## **UC Santa Barbara**

# **Himalayan Linguistics**

## **Title**

Deictic motion in Hakhun Tangsa

## **Permalink**

https://escholarship.org/uc/item/22c040n4

## Journal

Himalayan Linguistics, 19(2)

## **Author**

Boro, Krishna

## **Publication Date**

2020

## DOI

10.5070/H91151001

## **Copyright Information**

Copyright 2020 by the author(s). This work is made available under the terms of a Creative Commons Attribution-NonCommercial-NoDerivatives License, available at <a href="https://creativecommons.org/licenses/by-nc-nd/4.0/">https://creativecommons.org/licenses/by-nc-nd/4.0/</a>

Peer reviewed



Languages and Peoples of the Eastern Himalayan Region (LPEHR) comprises an annual special issue of Himalayan Linguistics together with occasional special publications. Peer-reviewed and open-access, it focuses on linguistic and ethnographic documentation and description in the Eastern Himalaya.

## Languages and Peoples of the Eastern Himalayan Region (LPEHR)

Deictic motion in Hakhun Tangsa

### Krishna Boro

Gauhati University

**ABSTRACT** 

This paper provides a detailed description of how deictic motion events are encoded in a Tangsa variety called Hakhun, spoken in Arunachal Pradesh and Assam in India, and in Sagaing Region in Myanmar. Deictic motion events in Hakhun are encoded by a set of two motion verbs, their serial or versatile verb counterparts, and a set of two ventive particles. Impersonal deictic motion events are encoded by the motion verbs alone, which orient the motion with reference to a center of interest. Motion events with an SAP figure or ground are simultaneously encoded by the motion verbs and ventive particles. These motion events evoke two frames of reference: a home base and the speech-act location. The motion verbs anchor the motion with reference to the home base of the figure, and the ventives (or their absence) anchor the motion with reference to the location of the speaker, the addressee, or the speech-act. When the motion verbs are concatenated with other verbs, they specify motion associated with the action denoted by the other verb(s).

### **KEYWORDS**

Hakhun, Tibeto-Burman, deictic motion, motion verbs, ventive

This is a contribution from *Himalayan Linguistics Vol* 19(2) – *Languages and Peoples of the Eastern Himalayan Region:* 9–29. ISSN 1544-7502

© 2020. All rights reserved.

This Portable Document Format (PDF) file may not be altered in any way.

Tables of contents, abstracts, and submission guidelines are available at escholarship.org/uc/himalayanlinguistics

# Deictic motion in Hakhun Tangsa<sup>1</sup>

# Krishna Boro

Gauhati University

## 1 Introduction

This paper describes how deictic motion events are encoded and contextually anchored in the speech situation in Hakhun, a variety of Tangsa or Tangshang (Ethnologue ISO 639-3 nst) spoken in the states of Arunachal Pradesh and Assam, India, and in Sagaing Region, Myanmar. The terms Tangsa or Tangshang refer to a large ethnic group, consisting of as many as 80 sub-groups, and their speech varieties, who are located on both sides of the Indo-Myanmar border on the Patkai mountain range (see Morey 2017). The speech varieties spoken by these groups seem to form a dialect continuum, where mutual intelligibility is observed between communities living in close proximity and with regular contact (Morey 2017). The speech varieties of Tangsa, Nocte, Wancho, Tutsa, Phom, Konyak, and Chang form a low-level clade called Northern Naga or Konyak group, which in turn forms a higher-level clade along with Bodo-Garo and Jinghpaw called Bodo-Konyak-Jinghpaw (Bradley 1997; French 1983; Burling 2003).

Deictic motion events refer to those motion events whose interpretation is contextually anchored to the identity of the speaker and addressee, their locations, and the time of utterance (see Zubin & Hewitt 1995: 129). They are viewed from a certain perspective point, which is usually the speaker's current location, but it can be any location (either physical or psychological) with which the speaker identifies or empathizes (Talmy 2000: 68; Zubin & Hewitt 1995: 130). The motion events under consideration are translational and bounded, i.e. the moving entity is at one location at one time and at another location at another time, and the motion has a starting point (the source) and an end point (the goal), whether or not these points are overtly specified in a given utterance (cf. Fillmore 1975: 271). A basic motion event consists of one object, the figure, moving with respect to a reference frame, the ground (Talmy 2000: 25). The ground may be identified with the source, the goal, or the entire path, depending on the semantics of the verb (cf. Fillmore 1975: 272).

Deictic motion events in Hakhun are encoded by different classes of forms within the verb complex: motion verbs, serial or versatile verbs, i.e. grammaticalized verbs with

<sup>&</sup>lt;sup>1</sup> This paper is based on work partly supported by the National Science Foundation, USA, under grant no. BCS-1500694, entitled "Doctoral Dissertation Research: A Descriptive Grammar of Hakhun Tangsa". Some of the data used were collected by Dr. Stephen Morey as part of his documentation project funded by DOBES programme by Volkswagen Foundation, entitled "The Traditional Songs and Poetry of Upper Assam – A Multifaceted Linguistic and Ethnographic Documentation of the Tangsa, Tai and Singpho Communities in Margherita, Northeast India".

varying degrees of abstract meaning which concatenate with more lexical verbs (cf. Matisoff 2003: 218), and ventive particles. Encoding of motion events with such variety of forms is quite typical in Tibeto-Burman or Trans-Himalayan languages, which is largely due to cyclic recoding of the category of motional deixis whereby lexical motion verbs become grammaticalized verbs, which become grammatical particles, which in turn may become affixes (DeLancey 1980: 141-142). Thus, for instance, serial or versatile verbs encode deictic motion, often in addition to motion verbs, in Lahu, Burmese, Lhasa, and Bodo (see Matisoff 2017; Soe 1994; DeLancey 2003: 280, 1991; Boro 2012). Verbal particles or affixes encode deictic motion, often in addition to motion verbs and versatile verbs, in Tangut, Qiang, Rawang, Meitei, Mizo, Hakha Lai, Lamkang, and Galo (see Kepping 1982; Hwang-Cherng 2003: 608; LaPolla 2003:581; Straub 2016: 85-108; Ningomba 1993; Chhangte 1986: 136; VanBik 2017; Peterson 2003: 414; Chelliah 2017; Post 2011: 144).

Many Tibeto-Burman languages encode multiple frames of reference in anchoring deictic motion events. Thus, besides anchoring motion events with reference to speech-act location (i.e. egocentric deixis), many Tibeto-Burman languages, such as Hakha Lai, Lamkang, Tangut, Rawang, and Galo, use topographically-anchored planes, such as upward, downward, or on the same level, to orient motion events. Such simultaneous encoding of egocentric and topographical deixis (cf. Post 2019, 2011: 141) is very common, although realized differently in different languages. For instance, Lamkang uses motion verbs to encode topographical deixis and a verbal prefix (ventive) to encode egocentric deixis. Rawang uses suffixes to encode both types of deixis (Straub 2016: 85-108), whereas Hakha Lai uses pre-verbal particles to encode both types of deixis (see VanBik 2017). Hakhun differs from these Tibeto-Burman languages, in that it does not encode topographical deixis despite being spoken in mountainous terrain. Instead, Hakhun uses motion verbs to encode motion events which are anchored with reference to a center of interest (such as the location of an ongoing event or the location of a central character in a narrative) or with reference to a fixed location, a home base, such as one's own home, village, town, etc. In addition, Hakhun uses ventives (or their absence) to anchor motion events with reference to the location of the speaker, the hearer, or the speech-act location.

