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ABSTRACT

Motion verbs and directional prefixes are used in Lamkang to encode space. The Lamkang language, spoken by the Lamkang Naga, is part of the Kuki-Chin subgroup and is spoken in the Chandel district of Manipur state, India. Lamkang evokes absolute frames of reference, specifically the uphill and downhill axis, to describe movement. Lamkang combines this absolute framing with the culturally determined prestige of one location over another. Directional prefixes, derived from motion verbs, are also employed to express movement through space and metaphorically through time and social or psychological space. The directional prefixes exhibit verb-stem variation just like main verbs. Lamkang employs these prefixes to express boundary crossings, but for fictive or virtual motion main-verb semantics is employed. Finally, Lamkang spatial encoding employs a venitive which acts as a narrative device to locate the center of action.

KEYWORDS

Lamkang, absolute reference, aristomorphic reference, fictive reference

This is a contribution from *Himalayan Linguistics*, Vol. 16(1), *Special Issue on the Grammatical Encoding of Space*, Carol Genetti and Kristine Hildebrandt (eds.): 28-40.

ISSN 1544-7502

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The syntax and semantics of spatial reference in Lamkang verbs

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1 Introduction

Motion verbs and directional prefixes are used in Lamkang to encode space. Using the framework developed in Levinson (2003), which distinguishes absolute, intrinsic, and relative frames of reference, we describe how Lamkang evokes absolute frames of reference, specifically the uphill and downhill axis, to describe movement. Lamkang combines this absolute framing with the culturally determined prestige of one location over another, providing an example of arisomorphic encoding of space as discussed in Bickel (1999). Directional prefixes, derived from motion verbs, are also employed to express movement through space and metaphorically through time and social or psychological space. The directional prefixes also exhibit variation, patterning along the lines of verb stem variation, and in some instances the use of alternate forms seems predictable on the basis of agency. Lamkang employs these prefixes to express boundary crossings, but for fictive or virtual motion main-verb semantics is employed. Finally, Lamkang spatial encoding employs a venitive which acts as a powerful framing device.

The paper is organized as follows. Section 2 provides background typological information on Lamkang with specific reference to the structure of the verb and verb stem alternation. Section 3 describes the use of motion verbs, including the ecomorphic and artisomorphic factors that determine their distribution. Section 4 lists and discusses the position of directional prefixes. Section 5 discusses why these prefixes are considered part of the verbal template and not independent verbs that are part of serial verb construction. Section 6 discusses the semantics of the directional prefixes including the semantics of prefix-shape variants. Section 7 discusses the how the venitive serves as a narrative framing device.

The Lamkang language (Ethnologue ISO 639-3 code [lmk]; Glottocode lamk1238) is a Tibeto-Burman language of the Kuki-Chin branch. Spoken by an ethnically Naga group, the Lamkang, who use the autonym *Ksen Lamkaang* 'Red Lamkang'¹, live in Chandel District, Manipur State, India (24.5° N, 94.27° E) with speakers of six culturally and linguistically related languages, i.e. Aimol, Anal, Inphui, Monsang, Chothe, and Kom. The reported estimated number of Lamkang speakers in approximately 40 villages in Chandel ranges from 3,452 in 1981 (The People of Manipur 2005) to 4,524 in 2001 (Manipur Online Team 2001).

¹ Also translated as 'people of red earth' (Sumshot Khular p.c.).

There is very little documentation on Lamksang other than the description in the *Linguistic Survey of India* (Grierson 1967 [1904]) and two grammatical sketches (Thounaojam 1998, and Thounaojam and Chelliah 2007). The data for this study are from a corpus of elicited sentences, traditional stories, monologues, Pear Story retellings, and discussions with speakers, specifically Sumshot Khular, Rex Rengpu Khular, Swamy Tholung Ksen, Daniel Tholung, Shekarnong Sankhil and Kumar Sankhil. The corpus was created between 2008 and 2016 as part of two US National Science Foundation projects to document Lamksang.² When illustrating a special characteristic of Lamksang as opposed to related languages in the region, speakers consistently highlight the complexity of expressing motion in the language. During our elicitation sessions, speakers drew maps and diagrams to explain the use of the directionals. There are also subtler pragmatic uses of the directional prefixes which we illuminated via discussion of the texts.

