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How grammar encodes space in Cogtse Rgyalrong

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ABSTRACT

This paper presents the grammatical systems that are used for the concepts of space in the Cogtse dialect of Rgyalrong. Cogtse (a.k.a. Zhuokeji) is noted for the way it lexicalizes a rich set of orientations (up-down, east-west, upstream-downstream) in terms of nominals, pronominals, verbs, and adverbials. Together with locative postpositions and the relator-noun construction, they constitute three primary kinds of grammatical devices to incorporate notions of space. Despite the fact that Cogtse lexicalizes the intrinsic, relative, and absolute (based on the six orientations) frames of reference; no occurrence of 'left' and 'right' has been observed in the discourse data, spontaneous or preplanned. Speakers clearly prefer the absolute references that take the above-mentioned orientations as the basis. Finally, this paper illustrates from two socio-cultural perspectives how entrenched the orientation system is in Rgyalrong. The selection of semantically-dependent perfectivizer reveals the way Rgyalrong speakers conceptualize events in orientational terms; while the seating arrangement in the Rgyalrong house demonstrates that in assigning orientation terms to refer to various indoor spaces, cultural conceptions override natural geographical settings.

KEYWORDS

Rgyalrong, Cogtse, space, orientation, topological, motion, frames of reference

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1 Introduction

This paper presents the grammatical systems that are used for the concepts of space in the Cogtse dialect of Rgyalrong. After a brief introduction to the language and data (Sections 2 and 3), the paper sketches the primary grammatical devices that are used to encode space (Section 4). Section 5 explores strategies of denoting specific topological descriptions; while how motion events are described in this language is discussed in Section 6. Section 7 is dedicated to the ways speakers employ in spatial description an intrinsic frame of reference, a relative frame of reference, and an absolute frame of reference that is based on the riverine, solar, and vertical axes. In Section 8, the role that the language of space plays in Rgyalrong cultural conceptualizations are discussed from two socio-cultural perspectives. The results are summarized in Section 9.

2 Rgyalrong and its Cogtse dialect

The Rgyalrong group is consisted of four closely related but mutually unintelligible languages: Situ (四土), Japhug (茶堡), Tshobdun (草登), and Showu (used primarily in Rjong'bur 日部) (Jacques 2014; Sun 2015: 731). These languages form a subgroup of the Rgyalrongic group, which comprises the subgroups of Rgyalrong, Khroskyabs (Jacques et al. 2017), and Horpa (Sun 2000a; Sun 2015; Sun 2000b). Figure 1 illustrates the geographical distribution of these languages near and within 'Barkhams (马尔康) County in Rngaba (阿坝) Tibetan and Qiang Autonomous Prefecture, Sìchuān, China. Some other Rgyalrongic speech forms that have been investigated by linguists are not included in this map. These speech forms are used in neighboring areas in both Rngaba Prefecture and Dkarmjos (甘孜) Tibetan Autonomous Prefecture.

The speech form examined for the present study is the Cogtse (a.k.a Zhuokeji 卓克基) dialect of Situ Rgyalrong, used primarily in Cogtse Township, which is approximately 8 kilometers east to 'Barkhams. The consultants I have worked with are from the First and Second Sections of Xīsuǒ (西索) Hemlet.

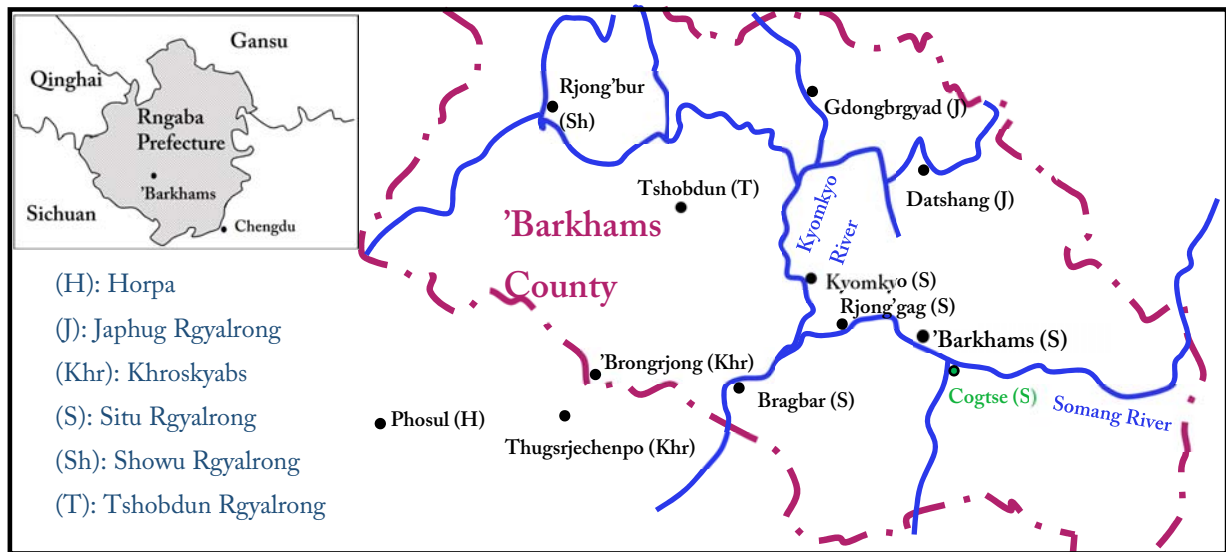


Figure 1. The distribution of the Rgyalrong (four languages), Horpa and Khroskyabs groups within and near 'Barkhams County in Rngaba Prefecture, Sichuan

3 The data

The data collected for the present study include spatial description elicited using “Topological relations picture series” (Bowerman and Pederson 1992), “The Man and Tree Space Game” (Levinson and Wilkins 2006: 11-13), spontaneous discourse data, mythological narratives, pre-planned conversations of various designated topics, as well as a small amount of elicited paradigms and sentences.

Dongfang Yang, Rjamts^{ho} əlrjeltʰû, and Atfâm Kərzi generously provided the spontaneous discourse data and narratives. The elicited spatial description and pre-planned conversations are contributions made by Dongfang Yang (63-years old in 2017), who, with his expertise in Rgyalrong, has been my language teacher since 1999.

4 The grammatical devices for spatial relationships in Cogtse

This section discusses the three types of grammatical markers and constructions that figure prominently in spatial description in Cogtse Rgyalrong (henceforth “Cogtse”). These grammatical devices may work independently or collaboratively to achieve the description of topological relations and motion events. The following subsections will lay out their basic forms and functions. Section 4.1 is dedicated to the orientation system, which, as Sun (2003: 496) observes, is typical of Rgyalrongic grammar. Section 4.2 examines two locative postpositions: =s and =j. Finally, in Section 4.3 the structuring of the relator-noun construction will be profiled.

4.1 The orientation subsystems and morphemes

The orientation system in Rgyalrong consists of the vertical, solar, and riverine subsystems, each of which comprises two conceptually opposing terms (Lin 2002; Sun 2000b: 180; Sun 2003: 496), as illustrated in Table 1.