The motion verbs and directional particles/affixes in many of these languages, such as Burmese and Rawang, have additional grammatical functions like tense and aspect (see Soe 1994; Straub 2016: 110-130). Such grammatical functions are not attested in Hakhun, although the motion verbs in Hakhun may additionally express change of state. The ventives in Hakhun also function as inverse markers, which is also the case in Nocte, Sizang, Tiddim, and Paite, among others (see DeLancey 1980: 167-175, 2010). The paper is organized as follows. §2 provides some background information and outlines some relevant typological features of the language. §3 deals with the motion verbs and deictic motion events in impersonal third person narrative. §4 deals with the ventive particles and motion events which involve speech-act participants. §5 deals with motional versatile verbs and associated motion. §6 summarizes the paper.

## 2 Background

The Hakhuns are located in Changlang and Tirap districts of Arunachal Pradesh, India, and in Sagaing Region, Myanmar. They are also found in three villages in the Margherita subdivision of Tinsukia district of Assam, India, namely Malugoan, Mullong, and Lekhapani. Hakhun villages are mostly located on the hills, shown in Figure 1. Hakhun is a relatively large group with around 10,000 speakers in both countries. In Myanmar, Hakhun people are in regular contact with several other Tangsa communities, such as Bote, Hasik, Hakhi, Hame, and Hathim, and they can understand and speak their varieties. In Assam, Hakhun people also speak and understand Hacheng, another Tangsa variety. Nagamese, Assamese, and Burmese are used as lingua franca to varying degrees among Tangsa communities.



Figure 1 – Map of Hakhun villages on Indo-Myanmar border (source: Google Maps)

Hakhun, like other Tangsa varieties, has been an undescribed and undocumented language until very recently. A DOBES documentary project led by Dr. Stephen Morey and his colleagues produced an extensive number of wordlists, glossed texts, and grammatical sketches of various Tangsa varieties, including Hakhun, between 2007 and 2011, which are archived at the DOBES archive.<sup>2</sup> The author has conducted more fieldwork on Hakhun between 2009 and 2017 and produced more texts, an extended wordlist, and a descriptive

<sup>&</sup>lt;sup>2</sup> Project details are found at https://dobes.mpi.nl/projects/singpho\_tai\_tangsa/ and the archive is located at https://archive.mpi.nl/tla/islandora/object/tla:1839\_00\_0000\_000D\_BB1A\_A?asOfDateTime=2018-03-02T11:00:00.000Z (accessed on 7/8/2020).

grammar. The data are archived at PARADISEC and accessible to the public.<sup>3</sup> This paper is based on the same data, which contains spoken narratives (SNR), spoken conversations (SCN), a dubbed movie on Jesus (MOV), a few written texts, elicited sentences, and utterances observed by the author. The data comes from two villages: Malugaon, located near the town of Ledo in Tinsukia district of Assam, and Vanruk, located across the border in Sagaing Region of Myanmar.<sup>4</sup>

Hakhun is a tonal language with a low, a high, and a falling tone. Tonal contrast is found in open syllables and syllables with sonorant codas, but not in syllables with stop codas. Reduced syllables, known as sesquisyllables (see Matisoff 1989), and most grammatical morphemes are atonal. Hakhun has two open word classes: nouns and verbs. Semantic adjectives or property concept terms can be treated as a subclass of verbs (see Boro 2017: 80-98 for details). A subset of verbs, consisting of around 19 lexemes, has an allomorphy known as verb stem alternation (see VanBik 2009), where one stem consists of an open syllable and the other stem consists of a closed syllable with a stop coda. The two verb stems usually have distinct morphosyntactic distributions. The forms without the coda take finite verbal operators, i.e. those marked with argument indices. The forms with the coda, on the other hand, have a distribution of nominalized verbs. They can take a nominalizing prefix *a*-, do not take finite verbal operators, and occur in subordinate clauses (Boro 2017: 272-276). The verb complex may contain a number of elements. Figure 2 shows a broad schema of the verb complex (see Boro 2017: 271).

<b>-</b> 2	-1	0	1	2	3	4	5
NEG	grammaticalized verbs, adverbial particles	root	grammaticalized verbs, adverbial particles	CAUS	operators	aspect	hearsay

Figure 2 – A broad schema of the verb complex

A minimal verb complex consists of the verb root and a (verbal) operator in position 3, although sometimes the operator is dropped in spontaneous speech. The verbal operators consist of tense, mood, negative, and ventive/inverse markers. The verbal operators along with argument indices form a phonologically independent monosyllabic word, which has been called "sentence final word" or "agreement word" elsewhere (see Dai & Diehl 2003; DeLancey 2015). Other elements in the verb complex are optional. Position -2 is occupied by a negative particle  $m\grave{a}$ , which occurs only in certain constructions, such as the present tense. Positions -1 and 1 are occupied by various grammaticalized verbs and particles denoting meanings like 'again', 'start', 'finish', 'keep', 'give', 'come', 'go', etc. (see Boro 2017: 301). The motional versatile verbs under consideration occur in position 1. Position 2 is occupied by a causative particle  $t^hik$ . Position 4 is occupied by a perfective particle  $n\grave{a}$ , and position 5 is occupied by a hearsay marker  $n\grave{a}$ .

Hakhun is a highly isolating language with very little affixation. Most grammatical categories, such as case, tense, aspect, polarity, etc. are encoded by separate words. It is a

\_

<sup>&</sup>lt;sup>3</sup> See at https://catalog.paradisec.org.au/collections/KB1.

<sup>&</sup>lt;sup>4</sup> Data from Vanruk was collected by my consultant Khithung Hakhun.

verb final language with SOV order, although the constituent order is variable. Hakhun largely follows a clause-chaining discourse structure, where multiple clauses are chained together and the most finite clause occurs at the end of the chain. Serial verb construction or verb concatenation is a prominent feature of Hakhun grammar (cf. Aikhenvald 2006; Matisoff 2003). Multiple verbs are concatenated by simple juxtaposition, i.e. without any dependency marking, within a single verb complex expressing events that may be interpreted as sequential, or one resulting from another (i.e. resultative), or one modifying the other in some way (i.e. adverbial) (see Boro 2017: 276-327). The verbs in a serial verb construction occur in positions -1, 0, and 1 within the verb complex. Around a dozen of the concatenated verbs, which may precede or follow a more lexical verb, add more abstract grammatical meanings, such as aspectual, directional, benefactive/malefactive, etc. (see Boro 2017: 301-327).