2 Background

Lamksang has a familiar typological profile for Kuki-Chin languages. It is verb-final and exhibits clause chaining. Verbal prefixes are used for participant marking with additional fusional verbal suffixes that indicate participant and aspect. Negation is also indicated by post-verbal morphology. As in Central (e.g. Mizo (Chhangte 1986, 1989)), Southern (e.g. K'Cho (Mang 2006)), and Northern Kuki-Chin (e.g. Falam Chin (King 2010)), a sizeable number of Lamksang verbs exhibit stem alternations (we've collected over 140 thus far and our list continues to grow). Table 1 provides examples of the major stem shapes.

Pattern	Stem-I	Stem-II	Gloss
ng~n	kyoong	kyoon	'catch' ³
∅~k	chaa	chaak	'eat'
t~∅	kaat	kaa	'shoot'

Table 1. Verb-stem alternation patterns in Lamksang

The designation of Stem-I or Stem-II harmonizes with the designations in VanBik's (2009) reconstructions. In Lamksang, Stem-I is consistently used in the perfective and imperfective⁴ paradigms, as well as nearly all negative verb-forms, and Stem-II is used in the current paradigm in affirmative non-subordinate constructions, as well as subordinate verbal constructions. We use the term "current" rather than "perfect" to prevent confusion with "perfective".

For the purposes of this article, it will be useful for the reader to keep in mind the template for the Lamksang verb given in Table 2. This template is for the affirmative current non-subordinate paradigm. Participant markers occur in slots 1 and 4. Of particular interest in this account: in slots 2 and 3 we find the venitive marker and preverbal directional markers, respectively. Slot 5 will include

² Funding for this work comes from the National Science Foundation (1160640 and 0755471, Principal Investigator Shobhana Chelliah). We are grateful for the insights and patience of Lamksang speakers we worked with. We hope to have understood their explanations and regret any errors in description and analysis. We also thank our research team for discussion and logistics: Evaline Blair, Sumshot Khular, Jane Lorenzen, Coleman Norville, and Will Reiman.

³ The practical orthography has been used to provide the Lamksang community access to the data.

⁴ With the apparent exception of 1st plural.inclusive agent acting on third person, where Stem-II occurs.

the inverse if 3rd person acts on 2nd or 1st person, or if 2nd person acts on 1st. Slot 6 includes four possible positions for derivational suffixes such as manner and intensity adverbials. Slot 7 includes two positions for inflection, person and number (e.g., *-in* ‘PL’). In the perfective and imperfective paradigms slot 7 would be filled by a portmanteau morph for person and aspect (e.g., *-da* ‘SBJ:3.PFV’).

1	2	3	4	5	VERB	6	7	Enclitics
Patient	Venitive	Preverbal Directional	Agent	Inverse	ROOT	Derivational Suffixes	Inflectional suffixes	

Table 2. Lamkang verb template for the affirmative current non-subordinate paradigm⁵

Lamkang is a tone language, as illustrated by the minimal pair [bu⁵⁵] ‘rice’ with high level tone, versus [bu²¹] ‘nest’ with low falling tone. There is limited segmental morphophonemics but unusual phonotactics because of C(ə)CV(C) sesquisyllables (rather than the commonly observed CVCə for Southeast Asian languages), created through productive prefixation, as in *kbuu then* [kəbu⁵⁵ tʰen⁵⁵] ‘my share of rice’. We also see these reduced syllables in vestiges of historical morphological structure such as *psaai* [p³sa:j] ‘elephant’ where the initial *p-* reflects an animal classifier (see VanBik 2009).

3 Motion verbs

Examples (1)-(5) illustrate motion verbs *yung* ‘go downwards’; *hang* ‘go up, climb’; *hung* ‘go up’; *vang* ‘go’; *hei* ‘travel, walk, move along’. These are the core motion verbs in Lamkang although there are others which include semantic components of movement such as ‘cluster’ or ‘pass by’.