Vertical		Solar		Riverine	
up	down	east	west	upstream	downstream

Table 1. Rgyalrong orientation systems

In Cogtse, as in the other Rgyalrongic languages (Jacques 2008; Lin 2011; Sun 2000a; Sun 2000b; Sun 2003), the orientation oppositions materialize in distinct forms, which include nominals, verbs, verbal prefixes, as well as adverbials, as shown in Table 2.¹

	Solar		Riverine		Vertical	
	east	west	upstream	downstream	up	down
Nominal 1	<i>akû</i> 'east direction'	<i>adi</i> 'west direction'	<i>atô</i> 'upstream direction'	<i>aré</i> 'downstream direction'	<i>atâ</i> 'upward direction'	<i>anâ</i> 'downward direction'
Nominal 2	<i>hakû</i> 'further east direction'	<i>hadî</i> 'further west direction'	<i>hatô</i> 'further upstream direction'	<i>harê</i> 'further downstream direction'	<i>hatâ</i> 'further upward direction'	<i>hanâ</i> 'further downward direction'
Nominal 3	<i>fakû</i> 'farthest east direction'	<i>fadi</i> 'farthest west direction'	<i>fatô</i> 'farthest upstream direction'	<i>farê</i> 'farthest downstream direction'	<i>fatâ</i> 'farthest upward direction'	<i>fanâ</i> 'farthest downward direction'
Pronominal	<i>akut</i> 'the one to the east'	<i>adit</i> 'the one to the west'	<i>atot</i> 'the one upstream'	<i>aret</i> 'the one downstream'	<i>atat</i> 'the one up there'	<i>anat</i> 'the one down there'
Verb 1 <i>kɐ-</i> (NMZL)	<i>kɐ-gô</i> 'to go eastwards'	<i>kɐ-dâ</i> 'to go westwards'	<i>kɐ-rô</i> 'to go upstream'	<i>kɐ-rə</i> 'to go downstream'	<i>kɐ-t^hô</i> 'to go upwards'	<i>kɐ-jâ</i> 'to go downwards'
Verb 2 <i>ka-</i> (NMZL)	<i>ka-got</i> 'to take sth eastwards'	<i>ka-dit</i> 'to take sth westwards'	<i>ka-rot</i> 'to take sth upstream'	<i>ka-ret</i> 'to take sth downstream'	<i>ka-t^hot</i> 'to take sth upwards'	<i>ka-jut</i> 'to take sth downwards'
Verbal Prefix	<i>ko-</i> 'eastwards'	<i>nə-</i> 'westwards'	<i>ro-</i> 'upstream'	<i>rə-</i> 'downstream'	<i>to-</i> 'upwards;'	<i>na-</i> 'downwards'
Adverbial	<i>kû</i> 'eastwards'	<i>dî</i> 'westwards'	<i>rô</i> 'upstream'	<i>rê</i> 'downstream'	<i>tô</i> 'upwards'	<i>nâ</i> 'downwards'

Table 2. Grammatical and lexical forms encoding the six orientational notions in Cogtse (Adapted from Lin 2002).

The examples below illustrate the uses of some of the forms presented above in Table 2:

¹ The suprasegmental symbol \hat{o} indicates that the word it is situated in is a falling-toned word. Cogtse operates with a dichotomous tonal system, in which falling tone contrasts with zero. Once the tonal value of a word is determined in lexicon, the pitch shape of the whole word can be derived using a set of phonological rules. The reader is referred to Lin (2012) for a detailed analysis of tones in Cogtse.

- (1) Nominal: *atâ* ‘upward direction’, taking a locative postposition =*j*
 Verbal prefix: *to-* ‘upward’, serving as a perfective marker here

(“Runaway Horses” 06N08)

ŋədzê atâ=j to-mdə-tj=ti
 1DU upward.direction=LOC PFV:upward-arrive.at1-1DU=TOP:OBL

‘When we two arrived up there...’

- (2) Pronominal: *adit* ‘the one in the west’

(Elicited)

ʃtə wə-tʰolo ma-ra, adit ra
 this 3SG:POSS-pine.tree NEG-want the.one.in.the.west want

‘I don’t want this pine tree, I want the one to the west.’

- (3) Adverbial: *tô* ‘upward’
 Verb: *kə-tʰô* ‘go upward’

(“Fish in Burning Water” 06N01)

ʃəkô=s tô kə-tʰô zə
 treetop=ALL upward 3PL:INTR-go.upward1 PART
to-kə-tsis nə-ŋos
 PFV:upward-NMZL-say2 OBV- COP1

‘(If the fish are burnt in the water), they sure go up toward the treetop.’

- (4) Verb 2: *ka-dit* ‘take something westwards’

(Elicited)

wəjo tʰorʒetʃimbo=s skə dit
 3SG Thugsrjechenpo:PLN=ALL/ABL statue.of.a.deity take.westwards

‘He will take/takes the statue of a deity westwards towards Thugsrjechenpo.’

- (5) Verbal prefix: *ro-* ‘upstream’, serving as an imperative marker here
 Adverbial: *rô* ‘upstream’, *rorô* ‘upstream’ (reduplicated)
 Nominal 2: *hatô* ‘further upstream direction’
 Verb 1: *kə-rô* ‘to go upstream’

(“Runaway Horses” 06N08)

ʃtə cokʰa wə-ŋgu rô ro-tʰê-ŋ
 this valley 3SG:POSS-inside upstream IMP:upstream-go1-2/3PL

‘You go upstream into the valley,’

ptʂêrə hatô=j
 then further.upstream.direction=LOC

wətə *wə-ŋgu* *rorô* *kə-rô=tə=mənaŋorə*
 that 3SG:POSS-inside upstream NMZL-go.upstream1=TOP=TOP

‘If you go further upstream into it, to the further upstream direction...’

As shown in examples (1) and (5), the orientation prefixes are used to denote both orientation and perfective or imperative meanings. With non-locomotion verbs, these prefixes have further developed to encode only aspect-modality meanings. Spatio-temporal developments as such will be discussed more in Section 8.1.²

4.2 Locative postpositions

There are two locative postpositions in Cogtse. One is a general locative =*j*, which can be used to encode locative and allative meanings. The other is =*s*, denoting ablative and allative meanings. These two are both clitics that are phonologically dependent on the last element of a noun phrase.³

In example (6), the meaning encoded by =*j* can be interpreted either as general locative or allative.

(6) (“Our dogs and hunting” 06N05)

ŋədʒé *atâ=j* *to-mdə-tʃ=ti*
 1DU upward.direction=LOC PFV:up-arrive2-1DU=TOP:OBL

‘When the two of us got up there (Literally: When the two of us arrived at that place to the upward direction),’

k^həna=ndʒés=tə=mənaŋorə *câ=te* *ʃikô=j*
 dog=DU=TOP=TOP musk.dee=one tree.top=LOC
ta-â-w-rko
 EVI:PFV:up-EVI-3PL:TR-put.into1

‘The two dogs had already cornered a musk deer on/to the tree top.’

On the other hand, in (7), it is rather clear that the enclitic =*j* is used to signify allative meaning:

(7) (“My father and hunting” 06N03)

to-nəna-s *wəŋk^huj=mənaŋorə*
 PFV:上-rest2-PST after=TOP

‘After he retired...’

² The reader is referred to Lin 2011 for a complete detailed discussion.

³ In Japhug it is observed that in oblique relativization, bare noun phrases (which represent the relativized obliques) can have allative or ablative interpretations (as shown in examples (40–41) in Jacques 2016: §5.3). It should be noted that in Japhug such bare noun phrases occur in internally-headed relative clauses that are meant to relativize obliques (represented by the said bare noun phrases). Cogtse, on the other hand, does not use internally-headed relative clauses at all; and noun phrases do not get allative or ablative interpretations if they do not come with any locative postposition.

coktsə=j *ko-pi* *ptʂérə*
 PLN:Cogtse=LOC PFV:eastwards-come2 then

‘He came to Cogtse, and...’

The enclitic =*s* serves to denote ablative or allative meanings with verbs to describe motions from or toward a specific location. In examples (8a), (8b), and (8d) =*s* encodes allative meaning; while in (8c), it is used to mean ‘from’ (ablative meaning).⁴

(8)

(“Our dogs and hunting” 06N05)

a. *mə=tə* *ʃikʰa=s* *kə-tʃʰé* *kə-nərga*
 3SG=TOP woods=ALL/ABL NMZL:INF-go1 NMZL-like1

‘As for her (the dog), she liked to go to the woods,’

b. *ta-nâp* *kam* *rəʔw-tu=tə=mənaŋorə*
 N-morning door as.soon.as-open1=TOP=TOP

‘as soon as the door opened in the morning,’

c. *ptʂérə* *kam-kʰə=s* *rəʔw-kʃut* *kə-pa*
 then door-mouth=ALL/ABL as.soon.as-go.out1 NMZL-do1
ptʂérə *wə-ʃtʃi*
 then 3SG:POSS-self

‘she would go out from the door by herself,’

d. *ʃikʰa=s* *ʃö* *kə-tʃʰé* *na-ŋôs*
 woods=ALL/ABL often NMZL-go1 IMPFV:PST-COP2

‘she went to the woods often.’

