of mood and modality. In Sütša these can be expressed through full-fledged modal verb, suffixes and also the grammaticalization of lexical verbs like ‘give’, ‘look’ to indicate requestive and suggestive mood. Table 3, shows the types of modalities found in Sütša.

Modality	Imperative	ve
	Requestive	tsilo
	Abilitative	lu
	Desiderative	nifĩ
	Retrospective	ayi
	Necessity	masa, pitsa
	Probability	mit ^h a, vi
	Permissive	pelo
	Suggestive	dzu

Table 3: Modality in Sütša

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Tense in Sampang

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The paper aims to describe ‘Tense in Sampang’. Sampang is a subgroup of the Central Kirati Rai group. It belongs to the Tibeto-Burman group of the Sino-Tibetan language family. There is a contradiction in terms of the name Sampang [sampa], and Sangpang [sapa] but most of the native speaker uses Sampang rather than Sangpang (Rai, 2009). Sampang is spoken in the villages of the Baspani, Khartamchha, Patheka and Phedi areas in the northern Khotang District of eastern Nepal. Similarly, it is spoken in different villages of the neighbouring Bhojpur district like Okharbote around the Lahure Khola, Syam Khola area: Kimalung, Nigale, Talakharka and Surke (Eppelle et al. 2012 and McIntosh et al. 2001). And Sampang people are inhabiting throughout the country. Winter (1991) mentions that most of the Sampang Rai people living in the Bhojpur district have stopped speaking Sampang Rai and have started to speak Bantawa or the lingua franca Nepali. All the Sampang Rais who live in the villages speak Sampang as their first language. The language that is spoken in the Sampang community is called ‘*Sampang Gung*’. The term ‘*Gung*’ means language (Rai, Dumi Rai and Thokar, 2015). According to the National Census Report 2021, the population of Sampang is 21,597. Sampang is an endangered and unwritten language too. The main objective of this study is to find out the tense system in Sampang. The main goal of this study is to boost the status of the Sampang language in the multilingual society. And it might be helpful for further research on other Kirati languages or the Sampang language. This research is based on the primary data. The data was collected from oral texts from the people of the Baspani and Phedi areas. It is transcribed in the IPA symbols.

Sampang has two distinct tense forms: non-past and past tense. Though tense in Sampang is expressed morphologically, there are many morphemes which express non-past and past tense. The non-past tense is marked by the suffixes (-, -i, -e) as illustrated in (1)-(3).

In examples (1-3), the non-past tense expresses the present event by the suffixes (- $\tilde{\text{a}}$, -i, -e). They are suffixed in the verb root. The suffix (- $\tilde{\text{a}}$) occurs to the verb if the first person singular appears as the subject, (-i) is suffixed for the third person singular and (-e) occurs in the verb if the first person plural is shown as the subject. In Sampang, past tense is marked by the suffixes (- $\text{\textcircled{a}}$, -u, - α , -o) as illustrated in (4)-(6).

In examples (4-7), the past tense is expressed by the suffixes (- $\text{\textcircled{a}}$, -u, - α , -o) in Sampang. It is suffixed on the verb root. Past tense markers (- $\text{\textcircled{a}}$, -u) occur to the verb root if the subject is the first person singular. The suffixes (- α , -o) are suffixed to the verb root if the subject is the third person singular.

The non-past tense is marked by the suffixes (-*ḍ*, -*i*, -*e*) as illustrated in (1)-(3).

- | | |
|---|---|
| <p>1. <i>kḍ</i> <i>kʰim</i> <i>kʰat-ḍ</i>
 1SG house go-NPST.1SG
 ‘I go to home.’</p> <p>3. <i>kʰəkə</i> <i>kʰim</i> <i>kʰat-i</i>
 3SG house go-NPST
 ‘He goes to home.’</p> | <p>2. <i>ka-tsi</i> <i>kʰim</i> <i>kʰat-e</i>
 1-NSG house go-NPST.1PL
 ‘We (all) go to the house.’</p> |
|---|---|

In Sampang, past tense is marked by the suffixes (-*ə*, -*u*, -*a*, -*o*) as illustrated in (4)-(6).

- | | |
|---|---|
| <p>4. <i>kḍ</i> <i>kʰim</i> <i>kʰat-ə-ŋ</i>
 1SG house go-PST-1SG
 ‘I went to the house.’</p> <p>6. <i>kʰəkə</i> <i>kʰim</i> <i>kʰat-a</i>
 3SG house go-PST.3SG
 ‘He went to the house.’</p> | <p>5. <i>kḍ-ŋa</i> <i>tsa</i> <i>ts-u-ŋ</i>
 1SG-ERG rice eat-PST-1SG
 ‘I ate rice.’</p> <p>7. <i>kʰo-sa</i> <i>tsa</i> <i>ts-o</i>
 3SG-ERG rice eat-PST
 ‘He ate rice.’</p> |
|---|---|

At last, this study will provide information about the tense system in Sampang.

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Meiteilon as a strict negative concord language

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The paper investigates on the working of strict negative concord system in Meiteilon. It showcases the phenomenon using a variety of negative polarity items which require a clausemate licenser (usually a ‘negation’). The strict-ness of this system is further established in the premise of the Classical NEG-Raising Predicates (CNRPs).

1. INTRODUCTION

Zeijlstra (2004) defines Negative Concord (NC) as a phenomenon which occurs when ‘two negative elements do not cancel each other out, but yield one semantic negation only’.

1. Gianni **non** ha telefonato a **nessuno**

Gianni neg has called to n-body

‘Gianni didn’t call anybody’ (Italian, Zeijlstra 2004)

Similarly, Meiteilon shows such a phenomenon of a strict NC language (Zeijlstra 2004) showing an obligatory requirement for a sentential negation in the presence of an n-word (Laka 1990) regardless of whether it occurs as a subject (2) or an object (3). Absence of the sentential negation results to ungrammatical counterparts as shown in (2) and (3).

- | | | | |
|-----|--|------------------------|--------------|
| 2. | kəna əmə-tə | lak-tə-rə-i | |
| | Who one-Neg (‘n-body’) | come-Neg-Perf-Ind | |
| | ‘Anybody hasn’t come’ [<i>lit. translation</i> : Nobody hasn’t come] | | |
| 2’. | *kəna əmə-tə | lak-lə-i | |
| | Who one-Neg (‘n-body’) | come-Perf-Ind | |
| 3. | tombə-nə | kəna əmə-tə | nuŋsi-tə-i |
| | Tomba-Subj | who one-Neg (‘n-body’) | love-Neg-Ind |
| | ‘Tomba does not love anybody’ [<i>lit. translation</i> : Tomba doesn’t love nobody] | | |
| 3’. | *tombə-nə | kəna əmə-tə | nuŋsi-i |
| | Tomba-Subj | n-body | love-Ind |

This variety of NC shown in (1), (2), and (3) is also known as negative concord proper (den Besten 1986 as cited by Giannakidou 2000) as they have sentential negative markers which contribute a logical negation and n-words. As the above examples show NPIs in such NC languages, the following sub-section provides a brief overview on it.

2. NEGATIVE POLARITY ITEMS

A negative polarity item (NPI) is a word which must be licensed by a sentential negation. An NPI is labeled as a strict NPI when it has a local licenser (Collins and Postal, 2014). In other words, a strict NPI is an NPI which requires a clause-mate licenser (usually a ‘negation’) in order to make the sentence grammatical (Collins, 2015). Moreover, the locality of the clause-mate licenser and its possible effects on the strict NPIs can be checked in the environment of a Classical NEG-Raising Predicate. Taking the help of a strict NPI example from English, *until* (Collins and Postal, 2014), the notion of a local licenser is illustrated below

4. Mona would ***(not)** move in **until** June.
5. Calvin did **not** believe/***claim** that Mona would move in **until** June.

(4) shows that the strict NPI *until* obligatorily requires a clause-mate negation to license it. On the other hand, even in the apparent absence of a clause-mate negation in (5) with *believe* as the matrix verb, the sentence is still grammatical; whereas it is not so in case of the matrix verb *claim*. The reason being that the two verbs belong to two contrasting categories - *Classical NEG Raising Predicates* (CNRPs) and *Non-Classical NEG Raising Predicates* (Non-CNRPs) – where in the former category, the negation *not* is supposed to have moved from the embedded clause after licensing *until* as in (6). But, the latter being a Non-CNRPs does not involve that kind of licensing before raising. Moreover, there is no semantic change in the construction (given below in 6 with *believe*) as compared to (5) (with *believe*); but, a Non-CNRP verb like *claim* cannot have the same interpretation with negation in the embedded and the matrix clause.