## 3 Motion verbs and impersonal deictic motion

There are two lexical deictic motion verbs in Hakhun –  $v\hat{r}$  'come' and  $k\hat{a}$  'go'; the latter has an allomorph ke?. These verbs have cognates in several Tangsa varieties, such as Shecyü ( $va^1$  'come, go, go upward',  $ki^1$  'come, go, go downward'), Mungre ( $vo^1$  'come, go',  $okoj^1$  'come, go'), Rera ( $\beta a\eta^3/wa\eta^2$  'go, come',  $ka^1$  'go'), Muishaung ( $\beta au\eta^1$  'come',  $ka^1$  'go') and Muklom ( $\beta a\eta^3$  'go up',  $ka^1/kat$  'go'), as well as in Nocte ( $wa\eta$  'go up', ka/kat/ke? 'come/go') (see Khan 2017: 195; Goswami 2017: 36, 49, 58; Morey 2019: 56; Mulder 2020: 112, 251; Rahman 2016: 7, 112). The motion verbs in Hakhun are quite frequent in natural discourse, with approximately 300 instances of  $v\hat{r}$ , 400 instances of  $k\hat{a}$ , and 150 instances of ke? in the corpus.

A few points are worth pointing out here. First, either of the motion verbs is glossed as 'come' or 'go' in some of the varieties mentioned above. This seems to indicate that there is more to the meaning of these verbs than what can be represented with simple English glosses like 'come' and 'go'. Second, the motion verbs in some of these Tangsa varieties seem to express a vertical motion as well, as apparent from their glosses in the preceding paragraph. Morey (2019: 56) has explicitly stated that the motion verbs in Muishaung have a sense of upward (expressed by  $\beta au\eta^1$  'come') and downward (expressed by  $ka^1$  'go') motion. Finally, the verb  $k\grave{a}$  'go' and its cognates in some Tangsa varieties involve verb stem alternation. They have allomorphs which have stop codas, such as Hakhun  $ke^2$ , Muklom kat, and Nocte kat or ket (see Mulder 2020: 251; Rahman 2016: 15, 82; Morey 2018). The two stems in Hakhun have distinct morphosyntactic distributions as well as some functional differences, especially when concatenated with other verbs (see §5).

In impersonal deictic motion events, i.e. motion events in which SAPs are not involved, either as figure or ground, as in third person narratives, the verb  $v\hat{r}$  denotes motion toward the deictic center, and the verb  $k\hat{a}$  denotes motion in some other direction. The deictic center is usually the location of the main character or their home base or the location of a main line event (cf. Fillmore 1975: 285-286). Examples (1)-(3) illustrate the motion verbs in third person narrative. The deictic center in (1) is understood to be the figure's home, who is the central character of the story. The verb  $v\hat{r}$  here encodes motion toward the deictic center.

(1) hìm a- $nùc^h\grave{a}$ ibə nγ vr t-ə bə imə nà when 3-wife that then house LOC come PST-3 PFV

*mi?* a-sw? nà. person NMLZ-filled PFV

'When he came home, his wife was pregnant.' [SNR-11-1.51]

The deictic center in (2) is also understood to be the figure's home, but the motion here is away from the deictic center, encoded by  $k\grave{a}$ .

(2) hìmtî bè nứ kà t-a?.
family field LOC go PST-3
'The family went to the field.' [SNR-7-1.25]

Example (3) illustrates a metaphorical motion, encoded by  $v\hat{r}$  'come', of 'responsibility' toward a wild pig, the deictic center, which just turned the central character in the narrative.

(3)  $vak\eta\hat{\imath}$  co?  $n\acute{x}$   $v\grave{x}$   $k-\grave{a}$   $m\hat{\sigma}r\hat{a}$  ... wild.pig body LOC come PRS-3 responsibility 'The responsibility fell on the wild pig.' [SNR-6-4.30]

Unlike in the Tangsa varieties mentioned above, the motion verbs in Hakhun do not seem to encode topographical deixis, i.e. vertical motion. Instead, the vertical dimension of a motion event must be inferred from the context. For example, the motions expressed by  $v\hat{r}$  'come' in (4) and (5) are downward/downstream motions. This is opposite of what the cognates of this verb express in other Tangsa varieties, which is 'upward motion'. Example (4) is about a sky spirit descending from the sky to the earth. Example (5) involves a downstream motion. The context in (5) is that a person puts his brother inside a wooden container (shaped like a coffin) and throws him into the river. A family of ghosts sees that wooden container downstream and utters this sentence. The motion expressed by  $v\hat{r}$  'come' in (6), on the other hand, is understood as upward/upstream. Here the brother referred to in (5), who was thrown into the river, comes back home (which is upstream).

- (4)  $3\dot{u}b\hat{e}$  mi?  $p^hr$ ?- $t\hat{i}$  abe? ...  $r\hat{r}$  va?  $v\hat{r}$  t-a  $p\hat{a}$ . ghost person eat-NMLZ this ... sky from come PST-3 hearsay 'It is said that this people eating ghost came from the sky.' [SNR-9-8.14]
- (5)  $c\grave{a}l\grave{i}$   $p^h\acute{u}$   $v\grave{x}$  r-a  $n\^{i}$  ...? what float come VEN-3 Q 'What is it floating (towards us)?' [SNR-11-1.16]

'Then, he came home and suddenly saw his elder brother.' [SNR-11-1.40]

Similarly, the verb  $k\grave{a}$  'go' expresses an upward motion in (7), but a downward motion in (8). Example (7) is from the same story as (4) and is talking about sending the sky spirit back to the sky, which is where it came from. Example (8) is from a conversation between two friends who have come down to the town to buy stuff.

- (7) a-vin vin ke? bà ta-rì là! NMLZ-return return go just CAUS-do IMP 'Just make him go back!' [SNR-9-8.13]
- (8) $p^h\hat{u}n\hat{a}$  $t^h \partial n\hat{\imath}$ nγ kà  $t^h \ni$ le...nà r-u friend while.ago PST.VEN VEN-2SG DP... LOC go PFV 'Hey friend, did you come here a while ago?' [SCN-6-1]

It is clear from these examples that meanings like 'upward' or 'downward', unlike in some Tangsa varieties, are not inherent in these verbs. Instead, they orient motions as toward or not toward a center of interest.

## 4 Ventives and motion events with SAPs

Motion events which do not involve SAPs, either as figure or ground, are encoded by the motion verbs  $v\dot{r}$  'come' and  $k\dot{a}/ke$ ? 'go' alone, as seen in §3. However, motion events which involve SAPs, either as figure or ground, are simultaneously encoded by two sets of deictic elements: the motion verbs and a set of two ventives –  $r\partial$  'ventive' and  $t^h\partial$  'past ventive'. The ventives are part of a larger category, called (verbal) operators (see §2), which includes tense, mood, negative, and the ventive markers (see Boro 2017: 334-349 for more detail). The ventive  $r\partial$  has its root in PTB motion verb \*ra 'come', which has cognates in many languages, such as Jinghpaw, Zahao, Meithei, and Nocte (DeLancey 1980: 158). The past ventive  $t^h\partial$  consists of the past tense morpheme  $t\partial$  and an archaic ventive/inverse marker h, which has a cognate in Nocte (see DeLancey 1980:168, 2011). The archaic ventive h, unlike in Nocte, does not occur with any other operator than the past tense marker in Hakhun. Therefore, the past tense morpheme and the ventive h (i.e.  $t^h\partial$ ) are treated as a single morpheme in Hakhun. Both ventives also function as inverse markers (see Boro 2019), which is also the case in languages like Nocte, Sizang, Tiddim, and Paite (see DeLancey 1980: 167-175, 2010).

