

# *Come is the new go*

## The evolution of stem alternation of basic motion verbs in Khroskyabs

Yunfan Lai

Max-Planck Institute for Evolutionary Anthropology

In this paper, I describe the morphology as well as the uses of the basic motion verbs, ‘to come’ and ‘to go’, in Khroskyabs based on two of its varieties, Siyuewu and Wobzi, before analyzing the evolutionary pathways of their stem alternation patterns. The meanings of the basic motion verbs in Khroskyabs originally were not ‘to come’ or ‘to go’; instead, these verbs denoted Goal-oriented motion and Source-oriented motion. The choice of the deictic center is the key to the semantic change toward ‘to come’ and ‘to go’ in the modern language.

**Keywords:** motion verbs, orientation, stem alternation, Khroskyabs, Rgyalrongic

### 1. Introduction

Khroskyabs is, together with the Rgyalrong languages (Situ, Japhug, Zbu and Tshobdun) and the Horpa languages, a Rgyalrongic language (Trans-Himalayan or Sino-Tibetan) (Sun 2000a; b), spoken in Sichuan, China, by around 10,000 inhabitants (Huang 2007: 1–2).

This paper focuses on the synchronic and diachronic morphology of the basic motion verbs in Khroskyabs, generally translated into English by ‘to come’ or ‘to go’. I shall show that the basic motion verbs originally did not have the meanings ‘to come’ or ‘to go’, instead, they were used to describe motions toward a certain goal, or from a certain source. The basic motion verbs in Proto-Khroskyabs underwent semantic and morphological changes to denote ‘to come’ and ‘to go’ in the modern language.

The current study is based on fresh fieldwork on two Khroskyabs dialects, Wobzi and Siyuewu. In § 3, I present some typological features of the languages

that help with the understanding of the whole paper; in § 4, the morphology, focusing on orientational prefixes, argument indexation, and stem alternation, is described; in § 5, I discuss the semantic distribution of the basic motion verbs from a synchronic perspective; this section is followed by § 6 with a comparison with other Rgyalrongic languages; in § 7, I put forward historical hypotheses on the typologically rare stem alternation patterns of the verbs in question, in which the verb for ‘to come’ seemingly entered the stem alternation of the verb ‘to go’; finally, § 8 wraps up the paper with a conclusion.

2. Dialects under investigation

I base my study on two of the best documented Khroskyabs dialects, Siyuewu (斯躍武 Sīyuèwǔ) and Wobzi (俄熱 Érè). These two dialects are spoken in two different townships, Dzamthang (壤塘縣 Rǎngtáng Xiàn) and Chuchen (金川縣 Jīnchuān Xiàn) respectively, with a driving distance of about 46 kilometers from one to the other. According to Lai’s (2017: 15) classification based on common innovations, they belong to the same sub-branch called Thugschen, which is illustrated in the *Stammbaum* of Khroskyabs in Figure 1.

Siyuewu and Wobzi are mostly mutually intelligible to native speakers, but they show various distinct features when being carefully looked into. Since examples from both varieties need to be illustrated in this paper, I shall systematically indicate the relevant variety for each example.

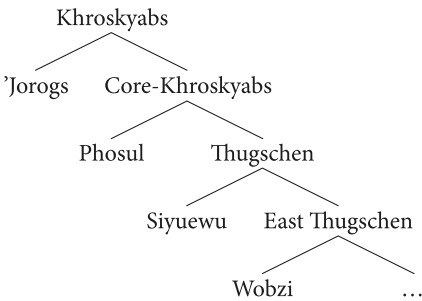


Figure 1. *Stammbaum* of Khroskyabs according to Lai (2017: 15)

### 3. Basic grammatical features

In this section, I present some basic grammatical features of the two Khroskyabs varieties that are necessary for the analyses carried out in the rest of the paper. First, § 3.1 provides a brief description of the phonological systems of the two dialects under study; and second, § 3.2 treats verbal morphology such as argument indexation and stem alternation.

#### 3.1 Phonological sketch

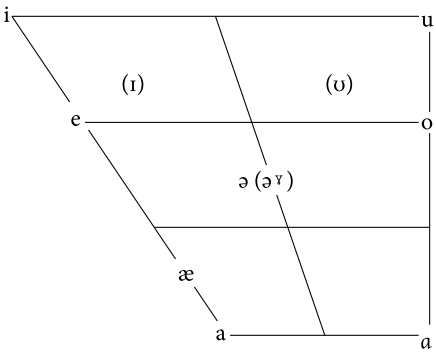
The consonant inventories of Wobzi and Siyuewu Khroskyabs are very similar, as illustrated in Table 1. The Siyuewu variety presents one additional velar consonant than Wobzi, namely [x] (in bold in Table 1).

Table 1. Consonant inventory

Bilabial	<i>p, p<sup>h</sup>, b, m</i>
Labiodental	<i>v, f</i>
Dental/alveolar	<i>t, t<sup>h</sup>, d, n, l, ɬ, ts, ts<sup>h</sup>, dz, s, z</i>
Post-alveolar	<i>tɕ, tɕ<sup>h</sup>, dʒ, ɕ, ʒ</i>
Palatal	<i>c, c<sup>h</sup>, ʃ, ɕ, j</i>
Retroflex	<i>tʂ, tʂ<sup>h</sup>, dʒ, ɀ, ʂ, ʐ</i>
Velar	<i>k, k<sup>h</sup>, g, ŋ, ʝ, <b>x</b></i>
Uvular	<i>q, q<sup>h</sup>, ɣ, ʁ</i>

The two varieties share the same vocalic system, illustrated in Table 2 (parenthesized vowels are not phonemic).

Table 2. Vowel inventory



Both varieties have two tones, the falling tone, noted  $\sigma$ , and the high tone, noted  $\sigma'$ . In a phonological word, only one syllable can bear a tone, from which the surface tones of the other syllables are derived.

3.2 The verb

This section focuses on some aspects of verbal morphology that are relevant to this paper.

3.2.1 *Orientational prefixes*

Orientational prefixes are an important morphological category for motion events in Khroskyabs. The primary function of these prefixes is indicating the direction denoted by their verbal hosts.

The orientational prefixes of Siyuewu and Wobzi are illustrated in Tables 3 and 4.

Table 3. Orientational prefixes in Siyuewu

Prefixes	Directions
<i>o-</i>	upward
<i>næ-</i>	downward
<i>kə-</i>	dark side of the mountain
<i>nə-</i>	sunny side of the mountain
<i>læ-</i>	upstream
<i>və-</i>	downstream
<i>rə-</i>	neutral
<i>æ-</i>	neutral

Table 4. Orientational prefixes in Wobzi

Prefixes	Directions
<i>æ-</i>	upward
<i>næ-</i>	downward
<i>kə-</i>	upstream
<i>nə-</i>	downstream
<i>læ-</i>	toward the left bank, or a higher altitude
<i>və-</i>	toward the right bank, or a lower altitude
<i>rə-</i>	neutral

The morphological behaviors of orientational prefixes in the two varieties are mostly the same and only differ in the way the orientational prefixes combine with other prefixes. When the orientational prefixes are followed by markers such as the inverse *u-* and the irrealis *â-*, they undergo crasis either by replacing their original vowel with the added marker, or by a merger into a new vowel. In the Wobzi case, a simple replacement is sufficient: *rə- + u- → r-u-*, *æ- + u- → u-*, *læ- + â- → l-â-*, *kə- + -â → k-â-*, etc. However, in Siyuewu, the crasis process involves both replacement and merger, as shown in Table 5.

Table 5. Orientational prefix series in Siyuewu

	Neutral	Neutral	Upward	Downward	Dark side	Sunny side	Downstream	Upstream
Series 1 (default)	<i>æ-</i>	<i>rə-</i>	<i>o-</i>	<i>næ-</i>	<i>kə-</i>	<i>nə-</i>	<i>və-</i>	<i>læ-</i>
Series 2 (inverse)		<i>ru-</i>	<i>a-</i>	<i>na-</i>	<i>ku-</i>	<i>nu-</i>	<i>vu-</i>	<i>la-</i>
Series 3 (irrealis)		<i>râ-</i>	<i>â-</i>	<i>nâ-</i>	<i>kâ-</i>	<i>nâ-</i>	<i>vâ-</i>	<i>lâ-</i>

The careful reader might have noticed that I use a hyphen between orientational prefixes and inverse/irrealis markers in Wobzi, but not in Siyuewu. This is due to the fact that at least the inverse marker *u-* does not necessarily co-occur with orientational prefixes in Wobzi, which is not the case of Siyuewu. This can be illustrated by transitive verbs incompatible with orientational prefixes. In Wobzi, inverse *u-* can stand alone with these verbs, however, in Siyuewu, without an orientational prefix, the inverse cannot surface. I therefore analyse the Wobzi inverse marker as an independent prefix. See Example (1).

- (1) a. Wobzi  
*nû=γə    ηô u-vdâ-η.*  
2SG=ERG 1SG INV-see<sub>2</sub>-1SG  
'You saw me.'
- b. Siyuewu  
*nû=γə    ηê vdé-æη.*  
2SG=ERG 1SG see<sub>2</sub>-1SG  
'You saw me.'

LaPolla (2017: 49) mentions several orientation systems related to orientational prefixes generally found in what he calls Qiangic languages, with which Rgyal-rongic languages share a good deal of similarities. The orientation systems are summarized in (2).

- (2) 1. Relative: upward, downward; inward, outward; towards the speaker, away from the speaker
2. Riverine: upstream, downstream

3. Mountain related: towards the mountain, away from the mountain
4. Cardinal: eastward, westward, northward, southward

The two Khroskyabs varieties discussed in this paper do not present the same orientation systems, and the prefixes used, albeit mostly cognates, may not refer to the same directions. The pair *læ-* and *və-* indicates upstream and downstream directions in Siyuewu; in Wobzi, however, they designate the perpendicular directions: towards the left or the right bank. The *kə-/nə-* pair meaning upstream and downstream in Wobzi, has to do with the mountain in Siyuewu, with the meaning of “dark side of the mountain” and “sunny side of the mountain”.

Furthermore, the two varieties use different terms for the two banks of the river. A Wobzi speaker, standing on the left bank of the river (with regard to the direction of current) in the Township of Thugschen, calls his current location *luyâr*, related to the orientational prefix *læ-* ‘towards the left bank’. The bank on the other side of the river is called *vuyâr*, from the orientational prefix *və-* ‘towards the right bank’. A Siyuewu speaker, standing at exactly the same location in Thugschen, calls his current position *nəbâr*, from the prefix *nə-* ‘sunny side of the mountain’, and the other bank *kubâr*, from the prefix *kə-* ‘dark side of the mountain’.

In both varieties, *kə-* can secondarily denote a motion towards the deictic center. In (3a), without any context, the use of the prefix *kə-* implies that the action is directed to the deictic center, the speaker herself. In (3b), the verb form *kə-mə-tʰód=tsʰi* (PST:centripetal-NEG-come<sub>2</sub>=IFR) is used figuratively with *scêva* ‘pain’, therefore, it does not denote the geographical direction towards the dark side of the mountain. The action of this verb form has an effect on the person killed in the accident, who is also the deictic center of the motion, and the prefix *kə-* conveys the centripetal meaning. While it is more or less clear that *kə-* is centripetal, its counterpart, *nə-*, should logically have a secondary centrifugal meaning. However, admitting that this conjecture is promising, I do not find convincing examples of *nə-* assigning a centrifugal direction to the verb in Khroskyabs. Lin (2002: 38–39) and Sun (2017: 563) notice that *kV-/nV-* pairs in other Rgyalrongic languages too have secondary centripetal/centrifugal meanings.