6. Calvin **not** believed/claimed that Mona would **¡not>** move in until June.

This observation implies that testing the strict-ness of an NPI should be done in the presence of CNRP and Non-CNRP verbs. We, therefore, need to check which are the CNRP and Non- CNRP verbs in Meiteilon. Taking the English CNRPs *think* and *believe* as examples of Meiteilon CNR predicates, let us now check simple occurrences first (i.e, without an NPI).

7. ka-si-də tombə ləy-tə-i haynə tombi-nə k^həl-li
 room-this-Loc Tomba present-Neg-Ind Comp Tombi-Erg think-Ind
 ‘Tombi thinks that Tomba is **not** in the room’
8. ka-si-də tombə ləy-y haynə tombi-nə k^hən-də-i
 room-this-Loc Tomba present-Ind Comp Tombi-Erg think-Neg-Ind
 ‘Tombi does **not** think that Tomba is in the room’
9. ka-si-də tombə ləy-tə-i haybə tombi-nə t^həjə-y
 room-this-Loc Tomba present-Neg-Ind Comp Tombi-Erg believe-Ind
 ‘Tomba believes that Tomba is **not** in the room’

10. ka-si-də tombə ləy-y haybə tombi-nə tʰaŋə-də-i
 room-this-Loc Tomba present-Ind Comp Tombi-Erg believe-Neg-Ind
 ‘Tombi does **not** believe that Tomba is there in this room’

The English CNRPs think and believe behave like CNRPs in the Meiteilon of the verbs also. Similarly, let us now look for the non-CNRPs of English say and know to investigate their nature in Meiteilon.

11. ka-si-də tombə ləy-tə-i haynə tombi-nə hay-y/ kʰəŋ-ŋi
 room-this-Loc Tomba present-Neg-Ind Comp Tombi-Erg say-Ind/ know-Ind
 ‘Tombi says/knows that Tomba is **not** in the room’
12. ka-si-də tombə ləy-y haynə tombi-nə hay-də-i/ kʰəŋ-də-i
 room-this-Loc Tomba present-Ind Comp Tombi-Erg say-Neg-Ind/know-Neg-Ind
 ‘Tombi does **not** say/know that Tomba is there in this room’

As there is difference in the semantic interpretation between (11) and (12), the non-CNRPs say and know of English are non-CNRPs in Meiteilon, too. We can now assume (till this point) that Meiteilon has Classical NEG Raising Predicates (CNRPs) since the example pairs of (7)- (8), and (9)-(10) do not show any particular change in the interpretation. The paper also aims to check on the Meiteilon NPIs’ other licenser like question (Yes/No) constructions in order to check the strict-ness of the negative concord system found in the language.

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Predicate and Object Type Dependency of Object Incorporation in Pnar

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This paper proposes to show that in Pnar, object argument incorporation (Baker 1988, 1996,) into the verb is depended upon the nature of both the predicate and object type. Pnar is spoken around the Jaintia Hills, region of Meghalaya. The data provided here are in Sutnga dialect of Pnar, one of the 12 dialects of Pnar listed by Daladier (2010).

Incorporation is a phenomenon by which a grammatical category such as a verb forms a compound with its direct objects (object incorporation) or with an adverbial modifier, while retaining its original syntactic function (Baker et al., 2005). This paper argues for a syntactic approach to noun incorporation (NI), in which (1a) obtains as a result of NI or more specifically object incorporation (OI) from the base structure in (1b). The process is clearly visible as the object ‘Apple’ loses its gender/definiteness/agreement marker in (a):

- (1) a .(ŋa) ma baŋ əpel a (Bhattacharya &Sutnga; 2022)
1SG very taste apple1SG
‘I like apple’
- (1) b .(ŋa) ma baŋ a o əpel
1SG very taste 1SG 3MSG apple
‘I like apple/tomato’

Depending on the nature of the object, there are definite cases of object shift or incorporation in Sutnga. It is further observed that OI obtains with objects that are more inanimate in the animacy scale (i.e. where no possibility of a life form is imaginable), however when the object is higher in the animacy scale, object incorporation clearly fails (Battacharya &Sutnga 2022).This is further demonstrated for various different kinds of object types in the following.

First, when an object is inanimate (concrete or abstract), incorporation is satisfied and when an object is animate, incorporation clearly fails. In the following, the incorporated noun are always the direct object *dɔʔ-syiar* ‘chicken’ of the predicate *c^het* ‘cook’ which is an action verb. This is obviously the case when the object is clearly inanimate as in (4). In (2), the direct object *dɔʔ-syiar* ‘chicken’ having been deprived of its life form, is able to undergo object incorporation with the action verb *c^het* ‘cook’.

(2) u rilang daŋ c^het doʔ-syiar u.

3msg rilang still cook meat-hen 3msg

‘Rilang is cooking chicken’.

(3) a be daŋ c^het ɔ o syiar.

3fsg mother still cook 3fsg 3msg cock

‘Mother is cooking the chicken’

(4) a mem khait sla ɔ.

3fsg mem plug leave 3fsg

‘Mem is plugging the leaves’

But with a predicate like ‘chase’ (5) OI is possible even when the object syiar ‘hen’ is [+animate] bearing its full life form. This shows that there needs to be fine grained classifications within action predicates as well.

(5) a be daŋ beʔ syiar ɔ.

3fsg mother prog chase hen 3fsg

‘Mother is chasing the hen’

Similarly, in the following, c^hukra ‘a traditional dance in Jaintia’ undergoes incorporation but the [+animate] direct object *ka meri* does not.

(6) u manic c^hat c^hukra u.

3Msg manik dance chukra 3msg

‘Manik is dancing Chukra dance’

(7) a nini c^hat ɔ wa ka mary.

3fsg dance 3fsg P 3fsg mary

‘Nini is dancing with Mary’

In the following, abstract/stative like verb *maja* ‘love’ *yusuk* ‘like’ do not aid in incorporation of an object be it +animate/ -animate:

- (8) a meri maja ɔ o jɔn
 3fsg mary love 3fsg 3msg john
 ‘Mary loves John’
- (9) a. kyntiew yusuk ɔ ki riam ki bait
 3fsg kyntiew like 3fsg PL dress PL etc
 ‘Kyntiew likes dressing and etc....’

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Analysis of Linguistics Differences in Malayalam using NLP models

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1. INTRODUCTION

Recognizing subtle linguistics differences in human conversations is vital for improving AI-based conversational agents that can adapt to its users. This study aims to investigate the ability of various NLP text-based models to detect linguistics differences of various users based on age and gender.

1.1. REVIEW OF EXISTING RESEARCH

The works of Schler et. al. (2006), has explored the influence of factors like age and gender on the content and style of various blogs. The study concludes that there exists a significant difference in the blogging style of users of different age and gender. The difference in style varied from the topic of the blogs (male bloggers wrote more about politics, technology and money, while, female bloggers wrote more about their personal lives) to the linguistic variations (preposition and determiners were more frequent with an increase in the age of the blogger). Following the works of Schler et. al. (2006), Jansen et. al. (2021), presented a study on the ability of various text-based NLP models to identify age-related linguistics differences, and the key factors contributing to their predictions. The study shows that the NLP models are capable of capturing the linguistics differences with a significant accuracy with BERT fine-tuned on the task being the best-performing model.

1.2. ANALYSIS OF LINGUISTICS DIFFERENCES IN MALAYALAM

This study builds on the work of Jansen et. al. (2021). While the study of Jansen et. al. (2021), was conducted in English, we aim to replicate the experiments to detect the linguistics differences using text-based NLP models in Malayalam (A south-Dravidian Language). Moreover, this study also aims to explore whether these text-based NLP models can detect gender-related linguistics differences.