The ventives occur with the deictic motion verbs  $v\hat{r}$  'come' and  $k\hat{a}$  'go'. They do not occur with non-deictic motion verbs, such as  $k^hw\hat{a}m$  'walk',  $c^hw\hat{e}$  'run', unless the verb complex also contains the deictic motion verbs or a motional particle  $v\hat{a}n$  'move, move along' (see §5). A ventive construction without an overt tense marker is interpreted as either present or future, as in (9). The past ventive  $t^h\partial$  occurs before the ventive  $t^h\partial$  and overtly marks the ventive construction as past, as in (10). Note that the ordinary past tense marker  $t\partial$  cannot be used in a ventive construction, such as (10). Thus, (10) will be ungrammatical if we replace the past ventive  $t^h\partial$  with the ordinary past tense marker  $t\partial$ . However, occasionally the past ventive occurs by itself and marks the motion event as both past and ventive, as in (11).

- (9)  $mi^2$   $m\hat{r}$ - $t^h\hat{\sigma}$  a- $d\hat{u}\eta$   $v\hat{r}$  r-a.

  person CLF-one NMLZ-big come VEN-3

  'A powerful man is coming/will come (toward here).' [MOV-1-1.172]
- (10)  $\eta \grave{a}$   $m \grave{a} h \grave{i} m$   $n \acute{x}$   $k \grave{a}$   $t^h \grave{a}$  r r. 51SG 2SG.POSS-house LOC go PST.VEN VEN-1SG 'I came to your house.' [MOV-2-1.93]
- (11)  $im\dot{\delta}$   $s\hat{e}mik$ - $r\hat{r}$   $p^hja$ ?  $v\hat{r}$   $t^h$ -a. then sun-SIM light come PST.VEN-3 'Then sun-like (bright) light came (toward us).' [MOV-4-1.168]

There are no andatives in the language, i.e. forms denoting motion away from the speech-act location. When a motion event involves an SAP, either as figure or ground, the absence of a ventive marker implies motion toward some other direction than the location of the speech-act, shown by the contrast between (12) and (13). While the ventive  $r \partial$  in (12) indicates that the motion expressed by  $v \hat{r}$  'come' is towards the speech-act location, the absence of it in (13) implies that the motion expressed by the same verb  $v \hat{r}$  'come' is towards some other direction than the speech-act location.

- (12)  $t u y v r r o!^6$ sit come VEN-2SG 'Come and sit!' [SNR-9-8.24]
- (13) hìm nứ vín vừ l-o?! house LOC return come IMP-2SG 'Go back home!' [MOV-2-1.198]

<sup>5</sup> As inverse markers,  $r\partial$  and  $t^h\partial$  do not co-occur; they are paradigmatic. The morpheme  $r\partial$  marks non-past inverse, and  $t^h\partial$  marks past inverse.

<sup>&</sup>lt;sup>6</sup> Example (12) is an imperative sentence. The ventive has a force of an imperative marker here. It replaces the ordinary imperative marker  $l_{\partial}$ . They do not co-occur.

The ventives (or their absence) add another set of deictic specification to the motion events (in addition to those of the motion verbs) which involve an SAP, either as figure or as ground. Thus, motion events with an SAP figure or ground are simultaneously anchored by the motion verbs and the ventives (or their absence). The motion verbs anchor motion events with reference to the figure's home base, such as its own home, village, town, etc. The verb  $v\hat{r}$  'come' indicates motion toward the home base, and the verb  $k\hat{a}/ke$ ? 'go' indicates motion toward some other direction. The ventives orient the motion toward the speech-act location and their absence implies motion toward some other direction. Thus, the two sets of deictic elements, i.e. the motion verbs and the ventives (or their absence), together encode four types of deictic orientation of motion events which involve an SAP figure or ground, outlined in Table 1.

	Deictic orientation types		Verb	Ventive	Gloss
	Home base	Speech-act location			
1	toward	toward	vř	rə/tʰə	'come'
2	toward	away	vř	without ventive	ʻgoʻ
3	away	toward	kà	rə/tʰə	'come'
4	away	away	kà	without ventive	'go'

Table 1: Deictic motion involving the SAPs

We first consider the four types of deictic orientation in contexts where the speaker is the ground, and the figure is either the addressee or a third person argument. The first orientation type, which involves a motion toward both the home base and the speaker's location, is expressed by the verb  $v\hat{r}$  'come' followed by a ventive marker, illustrated in (14)-(15). The context in (14) is that the parents, who are at home at the time of speech, are talking about their son coming home from his college. Here the motion is toward the figure's home base as well as toward the speaker's location. In (15) the figure is returning home somewhere from the village, and the speaker is located at home. Here also the motion is toward the home base as well as the speaker's location.

- (14) atî nînap vr r-a. 3SG tomorrow come VEN-3 'He will come tomorrow.' [Elicited]
- (15)  $v\dot{r}$   $t^h\partial$  r-u  $n\dot{a}$  ne? come PST.VEN VEN-2SG PFV Q 'You have come (back)?' [Observed]

In some contexts, the combination of  $v\hat{r}$  plus a ventive marker is simply interpreted as 'motion toward the speech-act location' (and not motion toward the home base and the speech-act location). This interpretation is found in contexts where the goal is more permanent or significant than the source, and the source is either irrelevant, less permanent, or even unspecifiable. For instance, in (16), the speaker is talking about a god-like person coming to his place. In this context, the source of the figure's motion is

unspecified, and it does not seem relevant in this context. Therefore, reference to the figure's home base does not seem likely. The only location with any significance or permanence is the location of the speaker. Similarly, in (17) the motion being referred to is a set of unreal motions, and no home base is specifiable in this context (and the source can be different at different occasions). The only location specifiable is the speaker's location (i.e. the speaker of the reported speech).

- (16) i-t<sup>h</sup>r? n $\acute{x}$  mi? m $\acute{x}$ -t<sup>h</sup> $\grave{o}$  a-d $\hat{u}$ n $\hat{v}$  $\hat{v}$  $\hat{v}$ r-a. 1SG.POSS-than LOC person CLF-one NMLZ-big come VEN-3 'A person more powerful than me is coming.' [MOV-1-1.172]
- (17)  $t\acute{u}\eta$   $v\grave{r}$  r-o  $\eta\hat{a}$   $t^h\partial$   $r\partial$  m-r?. sit come VEN-2SG say PST.INV INV NEG-1SG 'You never said (to me), "Come and sit".' [MOV-2-1.96]

The expression  $v\hat{r}$  'come' plus a ventive marker also seems to have developed a more generic interpretation of "motion toward any deictic center" (not just "motion toward the speech-act location"), which allows it to be used in impersonal deictic motion events in third person narratives. In (18)-(19), the narrator is describing a scene in which an unconscious person is lying on the road, and toward that person comes a Levite person and a Samaritan person. Here the expression  $v\hat{r}$  'come' plus the ventives encodes motion toward the unconscious person, the deictic center. Clearly, the ventive is not orienting the motion toward the speaker's location here, but toward a center of interest. This extension of the expression  $v\hat{r}$  'come' plus a ventive marker in third person narrative puts it in contrast with the more expected expressions  $v\hat{r}$  'come' without the ventives (since the speaker is not involved in the motion), such as  $v\hat{r}$  'come' plus to 'past', in this context. However, it is not clear what the functional difference is between  $v\hat{r}$  'come' plus a ventive and  $v\hat{r}$  'come' without a ventive in this context.