- (3) a. Wobzi  
*kə-srî-n!*  
IMP:centripetal-look-2  
‘Look at me!’
- b. Siyuewu  
*tʂædtʂæd câmpəd zær*      *nə-sêd=tsʰi, scêva*  
suddenly like.this immediately PST-dead<sub>2</sub>=IFR pain  
*kə-mə-tʰód=tsʰi.*  
PST:centripetal-NEG-come<sub>2</sub>=IFR  
‘He died immediately, without any pain (pain did not come to him).’

Siyuewu exhibits an additional orientational prefix for the neutral direction æ-, apart from rə- that is attested in other Khroskyabs dialects. Unlike rə-, which usually has a sensory or inferential flavor, æ- seems to be purely directional. In (4a), the use of rə- implies that the speaker sees the motion, or that she bases her statement on certain evidence; as for (4b), there is no evidential implication.

- (4) Siyuewu
- a. cĕ < Měiguó><sup>1</sup> rə-vă.  
3SG USA NPST:neutral-go<sub>1</sub>  
'He is going to the USA (with direct or indirect evidence).'
  - b. cĕ < Měiguó> æ-vă.  
3SG USA NPST:neutral-go<sub>1</sub>  
'He is going to the USA (without evidential implication).'

Table 6 shows the orientation systems and the prefixes used in both Khroskyabs varieties. It is clear that Siyuewu adopts three of the four systems observed by LaPolla (2017), relative, riverine, and mountain-related systems. Wobzi has only two without the mountain-related system. Both varieties do not have the cardinal orientation system, which however is attested in many other Rgyalrongic languages (Lin 2002), including another Khroskyabs dialect, 'Brongrdzong (Sun 2000a: 183).

Table 6. Orientation systems

System	Siyuewu	Wobzi
Relative	o-, næ-, kə-	æ-, næ-, kə-
Riverine	læ-, və- (stream)	kə-, nə- (stream); læ-, və- (bank)
Mountain related	kə-, nə-	
Cardinal		

3.2.2 Intransitive argument indexation

In intransitive constructions, the verb indexes the unique argument, the S, with suffixes overtly present, shown in Table 7. Siyuewu distinguishes suffixally three numbers – singular, dual, and plural – for first and second persons, while Wobzi only marks first person singular and plural, and second person regardless of the number. Both varieties have their third person totally unmarked.

1. Chinese transliterations are between angle brackets: <tiāndì> 'Emperor of the Sky'.

Table 7. Intransitive paradigms in Khroskyabs

	Siyuewu pronouns	Siyuewu suffixes	Wobzi pronouns	Wobzi suffixes
1SG	ηǣ	-η	ηó	-η
1DU	ηǵǎne (EXCL), ηǎnê (INCL)	-γ	ηǵǎne	-j
1PL	ηǵǎ (EXCL), ηǵǎjǵǎ (INCL)	-j	ηǵǎi (EXCL), ηǵǵǎjǵǎi (INCL)	-j
2SG	nú	-n	nú	-n
2DU	nǵêne	-z	nêne	-n
2PL	nǵejǵǵǎ	-jɳ	nêjǵjǵi	-n
3SG	ǣtǎ		ǣtǎ	
3DU	ǣtǎne		ǣtǎne	
3PL	ǣtǎjǵǎ		ǣtǎjǵi	

Transitive constructions are not the focus of the present paper, so the reader is invited to consult Lai (2015) and Lai (2017: 415–434) for a detailed description on transitive indexation in Khroskyabs.

3.2.3 Stem alternation and tense-aspect-modality categories

Stem alternation is found in Khroskyabs as well as nearly all Rgyalrongic languages (Sun 2000b, 2004; Jacques 2004; Prins 2011). In both varieties, a verb can present as many as three distinct stems, while most verbs have only two. The stems are numbered from one to three and each stem has distinct functions. In Wobzi in particular, a few verbs do not exhibit any stem alternation, such as *sǎ* ‘to die’ and *nts<sup>h</sup>ǎ* ‘to think’, their cognates in Siyuewu, *sǎ* ‘to die’ and *nts<sup>h</sup>ǎ* ‘to think’, however, have both a stem 2: *sǣd*, and *nts<sup>h</sup>ǎ* respectively. There are four ways to alternate between stems, tone alternation, rime modification, aspiration alternation, and suppletion.

Tone alternation is the most common type, and it usually accompanies other types of alternation. In general, a flip-flop between the high tone and the falling tone is observed, such as Wobzi *vdê* ‘to see (Stem 1)’ vs *vdé* ‘to see (Stem 2)’, and Siyuewu *réd* ‘to leave sth. (Stem 1)’ vs *rêd* ‘to leave sth. (Stem 2)’.

Several sub-types of rime modification are attested. It can be an ablaut, as in the Wobzi pair *rts<sup>h</sup>ǣ* ‘to try (Stem 1)’ vs *rts<sup>h</sup>ǎi* ‘to try (Stem 2)’, or a total replacement of the rime, as in the aforementioned Siyuewu verb *sǎ* ‘to die’, whose Stem 2 is *sǣd*.

Unlike some Stau dialects such as Puxi (Sun 2000b) and G.yurong (personal investigation 2014), aspiration alternation is rather unproductive in Khroskyabs, in both dialects, the only instances found are with the two verbs that are genetically related, (*rǎ-*)*tô* ‘to come’ and *tô* ‘to become’ (Stem 1 is the same in both dialects), with (*rǎ-*)*t<sup>h</sup>ó* and *t<sup>h</sup>ó* as Stem 2 in Wobzi, and (*rǎ-*)*t<sup>h</sup>ód* and *t<sup>h</sup>ód* as Stem 2 in Siyuewu.



Suppletion occurs mainly with the verbs under study in this article, two of the motion verbs, *(rə-)*tô ‘to come’ and *rə-vâ* ‘to go’ (homophonous in both varieties) as well as their derivatives. These verbs are also the only examples that have three stems in the language. I shall present their stem alternation patterns in detail in § 4.

The Wobzi stem alternation is illustrated as a representative example in Table 8.

Table 8. Wobzi stem alternation

Stem 1	Stem 2	Stem 3	Gloss
<i>nts<sup>h</sup>â</i>			to think
<i>bâ</i>	<i>bâ</i> (tone)		to give (food)
<i>rts<sup>h</sup>æ̃</i>	<i>rts<sup>h</sup>î</i> (rime)		to try
<i>(rə-)</i> tô	<i>(rə-)</i> t <sup>h</sup> ó (aspiration)		to become
<i>(rə-)</i> vâ	<i>ɛâ</i> (suppletion)	<i>ɛ̃</i> (rime)	to go

Stem alternation, combined with verb-specific orientational prefixes, is the main way to distinguish tense-aspect-modality (TAM) categories. Khroskyabs exhibits two major types of verbs, dynamic verbs that simply distinguish two tenses, non-past and past, and stative verbs that further distinguish two aspects, perfective and past imperfective. Stem 1 is the default stem, used as the citation form and occurs in non-past situations, or irrealis situations if the verb does not possess a Stem 3; Stem 2 is generally employed in past situations and also perfective of stative verbs. Stem 3 is the irrealis stem, used in imperative and jussive constructions. As for single stem verbs attested only in Wobzi, the only stem participates in all the functions.

The Siyuewu variety further presents a progressive use of Stem 2, which must be combined with the orientational prefix *və-*, see Example (5).

- (5) Siyuewu  
*câmjɲəd â-sti læ-srí=ska=ɛəvæ, loc<sup>h</sup>â χc<sup>h</sup>ó=tə=gə*  
like.this one.time PST-look<sub>2</sub>=NMLZ:time=CONJ higher.side lock=DEF=LOC  
*və-srí rə-ŋó.*  
PROG-look<sub>2</sub> NPST-be<sub>1</sub>  
‘Just like this, when he looked outside, he was looking through the keyhole.’

This use is in accordance with Zbu (or Showu), one of the Rgyalrong languages, of which the past stem similarly expresses progressive aspect when combined with the orientational prefixes *rə-/rv-* (Sun 2004: 285–286).

4. The morphology of basic motion verbs

In this section, I shall discuss the morphology of the basic motion verbs in both Khroskyabs varieties.

4.1 The verb forms in question

Table 9 lists the basic motion verbs under study in this paper, which are generally translated in Chinese by the consultants as 來 *lái* ‘to come’ (cislocative) and 去 *qù* ‘to go’ (translocative).

Table 9. Basic motion verbs in Khroskyabs

Siyuewu	Wobzi	Gloss
<i>vâ</i>	<i>vâ</i>	to come
	<i>vji</i>	to come
<i>(rə- )tô</i>	<i>(rə- )tô</i>	to come
<i>æéd</i>		to go
<i>(rə- )vâ</i>	<i>(rə- )vâ</i>	to go

4.2 Compatibility with orientational prefixes

The reader may notice that both varieties have more than one verb for ‘to come’, and Wobzi presents even three verbs for this concept. To describe this observation in a morphological way, it is better to start with Siyuewu with only two cislocative verbs.

The Siyuewu verb form *vâ* ‘to come’ is only compatible with *rə-* used as an evidential marker (without orientational implication). It belongs therefore to the small group of verbs which are incompatible with orientational prefixes, including *vdê* ‘to see’, *smê* ‘to hear’, *væd* ‘to bring’, and *tô* ‘to become’, among others. An example is shown in (6), in which the Stem 2, *vâ* through tone alternation, appears as a bare stem with no prefixes attached.

- (6) Siyuewu
- vgêməme tʰæ tsʰəgi əsəd mu-gí=pa=ræ*

*vô=si.*
- be.naked any clothes a.little NEG.INV-wear<sub>1</sub>=NMLZ:A=one come<sub>2</sub>=IFR

‘A totally naked person came.’

The verb form *(rə- )tô*, however, is always accompanied by an orientational prefix to indicate the direction of the motion as well as TAM properties. I add “*(rə- )*” between parentheses for the motion verb compatible with orientational prefixes,

as *rə-* is a neutral orientational prefix that has no indication of direction (see § 3.2.1). As in Example (7), (*rə-*)*tô* ‘to come’ is prefixed by *ô-* ‘upward’, and because the verb is in Stem 1, the tense here is non-past and usually understood in these cases as describing a future event.

(7) Siyuewu

*ŋæ̌=pæ, o-mə-tô-ŋ=ŋi.*

1SG=TOP NPST:up-NEG-come<sub>1</sub>-1SG=ASSRT

‘As for me, I won’t come.’

Wobzi Khroskyabs shares basically the same features presented above for Siyuewu Khroskyabs, but the difference is that it has two verb forms, *vâ* and *vji* corresponding to Siyuewu *vâ*. These two forms exhibit no significant difference in usage, and like Siyuewu, they are not compatible with orientational prefixes. The form *vji* is much more frequently employed than *vâ* not to mention this latter is not so far attested in texts. Unlike Siyuewu, *vâ* in Wobzi exhibits no stem alternation. In (8), an example of *vji* is illustrated.

(8) Wobzi

*æ̌cə mēfæ̌r, fťsəskə cə rŋâvipa=tə=ji=ji jâm=tə=gə vji=si.*

CONJ night tulku DEM hunter=DEF=PL=GEN house=DEF=LOC come<sub>2</sub>=IFR

‘Then, at night, the tulku came to the hunters’ house.’

The Wobzi verb (*rə-*)*tô* ‘to come’ is the same as its cognate in Siyuewu, always with an orientational prefix, as illustrated in Example (9).

(9) Wobzi

*câlŋkʰa χpân=ji næ-tô næ-kʰrâ=si cə, cə̌ji=ji*

recently official=PL NPST:down-come<sub>1</sub> PFV-INCHO=IFR CONJ 3PL=ALL

*rə-mæ-ɛnê=yə.*

NPST-NEG-be.busy<sub>1</sub>=PART

‘The officials are about to come soon, so they are very busy.’

Like for the cislocative verbs, Siyuewu has two verbs for ‘to go’, *æ̌əd* which is incompatible with orientational prefixes, and (*rə-*)*vâ* of which the bare stem is homophonous with *vâ* ‘to come’, and the one thing that makes it distinct from *vâ* ‘to come’ is that it must take an orientational prefix. Wobzi, on the other hand, preserves only (*rə-*)*vâ*.