4.3 *The Relator-Noun Construction*

A small group of nouns are used in Cogtse as relator nouns that are involved in the description of Figure-Ground relations. The relator nouns specify some part or aspect related to an entity (such as the top of a table, the vicinity of a house, and so on) that serves as Ground. In most cases they have to take a possessive prefix, which cross-references the noun that refers to the entity.

Structurally the relator-noun construction is identical to a regular possessive construction, with the possessor noun (the entity) preceding the possessed noun (a specific part). The semantic relation between them is not possession though; rather, the possessed noun is a part or aspect related to the possessor.

⁴ Whether =*s* encodes allative or ablative meaning has to be deduced from context. A similar situation occurs in Lahu, in which locative noun-particles convey no specific spatial relationships, and can only have their spatial meanings determined according to context (Matisoff 1982: 165-166). I would like to thank one of the anonymous reviewers for bringing the case in Lahu to my notice.

A locative postposition (i.e. either =*j* or =*s*) is indispensable to the formation of the relator-noun construction. The template that illustrates its structuring thus goes as:

POSSESSIVE- + RELATOR NOUN + =LOCATIVE PP

Examples in (9) demonstrate how the construction can be used to refer to some parts that are related to a table:

(9)

- a. *tʃoktsə wa-ko=j*
table 3SG:POSS-head=LOC

‘on the top of the table’

- b. *tʃoktsə wə-spo=s*
table 3SG:POSS-beneath=ALL/ABL

‘from/toward the underside of the table’

Not all the nominal roots in the relator-noun constructions can serve as a plain noun in Rgyalrong. The nominal root *ko* in *wa-ko=j* ‘on its top’, for instance, can be used as a plain noun to refer to ‘head’ or ‘tip’; whereas the nominal root in *wə-wa=j* and *wə-fi=j*, with their meanings being more abstract (glossed as ‘whereabouts’⁵), are not observed to be used as independent nouns. In fact, these two relator-noun constructions have further grammaticalized into dative markers, marking the goal of an action, which quite often is addressee of a speech. In example (10) the direct quote is addressed to the second son, so the word *təlê* ‘the second one’ occurs with the relator-noun construction *wə-fi=j*:

(10)

(“A Bird Called Pshagalapongga” 07N02)

- a *təlê* *wə-fi=j* *no*
DM the.second.son 3SG:POSS-whereabouts=LOC 2SG

- na-ŋô-s-ŋ* *nə-tə-tsis-n* *ptʃêrə*
IMPV:PST-COP2-1SG PFV:downwards-2-say2-2SG then

“Ah,” (the father) said to the second (son), “You said you are (the person who brought the bird back here),

- no* *nə-sə-lêt* *to-ka-tsis*
2SG IMP:downwards-CAUS-release1 PFV:upwards-NMZL:PL-say2

now you make it talk” he said.’

⁵ A nominal root as such is also observed in Kham. The nominal root glossed as ‘whereabouts’ is *leo* (Watters 2004).

In this section three types of grammatical devices for Cogtse spatial description have been discussed. In the ensuing two sections we will discuss how these structures and markings are used to describe topological relations (Section 5) and motion events (Section 6).

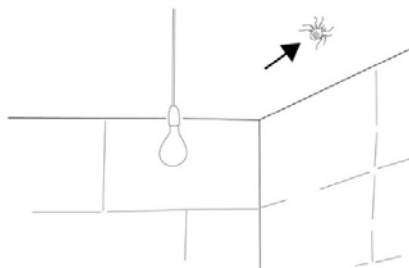
5 Topological relations

The topological relations discussed in this section are those as illustrated in the “Topological relations picture series” (Bowerman and Pederson 1992). The three main grammatical constructions involved are plain nouns with a postposition (Section 5.1), the relator-noun construction (Section 5.2), and the relator-noun construction plus a postposition (Section 5.3).

5.1 Plain nouns with a postposition

In describing topological relations, Ground can be designated using a plain noun plus a postposition. In doing so, the spatial parts of entities are not specified. Example (11) shows that the construction can signify the spatial configurations of contact but no support:

(11)



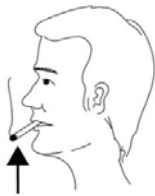
“Topological relations picture series” #7 (Bowerman and Pederson 1992)

kʰafna kʰarká=j nə-ŋos
 spider layer.of.soot.on.the.ceiling=LOC OBV-COP1

‘The spider is on the layer of soot on the ceiling.’⁶

In example (12), the locative postposition =*j* is attached to the plain noun *fnôs* ‘nose’ in a description of contact and support:

(12)



“Topological relations picture series” #39 (Bowerman and Pederson 1992)

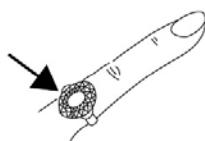
⁶ While working on the description of this picture, the consultant indicated that in a regular Rgyalrong living area, the ceiling is normally covered with a layer of soot, which is from the smoke produced in the wood-burning fireplace at the center of the area. Therefore, for this example, instead of using the word *kʰarká* ‘ceiling’, the consultant insists that *kʰarká* ‘layer of soot on the ceiling’ is the appropriate choice.

tə-kʰə *tə-rmi* *wa-fnôs=j* *nə-ŋos*
 N-cigarette N-person 3SG:POSS-lip=LOC OBV-COP1

‘The cigarette is on the man’s lips.’

For topological description, in many cases it is the general copula *nə-ŋos* [OBV-COP1] that serves as the predicate of a clause, denoting stative static topological relations, as illustrated above in examples (11) and (12). However, some spatial configurations are represented in Rgyalrong as a result of a prior action; so instead of the general copula, the primary predicate is a dynamic verb that denotes the prior action.⁷ For example:

(13)



“Topological relations picture series” #10 (Bowerman and Pederson 1992)

ksərlek *tə-jəkndzo=j* *ka-â-ŋa-tsʰok*
 ring N-finger=LOC EVI:PFV:eastward-EVI-GP-install1

‘The ring has been put on on the finger.’

5.2 *Relator-noun constructions*

In the data of topological relations, the most frequently-used grammatical device is the relator-noun construction that encodes the ‘on’ notions— *wa-ko=j* [3SG:POSS-head=LOC]. With the copular form *nə-ŋos* [OBV-COP1], *wa-ko=j* can be used to signify various ‘on’ notions, as exemplified in (14)-(16).

(14) ‘on top of’: Figure is over and directly support by Ground

kʰətsa *tʃoktsə* *wa-ko=j* *nə-ŋos*
 cup table 3SG:POSS-head=LOC OBV-COP1

‘The cup is on the table.’

(“Topological relations picture series” #1 (Bowerman and Pederson 1992))

(15) ‘attached on’: Figure is attached to vertical surface

kʰapâr *tə-ŋjêp* *wa-ko=j* *nə-ŋos*
 telephone N-wall 3SG:POSS-head=LOC OBV-COP1

‘The telephone is on the wall.’

(“Topological relations picture series” #25 (Bowerman and Pederson 1992))

⁷ The same is observed in Arrente, an Arandic (Pama-Nyungan) language (Wilkins 2006: 24).

(16) ‘attached on’: Figure is attached to projecting ground

rneji tə-rnâ wa-ko=j nə-ŋos
 earring N-ear 3SG:POSS-head=LOC OBV-COP1

‘The earring is on the ear.’

(“Topological relations picture series” #69 (Bowerman and Pederson 1992))

For many spatial configurations in the “Topological relations picture series”, *wa-ko=j* occurs with verbs denoting prior actions that result in the topological relations described. For example, when the figure is over and substantially covers the ground, the verb ‘spread’ has to be used:

(17)

tfoktsə wa-npâ tfoktsə wa-ko=j
 table 3SG:POSS-cloth table 3SG:POSS-head=LOC
na-â-ŋa-kpʰjɛr
 EVI:PFV:downward-EVI-GP-spread1

‘The tablecloth is spread on the table.’