- (18)  $ir \partial l\hat{a}m \quad m \partial levit \quad m\hat{i} \quad v\hat{r} \quad t^h \partial \quad r-a.$  that road along PN also come PST.VEN VEN-3 'Along that road, a Levite person also came.' [MOV-3-1.115]
- (19)  $d\hat{n}\hat{r}$  samari  $v\hat{a}$   $m\hat{r}$ - $t^h\hat{\partial}$   $v\hat{r}$   $t^h\partial$  r-a. later PN person CLF-one come PST.VEN VEN-3 'Later on, a Samaritan person came along.' [MOV-3-1.117]

Several metaphorical extensions of the expression  $v\hat{r}$  'come' plus a ventive are found in the corpus, shown in (20)-(22). It expresses a metaphorical motion of Jesus to one's heart in (20), returning to the path of virtue in (21), and prophesies coming true in (22).

- (20) trti zêsu? i-ràn i-mûŋ nứ vừ r-o. lord Jesus 1sg.Poss-heart 1sg.Poss-soul Loc come VEN-2sg 'Lord Jesus, come to my heart and soul.' [MOV-4-1.260]
- (21) *môrâ lâm va? vín vì r-an.* sin path from return come VEN-2PL 'Come back from the path of sin.' [MOV-1-1.145]
- (22)  $t\hat{s}\hat{u}$  zap  $k^hr\hat{l}\hat{a}$   $v\hat{r}$   $t^h\partial$  r-a.

  God word true come PST.VEN VEN-3

  'God's words have come true.' [MOV-1-1.220]

The second type of deictic orientation, i.e. motion toward the home base but not toward the speaker's location, is expressed by the verb  $v\hat{r}$  'come' without a ventive marker, illustrated in (23)-(24). The context in (23) is that a girl was playing at her neighbour's house where her father was also sitting with other men. At one point the father asks his daughter to go home using the sentence in (23). Here the motion is toward her home, the home base, but away from her father, the speaker. The context in (24) is that the Hakhun soldiers, i.e. the figure, were about to return to their own village after a battle, when the other tribe requests them not to leave. Here the motion involved is toward the figure's home base, i.e. the Hakhun village, away from the speaker's location. Notice that the English free translations in (23) and (24) do not reflect the contribution of the motion verb  $v\hat{r}$  'come'; they only reflect the contribution of the absence of a ventive marker, i.e. motion away from the speech-act location. This is one set of contexts where one may be tempted to gloss  $v\hat{r}$  as 'go' going by the English translation.

- (23) him  $n\acute{x}$   $v\grave{x}$  l-o?! house LOC come IMP-2SG 'Go home!' [Observed]
- (24) nr?  $v\dot{r}$ , nr?  $v\dot{r}$ !

  PROH come PROH come

  'Do not leave, do not leave!' [SNR-15-1.44]

The third type of deictic orientation, i.e. motion away from the home base and toward the speaker's location, is expressed by the verb  $k\grave{a}/ke$ ?'go' plus a ventive, illustrated in (25)-(26). The context in (25) is that a turtle is challenging a deer for a race and asking her to join the race. The motion here is away from the deer's location, the home base, and toward the speaker's location. The context in (26) is that another tribe invites the Hakhuns to rescue them from their enemy. The motion involved here is away from their own village, the home base, toward the speakers' location. Once again, the English free translations only reflect the contribution of the ventive, i.e. motion toward the speech-act location, but not the contribution of the motion verb  $k\grave{a}$  'go'. One may be tempted to gloss  $k\grave{a}$  as 'come' going by the free translations in these contexts.

- (25) izúŋ, kà r-o kʰiʔhî, tweʔ-mun cʰwé i nà. ready go VEN-2SG deer compete-RECP run 1PL PFV 'I am ready. Come deer. We will compete running.' [SNR-4-4.4]
- (26) *i-nù i-và kà r-an anà*.

  1SG-mother 1SG-father go VEN-2PL here
  'Our guardians, come here (and rescue us).' [SNR-14-1.62]

The final type of deictic orientation, i.e. motion away from both the home base and the speaker's location, is expressed by the verb ka/ke? 'go' without a ventive, illustrated in (27). The context in (27) is that a father is looking for his daughter who has left the house. Here the motion is away from the home base as well as the speaker's location.

(27) *mə-nânù bəkə kà k-ə nî?*2SG.POSS-younger.sister where go PRS-3 Q
'Where has your sister gone?' [SNR-12-1.37]

So far, we have looked at contexts where the speaker is the ground, and the figure is either the addressee or a third person argument. We now proceed to contexts where the speaker is the figure and the ground is either the addressee's location or some other location. Examples (28)-(29) illustrate the first type of deictic orientation, i.e. motion toward both the home base and the speech-act location, expressed by the verb  $v\hat{r}$  'come' plus a ventive. In (28), the speaker is talking about moving elsewhere temporarily and returning back to where he has been. The motion referred to is toward the home base, i.e. the more permanent of the source and the goal, and toward the speech-act location. In (29), the speaker is moving toward his home, the home base, and toward his addressee's location.

- (28)  $bərə r\hat{v}\hat{v}\hat{u}$  kə  $a-p^hja?$  zaza vin  $v\hat{v}$  r-r. which day LOC NMLZ-bright.light SS return come VEN-1SG 'One day I will return with bright light.' [MOV-2-1.234]
- (29) ŋà hìm nứ vừ r-r.

  1SG house LOC come VEN-1SG
  'I am coming home.' [Elicited]

Examples (30)-(31) illustrate the second type of deictic orientation, i.e. motion toward the home base but not toward the speech-act location, encoded by the verb  $v\hat{r}$  without a ventive marker. In (30), the motion being referred to is toward the location where Jesus is buried. This is not the usual home base of the speakers, but it could be considered a significant location for them. Moreover, the motion is not toward the speech-act location. In (31), the speaker is talking about how they migrated to the location where they settled. This motion is toward the speakers' present home base, and away from the speech-act location.

- (30)  $n\hat{i}r\hat{u}m$   $v\hat{r}$  t-i?.

  1PL.EXCL come PST-1PL

  'We went there (referring to where Jesus was buried).' [MOV-4-1.164]
- (31) "vr e zúŋ", ηâ l-ə-mə cap t-a?.
  come 1PL ready say NF-3-NF stand PST-3

  'We will go, (we are) ready', saying like that they stood up.' [SNR-13-1.27]

Examples (32)-(33) illustrate the third type of deictic orientation, i.e. motion away from the home base and toward the speech-act location, encoded by the verb  $k \dot{a}/ke$ ? 'go' plus a ventive. In (32), the speaker is talking about not visiting a neighbour's house again because of a fight. The motion involved is toward the speech-act location, but not toward the figure's home base. In (33), the speaker is talking about a fieldtrip to collect data. The motion here is away from the figure's home base, toward the location of the speech-act.