2. NOVELTY OF THE RESEARCH

Various AI conversational systems have become increasingly prevalent in various fields such as customer service and helplines. However, despite the widespread use, many users fail to form a connection with the systems. One solution to this is

anthropomorphism of conversational systems. By adopting an adaptive approach, conversational systems can tailor their response and language style to match the preference of each user. This approach not only improves the user experience but also increases the likelihood of establishing a connection between the user and the conversational system. While the rate of the researches conducted in the area of conversational systems in global languages is increasing at a steadfast rate, the same conducted in Indian languages needs a lot more attention. While this study aims to close the gap existing between researches conducted in Indian and global languages, it also acts as a foundation for the future works.

3. Keywords: Conversational systems, Text-based NLP models, Linguistics differences, Anthropomorphism.

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Language vitality assessment of Koro

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This paper discusses the vitality of Koro, a language spoken by a population of about 1500 (Eberhard et.al. 2023)¹⁷ in the East Kameng District of Arunachal Pradesh. The Koro Aka people share a special cultural relationship with two other tribes in the West Kameng District, namely Aka (Hrusso) and Sajolang. There is no definitive agreement on the genetic affiliation of the language and Koro remains an unclassified member of the Tibeto-Burman phylum. Koro is an understudied language with only a few scientific works on it such as Grewal (1997), Abraham et al. (2005), Anderson and Murmu (2010), Geissler (2013), Blench (2018), and Sinha (2021). It currently lacks standard orthography. Majority of the Koro speakers are multilingual. Hindi is used as the lingua franca.

The spread of education in Arunachal Pradesh is quite slow, especially in rural areas. Literacy rate in Koro villages is 54.29%, based on the data provided in Sinha (2021), which is less than average literacy rate 65.38% of Arunachal Pradesh (2011 census).

Drawing on the nine factors of UNESCO (2003), the study focuses on a detailed discussion on the intergenerational language transmission, language use, language preference and attitude of the speakers. 76 individuals were interviewed for the survey. The interviews were conducted in-person visiting each household, instead of administering the questionnaires across speakers.

The findings show that 100% of the Koro Aka speakers above the age of 35 reported Koro as their first language. Hindi started becoming the first language for the first time in the 31-35 age group (that is, between 1988 to 1993) and then on, has been steadily encroaching upon Koro Aka, which declined steadily and at present only 10% of the current 0-5 age group are learning Koro as their first language. The initial transition towards Hindi was observed during the period between 1988 and 1993. This timeframe coincides with a notable shift in government policy following the aftermath of the 1962 War, which saw an increased emphasis on the promotion of Hindi and its associated ideological underpinnings. (Wangchuk 2018, Modi 2006).

In a multilingual society, use of the regional or the national language is desirable. However, based on the in-depth interviews and observations, it can be inferred that in the process of learning Hindi, the Koro speakers are abandoning their mother tongue. Despite the positive attitude of the speakers towards the language during the interview, Koro lacks young native speakers making the language increasingly endangered. It is anticipated that the study will create awareness among the Koro native speakers to reverse language shift and to revitalize

¹⁷ www.ethnologue.com/language/jkr/

the language.

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Variations in agreement phenomena in Tibeto-Burman languages

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The semantic and/or grammatical properties of the pronominal arguments trigger a number of morphosyntactic phenomenon in the agreement-rich Tibeto-Burman languages. At least for the majority of languages, the placement of a SAP (Speech Act Participant) argument with respect to a non-SAP argument in an argument structure gives rise to agreement restrictions, that in some languages may result into person complementarity. Silverstien's (1976) prominence scale (simplified in Richards (2008)) is illustrated in (1).

1. 1/2 person (pron) > 3 person (pron) > animate (3 person) > inanimate (3 person)
- | | |
|---------------------------------|-------------------------------|
| ←— More likely agent/subject... | more likely patient/object —→ |
| ←— More likely definite... | more likely indefinite —→ |

Similarly, the placement of non-singular argument with respect to a singular argument may give rise to number complementarity, commonly known as Omnivorous Number Agreement [OMA] (Nevins, 2011). However, not all languages employ prominence scales, or at least, not only prominence scales, in the marking of the arguments.

The paper capitalises on the variations in Multiple Agreement Phenomenon (MAP) among different TB languages, and tries to capture the issue of multiple conflicting hierarchies employed in doing so. On the basis of agreement patterns shown in selected Kuki-Chin and Kiranti languages (gathered from existing corpus and field work), they can be broadly classified into two types:

A. Languages in which prominence scales dictate the controller of the agreement An ideal agreement system that is controlled by prominence scales should be able to induce person complementarity (Person-Case Constraint), and/or OMP, as we see in Thulung. The person slot is controlled by an argument that is higher in the person scale; hence, in (2a) the presence of 2nd person marker prevents suffixation by 3rd person argument and in (2b), the presence of 1st person marker prevents suffixation by a lower, 2nd person since the typical person hierarchy of 1>2>3 is followed by the language. Similarly, the number slot is controlled by the argument that is higher in the number scale, i.e. plural>dual>singular (compare (2b) and (2c)).

- | | | |
|--------------------|-------------------------------|---------------------------------|
| 2. a. jal-na | b. jal-ŋi-tsi | c. jal-ni-tsi [Lahaussis, 2002] |
| hit-2 | hit-1-du | hit-1→2-du |
| 'You hit her/ him' | 'You (du)/ they (du) hit me.' | 'I hit you (du).' |

Hayu (Gerogi, 2017) shows similar pattern in marking the person, where the 1st person argument outranks 2nd and 3rd persons. However, when it comes to the hierarchy between 2nd and 3rd person it is not very straightforward. The hierarchy is inactive if both the arguments in 2→3/ 3→2 construction are singular, hence, none of them is marked. However, in case where one of the arguments is plural, that argument controls the agreement. Therefore, in 2sg→3pl or 3pl→2sg configuration, the number slot is controlled by 3pl, and in 2pl→3s or 3s→2pl, it is controlled by 2pl; and in case both the arguments are plural, as in 2pl→3pl or 3pl→2pl, it is controlled by 2pl since it is high in both person and number scale. Hence, one can see clear interaction of two scales at some level in agreement marking in Hayu. The prominence scale then can be revised as 1SG/NSG > 2NSG > 3NSG > 2 / 3.

However, in languages like Chamling, Mizo, Kulung and others, the violation of prominence scales do not induce person complementarity and/or OMA, rather triggers the change in the linearisation of the agreement markers in a verb complex. For example, in Mizo, in the direct configuration the template for ordering of markers is [PER]_{SUB}-V-[PER]_{OBJ} as in (3a), however in the inverse configuration the template changes to [PER]_{OBJ}-V-[PER]_{SUB}.

- | | | | |
|-------|---|----|---|
| 3. a. | kéy-in nán kâ-du?-cê
I-erg you 1s-want-2o
'I want you.' [Chhangte (1993)] | b. | min-rhê-reŋ-áŋ-cê
1.obj-know-always-future-2
'Please, (you) remember me!' [Bedell (2001)] |
|-------|---|----|---|

B. Languages in which prominence scales work in tandem with grammatical scale

A fair number of MAP TB languages employ conflicting hierarchies in marking the arguments. In these languages the controller of an agreement slot may not only be subjected to prominence hierarchies but also to the grammatical scale. One such language is Thadou. The template employed in the marking of the person in direct configuration is [PER]_{SUB}-V(-NEG)-NUM_{SUB}-TAM] (in (4)), whereas in inverse it changes to [PER]_{SUB}-PER_{OBJ}-V(-NEG)-NUM_{PL>SG}-TAM] (in (5)). However, when it comes to number marking, it is partially subjected to the grammatical hierarchy, where only subject's number can be suffixed to the verb (compare (4b) and (4c)). But in the inverse configuration the number slot is subjected to the number hierarchy [PL>SG].

- | | | | | | |
|-------|---|----|--|----|--|
| 4. a. | ki=n nang ka=mu-ve
1=ERG 2 1=see-DECL
'I saw you (SG).' | b. | nang=in ama-ho na=mu-e
2=ERG 3-PL 2=see-DECL
'You saw them.' | c. | nang-ho=n ama-ho na=mu-u-ve
2-PL=ERG 3-PL 2=see-PL-DECL
'You (PL) saw them.' |
| 5. | ama=n nang-ho na=mu-poi-u-ve
3=erg 2-pl 2=see-pl-neg-pl-decl
'He did not see you (pl) .' | | | | |
- [Haokip (2019)]

Contrary to this, in Chiru, the person marking is subjected to grammatical roles (hence, only one template is followed in direct and inverse constructions).