(“Topological relations picture series” #29 (Bowerman and Pederson 1992))

When a fruit is stuck on a spike, the verb ‘stick’ is used instead of the regular copula. In example (18) the main part of the predicate is *ko-ka-mtsû* ‘PFV:eastward-NMZL:GP-spear2’, with the copular form *nə-ŋos* coding modal meanings.

(18)

pʰinkwô fendzo wa-ko=j ko-ka-mtsû
 apple spike 3SG:POSS-head=LOC PFV:eastward-NMZL:GP-spear2
nə-ŋos
 OBV-COP1

‘The apple has been speared through with a spike.’

(“Topological relations picture series” #29 (Bowerman and Pederson 1992))

To describe a scene in which a coat (Figure) is hanging on the hook (Ground), the relator noun takes the postposition =s, which encodes an ablative meaning here. The description in example (19) below literally means ‘The clothes is hanging from the top of the hook.’

(19)

tə-wê tɛ-jkək wa-ko=s na-ŋajok
 N-clothes N-hook 3SG:POSS-head=ALL/ABL OBV-hang1

‘The clothes are hanging from the top of the hook.’

(“Topological relations picture series” #9 (Bowerman and Pederson 1992))

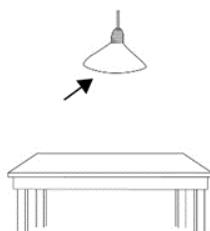
Below are the other relator-noun constructions observed in the description of topological relations:

(20)

wə-ŋgu=j	[3SG:POSS-inside=LOC]	‘inside of it’
wə-ŋgu=s	[3SG:POSS-inside=ALL]	‘into it’
wə-spo=j	[3SG:POSS-beneath=LOC]	‘underneath it’
wə-rkê=s	[3SG:POSS-round, around=LOC]	‘around it’
wə-rnəm=j	[3SG:POSS-side, vicinity=LOC]	‘beside it; around it’
wə-tʰwêr=j	[3SG:POSS-vicinity=LOC]	‘near it’
wə-mtô=j	[3SG:POSS-rim=LOC]	‘beside; on the rim of it’
ndzə-la=j	[2/3DU:POSS-middle=LOC]	‘between; in the middle of’
wə-rkê=j	[3SG:POSS- top, highest part =LOC]	‘at the top of it’
wə-tʂi=j	[3SG:POSS-front=LOC]	‘in front of it’
wə-ŋkʰu=j	[3SG:POSS-behind=LOC]	‘behind it’
wa-pa=j	[3SG:POSS-bottom=LOC]	‘under it’
wə-wâ=j	[3SG:POSS- whereabouts=LOC]	‘at its place’
wə-ʃi=j	[3SG:POSS- whereabouts=LOC]	‘at its place’

5.3 Relator-noun constructions plus orientation adverbials

For some of the space configurations presented in the “Topological relations picture series”, relator-noun constructions are used with orientation adverbials in the description of the Figure-Ground relations. Consider the picture below:



“Topological relations picture series” #13 (Bowerman and Pederson 1992)

In this picture, the lamp is vertically above the table (Ground), but not supported by Ground. One way to describe this space configuration in Rgyalrong is as follows:

(21)

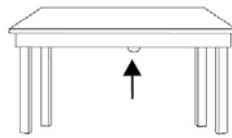
("Topological relations picture series" #13)

<i>ta-tʂʰo</i>	<i>tʂoktsə</i>	<i>wə-ko=s</i>	<i>nâ</i>	<i>na-ŋajok</i>
N-lamp	table	3SG:POSS-head=ALL/ABL	downward	OBV-hang1

'The lamp is hanging down from above the table.'

For this example, *wə-ko=s* [3SG:POSS-head=ABL] can be appropriately interpreted as 'from its above'; and with the orientation adverbial *nâ* 'downward', the whole clause indicates that the lamp is hanging down from above the table.

Now consider the following picture:



"Topological relations picture series" #53 (Bowerman and Pederson 1992)

For the Figure-Ground relation illustrated here, the use of a relator-noun construction plus an orientation adverbial signifies the attachment of Figure (chewing gum) to the Ground (Table):

(22)

("Topological relations picture series" #53)

<i>tʂoktsə</i>	<i>wə-spo=s</i>	<i>tô</i>	<i>ləktʂʰê</i>	<i>te</i>	<i>na-ndo</i>
table	3SG:POSS-beneath=ALL/ABL	upward	thing	one	OBV-there.be1

'There is something underneath the table. (Lit. There is something that goes up toward the underneath side of the table.)'

6 Motion events

This section deals with how space is encoded in motion events in which the subject of the clause changes location from one place to another. The discussion focuses on how verbs in Cogtse are used, so will proceed to discuss three kinds of verbs: Motion verbs (Section 6.1), orientation verbs (Section 6.2), and associated motion verbs (Section 6.3).

6.1 Motion verbs

The Cogtse verb distinguishes finiteness, and finite verbs are either Perfective or Imperfective. For motion verbs of indefinite orientation, the perfective prefixes must be orientationally specified. In the data collected, typical examples of such motion verbs include:

(23)

*ka-bjâm*⁸ 'fly'

⁸ The prefixes *ka-~kə-* and *kə-* in this list of verbs are nominalizers used to constitute non-finite verb forms.

<i>kɛ-sâ</i>	‘move slightly (of human)’
<i>kɛ-tʂêk</i>	‘push; crowd; press’
<i>kə-sut</i>	‘shift’
<i>ka-cat</i>	‘push slightly’
<i>kɛ-mtsêk</i>	‘jump’

In the Perfective and Imperative forms, the meanings of perfectivity/imperativity and orientation are both enclosed in the orientation prefix. If somehow a speaker cannot specify the orientation of a motion, they can have recourse to an orientationally-unspecified perfective/imperative prefix *jə-*, which, however, does not occur very frequently. The examples in (24) illustrate a motion verb in perfective forms, specifying all of the six orientations:

(24) *ka-bjâm* ‘to fly’ (Elicited)

- | | | | |
|----|----------------------|---------------------------------------|-----------------------------|
| a. | <i>patsâ</i>
bird | <i>to-bjam</i>
PFV:upward-fly2 | ‘The bird flew up.’ |
| b. | <i>patsâ</i>
bird | <i>na-bjam</i>
PFV:downward-fly2 | ‘The bird flew down.’ |
| c. | <i>patsâ</i>
bird | <i>ko-bjam</i>
PFV:eastwards-fly2 | ‘The bird flew eastwards.’ |
| d. | <i>patsâ</i>
bird | <i>nə-bjam</i>
PFV:westwards-fly2 | ‘The bird flew westwards.’ |
| e. | <i>patsâ</i>
bird | <i>ro-bjam</i>
PFV:upstream-fly2 | ‘The bird flew upstream.’ |
| f. | <i>patsâ</i>
bird | <i>rə-bjam</i>
PFV:downstream-fly2 | ‘The bird flew downstream.’ |

Imperfective prefixes, on the other hand, do not specify orientational meanings. For example, in (25) the Present Imperfective verb form of ‘fly’ comes with an imperfective prefix, which carries no information regarding orientation:

(25) (Elicited)

patsâ *ŋa-bjâm*
bird IMPFV-fly1

‘The bird is flying’

If orientation is to be specified in a clause with Present or Past Imperfective verbs (which is composed of an imperfective prefix attached to the verb stem), one has to use either an orientation adverbial or an orientation nominal plus the allative/ablative postposition =s. For example:

(26)(Elicited)

<i>patsâ</i>	<i>kû</i>	/	<i>akû=s</i>	<i>ŋa-bjâm</i>
bird	eastward	/	east.direction=ALL	IMPFV-fly1
	ADVERBIAL		NOMINAL=PP	

‘The bird is flying eastward/to the east.’

6.2 Orientation verbs

As shown in Table 1, the six orientations can be materialized in form with both transitive and intransitive verbs. Throughout the discourse data collected so far, no transitive orientation verb have been identified; while the intransitive ones occur rather frequently.