- (1) *ar-yung-da*
VEN -down-3PFV
‘he came down’ (PSKen.7)⁶
- (2) *hang-da*
climb-3PFV
‘he went up’ (PSBes.4)
- (3) *punlap ar-hung-lam-da*
all VEN-up-3PL- 3PFV
‘they all came up together’ (365.5.22)
- (4) *vang-lam-da*
go-3PL-3PFV

⁵ For the sake of exposition, the template does not include the causative prefix which occurs between the inverse and root or the middle suffix which occurs to the right of the verb root.

⁶ The citation numbers refer to narratives found in the Lamkang Language Resource collection housed at the University of North Texas Digital Library.

- 'they went' (365.5.8)
 (5) *m-hei* *thungbi=ngu*
 SBJ:3.NPFV-move when=CON
 'as/when she travelled' (353.105)

The hilly terrain where the Lamksang villages are located influences rules of use for motion verbs. For a given speech event, the speaker can locate an entity, residence, or place of business on the same plane as self, higher than self, or lower than self. Imagine,



Figure 1. Use of Lamksang directional verbs in hilly terrain

the same plane as self, higher than self, or lower than self. Imagine, for example, four residences as in Figure 1; A and C are on the same plane, D is higher than A and C, and B is lower down the hill. If I were in A and called out to someone at D to come home for dinner I would say *aryung* 'come down!'; if I were asking a person at C to come to dinner, I would use *arvang* 'come over!'; and if that person were at B, I would use *arhung* 'come (back) up!' (if the person was returning to her own house) or *arhang* 'come up!' (if the person was a visitor).

In the same way that the environment, or ecomorphic space as Bickel (1999:80) calls it, must be invoked to understand the distribution of these motion verbs in the situations described for Figure 1, social distance and proximity are significant in encoding movement between regional, national, and global spaces. The relevant factor is the culturally accepted prestige status of one area over another, what Bickel calls aristonorphic space (ibid.). Figure 2 provides an idea of the geographic position of each of Manipur's districts: Chandel is in the southeast; Imphal in the central valley; Tamenglong is in the hills north of Imphal. To express movement from Chandel district to Imphal one must use *hung* 'go upward' (see ex. 4 above) as in *Imphal thab hung nih* (glossed as: Imphal-to go-I.will) and from Imphal to Chandel would require *yung* 'move downward' as in *Chandel thab yung nih*. However, movement to or from any of the districts within Manipur other than the central Imphal district is usually expressed with *vang*, the directional that implies movement on a level plane (see ex. (1) above). This is regardless of whether the district one is traveling to is higher or lower in elevation. Thus from Tamenglong, a northern and hilly district, to Urukul in the east or to Senapati in the west, *vang nih* 'I will go/let me go' is appropriate. Speakers state that it is the political and social equivalence between the tribal areas that determines the usage of *vang* for movement between the districts. Flying in from another state or from an international destination towards Chandel, that is, homewards, would require the use of either *hung* or *yung*. Moving homewards or towards Imphal, the economic and political center of the state, requires the use of *hung*. In Belhare (Bickel 1999), the ecomorphic and aristonorphic anchors are differentiated on the up-and-down axis; in Lamksang, while the physical and social factors are the same, the anchors are differentiated on the up, down, and level planes.



Figure 2. Chandel District, Manipur State, India

- (10a) *dii ar-yuk-chaai-da*
 water VEN- DOWN-sprinkle-3PFV
 ‘water was being poured down’ (S. Khular p.c. 2016)
- (10b) *dii ar-yung-chaai-da*
 water VEN- DOWN-sprinkle-3PFV
 ‘water dripped down’ (S. Khular p.c. 2016)
- (11a) *dii ar-han chaai da*
 water VEN- UP -sprinkle-3PFV
 ‘water was being sprinkled upward (by someone)’ (S. Khular p.c. 2016)
- (11b) **dii ar-hang-chaai-da*
 water VEN-UP-sprinkle-3PFV
 ‘water was sprinkling upwards’ (S. Khular p.c. 2016)

In (12) *van-* is preferred to *vang-*, perhaps because the movement of the theme is temporary.