However, number marking is subjected to number scale of [PL>SG], resulting into OMA.

As illustrated in examples given above, at least at some levels of description, there are multiple hierarchies to be taken into account when looking at these languages, especially in Kuki-Chin and Kiranti languages. Apart from this, the paper also looks into the variation in the feature geometries among the TB languages. The set of evidence against so-called typical prominence hierarchies of [1>2>3] and [PL>DU>SG] in the TB agreement system comes from selected Kiranti and Kuki-Chin languages, especially from Chamling (Ebert, 1997).

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Schwa Optionality and Stress

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1. INTRODUCTION

Hindi shows schwa-zero optionality at the penultimate position in the string (Sanyal & Barla, FASAL-2019; Barla, SALA-36 & LSN-43, 2022). Stress is one of the influencing factors for optionality. Considering the prosody of the language, Hindi has been described to be bounded, and has quantity and rhythm-sensitivity (Hayes, 1995; Pandey 1989, 2021).

1.1. Schwa-zero optionality pattern

1. [baɖəl-ø:] ~ [baɖl-ø:] ‘clouds’
'HLH ~ 'HH
2. [ka'ri:gəri:] ~ [ka'ri:gri:] ‘workmanship’
L'HLH ~ L'HH

As the data shows, optional schwa is present following the stressed syllable in tri- and tetrasyllabic words. This pattern appears in the Underived words as well.

3. [go'ɖa:vəri] ~ [go'ɖa:vri] ‘name of a river’
L'HLL ~ H'ShL
4. ['uʂtəra:] ~ ['uʂtra:] ‘razor’
'HLH ~ 'HH

1.2 Other factors influencing stress placement apart from the right edge.

Apart from the right edge influencing the stress placement as the data above shows, we also have the following factors:

1.2.1. *Weight Sensitivity*: The super-heavy syllables attract stress irrespective of their placement position in the word string. Otherwise, the stress is usually in the penultimate or antepenultimate syllable.

5. ['iŋkɪla:b] ~ [iŋkɪ'la:b] ‘revolution’
'HLS ~ HL'S

1.2.2. *Reluctance of schwa to take stress*: If the schwa is present at the stress position in order to resolve a bad syllable contact, then the stress goes to the antepenultimate position.

6. ['səŋtəʃi] ‘offspring’
'HLL

1.2.3. *Syllable contact*: If any vowel of less sonority is epenthesized in order to resolve a bad syllable contact, then the number of syllables on a string increase, thus affecting the stress placement.

2. CONSTRAINT INTERACTION IN HARMONIC GRAMMAR FRAMEWORK

I use the constraint interaction in Harmonic Grammar framework (Pater, 2008, 2009) to show that the stress is one of the prosodic factors being affected by the schwa-zero optionality. The weighted constraints show the ganging effects resulting from the adding up of the low-weighted constraints in the language.

Markedness Constraints

- SYLL TROCHEE: Construct left-dominant foot. (Hayes, 1995)
- WSP: Following the weight-to-stress principle, heavy syllables are foot heads. (Prince & Smolensky, 1993)
- ALIGN R: Right edge of every foot coincides with the right edge of the prosodic word. A violation is assigned for every syllable intervening between misaligned edges. (McCarthy & Prince, 1993)
- NON-FINALITY: The prosodic head of the word does not fall on the final syllable. (Prince & Smolensky, 1993)

I define another constraint *'ə following the reluctance of schwa to take any stress unless it's lexically specified.

- *'ə: Do not stress a non-lexical schwa.

Table 1: L'HLH [ka'ri:gəri:] 'workmanship'

LHLH	NON-FINALITY	WSP	*'ə	SYLL TROCHEE	ALIGN R	Harmonic Values
<i>Weights</i>	3	1	1	1	1	
a. LH (L 'H)	-1			-1		-4
b. LH ('LH)		-1	-1		-1	-3
c. ('LH) LH		-1			-3	-4
d. L ('HL) H					-1	-1
e. (L 'H) LH				-1	-2	-3

Table 2: L'HH [ka'ri:gri:] 'workmanship'

LHH	NON-FINALITY	WSP	*'ə	SYLL TROCHEE	ALIGN R	Harmonic Values
<i>Weights</i>	3	1	1	1	1	
a. L H ('H)	-1					-3
b. ('L H) H		-1			-2	-3
c. (L'H) H				-1	-1	-2
d. L (H'H)	-1			-1		-3

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Exploring Dominance through Picture-Word Matching: A Longitudinal Analysis of Language Dominance in Young Adults

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1. INTRODUCTION

Language plays a vital role in society. Whether it is communication, promoting social solidarity, or passing down customs from one generation to the next; language shapes the society at large through the individuals. However, in most modern-day societies, people are bilingual and it is often observed that one language becomes more dominant than the other (Oppenheim et al., 2020a).

This dominance in one language can be owed to a few factors including the age of acquisition, frequency of usage, language prestige, and so forth. In this study, one will be studying the exact nature and extent of language dominance, and how they are different from proficiency. The study of language dominance is not entirely new. The idea has seen changes in terms of the defining factors and measures of the same over decades. First, dominance is measured at both societal and individual levels. These are interrelated concepts and one might help give rise to the other. Historically, the idea of language dominance has been integral to bilingualism since the 1950s. Over time, the measures to map the same have changed and incorporated newer nuances into it.

In some cases, researchers have used proficiency scales to measure dominance and have termed that proficiency can be replaced with dominance. However, that has been replaced by a later view as the two concepts have been distinguished from each other. The idea of proficiency relates to an individual's language competence (in a language), while dominance is a comparative term. Traditionally, the idea has been that a person's first language (L1) is their dominant language. The reason being that the L1 is the subconsciously acquired from infancy language, hence has been ingrained better. However, the context of language use can differ across one's lifetime and it can also include a change in dominance. For example, due to migration to L2 (second language) dominated area, one may start using the L2 in L1 domains like home, peer group, etc.

Thus, studies on language dominance and its shift are not just a linguistic phenomenon but also a social one. The work of Treffers-Daller shows that the level of bilinguals' proficiency and relative strength in each language affect their performance on given tasks. Hence, the dominant language might shift over a given period of time (Treffers-Daller, 2019). Moreover, language shift towards any particular language observed for a wide majority of people residing in a geographical area is indicative of a gradual language shift of the entire society. One can attempt to understand whether the entire group is undergoing a language change

through a study of dominance shift of language at the individual level. This paper will discuss methodologies to check whether English is gradually becoming the dominant language of an educational institute (IIT Guwahati) through proposed language-based and task-based experiments.

1.1. RESEARCH METHODOLOGY

For the following study a target group between the age of 18 -25 years is selected. The participants are taken from IIT Guwahati, to maintain a uniformity among the linguistic group. The participants will be native Bengali and Hindi speakers who are exposed to an L2 English environment. The participants are selected from IIT Guwahati to have a controlled setup for the experiment.

All the participants will have exposed to the English language and will be at a level proficient in speaking and reading L1 (Hindi and Bengali) and L2 (English). The tools used to conduct the experiment and collect data from the participants are E-prime 3 and Google form for the questionnaire. The questionnaire is adapted from LEAP-Q and Bilingual Language Profile (BLP). For statistical inference R software is used.

1.2. EXPERIMENT

The first experiment to be conducted is Picture – Word matching task. In this task the participants will be presented with random images and their corresponding names in L1 and L2 in two different tasks. The words presented will be the names of the pictures and each image will be put into similar semantic category. The images and words used in the experiment are pre-processed from a group of respondents where they have identified and rated on the parameters of familiarity with the images and words and if the words are the correct translation of the images. The ones with the highest rate of familiarity are used for the experiment. The images are taken from The International Picture Naming Project at CRL-UCSD having the same resolution and size to avoid any discrepancy.

The rate of familiarity has been taken from 10 respondents using google form. The response time and the rate of accuracy is calculated to understand that if their choice of language and the minimum time they are taking to respond with accuracy, which will show their dominant language.