Orientation verbs only occur in Non-past Imperfective forms (bare stems without any other tense-aspect marking). In an intransitive orientation verb, the meaning ‘go’ and a specific orientation are both incorporated in the verb root. For example in (27) the verb root *tʰô* denotes both the meanings of ‘go’ and ‘upwards’:

(27)

<i>ŋa</i>	<i>sôsni</i>	<i>fejtfi</i>	<i>wa-ko=s</i>	<i>tʰô-ŋ</i>	(Cogtse Daily Conversations: S108)
1SG	tomorrow	airplane	3SG:POSS-head=ALL/ABL	go.upward1-1SG	

‘Tomorrow I will go up on a plane.’

Example (28) shows that the orientation verb can occur with an adverbial that signifies the same orientation:

(28)

<i>fəko=s</i>	<i>tô</i>	<i>kə-tʰô</i>	<i>zə</i>	(“Fish in burning water” 06N01)
treetop=ALL	upward	3PL:INTR-go.upward1	PART	
<i>to-kə-tsis</i>	<i>nə-ŋos</i>			
PFV:upward-NMZL-say2	OBV- COP1			

‘“(If the fish are burnt in the water), they sure go up toward the treetop,” he said.’

On the other hand, in the Perfective and Imperative forms (the latter of which also requires one of the orientation prefixes for its formation), the orientation verb root is not applicable. In such cases, the meanings of ‘go’ and a specific orientation have to be expressed respectively by a verb stem of ‘go’ and an orientation prefix, as instantiated in (29):

(29)

<i>fikô=s</i>	<i>tô</i>	<i>to-tʰel-ŋ</i>	<i>ptšêrə</i>	(“Our dogs and hunting” 06N05)
treetop=ALL	upward	PFV:upward-go2-1SG	then	

‘... so I went up toward the treetop.’

6.3 Associated motion

Special markers that may occur in the preverbal slot include the “associated motion” markers *jə-* ‘TRANSLOCATIVE (go and)’ and *po-* ‘CISLOCATIVE (come and)’. Again, in the Perfective and Imperative of associated-motion verbs, orientation is specified, as orientation prefixes are required in the formation of these two verb forms. Compare the verb forms of associated motions in (30) and (31) with those in (32) and (33). In (30) and (31) the prefix *jə-* ‘TRANSLOCATIVE (go and)’ and *po-* ‘CISLOCATIVE (come and)’ are respectively attached to the bare verb stem, which encodes non-past imperfectivity. In these examples, no orientation is specified in the verb forms.

- (30) (Cogtse Daily Conversations S098)
- | | | | | |
|------------------------------|----------------------|----------------|---------------|-----------|
| <i>pojo</i> | <i>ŋə-salobra</i> | <i>jə-pə-ŋ</i> | <i>râ</i> | <i>zə</i> |
| tonight | 1SG:POSS-preparation | go.and-do1-1SG | be.necessary1 | otherwise |
| <i>ma-ŋa-tsotsô</i> | | | | |
| NEG1-PASS-there.be.time:REDU | | | | |

‘Tonight I have to go do preparation, otherwise there will be no time for it.’

- (31) (Cogtse Daily Conversations S021)
- | | | | | | |
|-----------------------------------|-----------|-----------|---------------------------|-----------------|----------------|
| <i>wa</i> | <i>wa</i> | <i>wa</i> | <i>wəŋk^huj</i> | <i>tô-nâ</i> | <i>kə-pə-j</i> |
| OK | OK | OK | in.the.future | upward-downward | NMZL-do1-1PL |
| <i>ʃti po-nəts^hu-j</i> | | | | | |
| here come.and-do.in.passing1-1PL | | | | | |

‘OK, OK, OK, if we go up and down (around here) in the future, we will come and do it (drink tea) here in passing’

On the other hand, (32) and (33) respectively show that in the Imperative and Perfective forms, orientation is specified since an orientation prefix is required in the formation of the verb forms:

- (32) (Cogtse Daily Conversations S091)
- | | | |
|---------------------|--------------------|---------------------------------|
| <i>wə-ŋgu=j</i> | <i>tə-ʃûr</i> | <i>ko-po-nəna-n</i> |
| 3SG:POSS-inside=LOC | one-period.of.time | IMP:eastward-come.and-rest1-2SG |

‘Come inside and rest a while.’

- (33) (Based on Cogtse Daily Conversations S105)
- | |
|--|
| <i>ko-po-ta-səmtsô-n</i> |
| PFV:eastward-come.and-1SUBJ:2OBJ-tell2-2SG |

‘I’ve come to tell you [that I’m leaving].’

Another thing example (33) demonstrates is the position of the associated-motion prefix with

regard to the TAM prefixes and personal prefixes. The linear ordering of the three kinds of prefixes goes as follows:⁹

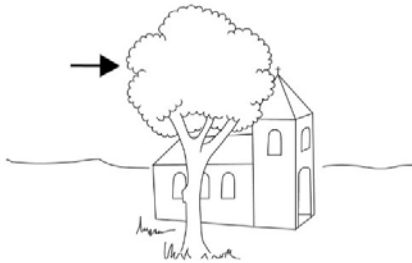
TAM—Associated-motion—Personal—Verb Stem

7 Frames of reference

Rgyalrong lexicalizes absolute, intrinsic and relative frames of reference. The intrinsic frame of reference is expressed via terms like ‘side’, ‘front’, ‘back’ and so on. The relative frame of reference can be observed in the use of ‘left’ and ‘right’. The absolute frame of reference is represented by the materialization of the orientation subsystems: up-down, east-west, upstream-downstream.

The intrinsic frame of reference can be observed in the description of the following picture:

(34)



“Topological relations picture series” #49 (Bowerman and Pederson 1992)

ʃəkphú tə-tʃim wɛ-rnɛm nə-ŋos
tree N-house 3SG:POSS-side OBV-COP1

‘The tree is next to the house (on the side of the house.)’

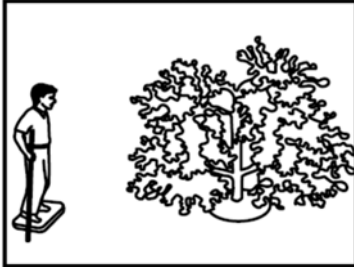
When asked why not use the notions of ‘front’ and ‘back’ to describe the relation between the tree and the house, the consultant said it was because the entrance of the cathedral is not facing the tree. This indicates that the entrance of the cathedral had been assigned to be the front part of the cathedral, and the tree (Figure) does not lie on the axis extended from the facet of the cathedral, so is not described as being in front of the cathedral, but as being next to it.

So far it looks like the uses of ‘side’, ‘front’, and ‘back’ are restricted to intrinsic frame of reference. The terms for ‘left’ and ‘right’, on the other hand, when not marked with any possessive

⁹ Within the Rgyalrong group, the linear ordering of the three kinds of prefixes varies from language to language. In Japhug, for one, the associated-motion prefixes are the farthest from the verb stem, and are followed by TAM prefixes and then personal prefixes (Jacques 2013: 200-211). Even among the dialects of Situ, the Rgyalrong language Cogtse is affiliated to, the morpheme orderings can be different. For example, Bragdbar (Zhang 2016: 201) is different from Kyomkyo (Prins 2016: 497-500) and Cogtse in that its associated-motion prefixes precede personal prefixes and follow TAM prefixes (so the ordering goes as “TAM—associated-motion—Personal”). For detailed discussions of associated-motion markers in other Rgyalrong languages/dialects, the reader is referred to Jacques (2013: 200-211) for Japhug Rgyalrong, Zhang (2016: 200-204) for the Bragdbar dialect of Situ Rgyalrong, and Prins (2016: 497-500) for the Kyomkyo dialect of Situ Rgyalrong.

prefix, are used based on relative frame of reference, that is, based on the viewer/speaker's own bodily coordinates. This point is demonstrated in the following example:

(35) "Tree and Man" 2.3 (Levinson and Wilkins 2006)



2.3

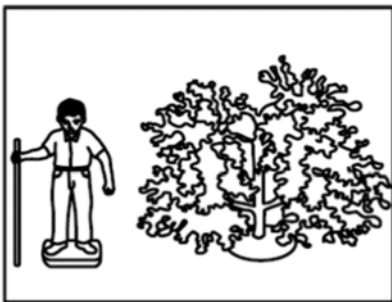
<i>tə-rmi</i>	<i>kəwla-sa=j</i>	<i>ʃəkpʰu</i>	<i>kacʰa-sa=j</i>
N-person	left-direction=LOC	tree	right-direction=LOC
<i>ʃəkpʰu</i>	<i>tə-rmi</i>	<i>wə-tʃi=j</i>	<i>nə-nədo</i>
tree	N-person	3SG:POSS-front=LOC	OBV-face1

'The person is on the left, the tree is on the right. The tree is facing the front of the person.'