- (12) *van-sii-lam-da*
 HORIZ.PERM-send-3PL-3PFV
 ‘they sent them (on an errand)’ (S. Khular p.c. 2016)

5 Evaluating prefix-root sequence

Note that we do not analyze the [verb prefix + verb root] as serial verbs. A serial-verb analysis would imply that participant marking occurs on the directional prefix and plural-marking suffixing on the verb root as in (13a). This is contrary to the standard understanding of verb serialization which has identical marking or identical lack of marking on roots in the serial-verb constituent. Following Aikhenvald’s definition of serial verbs (1999), we do consider examples like (13b) and (13c) to be serial-verb constructions since here we have a sequence of two finite verbs which can also be interpreted as serial actions.

- (13a) *ar-vang-prthleng-cha=u*
 VEN-HORIZ.PERM-change.clothes-MID=IMP
 ‘Come change your clothes!’ (354.55)
- (13b) *hung-lou*
 UP.PERM-take
 ‘you go up and bring it!’ (ambiguous, may also mean ‘bring it upwards!’)
- (13c) *k-van-loo*

SBJ:1.NPFV-HORIZ.PERM-take-II

‘I went and brought it (from another room, or from my side)’

Example (13d) is a rare example of what seems to be an auxiliary use of the verb ‘come’.

(13d) *a-hor-in-rah* *ar-van*
OBJ:2 -carry-PL-3IPFV VEN-go

‘they should all should come carrying you’ (356.92)

6 Semantics of directional prefixes

The directional prefixes are used to relay movement in space but can also be used to denote abstract movement. Take for example the giving of assistance in (14a) and the transfer of knowledge in (14b). While (14a) and (14b) have directional prefixes, neither necessarily connotes motion. The metaphorical reading in (14b) is highlighted when compared with (14c) where *van-* is used to point to the actual physical positions of the interlocutors:

(14a) *m-hei-thee-pik=ku*
OBJ:1-HORIZ-say-BENF=IMP
‘Give me instructions!’ (357.116)

(14b) *a-yu-thee-pik-nih*
OBJ:2-DOWN-say-BENF-1IPFV
‘I will tell it to you’ (365.2.66)

(14c) *a-van-thee-pik-nih*
OBJ:2-HORIZ.PERM-say-BENF-1IPFV
‘I will come over there and explain it (to help you out)’ (S. Khular p.c. 2016)

Another example is *hei-* and *han-* as in (15) where there is no motion per se but the use of the directional encodes the speaker scanning an expanse of imagined space.

(15a) *a-hei-k-dee=a*
OBJ:2 -HORIZ- SBJ:1.NPFV-see-II=COP
‘I am seeing you over there’ (S. Khular p.c. 2016)

(15b) *han-dei-thi-da=u*
UP-see-CONT-3PFV=CON
‘(The tiger) saw him looking upward from below, and then...’ (354.52)

The following aspectual connotation of the directional *hang-I~han-II* ‘up’ is another possible metaphorical extension of the directionals. As illustrated in (16) *hang-* indicates the inception of an activity. It is not clear if the other directional prefixes are similarly used for aspectual meaning.

(16a) *m-hang-kr-ngei-chaak* *thuunbi=ngu*
 SBJ:3.NPFV-UP-SELF-love-MID when.PL=CON
 ‘as they started to fall in love’ (360.93)

(16b) *m-hang-kr-del* *thungbi*
 SBJ:3.NPFV-UP-SELF-wake.up when
 ‘When he wakes up...’ (360.65)

(16c) *m-han-p-kaak* *thungbi=ngu*
 SBJ:3.NPFV-UP-CAUS-burn when=CON
 ‘When he started the fire’ (362.13)

Using Talmy’s (2000) typology, we can characterize the mapping of boundary crossing to satellites and not to main-verb semantics. As seen in (17), the directional prefix *vang-* (or stem alternate *van-*) is used for movement towards/entering and *hei-* is for movement away from/exiting. The directional *hei-* is not possible for the intended meaning in (17a) and the directional *van-* is not possible in (17b). Whether entering or exiting is in focus, the path of motion is expressed by the same syntactic construction, i.e. a preverbal directional with a satellite-path auxiliary verb following the main verb. The choice of directional and path auxiliary is determined by the speaker’s perspective on the boundary crossing.