The experiment is designed using the psychology tool E-prime 3.

The experiment is designed in Task 1 and Task 2.

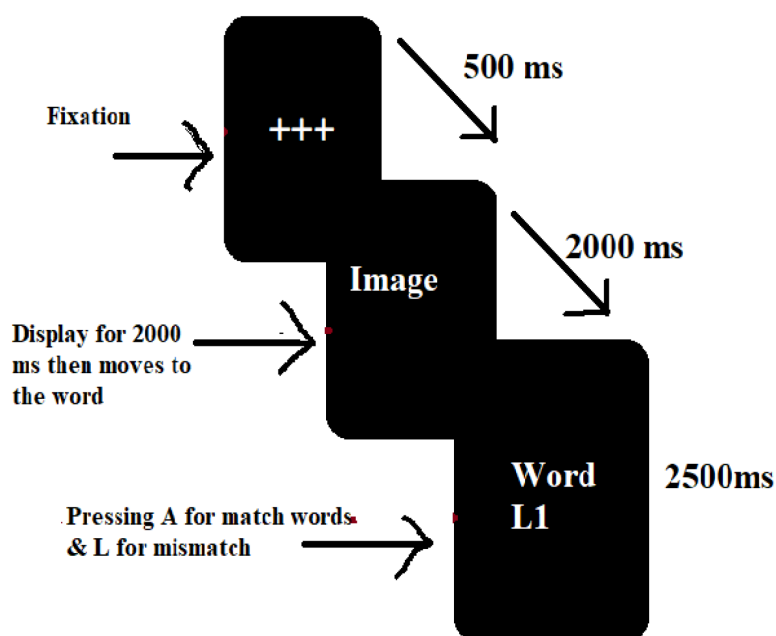
Independent Variable: Images and words

Dependent Variable: Response time

TASK 1

The experiment designed using images and words. It starts with the display of a fixation, represented by '+,' which is followed by the images and the words. The fixation is displayed for 500ms, images for 2000ms and the words for 2500ms. In the first experiment the words are presented in L2, i.e., English. The participants have to select 'A' if the word matches with the image and 'L' if it mismatches. The response time is calculated based on either the participants response or 2500ms whichever is the least.

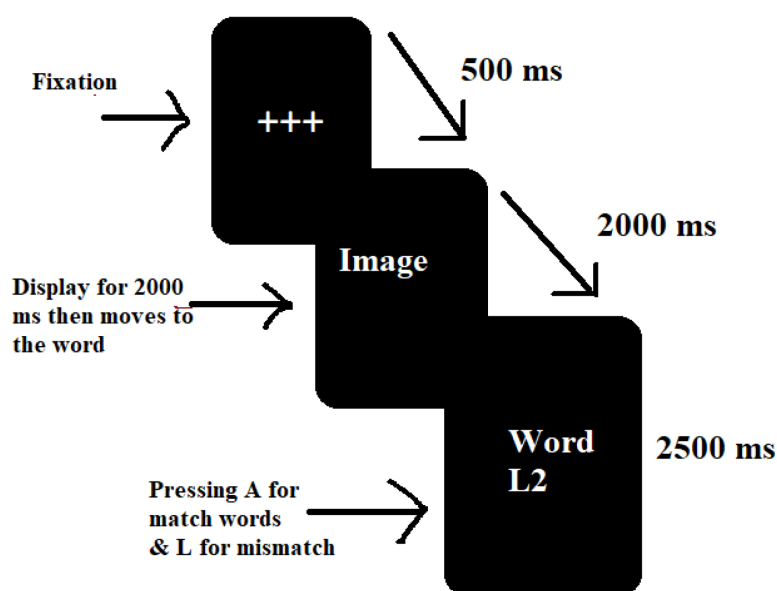
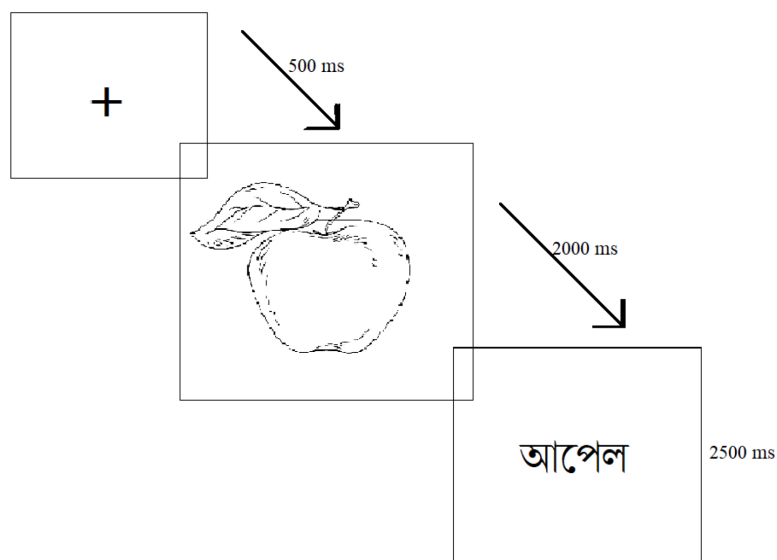
The data collected from the experiment helps to analyse the rate of accuracy and the response time calculated. This has helped us to infer if the participants are taking more or less time in responding and also their level of comprehension with that of the image.



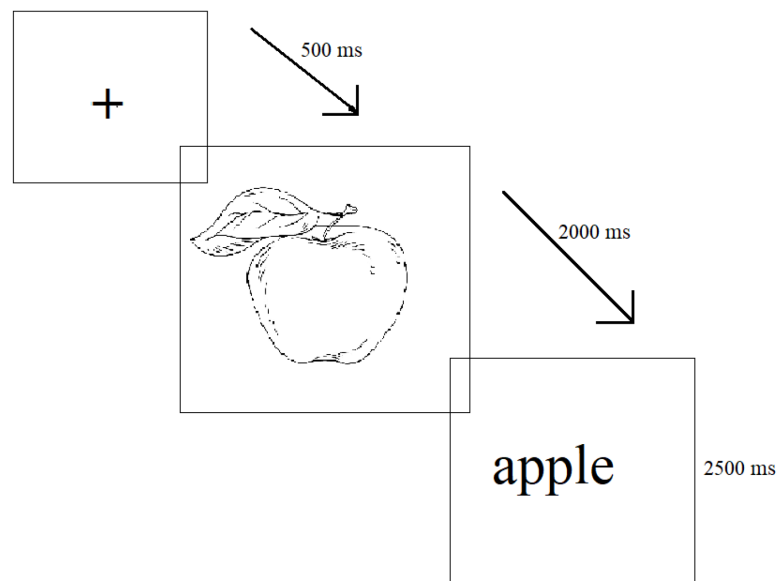
TASK 2:

The task 2 is similar to task 1. All the parameter are kept the same except in place of L2, L1, i.e., Hindi or Bengali will be used. The task is performed in the same pattern and the images are same as that of Task 1

Analysis: After removing outliers in R, Q-Q plot was used to obtain (approximately) normal distribution for the variables Accuracy and the Response time for the bilinguals of Hindi and Bengali speakers. As the experiment was conducted towards the beginning of the academic session the dominance in the mother language was seen in majority with a few exceptions in their L2 dominance. For both the Bengali and Hindi bilingual group the accuracy was seen was seen in L1, 62



accurate responses out of 93 items for the Bengali bilingual group and 71 accurate responses for the Hindi bilingual group. The response time was also calculated in the present study. The Bengali bilingual group had an average response time of 1.7ms in L1 and 2ms in L2. The Hindi bilingual group had an average response time of 1.5ms in L1 and 1.92ms in L2. In the both the cases which shows that L1 is the dominant language of the speakers. The study being a longitudinal study after a period the same experiment will be conducted on the same group of participants to look for a shift in the language from L1 to L2 and traits of the change of the dominant language.