Example (10) shows what *æ̌əd* looks like in a sentence, with its Stem 2, *ə̌əd*.

- (10) Siyuewu  
yâm=tə zjád a-ví=jə nə-mɲâd=ɛəvæ qlêɤ  
door=DEF IDEO INV.PST-close<sub>2</sub>=GEN PST.IPFV-happen<sub>2</sub>=CONJ suddenly  
ɛâd=ts<sup>hi</sup>.  
go<sub>2</sub>=IFR  
'She slammed the door shut and suddenly left.'

The examples in (11) show the prefixal behavior of (rə)-vâ in both varieties.

- (11) a. Siyuewu  
rêɣjə=jə gáv nə-tə-mblíy-n=məndi, rêɣjə sâ=ska=ɛə  
others=GEN foot IMP-NEG-step.over<sub>1</sub>-2SG=unless others die<sub>1</sub>=NMLZ=CONJ  
ɲalá rə-vâ=sce=gə rə-vâ-n ród=pa  
where NPST:neutral-go<sub>1</sub>-NMLZ=LOC NPST:neutral-go<sub>1</sub>-2SG must<sub>1</sub>=NMLZ  
rə-ɲó.  
NPST-be<sub>1</sub>  
'Do not step over others' feet, or you will have to go where they go when they die.'
- b. Wobzi  
çpâ=tə=də jɔŋsâ snəgó ɛə æ-nq<sup>h</sup>læ=pa rə-ɲæ,  
marmot=DEF=too again day.time CONJ NPST:up-get.out<sub>1</sub>=NMLZ NPST-be<sub>1</sub>  
ɛɣæɾ ɛə sâ=sne=gə nə-vâ=pa rə-ɲæ.  
night CONJ earth=LOC=LOC NPST:down-go<sub>1</sub> NPST-be<sub>1</sub>  
'Marmots, on the other hand, come out during the day and go back underground at night.'

Table 10 summarizes the compatibility with orientational prefixes of the motion verbs studied in this paper.

Table 10. Compatibility with orientational prefixes

Siyuewu	Wobzi	Gloss	Compatibility
vâ	vâ	to come	×
	vji	to come	×
(rə-)tô	(rə-)tô	to come	✓
ɛâd		to go	×
(rə-)vâ	(rə-)vâ	to go	✓

Following Sun (2004), I call the motion verbs incompatible with orientational prefixes ORIENTATIONALLY UNMARKED (hereafter O-U), and those compatible with orientational prefixes ORIENTATIONALLY EXPLICIT (hereafter O-E).

### 4.3 Stem alternation of Khroskyabs basic motion verbs

As alluded to above, the O-U forms can be one or two-stemmed verbs. In Siyuewu, the form *vâ* ‘to come’ exhibits regular tone alternation, between a falling tone in Stem 1 and a high tone in Stem 2. The same case is observed in Wobzi *vjî* ‘to come’, of which the Stem 2 is *vjí* with a high tone. Wobzi’s other O-U cislocative verb, *vâ*, exhibits only one stem. Table 11 illustrates the stem alternation of these verbs in both varieties.

Table 11. Stem alternation of O-U motion verbs

Siyuewu		Wobzi		Gloss
Stem 1	Stem 2	Stem 1	Stem 2	
<i>vâ</i>	<i>vâ</i>	<i>vâ</i>		to come
		<i>vjî</i>	<i>vjí</i>	
<i>ɛâd</i>	<i>ɛâd</i>			to go

The stem alternation of three-stemmed motion verbs (which are also O-E verbs) are illustrated in Table 12. The two varieties share actually the same alternating patterns, except that the Wobzi forms systematically lost the stop coda.

Table 12. Stem alternation of three-stemmed motion verbs

Siyuewu			Wobzi			Gloss
Stem 1	Stem 2	Stem 3	Stem 1	Stem 2	Stem 3	
<i>(râ-)tô</i>	<i>(râ-)t<sup>h</sup>ód</i>	<i>(râ-)vâ</i>	<i>(râ-)tô</i>	<i>(râ-)t<sup>h</sup>ó</i>	<i>(r-â-)vjî</i> or <i>(r-â-)vâ</i>	to come
<i>(râ-)vâ</i>	<i>(râ-)ɛâd</i>	<i>(râ-)ɛâd</i>	<i>(râ-)vâ</i>	<i>(râ-)ɛâ</i>	<i>(r-â-)ɛâ</i>	to go

As mentioned in § 3.2.3, the Siyuewu Stem 2 generally forms a progressive verb with the orientational prefix *vâ-*. This formation is however impossible with the motion verbs I discuss here. Therefore, *vâ-ɛâd* (PST:downstream-go<sub>2</sub>) can only mean ‘went downstream’ but not ‘is going’, and *vâ-t<sup>h</sup>ód* (PST:downstream-come<sub>2</sub>) only means ‘came downstream’ instead of ‘is coming’. An analytic progressive construction is used with these verbs: *vâ-vâ=zân jêd* (NPST:downstream-go<sub>1</sub>=CONJ exist<sub>1</sub>) ‘he is going downstream’.

## 5. Semantic distribution of Khroskyabs basic motion verbs

In this section, I analyse the uses of basic motion verbs in Khroskyabs mainly based on natural non-elicited data. The two varieties do not show significant semantic differences, therefore, I tend not to describe them individually; rather, I list examples of both varieties in the analysis of each verb.

In § 5.1, I briefly introduce the technical terms I use during the description. In § 5.2, I present the cislocative verbs and in § 5.3, the translocative verbs in Khroskyabs.

### 5.1 Terms used

In my analysis, I use the terms developed by Talmy (1985; 1991; 2000a; b), who divides a motion event into four major components: FIGURE, GROUND, PATH, and MOTION. Generally speaking, the Figure is the moving entity, usually the S of the motion verb; the Ground is the reference entity, having a stationary setting relative to a reference frame, thus, it can be the Goal of the motion as well as the Source; The Path is the trajectory followed by the Figure or the site where the Figure is located.

In Khroskyabs, the four components can be exemplified in Example (12). The participant, *tʂaɕi* 'Bkra.shis', is the moving entity, i.e. the Figure, and his destination, 'Barkhams, is the Ground. The Motion is denoted by the verb *rbjæ* 'to arrive', and the Path is overtly encoded by the orientational prefix *nə-*, indicating that the motion follows a downstream direction.

#### (12) Wobzi

*tʂaɕi mbærkʰæm nə-rbjɿ=si.*

Bkra.shis 'Barkhams PST:downstream-arrive<sub>2</sub>=IFR

FIGURE GROUND PATH-MOTION

'Bkra.shis went downstream to 'Barkhams.'

In this sense, Khroskyabs is best classified as a satellite-framed language as far as the basic motion verbs are concerned under Talmy's framework, with the orientational prefixes being the main "satellites".<sup>2</sup>

The concepts under study in this paper, 'to come' and 'to go', are generally considered as denoting deictic motions, motion towards or away from the deictic center, which, according to Talmy (2000b:56), are the two member notions of the deictic component of Path, included in the lexical meaning of deictic motion

2. A satellite "is the grammatical category of any constituent other than a noun-phrase or prepositional-phrase complement that is in a sister relation to the verb root" (Talmy 2000b: 102).

verbs. As a result, in Khroskyabs, Path can be encoded in the satellite and the verb at the same time. As in (13), the orientational prefix *o-* indicates the upward direction of the motion event, which is a part of Path, and the cislocative verb (*rə-*)*tô* provides additional Path information, which is toward the speaker.

- (13) Siyuewu  
*o-vâ-n!*  
 IMP:up-come<sub>3</sub>-2  
 ‘Come (up)!’

## 5.2 The cislocative verbs

The cislocative verbs in the two Khroskyabs varieties have been listed in Table 11. In a nutshell, both varieties have a cislocative verb which is orientationally unmarked, *vâ* in Siyuewu and *vji/vâ* in Wobzi, and another verb which is orientationally explicit, (*rə-*)*tô* in both varieties.

### 5.2.1 The Ground argument of cislocative verbs

In most cases, the Ground arguments bear no sign of being the Source or the Goal, and the meaning must be deduced from the context. Examples (14) and (15) show the different possibilities of the Ground argument in both Siyuewu and Wobzi.

- (14) Siyuewu  
 a. Goal  
*ɣdâ=gə=tə kotsê=jə=jə ɸvɔŋtsʰán=jə=jə mé=tə ɣdâ=gə=pʰjæɸ*  
 river=LOC=DEF PN=PL=GEN PN=PL=GEN mother=DEF river=LOC=LOC  
*næ-tʰód=mə mâ rə-ŋó.*  
 PST:down-come<sub>2</sub>=PART as.if NPST-be<sub>1</sub>  
 ‘The *kotsês* and the mother of the *ɸvɔŋtsʰáns*’ came to the side of the river.’  
 b. Source  
*grâmdə læ-tô=sce tɕʰi=gə ŋó=ɕəɣ?*  
 Thugschen NPST:upstream-come<sub>1</sub>=NMLZ:place way=LOC be<sub>1</sub>=Q  
 ‘Is this the way to come (here) from Thugschen?’
- (15) Wobzi  
 a. Goal  
*æ̂ɕə mēfɕæɾ, ftʂaskâ câ rŋâvipa=tə=ji=ji jâm=tə=gə*  
 CONJ night tulku DEM hunter=DEF=PL=GEN house=DEF=LOC  
*vjɿ=sɿ.*  
 come<sub>2</sub>=IFR  
 ‘At night, the tulku came to the hunters’ house.’

b. Source

*nəjê câ jdâ=tə tsaká, ŋgâji rjâmts<sup>hu</sup> nt<sup>h</sup>âji rjâmts<sup>hu</sup>*  
 2SG DEM water=DEF be.few CONJ sea far.away sea  
*rə-t<sup>h</sup>á-ŋ=pa ŋæ u-rə.*  
 PST-come<sub>2</sub>-1SG=NMLZ be<sub>1</sub> PST.INV-say<sub>2</sub>  
 'There is so little water at your place, I came from the sea.'

### 5.2.2 Choice of the deictic center

No matter which verb one uses, the concept 'to come' typically designates motion towards the deictic center, which is by default the speaker or the location of the speaker. In (16), examples of the o-u cislocative verbs are illustrated. The speaker of Example (16a) talks about his own experience of encountering a ghost. The deictic center, which is also the Ground, is the speaker himself, the Figure, the tall and thin ghost in red, moved towards him following the deictic Path. In (16b), the speaker speaks in the position of a character in a story, about a cat having moved to his location. She did not need to specify where the cat came from as she used the verb *vjî*, not requiring an orientational prefix.

(16) a. Siyuewu

*ætâ ŋântɛ<sup>h</sup>æ ŋó=væ nə-ŋû, ŋântɛ<sup>h</sup>æ mnây*  
 DEM really be.true<sub>1</sub>=TOP PST.IPFV-be<sub>2</sub> really red  
*grəygrây=ræ vâ=si nə-ŋû!*  
 IDEO:tall.and.thin=one come<sub>2</sub>=IFR PST.IPFV-be<sub>2</sub>  
 'It was true, someone tall and thin in red came!'

b. Wobzi

*ætâ torá rây vjî=təyð nəjê sâ-ndæ-n=ji metâ=tə*  
 DEM cat one come<sub>2</sub>=CONJ 2SG SUPERL-love<sub>1</sub>-2=GEN flower=DEF  
*u-p<sup>h</sup>aylôy!*  
 PST.INV-overturn<sub>2</sub>  
 'That cat came and broke your favorite flower!'