(17a) *kaari* *k-van-thou* *pluu*
 car SBJ:1.NPFV-HORIZ.PERM-drive exiting across
 ‘I drove the car into (the tunnel)’ (S. Khular p.c. 2016)

(17b) *k-hei-thou* *pthuu*
 SBJ:1.NPFV-HORIZ-drive emitting across
 ‘I drove (the car out of the tunnel)’ (S. Khular p.c. 2016)

To indicate a boundary crossing without an auxiliary construction, a root must include a directional as in (17c), otherwise no crossing is implied, e.g. *arthuk da* ‘(they) appeared’ (358.51).

(17c) *ar-hung-thuk-da*
 VEN-UP-come.out-3PFV
 they came out (of the water) (360.100)

Lamkang directional prefixes *han-/hang-* ‘up’ as in (18a) and *hei-* ‘horizontal’ as in (18b) are used for short-range movement as in transporting a theme from one area of a room to another. This is reminiscent of the Hakha Lai short-range andative *hay* (Peterson 2015).

(18a) *han-lou-da*
UP-take-3PFV
‘He picked up (something) (from a higher place)’ (S. Khular p.c. 2016)

(18b) *k-hei-loo*
SBJ:1.NPFV-HORIZ-take-II
‘I have taken (something) from the shelf (same level)’ (S. Khular p.c. 2016)

A long-range movement would require the use of a serial-verb construction as in (13b) and (13c) with *hung-* and *vang-*.

In Lamkang, descriptions of virtual or fictive motion (Talmy 2000) occur in two types of syntactic constructions. Advent paths as in (19a) and frame-relative paths as in (19b) encode virtual motion in verb semantics and not via satellites like directionals. Oriented paths are encoded in existential constructions using either the verb ‘to be’ or ‘to go’ as in (19c).

(19a) *moot-bul-rek* *moot-bil* *thuh knlom-da*
banana-base-plural banana-groove inside cluster-3PFV
‘the banana trees cluster in the banana grove’ (S. Khular, translations 2017)

(19b) *kaari m-dil* *thab k-k'on* *chun=ni* *paam ruung.chen=ni*
car 3POS-back in SBJ:1.NPFV-sit-II when=INST land appearance=INST
m-kheel-da
OBJ:1pass-3PFV
‘Sitting in the back of the car I watched the scenery rush past’ (S. Khular, translations 2017)

(19c) *roong ava=ngi* *lou tkbul-da* *k-vang/k'am*
fence that=INST field surround-3PFV NOM-go/NOM-be
‘The fence goes around the field’ (S. Khular, translations 2017)

7 The venitive

As is seen in related languages (see Peterson 2015), Lamkang has a venitive prefix *(a)r-* the use of which allows the speaker to orient an action with respect to a deictic center, which can be either the speaker or else an area of focus in the narrative. For example in (20a), the speaker encourages an interlocutor to climb up a tree towards him.

(20a) *ar-han-loon=nu*
VEN-UP-climb=IMP
‘climb up towards me!’ (359.115)

The locating entity can also be an implied ground as in (20b). Here, tears roll down the face towards an abstract point.

- (20b) *m-rthlii ar-yung-chaai-da*
 3POS-tear VEN-DOWN-roll-3PFV
 ‘His tears rolled down.’ (356.33)

Combined with abstract orienting points, the venitive becomes a rhetorical tool. In traditional narratives, the venitive is used to direct the listener’s gaze to a locus of activity. For example, (21) describes a man on a tree as he pulls down fruit towards himself. We gaze with the man upward to the fruit hanging from the tree.

- (21) *m-r-yuk-yao-nool-pi*
 SBJ:3.NPFV-VEN-DOWN-pluck-AGAIN-COPULA
 ‘He is plucking again’ (PSRob.11)

In (22), however, the man is in the tree and fails to look down. The function of the venitive here is to position us on the ground and not with the man on the tree, making the base of the tree the locus of activity for this scene of the narrative.

- (22) *ar-yuk-dei-m-eh⁷*
 VEN-DOWN-see-NEG-SBJ:3
 ‘(The man in the tree plucking pears) didn’t see (downward from above)’
 (PSRob.18)

In example (23) as well, the venitive is used to position the listener next to a stationary entity. The context for (23) is that a tiger is moving towards a man who has just emerged from a cave. With the use of the venitive, the tiger is portrayed as approaching the newly emerged man, the newly constituted deictic center. Without the venitive, the tiger would be perceived as moving to an unspecified direction.