- (32) kà rə m-r? arə dîmə.
  go VEN NEG-1SG this after
  'I will never come (to your house) after this (fight).' [SCN-2-53]
- (33)  $\eta \grave{a}$  i- $p \hat{i} \eta t \grave{e}$   $k \grave{a}$  t t t r-r.

  1SG 1SG.POSS-alone go PST.VEN VEN-1SG 'I came (here) alone (from home).' [Elicited]

Examples (34)-(35) illustrate the final type of deictic orientation, i.e. motion away from both the home base and the speech-act location, encoded by the verb  $k\dot{a}/ke$ ? 'go' without a ventive marker. In (34), the speaker, which is a bat, flies out of its nest, toward some direction other than the location of the speech-act. In (35), the speaker, which is a squirrel, goes out of its nest to get some fruit, toward some direction other than the location of the speech-act.

- (34)  $ir \partial l\hat{x}$   $n\acute{x}$   $m\acute{o}$   $p\grave{u}$   $k\grave{a}$  t-x?. that reason LOC unintentionally fly go PST-1SG 'That's why I flew away unintentionally (out of my nest).' [SNR-6-4.27]
- (35) sènà zapt<sup>h</sup>ûn mə zàtat kà t-x².

  PN order ADV pluck go PST-1SG

  'Following Senya's (i.e. a crab) order, I went and plucked (Pi fruit).' [SNR-6-4.39]

In sum, motion events which involve SAPs, either as figure or ground, are simultaneously encoded by two sets of deictic elements: the motion verbs and a set of two ventives. The motion verbs orient the motion with reference to the figure's home base, and the ventives (or their absence) orient the motion with reference to the speech-act location.

## 5 Versatile verbs and associated motion

The motion verbs  $v\hat{r}$  'come' and  $k\hat{a}/ke$ ? 'go' also belong to a class of verbs, commonly known as serial verbs or versatile verbs, which can be strung together or juxtaposed with other verbs within a single verb complex (see Boro 2017: 301-325; Matisoff 2003, 2017). As versatile verbs, the motion verbs occur following other lexical verbs, and specify motion associated with the action denoted by the other verb(s). However, the order in which the motion event and the event of the other lexical verbs occur varies for all three verb stems:  $v\hat{r}$ ,  $k\hat{a}$ , and ke?. The motion verbs primarily add deictic orientation when they occur with non-deictic motion verbs, such as  $k^hw\hat{a}m$  'walk',  $c^hw\hat{e}$  'run', as in (36) and (37). The context in (36) is that during a fight between a tiger and a pangolin, the tiger throws the pangolin away, as the tiger is unable to bite the pangolin due to its hard skin. The pangolin returns to the spot of fight, the deictic center, which is expressed by the verb sequence  $k^hw\hat{a}m$   $v\hat{r}$  'walk come'. Example (37) describes the scene of a pig running away from its nest, the deictic center, expressed by the verb sequence  $c^hw\hat{e}$   $k\hat{a}$  'run go'.

- (36) *iməbə kutkut le? kʰwâm vr̀ ku?*. then SS again walk come give 'Then (the pangolin) came back walking making kutkut noise.' [SNR-3-1.17]
- (37) 30? nr táhé nr chwé kà a. later LOC another.place LOC run go 3 'Later on, (the pig) will run away somewhere else.' [SNR-11-1.46]

The motion verbs add both a sense of motion and direction when they occur with non-motion verbs. The verb  $v\hat{r}$  'come' adds a sense of motion toward the deictic center, and the motion event may precede as in (38) (i.e. come and settle), follow as in (39) (i.e. steal and come), or be simultaneous with the action/event of the other verb as in (40) (i.e. cutting and moving).

- (38) *luŋbu? kə túŋ vr t-a?*.

  PN LOC sit come PST-3

  '(They) came and settled at Lungbuq.' [SNR-15-1.16]
- (39)vàndùthûm ihə kəmə hu? irə νî twè vì t-ə lit.firewood that monkey **ERG** steal take come PST-3 'The monkey stole and brought the lit firewood.' [SNR-7-1.29]
- (40)  $b\hat{r}$  ba  $3we? v\hat{r}$  r-a. tree DEF cut come VEN-3 '(They) are approaching cutting the trees.' [SNR-15-1.64]

The versatile verb  $k\grave{a}$  'go' adds a sense of motion which is not toward the deictic center. However, the two stems of the verb 'go',  $k\grave{a}$  and ke?, behave differently, both in their

distribution and in function. The form  $k\grave{a}$  occurs with both motion and non-motion verbs as in (41)-(42), whereas the form ke? is found only with non-motion verbs.

- lŝ nγ́ t-x2. (41)irə тó рù kà reason LOC unintentionally PST-1SG that fly go 'That is why I flew away unintentionally.' [SNR-6-4.27]
- (42) *sú kà r-an.*look go VEN-2PL
  'Come and see.' [MOV-3-1.59]

The two stems also differ in terms of when the motion event takes place relative to the action/event of the other verb(s). The sense of motion added by the stem  $k\grave{a}$  'go' precedes the action/event of the other verb(s) as in (42) (i.e. come and see) and (43) (i.e. come and ask). On the other hand, the sense of motion added by the stem ke? either follows as in (44) (i.e. take and then come) or is simultaneous as in (45) (i.e. push and go).

- (43) ira  $k^h \hat{a} ma$   $c^h in$   $k \hat{a}$  r-r. that reason ask go VEN-1SG 'That is why I have come to ask (for her).' [SCN-1-8.1]
- (44) *izúŋ, sèpà twè ke? r-u nà.*ready crab take go VEN-2SG PFV
  '(We are) ready. Crab, bring (the money).' [SNR-6-4.62]
- (45)  $ir\partial c^h a rr-ni$   $b\partial lo?he?$  lo?he? rì ke? that child CLF-two DEF push push do go

*l-ə-mə* .... NF-3-NF

'The two young men pushed (them) along.' [SNR-15-1.35]

The versatile motion verbs have certain semantic extensions. One such extension is the sense of "change of state" (cf. Morey 2019: 89). In (46), the motion verb ka 'go' follows the stative verb day 'be big' and indicates a change of state from 'small' to 'large'. In (47) the motion verb vr 'come' follows the verb siyniy 'decrease', and indicates a change of state from 'large' to 'small'.

bỳ-nù si? (46)bə irə va? dûn t-a?. kà tree-large DEF that faeces from big PST-3 go 'The large tree grew out of that faeces.' [SNR-2-2.18]

(47)  $k^hap-t^h\grave{\partial}$  signing  $v\grave{r}$   $l-\eth-m\eth$  ...

CLF-one decrease come NF-3-NF

'Once (the population) decreased, and then...' [SNR-9-10.48]

In addition to the versatile motion verbs, there is another particle  $v\acute{a}n$ , which occurs at the same slot as the versatile verbs in the verb complex and adds a sense of motion and/or direction to the events/actions of the main verb (which may be a motion or non-motion verb). This element appears to be cognate with  $\beta an^3$  'change of state' in Muishaung (Morey 2019: 89). It adds a sense of moving along a path, sometimes carrying/taking somebody/something along. Examples (48)-(49) illustrate this particle with the motion verbs  $v\grave{r}$  'come' and  $k^hw\^{a}m$  'walk', where the particle indicates motion along some path. Example (50) illustrates this particle with a non-motion verb, where it adds a sense of motion as well as carrying an object along, namely the TV. This element seems to be non-deictic, and the deictic orientation comes from the main verb, as in (48), and/or the presence or absence of the ventive, as in (49) and (50).