Example (17) illustrates the usage of (*rə-*)*tô* in Khroskyabs, with the deictic center being around the speaker. Example (17a) is selected from a true story (according to the consultant) about a giant yeti, who lived on the bank on the sunny side of the mountain. The yeti used to come across the river to the bank on the dark side of the mountain, that is, where the speaker was, to kidnap young women. In the sentence, the Ground is explicitly expressed as *nəvâr* 'bank on the sunny side of the mountain', related to the prefix *nə-* 'sunny side of the mountain', and the Path marker *kə-* 'dark side of the mountain' corresponds to the actual direction of the motion, from the sunny side of the mountain to the dark side of the mountain. Example (17b), like the previous example, is chosen because it explicitly



mentions the upstream location (which is also the starting point), *χukû*, related to the prefix *kə-* ‘upstream’. The verb (*rə-*)*tô* is prefixed by *nə-*, indicating a downstream direction.

(17) a. Siyuewu

*ætâεə nəkâr=tə=t<sup>h</sup>a*                      *ynəkræł*                      *t<sup>h</sup>jæná*  
 CONJ sunny.bank=DEF=LOC mountain.shadow how.many  
*kə-krġê=java=tə,*                      *vjærŋí=tə*  
 NPST-stand.up<sub>1</sub>=symbol=DEF yeti=DEF  
*kə-tô*                      *nə-ntε<sup>h</sup>ú=pa*                      *rə-ŋó,*  
 NPST:dark.side.of.mountain-come<sub>1</sub> PST.IPFV-will<sub>2</sub>=NMLZ NPST-be<sub>1</sub>  
*câmŋəd.*

like.this

‘So when the shadow of the mountain appeared, the yeti, from the bank on the sunny side of the mountain, would come.’

b. Wobzi

*æervâ nə-jé=ska,*                      *stayəvâ*                      *χukû*  
 Muslim PST.IPFV-exist<sub>2</sub>=NMLZ:time Stau.habitant upstream.location  
*mbrangú < Xiàn> vjú=gə, ts<sup>h</sup>ôŋ nə-t<sup>h</sup>ó=tə,*                      *ŋġji*  
*mbrangú* County man=CLF trade PST:downstream-come<sub>2</sub>=DEF 1PL.GEN  
*jəvdâ nə-ŋâŋ.*  
 leader PST.IPFV-be<sub>2</sub>

‘When there were Muslims (in ‘Barkhams), the Stau man from *mbrangú* County (upstream), who came to do business, was our leader.’

The examples in (17) show how the cislocative verbs denote motions hither with the deictic center being the speaker. However, the deictic center of the cislocative verbs can be shifted to the addressee in a conversation as well, therefore a motion thither can be denoted by *vâ*, *vġi*, or (*rə-*)*tô*. When the location of the addressee is the destination of the motion, the deictic center must be shifted to the addressee; see the examples in (18).

In Example (18a), the speaker refused an invitation from a relative, who lived in a higher hamlet in the mountain. Everyone else accepted the invitation, but the speaker expressed her unwillingness using the verb (*rə-*)*tô* ‘to come’, whose deictic center is obviously the home of the one who invited her. Example (18b), which is a Wobzi sentence, is similar. The speaker urged her addressee to come over, unless she would go and find him, using the verb forms *kə-vġi-n* (IMP:upstream-come<sub>3-2</sub>) and *nə-t-âŋ* (NPST.downstream-come<sub>1</sub>-1SG), both are stems of (*rə-*)*tô* ‘to come’.

- (18) a. Siyuewu  
 $\eta\hat{a}=pæ$   $o-mə-tô-\eta=\eta i$ .  
 1SG=TOP NPST:up-NEG-come<sub>1</sub>-1SG=ASSRT  
 ‘I won’t come (to your place).’  
 b. Wobzi  
 $ræj\hat{n}a$   $kə-vj\hat{i}-n=mənə$ ,  $\eta k^{hr}\hat{u}$   
 quickly IMP:upstream-come<sub>3</sub>-2=unless look.for  
 $nə-t-\hat{a}\eta=ni$ .  
 NPST:downstream-come<sub>1</sub>-1SG=ASSRT  
 ‘Come quickly (to me), or I shall come (to you) and get you.’

Using cislocative verbs with the addressee as the deictic center is not unfamiliar to English or German speakers, as in sentences like *I’m coming*/\**going right away* and *Ich komme*/\**gehe jetzt*, the translocative verb is strictly prohibited (Nakazawa 2007:62), while in Chinese, which is geographically close to Khroskyabs, it seems optional to choose from “come” and “go”.

### 5.2.3 Deictic center unreached

When a motion proceeds towards the deictic center without reaching it, the Khroskyabs speaker also employs the cislocative verbs instead of the translocative verbs. For instance, if someone in Siyuewu asks his addressee, who is currently in ‘Barkhams, to go to Bragbar, a place located between Siyuewu and ‘Barkhams, he has to use an imperative sentence with the verb  $(rə-)\hat{t}ô$  ‘to come’, because his addressee will be heading towards Siyuewu, even with no intention of reaching it. See Example (19).

- (19) Siyuewu  
 $brækvæ\hat{r}$   $kə-v\hat{a}-n!$   
 Bragbar IMP:sunny.side.of.mountain-come<sub>1</sub>-2SG  
 ‘Go to Bragbar!’

The examples in (20) also show cases of not reaching the deictic center. In (20a), the place that the speaker mentions is not his location, but in the same direction that the Figure went; in (20b), the Tibetan king, dwelling in Lhasa, invites the parents of Vairocana to go to Bsam.yas monastery, which is in Lhokha, to the south of Lhasa. Apparently, Lhasa and Lhokha are in the same direction from Vairocana’s homeland, the speaker employs the cislocative verb,  $(rə-)\hat{t}ô$  and the locative adverb  $\hat{a}gə$  ‘there’.

- (20) a. Siyuewu  
*ɛnâ vîskəro kʰrôvjære=jə rɣənbá rôraqʰar*  
 ago now *kʰrôvjære=GEN* temple *rôraqʰar*  
*næ-dâd=sce=gə ægə næ-tʰód rə-ŋó=tə*  
 PST.IPFV-exist<sub>2</sub>=NMLZ:place=LOC there PST:down-come<sub>2</sub> NPST-be<sub>1</sub>=DEF  
*stâ.*  
 PART  
 ‘He came to the temple near today’s *kʰrovjære* (house name) in *rôraqʰar*.’
- b. Wobzi  
*sæmjé rɣælpu=ji sâ ægə=tɛʰi rə-vjî-n=tɛʰə, nêne*  
 Bsam.yas king=GEN land there=LOC IMP-come<sub>3</sub>-2=CONJ 2DU  
*l-u-tʰæ-n=tə mí, l-u-tʰæ-n=pa*  
 NPST-INV-look.after<sub>1</sub>-2=DEF not.exist<sub>1</sub> NPST-INV-look.after<sub>1</sub>-2=NMLZ:A  
*dá, zamâ tʰjenanɣæ ntsʰær mə-ró.*  
 exist<sub>1</sub> food whatever worry<sub>1</sub> NEG-must<sub>1</sub>  
 ‘Come to Bsam.yas, a land of the King’s, you said no one could look after  
 you, but actually you will be well looked after, you don’t have to worry  
 about food.’

In Mparntwe Arrernte, a Pama-Nyungan language spoken in Australia, there is the same phenomenon of using the cislocative verb for motions towards but not reaching the deictic center, as shown in (21) (Wilkins & Hill 1995: 225).

- (21) Mparntwe Arrernte  
*re petye-me store, ikweriperre nhenh-werne petye-tyenhenge.*  
 3SG.S come-NPP store-ALL 3SG.DAT-after here-ALL come-SBSQNT  
 ‘She’s coming to(wards) the store, after which (she) then comes to(wards)  
 here.’

The Example (21) shows the cislocative verb *petye* can be used when the Figure does not arrive at the Ground, namely *store* ‘store’.

### 5.3 The translocative verbs

In this section, I describe the translocative verbs in Khroskyabs.

#### 5.3.1 O-U translocative verb

The o-u translocative verb, *æéd*, is only attested in Siyuewu Khroskyabs, but not in Wobzi. It denotes motions away from the deictic center, usually the location around the speaker. This verb is never attested with a Ground argument, and can be translated in English simply with ‘go away’ or ‘leave’.

In (22a), the speaker talks about his experience of seeing a ghost, during which his fear prevented him from fleeing, i.e. leaving his original location. In (22b), the speaker described the departure of her neighbors from where she was. She first uses *læ-vâ* (NPST:upstream-go<sub>1</sub>) to indicate the possible direction of the departure, and then she employs the O-U *ɛâd* (go<sub>2</sub>) to avoid specifying the destination.

(22) Siyewewu

- a. *æ̂ɛə ɛ̂ɛd=spi=zæ róz=spi mɲád=jə əsəd=də*  
 CONJ go<sub>1</sub>=NMLZ=and get.up<sub>1</sub>=NMLZ type=PL a.bit=even  
*o-mə-t̬ɛ̂-ŋ=si.*  
 PFV-NEG-think.of<sub>2</sub>=1SG=IFR  
 'I didn't even think of going away or getting up.'
- b. *æt̬=jə sk̂əkə=tətə, t̬sə̂ɛ̂itondzəv=jə əm̂ə læ-vâ*  
 DEM=GEN afterwards=DEF Bkra.shis.don.'grub=PL as.if NPST:upstream-go<sub>1</sub>  
*na-yô=si, ɛ̂âd.*  
 PST.IMPF.INV-be.able<sub>2</sub>=IFR go<sub>2</sub>  
 'And then, The family of Bkra.shis.don.'grub were able to go, so they left.'

The use of *ɛ̂ɛd* is comparable to Mandarin Chinese 走 *zǒu* 'go away', termed as a SOURCE-ORIENTED MOTION VERB, opposed to the GOAL-ORIENTED MOTION VERB (Lamarre 2008: 73), see the examples in (23). These two terms can be applied to the Khroskyabs case as well.

(23) a. Source-oriented

我 走 了。  
*wǒ zǒu le.*  
 1SG leave PFV  
 'I left.'

b. Goal-oriented

我 去 省城 了。  
*wǒ qù shěngchéng le.*  
 1SG go provincial.capital PFV  
 'I went to the provincial capital.'

c. Goal-oriented

我 來 省城 了。  
*wǒ lái shěngchéng le.*  
 1SG come provincial.capital PFV  
 'I have come to the provincial capital.'

### 5.3.2 O-E translocative verb

The verb (*rə*-)*vâ* ‘to go’ is orientationally explicit in both varieties of Khroskyabs. The Stem 3, (*rə*-)*ɛɛ́d* (Siyuewu) or (*rə*-)*ɛɛ́* (Wobzi) is identical to the Stem 1 of its orientational unmarked version (*ɛɛ́*(*d*)), and the Stem 2, (*rə*-)*ɛâd* (Siyuewu) or (*rə*-)*ɛâ* (Wobzi) to the Stem 2 of O-U *ɛɛ́*(*d*).

The verb (*rə*-)*vâ* ‘to go’ is mainly Goal-oriented, while in some cases, it can be Source-oriented as well. Especially in Wobzi, where the Source-oriented *ɛɛ́d* does not exist, (*rə*-)*vâ* covers its function. The prefix for neutral directions should be used in Source-oriented cases, as shown in Example (24).

- (24) a. Siyuewu  
*râ-ɛæ-ŋ=ɛə, nû æɛə vdê-æŋ=spi mîd.*  
 NPST.IRR:neutral-go<sub>3</sub>-1SG 2SG CONJ see<sub>1</sub>-1SG=NMLZ not.exist<sub>1</sub>  
 ‘If I go away, you won’t see me again.’
- b. Wobzi  
*câ slî=c<sup>h</sup>ə=na=k<sup>h</sup>ə, ɛə cā matsə=tə rə-vâ.*  
 DEM month=half=about=after CONJ DEM pockmark=DEF NPST:neutral-go<sub>1</sub>  
 ‘In about half a month, the pockmarks will disappear.’