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A Sociolinguistic Exploration of Language and Identity of Ranglong Tribe

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The sociolinguistic landscape of the Ranglong community, an ethnic group residing in the Northeastern region of India, is a dynamic interplay of language, identity, and cultural practices. Ranglong was divided into Old Kuki (Grierson 1904) and Ranglong was additionally sub-grouped under Old Kuki (Bradley (1997). In his sub-grouping, (Thurgood 2003) also included Ranglong under Old Kuki. In addition to the others, (Bareigts 1981) also grouped with the Tibeto-Burman language family, which was classified in the Northern Kuki-Chin group. In their sub-grouping, each of them has identified Ranglong as Langrong. Ranglong is one of the sub-tribes of the Halam community of Tripura. The speakers of Ranglong mainly reside in the Dharmanagar subdivision of the North Tripura, district of Tripura. Additionally, Ranglong speakers reside in the Karimganj district of South Assam and the Northwestern region of Mizoram. It is believed that Ranglong has come out from a cave called 'Khurpuitabum' but the exact location cannot be traced. Ranglong people use their language at home domain and also prefer to communicate in their mother tongue when they meet in a public place. The attitude of the Ranglong speakers is positive but it can also be seen that the younger generation is code-mixing while communicating in their language due to the influence of the medium of instruction or the dominant language in the surroundings. 'Ranglong has been registered as Langrong by UNESCO and declared as critically endangered language'. The present paper attempts to provide a preliminary description of the Ranglong community of Assam and highlight the nature and degree of language endangerment including language attitude, multilingualism and considering few aspects on sociolinguistics.

Keywords: Assam, Identity, Language, Ranglong, Sociolinguistics.

Attitude verbs and the clauses they embed: a view from Bangla

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Attitude verbs have long been an interesting area of research cross-linguistically. An attitude verb can be defined as one which expresses one's mental state or is used for communication. There can be two different types of attitude verbs- verbs of mental state (*believe, know, consider, hope, wish, feel* etc.) and verbs of communication (*say, claim, promise, call* etc.) (cf. Pearson, 2015). Attitude verbs have some specific semantic and pragmatic properties which allow these verbs to exhibit some peculiar properties that may be absent in others. Bangla, an eastern IA language, also employs attitude verbs to show mental state or to convey communication. Below I give some examples of attitude verbs in Bangla:

- (1) *ami bhabtam je ram khub bhalo chele, ✓kintu aSole o*
 1SG think.IMPF.1 REL ram very good boy, but actually he
khub-i Seyana
 very-FOC cunning
 'I used to think that Ram is a good boy, but he is actually very cunning.'
- (2) *ami bolechilam je ram kal aS-te parbena,*
 1SG say.PERF.PST.1 REL ram tomorrow come-INF can.FUT.NEG
 ✓*kintu o dekhlam Thik-i cole eSeche*
 but he see.PST.3 actually-FOC walk come.PERF.PRES.3
 'I said that Ram will not come tomorrow, but he did actually come.'

Such attitude verbs are called so because we can contradict the attitude report which need not adhere to the truth-preserving nature of a predicate in general.

It is not a novel fact that attitude verbs can embed both finite and non-finite clauses (Raising and ECM). When it embeds a finite clause in English, it may take a subordinator (*I believe that he is a good student*). Bangla, like other Eastern IA languages, exhibits dual complementizer system with two subordinators: a post-verbal REL *je* and a pre-verbal QC *bole* (Singh, 1980; Bayer, 1996; 1999; 2001; Bhattacharya, 2001; 2002; 2015; among others) which shows different properties from each other. The two examples above (1) and (2) can also be constructed with a pre-verbal QC *bole*:

- (3) *ami ram khub bhalo chele bole bhabtam, ✓kintu aSole o*
 1SG ram very good boy QC think.IMPF.1, but actually he
khub-i Seyana
 very-FOC cunning
 'I used to think that Ram is a good boy, but he is actually very cunning.'

- (4) *ami ram kal aS-te parbena bole bolechilam,*
 1SG ram tomorrow come-INF can.FUT.NEG QC say.PERF.PST.1
✓kintu o dekhlam thik-i cole eSeche
 but he see.PST.3 actually-FOC walk come.PERF.PRES.3
 ‘I said that Ram will not come tomorrow, but he did actually come.’

Issue at hand: In the data below, let us consider two particular attitude verbs in Bangla which express mental states and can embed ECM constructions:

- (5) *ami ram-ke pagol bole mone korechilam/ mantam,*
 1SG ram-ACC insane QC consider do.PERF.PST.1/consider.IMPF.1
✓kintu o adote Seyana
 but he actually cunning
 ‘I considered Ram to be insane, but he is actually really cunning.’

- (6) *ami ram-ke pagol bole gonno kortam, ✓kintu o*
 1SG ram-ACC insane QC consider/count do.IMPF.1, but he
adote Seyana
 actually cunning
 ‘I considered/counted Ram to be insane, but he is actually really cunning.’

Although, both of these verbs *mone kori* or *mantam* and *gonno kori* may act similarly in the way that they can both be attitude verbs (can be contradicted) and embed ECM clauses, they don’t always exhibit the same exact properties.

- (7) *ami mone kori/ mani je ram pagol*
 1SG consider do.HAB.1 consider.HAB.1 REL ram insane
 ‘I consider Ram to be insane.’
 (8) **ami gonno kori je ram pagol*
 1SG consider do.HAB.1 REL ram insane
 ‘I consider/counted Ram to be insane.’

As we can see, *gonno kori* cannot embed a sentence with a relativizer complement *je*, which is possible with the attitude verb *mone kori/mani*. This verb in Bangla behaves differently in how it can only embed a clause-final QC complementizer. Apart from this, it can only embed an ECM clause but not when the embedded nominal is marked with a NOM Case and is finite.

- (9) *ami [ram-ke bhalo chatroder modhye akjon bole]*
 1SG ram-ACC good students among one QC
gonyo kori
 consider/count do.HAB.1
 ‘I consider Ram to be one of the good students.’

- (10) **ami* [*ram* *bhalo chatroder* *modhye* *akjon bole*]
 1SG ram.NOM good students among one QC
 gonno *kori*
 consider/count do.HAB.1
 ‘I consider/count Ram to be one of the good students.’

I argue that *gonno kori* in Bangla behaves as a ditransitive and takes both a nominal and a complement clause with post-verbal subordinator or QC. It is also suggested that the embedded nominal is first posited inside the embedded clause where it is an agent of that clause but then it raises out of that embedded clause to the matrix clause where it gets an ACC Case from the matrix verb *gonno kori*. This attitude verb behaves quite differently than the others that we see above (*mone kori*, *mani* etc.) where the others are not ditransitives but are simply embedding a complement clause and also has an attitude holder as an agent in the matrix clause.

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Reading homographs in Assamese: A Reaction Time Study

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Reading is the processing of textual information, involving recognition and comprehension of a given text. Reading behaviour and the time taken to read a text can be influenced by any complexity in the text. Homographs in specific contexts may cause complexity in the text, creating ambiguity as, although they indicate two different meanings, they have the same graphemic representation. There have been studies to understand the reading behaviour of ambiguous texts in different languages. In Russian, eye movements and fixation durations are observed to be more while reading ambiguous sentences. It is observed that the frequency of the words that indicates the dominance of the word meanings, influences the selection process while reading the ambiguous text. In English the high-frequency or the dominant words are observed to be read with a shorter time. For instance, the English word ‘bank’ meaning ‘the money bank’ is dominant whereas, that, meaning ‘river bank’ is less dominant or subordinate. Based on various reaction time (RT) and eye-tracking studies, it is understood that reading ambiguous text requires additional attention and takes a longer time to read ambiguous sentences than non-ambiguous sentences. Research indicates that both the meanings can be recalled simultaneously while reading an ambiguous or non-biased contexts. In non-ambiguous or biased contexts, recalling one meaning is not influenced by the other. However, studies to understand the reading behaviour of ambiguous text in Indian languages are limited. As such, Assamese is taken as the target language for study. The present study is an investigation of the time taken to read Assamese homographs in ambiguous and non-ambiguous contexts.

Subjective frequency ratings of usage of the homographs were obtained. Most frequently used homographs were chosen as the target words for the study. A total of 99 experimental sentences were constructed: 33 sentences with the 33 homographs in ambiguous or non-biased context and 2 sets of 33 biased sentences each. Furthermore, for masking the properties of the experimental sentences, neutral sentences without any homographs and ambiguity were used as fillers. Each of the sentences were followed by multiple choice questions asking the meaning of the target words. The reaction time data for reading Assamese sentences was collected from 20 participants. A self-paced, silent reading experiment was conducted using ambiguous or non-biased sentences, biased sentences with the two meanings of the homographs and neutral sentences as fillers.