Notice that in this example the notions of left and right are based on relative frame of reference, while the idea of 'facing' is based on intrinsic frame of reference.

However, 'left' and 'right' can also be used in the intrinsic frame of reference. Consider the description of "Tree and Man" picture 2.7 in (36):

(36) "Tree and Man" 2.7 (Levinson and Wilkins 2006)



2.7

<i>tə-rmi</i>	<i>kəwla-sa=j</i>	<i>ʃəkpʰu</i>	<i>kacʰa-sa=j</i>
N-person	left-direction=LOC	tree	right-direction=LOC
<i>ʃəkpʰu=tə</i>	<i>tə-rmi</i>	<i>wə-kəwla-sa=j</i>	<i>nə-nədo</i>
tree=TOP	N-person	3SG:POSS- left-direction=LOC	OBV-face1

'The person on the right, the tree on the left. The tree is facing the man's left side.'

In this example the first occurrences of 'left' and 'right' are used according to the speaker's bodily coordinates (as he is facing the picture, and the man in the picture, for instance, is on the speaker's

left-hand side). The second occurrence of ‘left’, however, comes with a possessive prefix indexing the man in the picture, and the use of ‘left direction’ takes an intrinsic frame of reference, taking the man’s bodily coordinates as the as the frame of reference.

In Cogtse discourse (folklore stories, procedural descriptions, narratives of personal experiences, conversations, and so on) the terms meaning ‘left’ and ‘right’ do not occur at all, not even once. Their application seems restricted to specific linguistic tasks, such as describing the spatial settings in pictures. In the discourse data, when a coordinate system is needed, Cogtse speakers tend to rely on an absolute frame of references; and the fixed bearings that constitute the coordinate system are, as typical of Rgyalrong as a whole, the six orientations.

In (37) is a conversation about asking and giving directions on the street. Throughout the whole excerpt, the absolute frame of reference is the only coordinate system that is employed:

(37)

(Cogtse Daily Conversations)

<i>kə-t̪s̪s=ti</i>	<i>m̪bər̪kʰəm</i>	<i>slokp̪ân</i>	<i>ɲə-serətʰatə</i>	
NMZL:PL-say1=TOP:OBL	Mbarkham	teacher	2/3PL:POSS-school	
<i>ʃtə</i>	<i>ɯə-tʰiwâr=ti</i>	<i>ɲôs</i>	<i>nək̪atsəs,</i>	<i>məɲôs?</i>
this	3SG:POSS-vicinity=TOP:OBL	COP1	OBV-NMZL-say1	Q-COP1

‘It is said that Mbarkham Normal College is around here. Is that so?’

<i>ɲôs</i>	<i>smenkʰâɲ</i>	<i>ɯə-kû=s</i>	
Yes	hospital	3SG:POSS-east.direction=ALL	
<i>ta-ntʃap=s</i>	<i>kû</i>	<i>kə-gô</i>	
N-northern.side.of.mountain=ALL	eastward	NMZL-eastward	

‘Yes, going eastward to the east of the hospital, toward the direction of the mountain in the south...’

<i>ʃakû=j</i>	<i>ta-dzám</i>	<i>tə</i>	<i>náo</i>
farthest.east.direction=LOC	N-bridge	one	there.be1

‘in the farthest east there is a bridge.’

<i>ta-dzám</i>	<i>ma-ka-pʰôt</i>	<i>ɯə-dí=tə</i>	<i>wətí</i>	<i>ɲôs</i>
N-bridge	NEG-NMZL-cross	3SG:POSS-west.direction=TOP	there	COP

‘Not crossing the bridge, and to the west (of the bridge) it (Mbarkham Normal College) is there.’

8 Language of space in Rgyalrong culture

As demonstrated in Section 7, the orientation system figures significantly in Rgyalrong spatial description. Speakers tend to have recourse to the solar (east-west), riverine (upstream-downstream), and vertical (up-down) axes when they need a coordinate system.

The orientational conceptions are not restricted to spatial descriptions, however. In this section, we will show that the orientation system also plays an important role in Rgyalrong cultural

constructs and conceptualization. The discussion starts with the selection of the orientationally-opaque perfective prefix for each verb, which indicates the crucial role space plays in Rgyalrong speakers' conceptualization of events or situations (Section 8.1). Then, Section 8.2 will discuss how the orientational concepts work when Rgyalrong speakers talk about the seating arrangement in the living area of a house.

8.1 *Orientationally-opaque prefix for each other*

Orientation prefixes, as already mentioned in Section 4.1, code orientation and perfectivity/imperativity. Attached to a motion verb, the six orientations in Cogtse are explicitly specified (See also example (24) in Section 6.1).

However, in most cases these prefixes can serve as ORIENTATIONALLY OPAQUE PERFECTIVIZERS. That is to say, these prefixes are deprived of orientational specification in favor of aspectual (perfective) or modal (imperative) significance.¹⁰ For example:

(38) *ka-za* 'to eat' (Elicited)

wəjo to-zɐ-w
3SG PFV-eat2-TR

'He ate/ has eaten.'

In (38), where *to-* serves as the perfective prefix for *ka-za* 'to eat', the concept of 'upward' is not intended. This point is directly confirmed by my consultant, who asserts that in a Perfective verb as in this example, the prefix does not bear any orientational meaning.

The selection of prefixes as such is totally conventionalized in some cases; and in the other cases, it is dependent on the orientation information inherent to a verb's lexical semantics. Example (38) presents a case in which the selection comes without apparent motivation from the lexical semantics of the predicates involved. Likewise, in (39), *na-* ('downward') is selected while no concept of 'downward' can be discerned in the predicate *kɐ-sɛp* 'to catch up with; to reach':

(39) *kɐ-sɛp* 'to catch up with ; to reach' (Elicited)

k^horlô na-sâp-ŋ
vehicle PFV-catch.up.with2-1SG

'I caught up with the vehicle.'

Nevertheless, if a Cogtse verb inherently codes a specific orientation, it tends to select a prefix with matching orientation semantics as its orientationally opaque perfectivizer. For instance, one can infer on semantic and pragmatic grounds that the orientation concept 'up/upward' is inherent in the verb *kɐ-rwɛs* 'to get up; to rise', hence the orientationally opaque perfectivizer *to-*. Prefixes like *to-* in this case are orientationally motivated but redundant, as the directionality they code is already

¹⁰ A similar situation is observed in the Slavonic languages, notably Modern Russian (Comrie 1976: 89; Dahl 1985: 84), in which the orientationally specified prefix may endow a verb it attaches with nothing but aspectual meanings.

conveyed by the verb. Typical verbs requiring *to-* are provided in (40), and verbs requiring *na-* are exemplified in (41).