In most of the cases, the O-E translocative verbs are Goal-oriented, usually with a Ground argument indicating the goal, as illustrated by the examples in (25).

- (25) a. Siyuewu  
*tšôŋko=yə tɛfɛ́ŋ nu-ví=mægo, ɛə rjælvârambutɛ<sup>h</sup>e*  
 China=ERG Liberation PST.INV-do<sub>2</sub>=CONJ CONJ Big.Monk  
*rjǽgær=gə kə-ɛâd=mægo ɛə.*  
 India=LOC PST:dark.side-go<sub>2</sub>=CONJ CONJ  
 ‘After the foundation of China P.R., the Big Monk went to India.’
- b. Wobzi  
*æɛə jêfi=tə tɛ<sup>h</sup>i=gə rə-vâ=zə=tə*  
 CONJ 3PL=DEF road=LOC NPST:neutral-go<sub>1</sub>=NMLZ=DEF  
*næ-mî=sí.*  
 PST.IPFV-not.exist<sub>2</sub>=IFR  
 ‘They had no way to go onto the road.’

Even when there is no Ground argument, the orientational prefixes may imply an intended or presumed Goal. In (26a), the speaker supposes that Dbang.skyid, living in an upstream house, was going back home, she therefore employs the corresponding prefix *læ*- that implies a Goal. In the Wobzi example of (26b), the visitors were told not to go to the room upstairs beforehand, so repeating the Goal seems unnecessary to the narrator.

- (26) a. Siyuewu  
kê γó=mə=tə, kvɔŋscât sâ-dzəγ  
some be.able<sub>1</sub>=NMLZ:A=DEF Dbang.skyid SUPERL-anterior  
lə-ɛəd.  
PST:upstream-go<sub>2</sub>  
‘Some of the least injured, Dbang.skyid for instance, went upstream back first.’
- b. Wobzi  
kəvâji âsnə=tə xpâ, æ-mæ-ɛâ=si.  
visitors one.day=DEF restrain<sub>1</sub> PST:up-NEG-go<sub>2</sub>=IFR  
‘The visitors held themselves in, and did not go up for the whole day.’

5.4 Summary of motion verb uses

Table 13 summarizes the uses of basic motion verbs in both Khroskyabs varieties.

Table 13. Motion verb uses in Khroskyabs

Verbs	Gloss	Deixis	Orientation
vâ (Siyuewu), vâ/vji (Wobzi)	to come	towards center	
(rə-)tô	to come	towards center	
ɛəd (only in Siyuewu)	to go	away from center	Source-oriented
(rə-)vâ	to go	away from center	Goal-oriented

5.5 Conveyance verbs

There is significant symmetry between conveyance verbs and basic motion verbs in Khroskyabs. The conveyance verbs are mostly cognates to their counterparts, and show consistent stem alternating patterns.

In Siyuewu, like its motion verbs, there are conveyance verbs that are orientationally unmarked, and those that are orientationally explicit. The o-u ones are vâd ‘to bring’ and zâm ‘to take’, and the o-e ones are (rə-)thâd ‘to bring’ and (rə-)vâd ‘to take’. The form vâd is undoubtedly related to the motion verb form vâ, which, symmetrically, has a cislocative version vâ ‘to come’ and a translocative version (rə-)vâ ‘to go’, cf. Japhug (Rgyalrong) yi ‘to come’ vs. yut ‘to bring’. The verb thâd ‘to bring’ is related to (rə-)tô ‘to come’, whose aspirated initial is comparable to the Stem 2 verb (rə-)thód ‘come<sub>2</sub>’. The form zâm is cognate to Japhug tsum ‘to take’.

No o-u conveyance verb is attested in Wobzi. Its o-e versions correspond to the Siyuewu o-e conveyance verbs.

The conveyance verbs in Khroskyabs are summarized in Table 14.

Table 14. Conveyance verbs in Khroskyabs

Siyuewu	Wobzi	Gloss	Type
<i>væd</i>		to bring	O-U
<i>(rə-)<sup>t</sup>hæd</i>	<i>(rə-)<sup>t</sup>hæ</i>	to bring	O-E
<i>zəm</i>		to take	O-U
<i>(rə-)<sup>v</sup>æd</i>	<i>(rə-)<sup>v</sup>æ</i>	to take	O-E

The stem alternation patterns of conveyance verbs are similar to those of motion verbs as well. The O-E verbs, like their corresponding motion verbs, are three-stemmed, and Stem 1 and Stem 2 of *(rə-)<sup>t</sup>hæ(d)* ‘to bring’ are manifestly cognates, with its Stem 3 suppletive. This suppletive Stem 3, *væ(d)* is on the other hand genetically related to Stem 1 of *(rə-)<sup>v</sup>æd* ‘to take’, whose Stem 2 and Stem 3, *(rə-)<sup>z</sup>əm/(rə-)<sup>z</sup>óm*, are related to the O-U “take” verb. The patterns are illustrated in Table 15.

Table 15. Stem alternation of conveyance verbs

Siyuewu			Wobzi			Gloss
Stem 1	Stem 2	Stem 3	Stem 1	Stem 2	Stem 3	
<i>væd</i>	<i>vád</i>					to bring
<i>zəm</i>	<i>zóm</i>					to take
<i><sup>t</sup>hæd</i>	<i><sup>t</sup>húd</i>	<i>(râ-)<sup>v</sup>æd</i>	<i><sup>t</sup>hæ</i>	<i><sup>t</sup>hây</i>	<i>(r-â-)<sup>v</sup>æ</i>	to bring
<i>(rə-)<sup>v</sup>æd</i>	<i>(rə-)<sup>z</sup>óm</i>	<i>(râ-)<sup>z</sup>əm</i>	<i>(rə-)<sup>v</sup>æ</i>	<i>(rə-)<sup>z</sup>əm</i>	<i>(r-â-)<sup>z</sup>əm</i>	to take

As far as deictic center is concerned, the conveyance verbs behave exactly like their motion verb counterparts. The O-U *væd* ‘to bring’ and *zəm* ‘to take’ in Siyuewu patterns with *vâ* ‘to come’ and *æéd* ‘to go’. The verb *væd* ‘to take’ denotes conveyance toward the deictic center and *æéd* away from the deictic center, as shown in (27).

## (27) Siyuewu

- a. *æ̌cə, ťæ̌r zám=pa rə-ŋó.*  
 CONJ all take<sub>2</sub>=NMLZ NPST-be<sub>1</sub>  
 ‘Then, he took them all away.’
- b. *æťâ=yu ŋəŋyâjə, gelerê=jə stæ̌klavgôn nə-c<sup>h</sup>î-j=ræ=jə*  
 DEM=LOC CONJ gelerê=GEN PN PST-abandon<sub>2</sub>-1PL=say=GEN  
*ťc<sup>h</sup>á=tə vád.*  
 message=DEF bring<sub>2</sub>  
 ‘What’s more, the news of *stæ̌klavgôn* of *gelerê* (house name) being killed  
 has been brought to us.’

Examples of the O-E conveyance verbs are illustrated in (28).

(28) a. Siyuewu

*æ̃æ̃væ̃ zỗs semtæ̃én martsâ=jə ru-rŋá*  
 CONJ fowl creature unsurprisingly=TOP PST.INV-hunt<sub>2</sub>  
*ru-t<sup>h</sup>ûd=tæ̃æ̃væ̃, zæ̃éndzi=jə ɣâmɣar=ne*  
 PST.INV:neutral-bring<sub>2</sub>=CONJ PN=GEN courtyard=LOC  
*la-zám rə-ŋóz.*

PST:upstream-take<sub>2</sub> NPST-be<sub>1</sub>

'As expected, they brought fowl and livestock and took them to zæ̃éndzi's courtyard.'

b. Wobzi

*mbrəymú=tə vdât=gə=yə r-u-zám rə-ŋæ̃.*  
 'Brug.mo=DEF devil=CL=ERG PST:neutral-INV-take<sub>2</sub> NPST-be<sub>1</sub>

'A devil took 'Brug.mo away.'

c. Wobzi

*sprəkâ=ji âma=ji=sce əŋó k-u-t<sup>h</sup>âɣ ɛə.*  
 tulku=GEN mother=PL=COM together PST:upstream-INV-bring<sub>2</sub> CONJ  
 'The tulku brought his parents here.'

## 6. Cross-Rgyalrongic comparison

In this section, I shall compare the Khroskyabs motion verbs with those in other Rgyalrongic languages.

### 6.1 Forms of motion verbs

Generally speaking, in Rgyalrongic languages other than Khroskyabs, the translocative verb(s) should present at least one stem that is cognate to Khroskyabs *æ̃é(d)*, and in most cases the cislocative one(s) should have at least one stem cognate to Khroskyabs *vâ* or the Wobzi specific *vjî*. In Table 16, five other Rgyalrongic languages from different branches are included, illustrating their motion verb stems which are cognate to one of the Khroskyabs stems (I list the forms regardless of stem alternation). The Japhug data are from Jacques (2015)'s dictionary, the Bragbar Situ data from Zhang (2016: 156–157), the Zbu data from Sun (2004: 274–275), the Khang.gsar data from Jacques et al. (2017) and their unpublished database, and the 'Jorogs data from Yin (2007).

The translocative verbs, Japhug *ɛɛ*, Bragbar Situ *tæ̃hē*, Zbu *xwē* and Khang.gsar *ɛə*, are related to Khroskyabs *æ̃é(d)*. Although the Zbu form seems different, but the sound change *ɛ- > x-* is quite common in Rgyalrongic and the surrounding



Amdo Tibetan dialects. The cislocative verb stems *yi* in Japhug, *vá* in Bragbar Situ and *vā* in Zbu are related to Khroskyabs *vâ*, while *βzé* in Bragbar Situ is cognate to Khroskyabs *vji*. Another cislocative stem in Zbu, *tû*, is comparable to *(rə- )tô* in Khroskyabs. 'Jorogs, as a non-core Khroskyabs dialect, presents *ɛet*<sup>55</sup> 'to go' cognate to Khroskyabs *ɛɛ(d)*, and *(o- )vi*<sup>55</sup> cognate to Khroskyabs *(rə- )vâ*, it also exhibits the o-u cislocative verb *vi*<sup>53</sup> (Khroskyabs *vâ*), and the o-e one *t<sup>ho</sup>o*<sup>53</sup> (Khroskyabs *(rə- )tô*).

Table 16. Motion verb cognates in Rgyalrongic

Language	Branch	Trans- locative I	Trans- locative II	Cis- locative I	Cis- locative II	Cis- locative III	Cis- locative IV
Japhug	Rgyalrong	ɛe		yi			
Bragbar Situ	Rgyalrong	tɛ <sup>hé</sup>		vá	βzé		
Zbu	Rgyalrong	xwē		vā		tû	
Khang.gsar	Horpa	ɛə					k̥de
'Jorogs	Khroskyabs	ɛet <sup>55</sup>	(o- )vi <sup>55</sup>	vi <sup>53</sup>		t <sup>ho</sup> o <sup>53</sup>	
Siyuewu	Khroskyabs	ɛɛd	(rə- )vâ	vâ		(rə- )tô	
Wobzi	Khroskyabs	ɛɛ	(rə- )vâ	vâ	vji	(rə- )tô	

No matter how varied the motion verb forms are, I know of no Rgyalrongic language, apart from Khroskyabs, that has a cognate of *vâ* as a translocative verb.

6.2 Stem alternation

Motion verbs in most Rgyalrongic languages are suppletive to a certain extent.

In Rgyalrong languages, verb stems are usually numbered from 1 to 3, and in some languages, additional stems are named according to their functions. The functional distribution of the stems may vary from language to language, the general pattern being Stem 1 as the base used in cases not denoted by Stem 2 or Stem 3, Stem 2 in past situations, and Stem 3 in non-past and irrealis situations. In most Rgyalrong languages, Stem 3 is only available to transitive verbs in the singular. Like Khroskyabs, not all verbs in Rgyalrong have all the three stems, some verbs may have only two.