- (48) ... h i m n r v r v a n t a ? ... house LOC come move PST-3 '(He) went home.' [MOV-1-1.261]
- (49)  $h\acute{o}$   $k^{\dagger}w\^{a}m$   $v\acute{a}n$  l-o?! get.aside walk move IMP-2SG 'Go away!' [MOV-4-1.28]
- (50)  $i-p^h \hat{u}$   $k \ni m \ni tivi \quad r\hat{i} \quad v \not an \quad t^h-a.$ 1SG.POSS-elder.brother ERG TV buy move PST.VEN-3 'My brother bought a TV and brought it (home).' [Elicited]

The versatile motion verbs behave in the same way in terms of their deictic specification as their lexical verb counterparts. The versatile verbs orient the motion with reference to a center of interest in impersonal deictic motion events. When SAPs are involved in the motion event, either as figure or ground, they orient the motion with reference to a home base, and the ventives (or their absence) orient the motion with reference to the speech-act location. Example (51) illustrates a motion which is both toward the home base as well as toward where the speaker will be at the end of the motion, expressed by the expression  $v\hat{r}$  'come' plus the ventive ra. The context in (51) is that Jesus was passing by on a street with his followers, and a father comes and invites him to his house to save his sick daughter.

Boro: Deictic motion in Hakhun Tangsa

(51) i-c<sup>h</sup> $\grave{a}$  t-ahja? c<sup>h</sup> $\grave{a}$  m $\hat{u}$ ng $\hat{a}$ m c<sup>h</sup> $\acute{a}$  k-a?, 1SG.POSS-child girl child a.lot pain PRS-3

vukvwam  $v\hat{r}$  r-o. save come VEN-2SG

'My child is very ill. Come and save her.' [MOV-1-1.282]

Example (52) illustrates a motion which is toward the home base but not toward the speech-act location, expressed by  $v\hat{r}$  'come' without a ventive marker. Here the Hakhun people are returning to their own village, which is not the speech-act location.

(52) ...  $ha?k^hù n$  ha? k > ab > tú y v > v > k - i. ... PN place LOC this sit come PRS-1PL 'We return to the Hakhun place.' [SNR-15-1.97]

Example (53) illustrates motion which is not toward the home base but toward the speech-act location, expressed by  $k\grave{a}$  'go' plus the ventive ra. Here a person comes to his girlfriend's house to ask her father's permission to marry her. The motion here is away from the figure's own house toward where the speaker is at the time of speech.

(53) ira  $k^h \hat{a} ma$   $c^h \hat{i} n$   $k \hat{a}$  r-r. that reason ask go VEN-1SG 'That is why I have come to ask (for her).' [SCN-1-8.1]

Example (54) illustrates a motion which is both away from the home base and the speech-act location, expressed by  $k\grave{a}$  'go' without a ventive marker. Here, a bat is explaining to other animals how it flew out of its nest when something attacked its nest. The motion here is from the home base (the nest) to some direction which is not the speech-act location (i.e. where the bat is speaking to other animals).

(54) ira  $l\hat{x}$   $n\hat{x}$   $m\acute{o}$   $p\grave{u}$   $k\grave{a}$  t-x?. that reason LOC unintentionally fly go PST-1SG 'That is why I flew away unintentionally.' [SNR-6-4.27]

## 6 Summary

Deictic motion events in Hakhun are encoded by motion verbs, serial or versatile verbs, and ventive markers. Motion events which do not involve an SAP, either as figure or ground, as in third person narratives, are encoded by motion verbs alone, which orient the motion either toward or not toward a deictic center, which is typically the location of the central character, her home base, or the location of a main-line event. Motion events which involve an SAP, either as figure or ground, are simultaneously encoded by the motion verbs and the presence or absence of a ventive marker. The motion verbs orient the motion with

reference to the home base, and the ventives (or their absence) orient the motion with reference to the speech-act location. The verb denoting 'come' orients the motion toward the home base, and the verb denoting 'go' orients the motion to some other direction. The ventives orient the motion toward the speech-act location, and their absence implies motion toward some other direction.

The two sets of deictic elements, the motion verbs and the ventives (or their absence), encode four types of deictic orientation: (i) motion toward both the home base and the speech-act location, encoded by the verb denoting 'come' plus a ventive; (ii) motion toward the home base but not toward the speech-act location, encoded by the verb denoting 'come' without a ventive marker; (iii) motion which is not toward the home base, but toward the speech-act location, encoded by the verb denoting 'go' plus a ventive; and (iv) motion which is neither toward the home base nor toward the speech-act location, encoded by the verb denoting 'go' without a ventive marker. The expression used for the first deictic orientation type, i.e. 'come' plus a ventive, has developed a more generic interpretation of denoting motion toward any (single) deictic center, allowing it to be used in third person narratives. The basic motion verbs are also concatenated with other verbs, both motion and non-motion, and adds a sense of direction and/or deictic orientation. The concatenated motion verbs encode the same deictic orientations as their lexical verb counterparts.

#### **ABBREVIATIONS**

1	first person	NMLZ	nominalizer
2	second person	PFV	perfective
3	third person	PL	plural
ADV	adverbial	PN	personal name
CAUS	causative	POSS	possessive
CLF	classifier	PROH	prohibitive
DEF	definite	PRS	present
DP	discourse particle	PST	past
ERG	ergative	Q	question
EXCL	exclusive	RECP	reciprocal
IMP	imperative	SG	singular
INV	inverse	SIM	simulative
LOC	locative	SS	sound symbolic
NEG	negative	VEN	ventive
NF	non-final		