- (23) *m-r-van thungbi=ngu m-yel trthuu-da=u*
 SBJ:3.NPFV-VEN-go when=CON 3POS-arrow take.out-SBJ:3.PFV=CON
 ‘Being approached (by the tiger), he took out an arrow.’ (365.1.34)

⁷ The venitive can occur directly on the main verb root, not just on a preverbal directional.

ar-yung-da
 VEN-fly-SBJ:3.PVF
 ‘he came down (from the tree)’ (PSKen.7)

The venitive also servers to position an event at a distance from an originating point. This distance could be temporal or social. In (24), the speaker is reporting that community members have recorded cultural information for future generations.

- (24) *mii=ya* *m-k-pao* *khimkhei* *m-do* *ar-hei-nam-daat*
 people=TOP DEF-NOM-speak all SBJ:3-DET VEN-HORIZ-record-STATIVE
pi
 COPULA
 ‘everyone’s (speaking) which was recorded’ (365.7.185)

Here the venitive is used to signal the effects of action moving from a past time towards the speaker in the present. In addition to the venitive signaling temporal reference, there is a metaphorical extension of the directional *hei-* to indicate movement from the community members of the past towards community members of the current day.

8 Conclusion

This paper lays out four ways in which Lamkang encodes space in the verbal complex: via motion verbs, directional prefixes, the venitive, and verbs which include reference to motion in their semantics. To appropriately use the motion verbs, in addition to the ‘up’, ‘down’, and ‘across’ dimensions, speakers must consider factors of social familiarity, distance, and prestige. Lamkang speakers report that the correct use of directionals is one of the big stumbling blocks speakers of neighboring languages face in learning Lamkang. These motion verbs have developed secondary uses as directional prefixes which are the central mechanisms for expressing boundary crossings. Directional prefixes continue to exhibit shape variation which in limited cases is used meaningfully. The venitive is used in discourse to reorient an interlocutor’s attention. Finally, verbs with some semantic component of movement are used to indicate advent paths or frame relative motions. Pre-stem and stem slots in the verbal template are important but distinct loci for spatial encoding in Lamkang.

ABBREVIATIONS

1IPFV	1 st person subject imperfective aspect	<i>-nib</i>
1PFV	1 st person subject perfect aspect	<i>-nu</i>
3IPFV	3rd person subject imperfective aspect	<i>-rah</i>
3PL	3rd plural	<i>-lam</i>
3POS	3rd possessive	<i>m-</i>
3PFV	3 rd person subject perfective aspect	<i>-da</i>
BENF	benefactive	<i>-pik</i>
CAUS	causative	<i>p-</i>
CON	connective	<i>=ngu</i>
CONJ	conjunction	<i>le'</i>
CONT	continuative	<i>-thi</i>
DIST	distal	<i>va</i>

DOWN	downward movement	<i>yung-</i> ~ <i>yuk-</i> ~ <i>yu-</i>
HORIZ.PERM	horizontal permanent	<i>vang-</i> ~ <i>van-</i>
HORIZ	horizontal	<i>hei-</i>
IF	conditional	= <i>bih</i>
IMP	imperative	= <i>u</i>
INST	instrumental	= <i>ngi</i>
MID	middle	<i>-cha-I, -chaak-II</i>
NEG	negative	<i>-m(a)</i>
OBJ:1	1 st -person obj.	<i>m-</i>
OBJ:2	2 nd -person obj.	<i>a-</i>
PL	general plural	<i>-in</i>
COP	copula	<i>pi</i>
SBJ:1.NPFV	1 st -person subject non-perfective aspect	<i>k-</i>
SBJ:3.NPFV	3 rd -person subject non-perfective aspect	<i>m-</i>
SBJ:3.IPVF	3 rd person subject imperfective aspect	<i>k-</i>
SELF	self, reciprocal	<i>(k)r-</i>
TOP	topic	= <i>a</i>
UP	upward movement	<i>hang-</i>
UP.PERM	upward movement, to expected/permanent state, more significant place	<i>hung-</i>
VEN	venitive	<i>(a)r-</i>

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