Japhug presents simple alternating patterns of motion verbs, as shown in Table 17. The cislocative verb exhibits ablaut from *-i* to *-e*, while the translocative verb is suppletive.

Table 17. Japhug motion verb stems

Stem 1	Stem 2	Gloss
<i>yi</i>	<i>ye</i>	to come
<i>εe</i>	<i>ari</i>	to go

The Bragbar Situ case is more complex. The cislocative Stem 1 *βzé* ‘to come’ is suppletive with mutually related Stem 2 and Stem 3, *vá* and *ví*, additionally, it presents a toneless inferential stem *βze*. Bragbar Situ exhibits two translocative verbs, the regular *ka-té<sup>h</sup>é*, and the highly suppletive *ka-t<sup>h</sup>ár* with various suppletive stems that are orientationally driven: *t<sup>h</sup>é* ‘to go upwards’, *jé* ‘to go downwards’, *ηgé* ‘to go upstream’ and *ndá* ‘to go downstream’, as shown in Table 18.

Table 18. Bragbar Situ motion verb stems

Citation form	Stem 1	Stem 2	Stem 2’	Inferential	Gloss
<i>ka-βzé</i>	<i>βzé</i>	<i>vá</i>	<i>ví</i>	<i>βze</i>	to come
<i>ka-té<sup>h</sup>é</i>	<i>té<sup>h</sup>é</i>	<i>té<sup>h</sup>é</i>		<i>té<sup>h</sup>é</i>	to go
<i>ka-t<sup>h</sup>ár</i>	<i>t<sup>h</sup>é</i> (upwards) <i>jé</i> (downwards) <i>ηgé</i> (upstream) <i>ndá</i> (downstream)	<i>t<sup>h</sup>ár</i>			to go

The Zbu system is the most comparable to Khroskyabs, with O-U/O-E motion verbs, illustrated in Table 19. The O-U forms show perfect correspondence to the Khroskyabs case: *vā/vī* vs *vâ/vá*, and *xwē/xwāt* vs *εā́d/εād*. The Zbu cislocative *tû* ‘to come’ has additionally an imperative stem *tō* and a progressive stem *vā* related to the O-U counterpart, *vā*; the Zbu translocative *rî* ‘to go’ has a genetically related Stem 2 *rāt* and a suppletive Stem 3 *xwē*, which is related to the O-U counterpart, *xwē*.

Zbu and Khroskyabs exhibit both the cislocative verb *tV* as O-E Stem 1. Another parallelism between the two is that the original O-U stems became non-base (or non-Stem 1) stems in O-E patterns: in Zbu, *vā* became the imperative stem, and *xwē* the imperative/progressive stem, and in Khroskyabs, *vâ* and *εā́d* both became Stem 3.

Table 19. Zbu motion verb stems

Stem 1	Stem 2	Progressive	Imperative	Orientation	Gloss
<i>vā</i>	<i>vī</i>			unmarked	to come
<i>xwē</i>	<i>xwāt</i>			unmarked	to go
<i>tû</i>	<i>vī</i>	<i>tō</i>	<i>vā</i>	explicit	to come
<i>rî</i>	<i>rāt</i>		<i>xwē</i>	explicit	to go

## 7. Historical development of Khroskyabs motion verb stem alternation

In this section, I shall present hypotheses regarding the evolution of the basic motion verbs in Khroskyabs. To start with, I present in § 7.1 the origin of the O-E verb  $(rə-)\dot{t}ô$  ‘to come’, emphasizing its relation with an orientationally unmarked non-motion verb  $\dot{t}ô$  ‘to become’. Then in § 7.2, I hypothesize that O-U/O-E pairs existed during an earlier stage of the language. I shall then describe the O-U/O-E pairs according to their orientational focus, Goal-oriented or Source-oriented. § 7.2.1 and § 7.2.2 present detailed analyses of the verbs in question. § 7.2.3 provides typological evidence for the semantic shifts. In § 7.3, I shall treat the merger of stem alternation patterns of motion verbs in Khroskyabs.

In the analysis, I shall use the radical symbol ( $\sqrt{\phantom{x}}$ ) to mark the verb root of each motion verb to unify the O-U and O-E variants:  $\sqrt{\dot{t}ô}$  for  $\dot{t}ô$  and  $(rə-)\dot{t}ô$ ,  $\sqrt{v\hat{a}}$  for  $v\hat{a}$  and  $(rə-)v\hat{a}$ , and  $\sqrt{\epsilon\acute{a}d}$  for  $\epsilon\acute{a}d$  and  $(rə-)\epsilon\acute{a}d$ .

### 7.1 Origin of $(rə-)\dot{t}ô$ ‘to come’

Before analyzing the evolutionary pathways of the motion verbs, it is necessary to discuss the origin of the verb  $(rə-)\dot{t}ô$  ‘to come’. This verb has an etymologically related O-U verb:  $\dot{t}ô$  ‘to become’, of which Stem 2 is  $t^hó(d)$ . As  $\dot{t}ô$  ‘to become’,  $(rə-)\dot{t}ô$  ‘to appear’ and  $(rə-)\dot{t}ô$  ‘to come’ are morphologically identical, it is safe to assume that they are cognates to each other, and that their differences are due to semantic changes over time. Examples from Wobzi and Siyuewu are illustrated in (29).

(29) a. Wobzi

*n-u-jnzæv=gæresita,    ηgəjji, ætâ=joni    jɔnsâ ηgəjji, semtææn=joni rây*  
PST-INV-knead<sub>2</sub>=CONJ CONJ    DEM=like again CONJ    creature=like one  
*t^hó=si.*

become<sub>2</sub>=IFR

‘She kneaded (the mud), then it became a creature.’

b. Siyuewu

*ægə=ræ    εə    câmpnəd ræxlám=t^hə næ-nstí...    kə-nsti-æη=næ*  
there=say CONJ like.this chest=LOC    PST-place<sub>2</sub> PST-place<sub>2</sub>-1SG=but  
*câmpnəd o-sɲô-η=εə,    æεə ræxlám fqræɣ    dzâm    t^hód.*  
like.this PST-do.so<sub>2</sub>-1SG=CONJ CONJ chest    pattern IDEO:shiny become<sub>2</sub>  
‘Then, I put it on my chest, so I did, and it became something shiny.’

On the other hand, the O-E verb  $(rə-)\dot{t}ô$  can be interpreted as ‘to appear, to turn up’. As in the examples in (30), the best translation of  $(rə-)\dot{t}ô$  is not ‘to come’, but ‘to appear’.

- (30) a. Wobzi  
*gáv=t<sup>h</sup>a jɔŋsâ vâdzu ææræær læ-t<sup>h</sup>ó=si.*  
 foot=LOC again cocoon all PST:left.bank-appear<sub>2</sub>=IFR  
 ‘Cocoons appeared all over his feet.’
- b. Siyuewu  
*ɣnâ=tâ læ-tô, gâɣɣâ ŋgotâr=gæræ ætâ=k<sup>h</sup>e*  
 sun=DEF NPST:upstream-appear<sub>1</sub> IDEO:loud sound<sub>1</sub>=CONJ DEM=DAT  
*nscâr=tâ, zjæŋ o-srî=mægo, câmpnâd jóy=tâ=yu dzé.*  
 fear<sub>1</sub>=DEF always NPST-look<sub>1</sub>=then like.this hand=DEF=LOC hold<sub>1</sub>  
 ‘When the sun comes out, (the giant yeti) is afraid of it, making loud noises, he looks at the sun and holds (girls’) hands like this.’

From a typological perspective, it is not rare that the concepts of ‘to become’, ‘to appear’, and ‘to come’ can shift from one to another; e.g. the English word *become* shares transparently with *come* the same etymon and originally meant ‘to arrive, happen, turn out, befall’ (Skeat 2005:53). In some Trans-Himalayan languages, the notion ‘to come’ is also likely to be derived from ‘to appear, to emerge’. For instance in Sema, the form *pa-re* ‘to come out’ is derived from *pa* ‘to emerge’ suffixed by a directive marker *-re* (DeLancey 1985:372). From a comparative perspective, *tô* ‘to become’ is comparable to Lahu *tɔʔ* ‘to emerge’ (Matisoff 1988:663) and probably to Written Burmese *ထွက်* *thwak* ‘to emerge, to come out’, showing that it is reconstructible into Proto-Burmo-Qiangic,<sup>3</sup> with an original meaning of ‘to emerge, to appear’.

In light of typological and comparative evidence, it is plausible to propose that the meaning ‘to appear’ was the original meaning of the stem  $\sqrt{tô}$ . The verb *tô* ‘to become’ is orientationally unmarked, it could therefore come from the meaning ‘to appear from nowhere or an unknown place’, hence the meaning ‘to appear as a different state’.

The orientationally marked (*rə-*)*tô* continues the meaning ‘to appear’, usually with a known or implied path as orientationally prefixes should be added, and ‘to appear along a known path’ derived the meaning ‘to come’. In (31), the semantic shift of  $\sqrt{tô}$  ‘to appear’ is illustrated.

- (31)  $\sqrt{tô}$  ‘to appear’  
 O-U: to appear with the Path unimplied → to become  
 O-E: to appear from a known Path → to come

3. The Burmo-Qiangic hypothesis is put forward by Jacques & Michaud (2011).

7.2 O-U/O-E verbs in the proto-language

The O-U/O-E pairs in modern Khroskyabs are rather semantically than etymologically paired: *vâ* vs *(rə-)*tô** ‘to come’, *ɛɛd* vs *(rə-)*vâ** ‘to go’. However, the case must be more etymologically transparent at an earlier stage, i.e. in Proto-Khroskyabs, or even in Proto-Rgyalrongic (as is evidenced by Zbu, a Rgyalrong language). Such pairs in this earlier stage were surely both semantically and etymologically matched. Similar to the case of *√tô* ‘to appear’, the O-U member should not imply any Path, whereas its O-E counterpart should imply one.

The verb pairs are morphologically reunited in Table 20, regardless of their modern meanings. I have also shown that the original meaning of *√tô* was ‘to appear’. In the next two sections, I shall analyze the cases of *√vâ* and *√ɛɛd*, and come to the conclusion that they were originally both neutral motion verbs, with foci on Goal-orientation and Source-orientation respectively.

Table 20. Original O-U/O-E verb pairs

O-U	O-E	Proto-gloss
<i>vâ</i>	<i>(rə-)<i>vâ</i></i>	?
<i>ɛɛd</i>	<i>(rə-)<i>ɛɛd</i></i>	?
<i>tô</i>	<i>(rə-)<i>tô</i></i>	to appear

7.2.1 *√vâ: Goal-oriented motion*

In modern Khroskyabs dialects, O-U *vâ* and O-E *(rə-)*vâ** are translated with a pair of antonyms, ‘to come’ and ‘to go’. However, their shared etymology suggests that they once have been semantically homogeneous.

In § 5.3.2, I stated that the O-E verb *(rə-)*vâ** was mainly Goal-oriented in the modern language. I therefore assume that Goal-oriented motion should be the original use of *√vâ* in the proto-language, which cannot be simply translated as ‘to go’ or ‘to come’. The following scenario can be postulated:

1. Orientational prefixes express the Path. The presence of an orientational prefix means the Path is known or can be inferred by the speaker. The starting point of such a motion event can be either the location of the speaker or somewhere else.
2. When there is no orientational prefix at all, i.e. Path is unexpressed, the Goal of the motion automatically shifts to the deictic center, usually the speaker or the viewpoint of the speaker.

The use of  $\sqrt{v\hat{a}}$  can be illustrated in Figure 2, in which a star is used to represent deictic center, a tear-drop shaped mark to represent a location other than a deictic center, and an arrow for the motion.