(40) Typical verbs with *to-* as orientationally opaque perfectivizer

<i>kə-pʰəl</i>	‘dedicate’
<i>kə-rwəs</i>	‘get up; rise’
<i>ka-rjap</i>	‘stand’
<i>kə-scor</i>	‘support by placing hand on’
<i>kə-sprət</i>	‘turn in to the higher authorities’

(41) Typical verbs with *na-* as orientationally opaque perfectivizer

<i>ka-səku</i>	‘bury’
<i>ka-tʰem</i>	‘lower (e.g. one’s head)’
<i>ka-jê</i>	‘plant’
<i>ka-ta</i>	‘put’
<i>ka-ni</i>	‘sit’

As for the orientational motivation of verbs that take ‘east’ and ‘west’ as their semantically dependent prefix, metaphorical extension is involved. Sun has determined that in Tshobdun Rgyalrong, the solar contrast has been found to be extendable to a secondary centripetal (< ‘eastwards’, i.e., in the direction of this rising sun) vs. centrifugal (< ‘westwards’) oppositions (2003: 496). By the same token, Cogtse Rgyalrong exhibits the centripetal-centrifugal contrast as an extension from the solar opposition. If *ko-* or *nə-* serves as a verb-dependent orientationally opaque perfectivizer, it is the centripetal or centrifugal meaning that the prefix and the verb have in common.¹¹ Therefore, predicates requiring *ko-* as the perfective prefix, as those in (42), inherently denote ‘toward center’.

(42) Typical verbs with *ko-* as orientationally opaque perfectivizer

<i>kə-sejtən</i>	‘accumulate (vt.)’
<i>kə-dēm</i>	‘solidify; congeal’
<i>kə-ktfēr</i>	‘squeeze; crowd’
<i>ka-rgi</i>	‘thread (a needle)’
<i>kə-nəpjēm</i>	‘warm oneself by fire’

These verbs inherently convey a centripetal meaning. For example, in squeezing, the target material is made more compact and tight toward a specific center.

From the same line of thinking, predicates taking *nə-* as their orientationally opaque perfectivizer inherently denote ‘away from center’, as shown in (43).

(43) Typical verbs with *nə-* as orientationally opaque perfectivizer

<i>kə-prət</i>	‘break (e.g. a string) (vt.)’
<i>ka-fi</i>	‘die’

¹¹ X. Lin (1993: 228-31) also detects a centripetal-centrifugal contrast encoded by *ko-* and *nə-*, which, he states, code the upstream-downstream opposition.

<i>ka-p^hrâm</i>	‘dry (sth.) in the sun’
<i>ka-ldzî</i>	‘peel’
<i>kø-lêt</i>	‘release’

8.2 Arrangement of seats in the living area

Further evidence that the orientation notions play an important role in Rgyalrong culture comes from the seating arrangement in the living area, which is usually on the second level of a Rgyalrong house. As shown in Figure 2, the main living area has four differently-valued zones:

- k^hep^hâ* ‘seat(s) of honor’: reserved for guests from afar, outside of the Rgyalrong area, or for the eldest males in the family
- k^hejk^hôr* ‘seat(s) for important people’: reserved for adult males and elder females
- k^hekfêm* ‘seat(s) for regular people’: reserved for women and children
- k^het^hi* ‘lower seat’: used by women in charge of setting the fire and cooking at the fireplace.

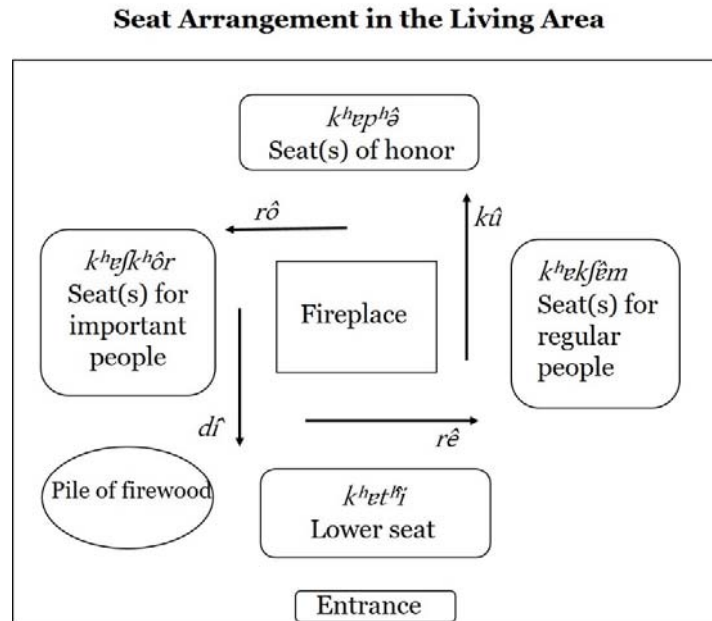


Figure 2. Seat arrangement in the living area of a Rgyalrong house

The name of the seats might be loans from neighboring Amdo Tibetan,¹² but every motion toward and from these seats requires the orientation to be specified. Two orientation axes are at work here: solar (east-west) and riverine (upstream-downstream). The seat of honor is opposite to the lower seat, and they are respectively designated to be in the ‘east’ and ‘west’. The seats for important people are situated across from the seats for regular people, and respectively they work with terms

¹² However, I have checked with several Amdo speakers in the neighboring areas, and none of them could think of any possible counterparts of these terms in their own dialects.

meaning ‘upstream’ and ‘downstream’.¹³ In other words, if one tells an honored guest to be seated, for instance, s/he would have to use the form(s) signifying the meaning of ‘east’:

(44) (Elicited)

kû *ko-tʰê-n*
eastwards IMP: eastwards-go1-2/3PL:HON

‘Please go eastwards (to the seat of honor).’

Notice that the use of orientation terms in such a cultural setting disregards their actual location in terms of geomorphic space.¹⁴ The seat of honor can be arranged on the westside of the living area, but still get signified using the adverbial *kû* ‘eastward’. By the same token, the seat for regular people can be located on the upstream side of the house yet still take the adverbial *rê* ‘upstream’ to indicate the direction toward it.

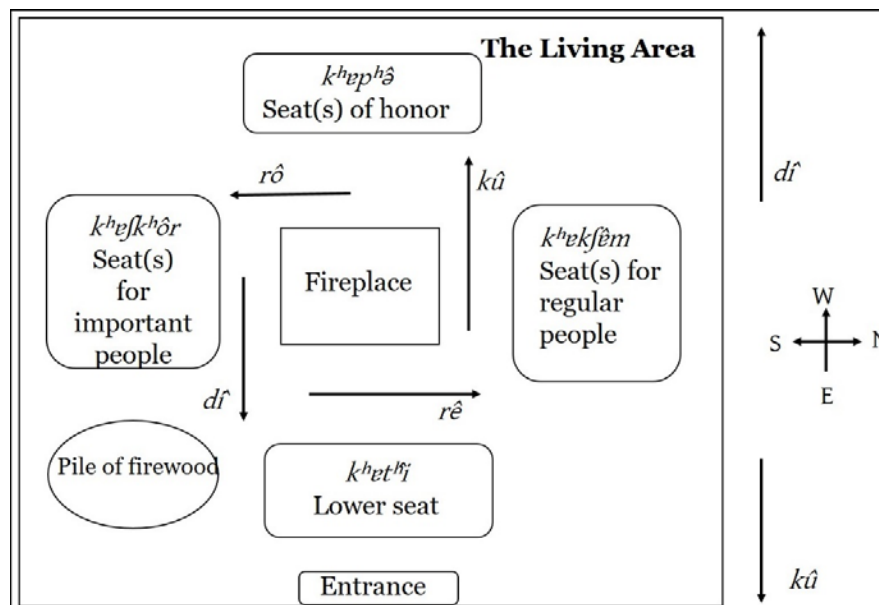


Figure 3. Uses of orientation adverbials respectively in the indoor living area and natural geographic setting the house is situated in

The consultant confirmed that the main entrance door is the one and only landmark that determines where the differently-valued zones should be. That is, the spot that goes farthest from the entrance is where the seat of honor should be, and the direction toward it is referred to using the terms for ‘eastwards’;¹⁵ whereas the spot right across from it is where the lower seat is located, and the terms

¹³ In Japhug, on the other hand, the seats for the host and honored guests are referred to as *khɔkɔɔɔ*, which is right across from *sondi*, the seats for children and servants (supposedly the lower seat). These two areas also referred to using words denoting ‘east’ and ‘west’ (Jacques 2008: 256-257).

¹⁴ The phenomenon is also observed in the aristomorphic anchoring of UP/DOWN motions in Belhare (Bickel 1999: 87).