The experiment was designed in an open-source software named Psychopy. The data was collected through the experiment link in Pavlovia, the online site linked to Psychopy. Based on the types the 99 experimental sentences were separated into three sets (viz. Ambiguous, Biased 1 and Biased 2) and divided into three sessions in order to avoid practice effect. Each session contained 34 sentences (13

target and 21 filler sentences) arranged in a pseudo-random order of 2:3 and their corresponding questions. A trial session preceded the main experiment for the subjects to familiarize with the process. Subjects were instructed to press the space bar soon after they finished reading a sentence and press a key (1/2/3/4) options (meaning 1, meaning 2, 'both of them' and 'none of them'). The time taken from one key press to another is recorded as the reaction time (RT). It was a silent reading and a self-paced experiment. The subjects were asked to perform the test on a computer and were monitored during the whole task.

As hypothesized, the time taken to read a homograph in an ambiguous context is more (mean RT 0.023) than the non-ambiguous (mean RT biased1: -0.14, biased2: 0.02) and neutral sentences. Besides, ambiguous words with low and high frequency are hypothesized to show significant influence. From the results of the statistical analysis, it can be understood that the homographs that create ambiguity, affect the reading time of readers. The time taken to read ambiguous sentences took significantly longer than the biased and the filler sentences. The RT of the two biased sets of sentences is not significantly different. The difference is observed in the RT of the filler sentences and the biased sentences. As the biased sentences contain homographs, they are read with comparatively longer time than the filler sentences. However, the filler sentences that are added with the ambiguous set of sentences are read with a longer time than those added with the biased sets of sentences. Previous researches discussing the 'exhaustive access model' and 'cross model semantic' explain that when a reader comes across an ambiguous word the reader retrieves all the meanings of the word for a few hundred seconds. The selection is based on the frequency of usage of the word meaning or the 'best guess'. As such, RT of the ambiguous sentences is seen to be more than the biased sentences. Besides, its impact is seen on the RT of the following sentences even those not containing any homographs or ambiguity as evident from the RT of the filler/neutral sentences added with the ambiguous sentences. It is assumed that the readers become more alert to anticipate challenging words in the sentences.

Keywords: Reaction time, ambiguity, homographs, reading, biasness, frequency.

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Morphophonemic Variation and Sound Change: A case study of Mising language of Assam with special reference to Lakhimpur district

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1. INTRODUCTION

Many undocumented languages in a nation like India are in danger of going extinct because of the impact of the dominating languages or may be due to language politics, which are present in many nations. In such cases, archiving and digitization are essential for preserving a great deal of linguistic data in order to conserve the specific language that has been impacted by other dominant languages. This phenomenon has been observed in the Tibeto- Burman language i.e. Mising, where the various dialects of Mising have been impacted by the language in use today. In light of all of this, the purpose of this proposal is to comprehend the morphophonemic variation, its perspective, and the sound change of the Mising speakers. This paper combines both descriptive and experimental analysis at various points and tries to comprehend and investigate by using both primary and secondary data. The data are gathered using a series of questionnaires and a semi-structured group interview among the Mising community in accordance with the guidelines established by sociolinguistic studies, and it also look at how native speakers feel about their mother tongue.

2. MORPHOPHONEMIC VARIATIONS AND SOUND CHANGE IN MISING

The Mising language has been categorized into eight Mising dialects: Sa.jang, Mo.jing, Ojan, Pagro, Ddu, Dambuk, Somua, and Samuguria (Prasad 2001:4). According to Taid (1987), Mising dialects can be divided into two main groups: the non-geminate group (NGG) and the geminate group (GG) and they differ depending on the phonological, morphological, lexical, and syntactic levels, among other levels. This study mainly focuses on the various morphophonemic variations and the sound change that occurs at the time of variation with special reference to the people residing in the Lakhimpur district of Assam. It has been observed that in both geminate and non-geminate groups, the affixation of the marker -ə to a subject NP or to a sentence-final nominal/adjective exhibits morphosyntactic variations in various Mising dialects. The marker -ə has two different syntactic functions in all the Mising dialects: first as a copula when suffixed to sentence-final nominal or adjective and second, as a generic or definite non-specific marker when suffixed to a subject NP. In Mising, the marker -ə operates as a copula when it is suffixed to a sentence final nominal or adjective. For example from the

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Affricates in Angami

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This study delves into understanding affricates in Angami (also known as Tenyidie, ISO 639 – 3: njm) and investigates the acoustic properties associated in distinguishing voicing contrasts and places of articulation (POA). The acoustic-phonetic features extracted to characterize the affricates in this study are duration, intensity, percentage of voicing and spectral moments such as skewness, kurtosis and center of gravity (CoG).

Angami has three-way laryngeal contrasts in stops, i.e., voiced (VD), voiceless unaspirated (VLU), and voiceless aspirated (VLA) in 3 POA's. In this study, we considered only the affricates that occur in alveolar (\underline{ts} , \underline{ts}^h , \underline{dz}) and palato-alveolar ($\underline{tʃ}$, $\underline{tʃ}^h$, $\underline{dʒ}$). Ten Angami native speakers residing in the Kohima village, Nagaland, participated in this study. Six affricates on the onset position of CV monosyllable in meaningful lexical words were produced in three contexts, namely, sentence, carrier and isolation. A total of 922 tokens were elicited and analyzed.

The spectrograms depicted in Figure 3 delineate the three laryngeal contrasts in Angami affricates, evident through distinct patterns in the burst, frication, aspiration, and voiced periods. The results of this study show that the VLA duration is longer than that of VD and VLU (Fig. 4). Moreover, the center of gravity (CoG) tends to be higher in the alveolar region than the palatal region, irrespective of voicing contrasts in place of articulation (Fig. 5). Additionally, the average intensity is greater in palatal articulations than in alveolar ones (Fig. 6). Furthermore, the percentage of voicing in voiced affricates within both alveolar and palato-alveolar are notably higher (Fig. 7). Further, the results illustrate that these features vary depending on the contexts in which they are produced. Among the statistically significant features, the amount of voicing appear to have stronger effects on affricate voicing ($\chi^2(2) = 111$, $p < 0.001$), while CoG has greater effects on POA ($\chi^2(1) = 30$, $p < 0.001$) as indicated by high chi-square values. The result further show that laryngeal contrasts, and place of articulation interactions significantly affect skewness and kurtosis in affricates.

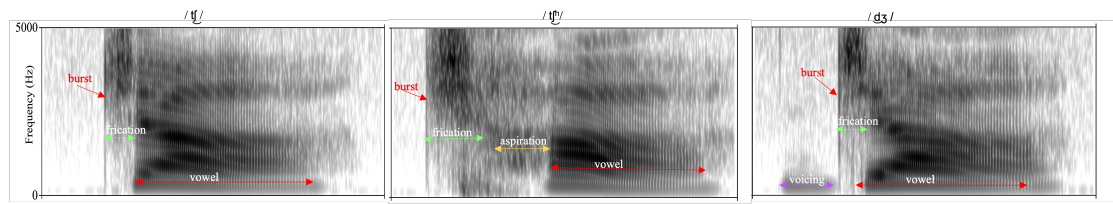


Fig. 3: Spectrograph of palatal voiceless unaspirated /tʃ/, voiceless aspirated /tʃʰ/ and voiced aspirated /dʒ/ followed by vowel /a/ as produced by a female speaker in isolation.

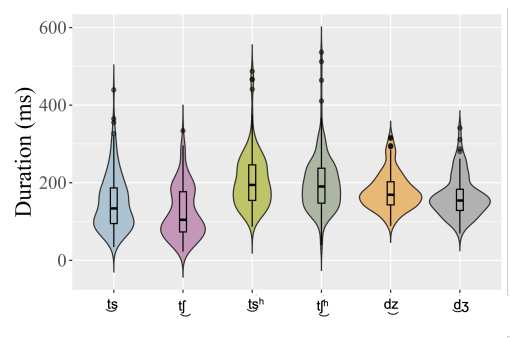


Fig. 4: Violin plots showing the average duration (ms) in Angami affricates.