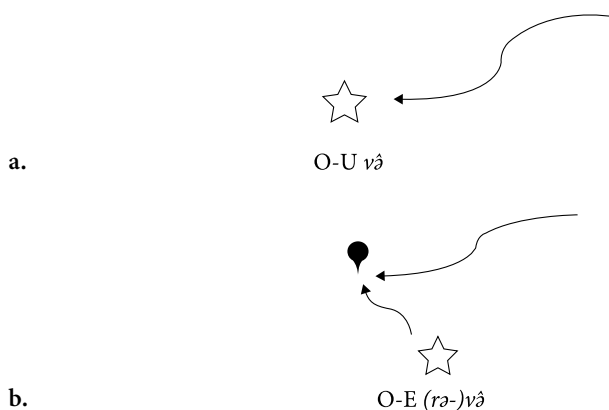


Figure 2. Illustrations of  $\sqrt{v\hat{a}}$

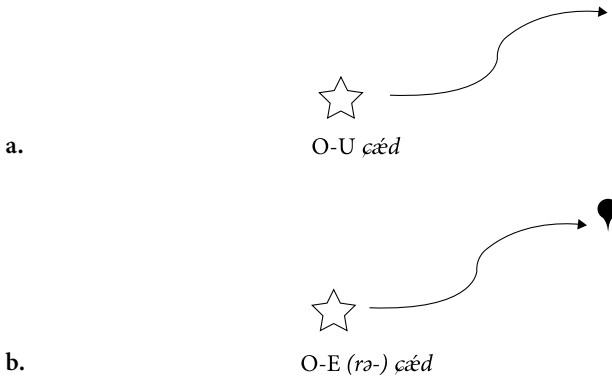
When the Goal overlaps with the deictic center, the motion in question corresponds the best to the English notion ‘to come’ or to the Chinese notion 來 *lái* ‘to come’, hence the modern cislocative interpretation.

### 7.2.2 $\sqrt{\epsilon\acute{a}d}$ : Source-oriented motion

I have shown in § 5.3.1 that O-U  $\epsilon\acute{a}d$  in Siyuewu denotes Source-oriented motion, I therefore propose that Source-orientation be the original purpose of this verb stem: in a motion event with  $\sqrt{\epsilon\acute{a}d}$ , the Figure departs from the deictic center. When an orientational prefix is present, the Path is expressed, which gives the possibility to add a Ground argument indicating the Goal; when there is no orientational prefix, the Path is either unknown or unnecessary to be expressed, which leads to the translation of ‘to go away’ or ‘to leave’. In Figure 3, the original use of  $\sqrt{\epsilon\acute{a}d}$  is illustrated.

### 7.2.3 Typological evidence

DeLancey (1980; 1985) observes that in many Tibeto-Burman languages, even though deictic motions (‘to come’ and ‘to go’) were once lexically distinguished, they tend to evolve into directive auxiliaries to specify the deixis of a neutral motion verb. In Sema, the cislocative verb *gwo-re* ‘to come’ is the translocative verb *gwo* ‘to go’ marked with a directive suffix (DeLancey 1985: 372); in Jinghpo, the two basic deictic motions are both denoted by the same verb stem with different directive markers (*r-* ‘proximal’, *s-* ‘distal’): *sa wa r-* ‘to come’ and *sa wa s-* ‘to go’ (DeLancey



**Figure 3.** Illustrations of  $\sqrt{cǎd}$

1980: 228); the same phenomenon is found in Almora languages, as in *pi-di* (neutral motion with *-di* ‘distal’) ‘to go’ and *pi-ra* (neutral motion with *-ra* ‘proximal’) ‘to come’ (DeLancey 1980: 237–238). The appendix of DeLancey (1980: 260–274) shows that the same motion verb root can derive translocative or cislocative meanings in different languages of the same branch.

As for the case of Khroskyabs,  $\sqrt{v\hat{a}}$  (Goal-oriented motion) and  $\sqrt{cǎd}$  (Source-oriented motion) are comparable to Delancey’s analyses. Orientational prefixes are equivalent to the directive markers that Delancey cited.

The form  $\sqrt{v\hat{a}}$  (Goal-oriented motion), when orientationally unmarked, denotes a motion toward the deictic center, which later became a cislocative motion and raised a semantic overlap with (*rǎ-*)*tô* ‘to come’; when orientationally explicit, its orientational prefix triggers the semantic reinterpretation towards ‘to go’.

The form  $\sqrt{cǎd}$  (Source-oriented motion), when orientationally unmarked, denotes a motion away from the deictic center, hence the meaning ‘to go, to leave’; and when orientationally explicit, its argument structure allows a Goal argument, creating a semantic overlap with the O-E verb (*rǎ-*)*v\hat{a}* ‘to go’.

The resulting semantic overlaps are most probably responsible for pattern merging observed in the Khroskyabs dialects, which will be discussed in the next section.

### 7.3 Emergence of new stem alternation patterns

This section focuses on the emergence of new stem alternation patterns of motion verbs in modern Khroskyabs varieties.

7.3.1 Pattern merging

The previous subsections dealt with the original functions of o-u and o-e pairs derived from  $\sqrt{t\hat{o}}$ ,  $\sqrt{v\hat{a}}$ , and  $\sqrt{\epsilon\acute{e}d}$ , which must be both morphologically and semantically paired in their earliest stage. I came to the conclusion that  $\sqrt{t\hat{o}}$  originally meant ‘to appear’,  $\sqrt{v\hat{a}}$  denoted Goal-oriented motions and  $\sqrt{\epsilon\acute{e}d}$  Source-oriented ones. With all these in mind, it is now possible to replace the question marks earlier in Table 20 with concrete proto-glosses, as shown in Table 21.

Table 21. Original o-u/o-e verb pairs with full proto-glosses

Unmarked	Explicit	Proto-gloss
$v\hat{a}$	$(r\grave{a}-)v\hat{a}$	Goal-oriented motion
$\epsilon\acute{e}d$	$(r\grave{a}-)\epsilon\acute{e}d$	Source-oriented motion
$t\hat{o}$	$(r\grave{a}-)t\hat{o}$	to appear

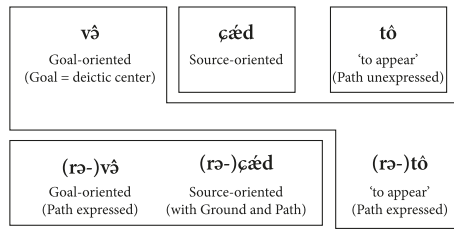
In later stages, the verb forms in question underwent semantic shifts and started to be remapped. The verb  $(r\grave{a}-)t\hat{o}$ , denoting the appearance of something with a known Source, gradually came to merge semantically with o-u  $v\hat{a}$  (whose Goal is the deictic center), meaning ‘to appear from a known Path’. The closest translation of the resulting meaning in English is ‘to come’. Therefore, while preserving its being the first stem of an o-u cislocative verb,  $v\hat{a}$  joined its new o-e counterpart as Stem 3, and was later replaced by  $v\hat{j}i$  everywhere in Wobzi. In Table 19 in § 6.2, I showed that Zbu had undergone a similar process of pattern merging, with a  $tV$  verb merging with a  $vV$  verb. This morphological resemblance between Khroskyabs and Zbu is hardly a coincidence. The merger of the ancestors of  $(r\grave{a}-)t\hat{o}$  and  $v\hat{a}$  must have already happened before the split between the Khroskyabs and Rgyalrong languages.

That  $(r\grave{a}-)v\hat{a}$  and  $(r\grave{a}-)\epsilon\acute{e}d$  ended up stems of a single verb ( $(r\grave{a}-)v\hat{a}$  ‘to go’), on the other hand, is rather recent. It is only observed in Khroskyabs dialects. The verb  $(r\grave{a}-)\epsilon\acute{e}d$ , with the possibility for a Goal argument, raised ambiguity between Source-oriented and Goal-oriented. Therefore, the two verbs became both semantically similar (both are able to denote Goal-oriented motion) as well as syntactically similar (both allow a Ground argument); they became stems of the modern verb  $(r\grave{a}-)v\hat{a}$  ‘to go’, with  $(r\grave{a}-)v\hat{a}$  as Stem 1, and the stems of  $(r\grave{a}-)\epsilon\acute{e}d$  as the rest of the stems.

The pattern merging in Khroskyabs shows a striking similarity to that in Zbu (see Table 19), where the o-u verbs, too, have only two stems, while the o-e verbs are suppletive with additional stems. The phenomenon may have already occurred in Proto-Rgyalrongic.

In Figure 4, pattern merging of motion verbs in Khroskyabs is illustrated.





**Figure 4.** Pattern merging of motion verbs

To sum up, the stem alternation patterns of cislocative verbs and translocative verbs did not merge in the same phase. Cislocative verbs merged in Proto-Rgyalrongic, as evidenced by Zbu; translocative verbs merged during the Proto-Khroskyabs stage, as no other Rgyalrongic languages exhibit this kind of merger. The two stages of pattern merging are shown in (32).

- (32) 1. **Stage I: (Late) Proto-Rgyalrongic**
- a.  $(rə-)tô$  'to appear (with known Source)' → CISLOCATIVE VERB
  - b.  $vâ$  (Goal-oriented motion (Goal = deictic center)) → CISLOCATIVE VERB
  - c. Merger of  $(rə-)tô$  and  $vâ$
2. **Stage II: Proto-Khroskyabs**
- a.  $(rə-)ɕæd$  (Source-oriented motion (with known Path)): ambiguity between Source-oriented and Goal-oriented
  - b. Merger of  $(rə-)vâ$  (Goal-oriented motion) and  $(rə-)ɕæd$  (Goal-oriented motion)
  - c. Reinterpretation as a translocative verb

### 7.3.2 Which form for which stem?

By observing the new stem alternation patterns, it is possible to find some clues on the form selection for each stem. In this section, I shall present a preliminary hypothesis based on current observations on the issue, and more data are needed to reveal the whole picture.

After pattern merging, the O-U/O-E pairs in the modern language are semantically paired, based on the translocative/cislocative contrast. In the new stem alternation patterns, it seems that there is a constraint that the Stem 1 of one verb cannot be genetically related to the other of the same concept. That is to say, the O-U verb must have a different Stem 1 from its O-E counterpart: for the cislocative motion, the Stem 1 of the O-U verb is  $vâ$ , while that of the O-E verb is  $(rə-)tô$ ; for the translocative motion, the Stem 1 of the O-U verb is  $ɕæd$ , while that of the O-E verb is  $(rə-)vâ$ . See the Siyuewu case in Table 22.

Table 22. Stem 1 of the motion verbs

Motion	O-U		O-E
to come	<i>və̌</i>	≠	<i>(rə- )tô</i>
to go	<i>ɛə́d</i>	≠	<i>(rə- )və̌</i>

Based on this observation, the motivation of Stem 1 choice can be postulated as follows. Given that the O-U forms had no choice but *və̌* and *ɛə́d* as Stem 1, the O-E counterparts promoted the unrelated verb stems to occupy the place of Stem 1, therefore, *(rə- )tô* and *(rə- )və̌* are chosen in contrast of *və̌* and *ɛə́d*.

Another observation concerns the Stem 2 slots. Except the O-U verb form *və́*, the cognate of *və̌* never appears as Stem 2. To account for this phenomenon, I believe that the tone alternation of the Stem 2 form, *və́*, in Siyuewu is due to analogy (given that tone alternation is by far the most common way of stem alternation, see § 3.2.3), and that the root  $\sqrt{və̌}$  was originally defective, it lacked a substantial Stem 2 form as in Wobzi (see Table 11). Similarly,  $\sqrt{tô}$  ‘to appear’ was probably also defective, rarely used in irrealis (especially imperative) contexts and, as a result,  $\sqrt{və̌}$  came in to serve as the irrealis form of *(rə- )tô*.