### REFERENCES

- Aikhenvald, Alexandra Y. (2006). "Serial Verb Constructions in Typological Perspective". In Alexandra Y. Aikhenvald & R. M. W. Dixon, Eds. *Serial Verb Constructions: A Cross-Linguistic Typology.* Oxford & New York: Oxford University Press: 1-68.
- Boro, Krishna. (2012). "Serialized verbs in Boro". In Gwendolyn Hyslop, Stephen Morey, & Mark W. Post, Eds. *North East Indian Linguistics 4*. New Delhi: Cambridge University Press: 83-103.
- Boro, Krishna. (2017). *A Grammar of Hakhun Tangsa*. PhD Dissertation. Department of Linguistics. Eugene: University of Oregon.
- Boro, Krishna. (2019). "Argument Indexation in Hakhun Tangsa". *Himalayan Linguistics* 18(1): 180-201. 10.5070/H918142556.
- Bradley, David. (1997). "Tibeto-Burman languages and classification". In David Bradley, Ed. *Papers in Asian Linguistics*, *No-14: Tibeto-Burman languages of the Himalayas*. Canberra: Pacific Linguistics: 1-72. 10.15144/PL-A86.cover.
- Burling, Robbins. (2003). "The Tibeto-Burman languages of Northeast India". In Graham Thurgood & Randy LaPolla, Eds. *The Sino-Tibetan Languages*. London & New York: Routledge: 169-192.
- Chhangte, Lalnunthangi. (1986). *A preliminary grammar of the Mizo language*. MA Thesis. The University of Texas at Arlington.
- Chelliah, Shobhana. (2017). "The syntax and semantics of spatial reference in Lamkang verbs". *Himalayan Linguistics* 16(1): 28-40. 10.5070/H916130760.
- Dai, Qingxia and Diehl, Lon. (2003). "Jinghpo". In Graham Thurgood & Randy LaPolla, Eds. *The Sino-Tibetan Languages*. London & New York: Routledge: 401-408.
- DeLancey, Scott. (1980). *Deictic Categories in the Tibeto-Burman Verb*. PhD Dissertation. Department of Linguistics. Indiana University.
- DeLancey, Scott. (1991). "The origins of verb serialization in Modern Tibetan". *Studies in Language* 15(1): 1-23. 10.1075/sl.15.1.02del.
- DeLancey, Scott. (2003). "Lhasa Tibetan". In Graham Thurgood & Randy J. LaPolla, Eds. *The Sino-Tibetan Languages*. London & New York: Routledge: 270-288.
- DeLancey, Scott. (2010). "Towards a History of Verb Agreement in Tibeto-Burman". *Himalayan Linguistics* 9(1): 1-39. 10.5070/H99123042.
- DeLancey, Scott. (2011). "Nocte and Jinghpaw: Morphological Correspondences". In Gwendolyn Hyslop, Stephen Morey, & Mark W. Post, Eds. *North East Indian Linguistics* 3. New Delhi: Cambridge University Press: 61-73.
- DeLancey, Scott. (2015). "Morphological evidence for a Central branch of Trans-Himalayan (Sino-Tibetan)". *Cahiers de Linguistique Asie Orientale*, 44(2): 122–149. 10.1163/1960628-00442p02.

- Fillmore, Charles J. (1975). Santa Cruz Lectures on Deixis. Bloomington: Indiana University Linguistics Club.
- French, Walter Thomas. (1983). *Northern Naga: A Tibeto-Burman Mesolanguage*. PhD Dissertation. New York: City University of New York.
- Goswami, Dipjyoti. (2017). Lexical Nominalization and the extended functions of the demonstrative kəra² in Rera, a Northern Naga Language. MA Thesis. Department of Linguistics. Chiang Mai: Payap University.
- Hwang-Cherng, Gong. (2003). "Tangut". In Graham Thurgood & Randy J. LaPolla, Eds. *The Sino-Tibetan Languages*. London & New York: Routledge: 602-620.
- Kepping, K. B. (1982). "Deictic motion verbs in Tangut". *Linguistics of the Tibeto-Burman Area* 6(2): 77-82.
- Khan, Lann. (2017). *A Phonological Comparison of Shecyü and Mungre and its Contribution to a Common Tangshang Naga Orthography*. MA Thesis. Department of Linguistics. Chiang Mai: Payap University.
- LaPolla, Randy J. (2003). "Qiang". In Graham Thurgood & Randy J. LaPolla, Eds. *The Sino-Tibetan Languages*. London & New York: Routledge: 573-587.
- Matisoff, James. (1989). "The bulging syllable, or the mora the merrier: echo-vowel adverbialization in Lahu". In J. H. C. S. Davidson. Ed. *Southeast Asian Linguistics: essays in honor of Eugenie J. A. Henderson*. London: School of Oriental and African Studies: 163-197.
- Matisoff, James. (2003). "Lahu". In Graham Thurgood & Randy J. LaPolla, Eds. *The Sino-Tibetan Languages*. London & New York: Routledge: 208-221.
- Matisoff, James. (2017). "On the expression of spatial concepts in Lahu". *Himalayan Linguistics* 16(1): 84-98. 10.5070/H916130687.
- Morey, Stephen. (2017). "Tangsa". In Graham Thurgood and Randy J. LaPolla, Eds. *The Sino-Tibetan Languages*. London and New York: Routledge: 398-414.
- Morey, Stephen. (2018). "Verb stem alternation in Pangwa Tangsa". In Linda Konnerth, Stephen Morey, and Amos Teo. Eds. *North East Indian Linguistics 8*. Canberra ACT: Asia-Pacific Linguistics: 86-109.
- Morey, Stephen. (2019). *Preliminary Muishaung Grammatical Sketch*. La Trobe University. Unpublished Manuscript. Downloaded from https://www.academia.edu/38437254/MoreyMuishaungGrammaticalSketch.pdf.
  - Accessed 25/07/2020.
- Mulder, Mijke. (2020). *A Descriptive Grammar of Muklom Tangsa*. PhD Dissertation. Center for Research on Language Diversity. Victoria: La Trobe University.
- Ningomba, M. S. (1993). "Deictic suffixes in Manipuri". *Linguistics of the Tibeto-Burman Area* 16(1): 45-56.
- Peterson, David A. (2003). "Hakha Lai". In Graham Thurgood & Randy J. LaPolla, Eds. *The Sino-Tibetan Languages*. London & New York: Routledge: 409-426.

- Post, Mark W. (2011). "Topographical deixis and the Tani languages of North-East India". In Gwendolyn Hyslop, Stephen Morey, & Mark W. Post, Eds. *North East Indian Linguistics* 3. New Delhi: Cambridge University Press: 137-154.
- Post, Mark W. (2019). "Topographical Deixis in Trans-Himalayan (Sino-Tibetan) Languages". *Transactions of the Philological Society*, 00: 1-22. 10.1111/1467-968X.12155.
- Rahman, Syed Iftiqar. (2016). *Verbal Agreement and Grammatical Description of Ha?wa Nocte.* MA Thesis. Department of Linguistics. Chiang Mai: Payap University.
- Soe, Myint. (1994). "A semantic study of deictic auxiliaries in Burmese". *Linguistics of the Tibeto-Burman Area* 17(1): 125-139.
- Straub, Nathan. (2016). Direction and Time Reference in the Rvmøl (Dvru) dialect of Rawang, from Northern Myanmar. MA Thesis. Department of Linguistics. Chiang Mai: Payap University.
- Talmy, Leonard. (2000). *Toward a Cognitive Semantics, Vol II*. Cambridge: MIT Press. 10.1017/S0008413100018338.
- VanBik, Kenneth. (2009). *Proto-Kuki-Chin: A Reconstructed Ancestor of the Kuki-Chin Languages*. (STEDT Monograph Volume 8). Berkeley, Sino-Tibetan Etymological Dictionary and Thesaurus Project: University of California.
- VanBik, Kenneth. (2017). "Directional pre-verbal particles in Hakha Lai". *Himalayan Linguistics* 16(1): 141-150. 10.507/H916130390.
- Zubin, David A. and Hewitt, Lynne E. (1995). "The Deictic Center: A Theory of Deixis in Narrative". In Judith F. Duchan, Gail A. Bruder, and Lynne E. Hewitt, Eds. *Deixis in Narrative: A Cognitive Science Perspective*. New York & London: Routledge: 129-155.