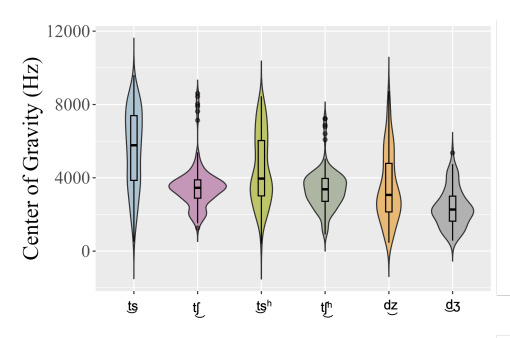


Fig. 5: Violin plots showing the average CoG (Hz) in six Angami affricates.

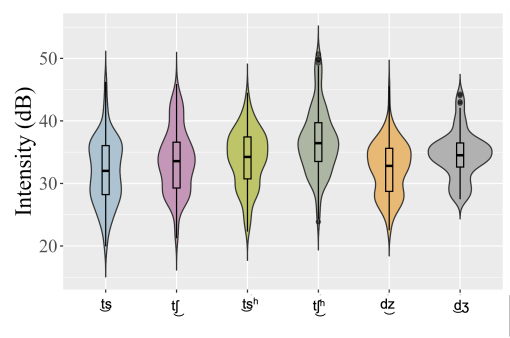


Fig. 6: Violin plots showing the average intensity (dB) in six Angami affricates.

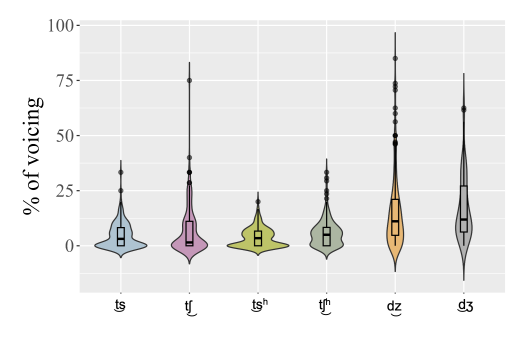


Fig. 7: Violin plots showing the average percentage of voicing in six Angami affricates.

Direct and Indirect Causatives in Bodo

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Bodo, a language of the Bodo Part under the Bodo-Garo branch of Sal (Bodo-Konyak-Jingpho, Brahmaputran) languages of Tibeto-Burman family (Post & Burling (2017: 224-5) employs a rich set of causative prefixes. There are three types of causative prefixes, namely, $\{sV-\}$, $\{p^hV-\}$ and $\{bV-\}$ (Brahma 2022: 316). The causative-types derived with these prefixes from inchoative verbs are broadly based on the directness and indirectness causative features of the derived causative verbs. Each of these prefixes has its corresponding allomorphs conditioned phonologically through vowel harmony. For example-

(A)	$\{sV-\}$	$\{suu-\}$	+	[maò]	‘move _{vi} ’	>	[sumaò]	‘move _{vt} ’
		$\{si-\}$	+	[gì]	‘be afraid’	>	[sigì]	‘frighten’
		$\{sɔ-\}$	+	[gó]	‘become free’	>	[sɔkʰó]	‘make free’
		$\{su-\}$	+	[bùŋ]	‘fill _{vi} ’	>	[supʰùŋ]	‘fill _{vt} ’
		$\{se-\}$	+	[gerēb]	‘crush _{vi} ’	>	[sekʰrēb]	‘crush _{vt} ’
(B)	$\{bV-\}$	$\{buu-\}$	+	[gá]	‘detach _{vi} ’	>	[bukʰā]	‘detach _{vt} ’
		$\{bi-\}$	+	[zì]	‘tear _{vi} ’	>	[bisì]	‘tear _{vt} ’
		$\{bɔ-\}$	+	[gó]	‘become free’	>	[bɔkʰó]	‘make free’
		$\{bu-\}$	+	[gú]	‘uproot _{vi} ’	>	[bukʰū]	‘uproot _{vt} ’
		$\{be-\}$	+	[geò]	‘open _{vi} ’	>	[bekʰeò]	‘open _{vt} ’
(C)	$\{p^hV-\}$	$\{p^huu-\}$	+	[tʰuì]	‘die’	>	[pʰutʰuì]	‘put to die’
		$\{p^ha-\}$	+	[hàm]	‘get well’	>	[pʰahàm]	‘put to get well’
		$\{p^hi-\}$	+	[sì]	‘get wet’	>	[pʰisì]	‘put to wet’
		$\{p^hɔ-\}$	+	[zó]	‘sit’	>	[pʰɔzó]	‘put to sit’
		$\{p^hu-\}$	+	[súŋ]	‘shorten _{vi} ’	>	[pʰusúŋ]	‘shorten _{vt} ’
		$\{p^he-\}$	+	[seò]	‘rot’	>	[pʰeseò]	‘put to rot’

These prefixes are broadly categorised based on their inflectional and derivational features; $\{sV-\}$ and $\{p^hV-\}$ are inflectional whereas $\{bV-\}$ is derivational. However, $\{bV-\}$ is a grammaticalised form of the verb [bú] ‘pull’. The lexical feature of this verb has been grammaticalised as a causation feature thereby manifesting an act of separation or detachment from the object, by the caused argument.

This study, sub-categorises and discusses the prefixes i.e. {sV-} and {bV-} as direct causative and {p^hV-} as indirect causative. Again, lexical causative verbs such as [duó] ‘feed’ (< [zá] ‘eat’) also exhibit direct causative feature. Joseph (2005: 79) has termed direct causative as directive causative and indirect causative as manipulative causative, respectively. The former indicates the causation that is straight from the agent itself whereas the latter indicates that the agent does not cause the causee directly. For example- [sugàb] ‘make cry; make weep’ is the direct causative form of [gàb] ‘cry; weep’, [bəsō] ‘split_{vt}’ is the direct causative form of [zō] ‘split_{vi}’ (causes to cry/split directly by the agent); whereas [p^hurān] ‘make (put to) dry’ is the indirect causative form of [rán] ‘dry_{vi}’ (caused to dry indirectly through the heat of the sun, fire, or any other heating object). However, two more types of causatives, viz. morphological causative through suffixation of [-hu] derived from [hu] ‘give’ e.g. [zāhu] ‘make eat’ from [zá] ‘eat’ and syntactic causative through the employment of the [hu] ‘give’ preceded by the verb base with the infinitive verb suffix {-nu} e.g. [bìr-nù hù] ‘make fly’ from [bìr] ‘fly’ do not exhibit any distinct direct- or indirect causative features.

Keywords: Bodo; Causative; Direct Causative; Indirect Causative.

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Orthographies of the languages of NE India

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As per the ‘Language Reports, June 2018’ of Census of India 2011, there are 121 languages in India. Out of these, as many as 66 languages comprising 61 Tibeto-Burman-, 4 Indo-Aryan-, and 1 Austro-Asiatic languages are present in the North-East. However, a couple of languages in the language list of CoI 2011- Chakhesang, and Zeliang do not exist as they refer to groups of people, not languages. In the writing systems of these languages thirteen different scripts, namely, Aming, Assamese, Bengali, Burmese, Devanagari, Meetei Mayek, Rai, Roman, Sambhota, Sirijonga, Tamyig, Tangsa, and Wancho. Every of Aming-, Burmese-, Meetei Mayek-, Rai-, Sirijonga-, Tamyig-, Tangsa-, and Wancho scripts is used to write one language whereas the rest of the scripts are used in writing multiple languages. Assamese is used in Assamese-, Deori-, Koch-, and Rabha orthographies; Bengali is used in Bengali-, Bishnupriya Manipuri-, and Kokborok orthographies; Devanagari is used in Bodo-, and Nepali orthographies; Sambhota is used in Bhutia-, and Sherpa orthographies; whereas the Roman or Latin based script has been used in writing forty-six (46) languages of NE India. The use of the scripts in writing multiple languages makes them diverse with reduction as well as extension of the scripts. This study aims at looking at the varied orthographies, especially, the scripts used in writing the languages of NE India and the linguistic as well as political issues involved in the use of some of these scripts.

Keywords: Orthography; Script; NE India; Assamese; Devanagari; Roman; Sambhota.

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