Therefore, *(rə- )tô* has its own Stem 2 *(rə- )tʰód*, whereas *(rə- )və̌* has to depend on the Stem 2 of *(rə- )ɛə́d*, due to its lack of a Stem 2.

See Table 23 for the new paired motion verb stems in the Siyuewu variety.

Table 23. Newly paired motion verb stems (Siyuewu)

Orientation	Explicit			Unmarked	
Stem	Stem 1	Stem 2	Stem 3	Stem 1	Stem 2
Cislocative	<i>(rə- )tô</i>	<i>(rə- )tʰód</i>	<i>(râ- )və̌</i>	<i>və̌</i>	<i>və́</i>
Translocative	<i>(rə- )və̌</i>	<i>(rə- )ɛə́d</i>	<i>(râ- )ɛə́d</i>	<i>ɛə́d</i>	<i>ɛə́d</i>

8. Discussion and conclusion

This paper gives a thorough description of motion verbs in two Khroskyabs varieties, Siyuewu and Wobzi, and discusses the evolution of stem alternation of these motion verbs. Khroskyabs is the only language in Rgyalrongic that employs the same stem  $\sqrt{və̌}$  for cislocative and translocative motions, which turns out to be the point of breaking through into the history of these verbs.

Strong suppletion with genetically unrelated stems is rare in Khroskyabs. Motion verbs and conveyance verbs (derived from motion verbs) are nearly the

only instances of such suppletion. While there is no surprise that motion verbs exhibit suppletive stems, the Khroskyabs case of suppletion deserves the linguist’s attention.

Generally speaking, the emergence of suppletion can be due to sound change, analogy, coalescence, lexical merger, and incursion (Juge 2000; 2013). Bybee (1985: 209) and Veselinova (2006: 98) also emphasize frequency, stating that suppletion should be created among words frequently used.

The Khroskyabs case involves coalescence and lexical merger of different verbs, which are triggered by independent semantic change of stems with and without orientational prefixes. Orientational prefixes add the value of Path to the verb stem, which can lead to different possibilities of Ground and Motion. The pair *vâ* and (*rə-*)*vâ* were once the same in that they both had been Goal-oriented verbs, but their meanings finally split in favor of their Goals, and ended up belonging to different verbs. In many if not most other Rgyalrongic languages, the cognate of  $\sqrt{vâ}$  are invariably assigned the cislocative meaning, making the Khroskyabs case look like a shift from ‘coming’ to ‘going’ at first sight. This study shows such a stark change never happened to Khroskyabs, and the original meaning of  $\sqrt{vâ}$  cannot be interpreted simply as cislocative or translocative, but a more neutral motion towards some Goal. Proto-Khroskyabs lacked motion verbs meaning ‘to come’ and ‘to go’, instead, there were concepts like ‘appearing’, ‘moving to somewhere’ and ‘moving from somewhere’, etc. It is however impossible to evaluate the role of frequency in the Khroskyabs case, because there is no historical data available.

The study of Khroskyabs motion verbs demonstrates the creation of a recent suppletion, and how the language went on to develop after it.

Acknowledgements

This research was supported by the DFG research fellowship grant 261553824 and the ERC Starting Grant 715618 CALC.

I would like to thank Shuya Zhang, Nathan Hill, my Siyuewu teacher G.yu Lha, my Wobzi teacher Rig’dus Lha.mo, and the two anonymous reviewers for their useful suggestions and corrections.

Abbreviations

A	Agentive argument	CONJ	conjunction
ALL	allative	DAT	dative
ASSRT	assertive	DEF	definite
CLF	classifier	DEM	demonstrative

ERG	ergative	NPST	non-past
EXCL	exclusive	O-E	orientationally explicit
GEN	genitive	O-U	orientationally unmarked
IDEO	ideophone	PART	participle
IFR	inferential	PL	plural
IMP	imperative	PN	personal name (without clear etymology)
INCHO	inchoative	PROG	progressive
INCL	inclusive	PST	past
INV	inverse	Q	interrogative
IPFV	imperfective	S	Subjective argument
IRR	irrealis	SBSQNT	subsequent
LOC	locative	SUPERL	superlative
NEG	negative	TAM	tense-aspect-modality
NMLZ	nominalizer	TOP	topicalizer
NPP	non-past participle		

References

Bybee, Joan L. 1985. *Morphology: A study of the relation between meaning and form*. Amsterdam: John Benjamins. <https://doi.org/10.1075/tsl.9>

DeLancey, Scott. 1980. *Deictic categories in the Tibeto-Burman verb*. Bloomington: Indiana University. (Doctoral dissertation.)

DeLancey, Scott. 1985. The analysis-synthesis-lexis cycle in Tibeto-Burman: A case study in motivated change. In Haiman, John (ed.), *Iconicity in syntax: Proceedings of a Symposium on Iconicity in Syntax, Stanford, 24–26 June 1983* (Typological Studies in Language 6), 367–389. Amsterdam: John Benjamins. <https://doi.org/10.1075/tsl.6.18del>

Huang, Bufan. 2007. *Lawurongyu yanjiu* [A study of the Lavrung language]. Beijing: Nationalities Press.

Jacques, Guillaume. 2004. *Phonologie et morphologie du Japhug (rGyalrong)*. Paris: Université Paris VII – Denis Diderot. (Doctoral dissertation.)

Jacques, Guillaume (ed.). 2015. *Dictionnaire Japhug-Chinois-Français* (Version 1.0). Paris: Projet HimalCo.

Jacques, Guillaume & Lai, Yunfan & Antonov, Anton & Nima, Lobsang. 2017. Stau (Ergong, Horpa). In Thurgood, Graham & LaPolla, Randy J. (eds.), *The Sino-Tibetan languages*, 597–613. 2nd edn. New York: Routledge.

Jacques, Guillaume & Michaud, Alexis. 2011. Approaching the historical phonology of three highly eroded Sino-Tibetan languages: Naxi, Na and Laze. *Diachronica* 28(4). 468–498. <https://doi.org/10.1075/dia.28.4.o2jac>

Juge, Matthew L. 2000. On the rise of suppletion in verbal paradigms. In Chang, Steve S. & Liaw, Lily & Ruppenhofer, Josef (eds.), *Proceedings of the 25th Annual Meeting of the Berkeley Linguistics Society: General session and parasession on loan word phenomena*, 183–194. Berkeley: Berkeley Linguistics Society.

- Juge, Matthew L. 2013. Analogy as a source of suppletion. In Kikusawa, Ritsuko & Reid, Lawrence A. (eds.), *Historical linguistics 2011: Selected papers from the 20th International Conference on Historical Linguistics, Osaka, 25–30 July 2011* (Current Issues in Linguistic Theory 326), 175–197. Amsterdam: John Benjamins. <https://doi.org/10.1075/cilt.326.14jug>
- Lai, Yunfan. 2015. The person agreement system of Wobzi Lavrung (Rgyalrongic, Tibeto-Burman). *Transactions of the Philological Society* 113(3). 271–285. <https://doi.org/10.1111/1467-968X.12051>
- Lai, Yunfan. 2017. *Grammaire du khroskyabs de Wobzi*. Paris: Université Paris 3 – Sorbonne Nouvelle. (Doctoral dissertation.)
- Lamarre, Christine. 2008. The linguistic categorization of deictic direction in Chinese – with reference to Japanese. In Xu, Dan (ed.), *Space in languages of China: Cross-linguistic, synchronic and diachronic perspectives*, 69–97. Dordrecht: Springer. [https://doi.org/10.1007/978-1-4020-8321-1\\_4](https://doi.org/10.1007/978-1-4020-8321-1_4)
- LaPolla, Randy J. 2017. An overview of Sino-Tibetan morphosyntax. In Thurgood, Graham & LaPolla, Randy J. (eds.), *The Sino-Tibetan languages*, 40–69. 2nd edn. New York: Routledge.
- Lin, You-Jing. 2002. A dimension missed: East and west in Situ rGyalrong orientation marking. *Language and Linguistics* 3(1). 27–42.
- Matisoff, James A. 1988. *The dictionary of Lahu*. Berkeley: University of California Press.
- Nakazawa, Tsuneko. 2007. A typology of the ground of deictic motion verbs as path-conflating verbs: The speaker, the addressee, and beyond. *Poznań Studies in Contemporary Linguistics* 43(2). 59–82. <https://doi.org/10.2478/v10010-007-0014-3>
- Prins, Maria Clazina. 2011. *A grammar of rGyalrong Jiāomùzú (Kyom-kyo) dialects: A web of relations*. Leiden: Leiden University. (Doctoral dissertation.)
- Skeat, Walter W. 2005. *An etymological dictionary of the English language*. New York: Dover Publications. (Reprint of the 1910 edn. by Clarendon Press.)
- Sun, Jackson T.-S. 2000a. Parallelisms in the verb morphology of Sidaba rGyalrong and Lavrung in rGyalrongic. *Language and Linguistics* 1(1). 161–190.
- Sun, Jackson T.-S. 2000b. Stem alternations in Puxi verb inflection: Toward validating the rGyalrongic subgroup in Qiangic. *Language and Linguistics* 1(2). 211–232.
- Sun, Jackson T.-S. 2004. Verb-stem variations in Showu rGyalrong. In Lin, Ying-chin & Hsu, Fang-min & Lee, Chun-chih & Sun, Jackson T.-S. & Yang, Hsiu-fang & Ho, Dah-an (eds.), *Studies on Sino-Tibetan languages: Papers in honor of Professor Hwang-cherng Gong on his seventieth birthday* (Language and Linguistics Monograph Series W4), 269–296. Taipei: Institute of Linguistics, Academia Sinica.
- Sun, Jackson T.-S. 2017. Tshobdun Rgyalrong. In Thurgood, Graham & LaPolla, Randy J. (eds.), *The Sino-Tibetan languages*, 557–571. 2nd edn. New York: Routledge.
- Talmy, Leonard. 1985. Lexicalization patterns: Semantic structure in lexical forms. In Shopen, Timothy (ed.), *Language typology and syntactic description, volume 3: Grammatical categories and the lexicon*, 57–149. Cambridge: Cambridge University Press.
- Talmy, Leonard. 1991. Path to realization: A typology of event conflation. In Sutton, Laurel A. & Johnson, Christopher & Shields, Ruth (eds.), *Proceedings of the 17th Annual Meeting of the Berkeley Linguistics Society: General session and parasession on the grammar of event structure*, 480–519. Berkeley: Berkeley Linguistics Society.
- Talmy, Leonard. 2000a. *Toward a cognitive semantics, volume 1: Concept structuring systems*. Cambridge: The MIT Press.
- Talmy, Leonard. 2000b. *Toward a cognitive semantics, volume 2: Typology and process in concept structuring*. Cambridge: The MIT Press.

- Veselinova, Ljuba N. 2006. *Suppletion in verb paradigms: Bits and pieces of the puzzle* (Typological Studies in Language 67). Amsterdam: John Benjamins. <https://doi.org/10.1075/tsl.67>
- Wilkins, David P. & Hill, Deborah. 1995. When “go” means “come”: Questioning the basicness of basic motion verbs. *Cognitive Linguistics* 6(2–3). 209–260. <https://doi.org/10.1515/cogl.1995.6.2-3.209>
- Yin, Weibin. 2007. *Yelong Lawurongyu yanjiu* [Study on the ’Jorogs Lavrung language]. Beijing: Nationalities Press.
- Zhang, Shuya. 2016. *La phonologie et la morphologie du dialecte de Brag-dbar du Rgyalrong Situ*. Paris: INALCO. (Master’s thesis.)

### *Author’s address*

Yunfan Lai  
Department of Linguistic and Cultural Evolution  
Max Planck Institute for Evolutionary Anthropology  
Deutscher Pl. 6  
04103 Leipzig  
Germany  
[khroskyabs@gmail.com](mailto:khroskyabs@gmail.com)

### **Publication history**

Date received: 27 July 2018

Date accepted: 21 December 2018