¹⁵ This should also be the reason why the notion of ‘enter’ is achieved using the orientation prefix *ko-* ‘eastwards’ plus the verbs *ka-pô* ‘to come’ or *ka-tʰê* ‘to go’. For example:

for ‘westwards’ are used to refer to the direction toward it. Once this indoor ‘east-west’ axis is determined, the forms for the riverine terms are applied to represent the axis perpendicular to it, with the seats for important people to be situated to the direction of ‘north’ (upstream), and the seats for regular people to the direction of ‘south’ (downstream).¹⁶

9 Concluding remarks and summary

Based on natural discourse and data collected using “Topological relations picture series” (Bowerman and Pederson 1992), as well as “The Man and Tree Space Game” (Levinson and Wilkins 2006: 11-13), this paper has sketched the main patterns of how space is encoded in Cogtse Rgyalrong grammar. Cogtse is noted for the way it lexicalizes a rich set of orientations (up-down, east-west, upstream-downstream) in terms of nominals, pronominals, verbs, and adverbials. Together with locative postpositions and the relator-noun construction, they constitute the three primary kinds of grammatical devices to incorporate notions of space.

In describing topological relations, Cogtse speakers have recourse to plain nouns with a locative postposition, the relator-noun construction, and the combination of the relator-noun construction plus orientation adverbials. Cogtse has only two locative postpositions: =*j* (general locative or allative) and =*s* (ablative and allative). While =*j* attaches to plain nouns and relator-noun constructions, and is used primarily in clauses that takes a copula as the main predicate; =*s* is the only choice if the relator noun it attaches to works with orientation adverbials to achieve space description, and it is used more in clauses that employ a dynamic verb denoting the prior action.

To refer to motion events, orientation prefixes and adverbials serve to specify the orientation of motions respectively in perfective and imperfective situations. Other than these two forms, orientation verbs are also used to encode the meaning of ‘go’ plus one of the orientations. Finally, Cogtse can describe associated motions using the prefixes *jə-* ‘go and...’ and *pə-* ‘come and...’; orientationally these associated-motion verbs are specified in the same way as simplex motion verbs.

Cogtse lexicalizes the intrinsic, relative, and absolute (based on the six orientations) frames of reference. The notions of ‘left’ and ‘right’, however, are not restricted to the relative frame. Indeed, without any possessive prefix they are used based on the relative frame of spatial references; however, with a possessive prefix that refers to Ground, the uses of ‘left’ and ‘right’ show an intrinsic frame of reference at work. In Cogtse discourse, however, speakers clearly prefer the absolute references that take the above-mentioned orientations as the basis.

As for how space language works in Rgyalrong culture, this paper illustrates how entrenched the orientation system is in Rgyalrong from two socio-cultural perspectives. The selection of semantically-dependent perfectivizer reveals how Rgyalrong speakers conceptualize events in orientational terms. For example, the verb *kə-nəpjəm* ‘to warm oneself by fire’ takes the prefix *ko-* ‘eastwards’ as its perfectivizer, as the notion of ‘eastwards’ is extendable to a secondary ‘centripetal’

(Cogtse Daily Conversations S087)

<i>se</i>	<i>tə-ŋəŋ-ŋ</i>	<i>ko</i>	<i>wə-ŋgu=j</i>	<i>ko-pə-ŋ</i>
who	2-COP1-2/3PL	DM	3SG:POSS-inside=LOC	IMP:eastwards-come1-2/3PL

‘Who are you? Come inside.’

¹⁶ Seating arrangement involving orientational terms is also observed in Qiang, another major Tibeto-Burman language in Aba Prefecture, the speakers of which have had a long history of close contact with Rgyalrong speakers. According to Huang (2015: 682), the seat of honor is referred to using the terms for ‘upstream’, and the lower seat, is located in the ‘downstream’ direction. The axis perpendicular to the riverine axis is the ‘up-down’ axis.

(toward the center) meaning. Many such conceptualizations are culturally determined. A further remarkable illustration comes from the seating arrangement in the living area of a Rgyalrong house. The arrangement demonstrates how cultural conceptions can override natural geographical settings in assigning orientation terms to refer to various indoor spaces.

ABBREVIATIONS

1	first person	NEG	negator
2	second person	NMZL	nominalizer
3	third person	OBL	oblique
ABL	ablative	OBV	observational
ALL	allative	PART	particle
CAUS	causative	PASS	passive
COP	copula	PFV	perfective
DM	discourse marker	PL	plural
DU	dual	PLN	place name
EVI	indirect evidential	POSS	possessive
GP	generic person	PST	past
HON	honorific	REDU	reduplicated
IMP	imperative	SG	singular
IMPFV	imperfective	TOP	topicalizer
INTR	intransitive	TR	transitive
LOC	locative	V1	verb stem 1
N	nominal marker	V2	verb stem 2

REFERENCES

- Bickel, Balthasar. 1999. "Cultural formalism and spatial language in Belhara". *Himalayan space: Cultural horizons and practices*, ed. by B. Bickel and M. Gaenszle, 73-101. Zürich: Museum of Ethnography.
- Bowerman, Melissa; and Pederson, Eric. 1992. "Topological relations picture series". In Levinson, Stephen C. (ed.), *Space stimuli kit 1.2: November 1992*, 51. Nijmegen: Max Planck Institute for Psycholinguistics.
- Huang, Chenglong (黃成龍). 2015. "羌語的空間範疇 (Spatial relations in the Qiang Language)". *Language and Linguistics 語言暨語言學* 16: 663-89.
- Jacques, Guillaume. 2013. "Harmonization and disharmonization of affix ordering and basic word order". *Linguistic Typology* 17.2: 187-217.
- Jacques, Guillaume. 2014. "Clause linking in Japhug Rgyalrong". *Linguistics of the Tibeto-Burman Area* 37: 263-327.
- Jacques, Guillaume (向柏霖). 2008. *嘉絨語研究 (A Study on the Rgyalrong Language)*. Beijing: Minzu Chubanshe (Ethnic Publishing House)

- Jacques, Guillaume; Antonov, Anton; Lai, Yunfan' and Nima, Lobsang. 2017. "Stau(Ergong, Horpa)". In: Thurgood, Graham; and LaPolla, Randy (eds.), *The Sino-Tibetan languages* (2nd edition), 597-613. London: Routledge.
- Levinson, Stephen C.; and Wilkins, David (eds.). 2006. *Grammars of space*. Cambridge (UK): Cambridge University Press.
- Lin, Xiangrong (林向荣). 1993. *嘉戎语研究 (A Study of Rgyalrong)*. Chengdu: Sichuan Nationality Press.
- Lin, You-Jing. 2002. "A dimension missed: east and west in Situ rGyalrong orientation marking". *Language and Linguistics* 3: 27-42.
- Lin, You-Jing. 2009. *Units in Zhuokeji rGyalrong discourse: Prosody and grammar*. PhD Diss, University of California, Santa Barbara.
- Lin, You-Jing. 2011. "Perfective and Imperfective from the same source: Directional 'down' in rGyalrong". *Diachronica* 28.1: 54-81.
- Lin, You-Jing. 2012. "By no means marginal: Privative tone in Zhuokeji Rgyalrong". *Language and Linguistics* 13.4: 625-662
- Matisoff, James A. 1982. *The grammar of Labu*. Berkeley, Los Angeles, London: University of California Press.
- Prins, Marielle. 2016. *A grammar of rGyalrong, Jiǎomùzú' (Kyom-kyo) dialects: A web of relations*. Leiden and Boston: Brill.
- Sun, Jackson T.-S. 2000a. "Stem alternation in Puxi verb inflection: Toward validating the rGyalrongic subgroup in Qiangic". *Language and Linguistics* 1.211-32.
- Sun, Jackson T.-S. 2000b. "Parallelisms in the verb morphology of Sidaba rGyalrong and Lavrung in rGyalrongic". *Language and Linguistics* 1: 161-90.
- Sun, Jackson T.-S. 2003. "Caodeng rGyalrong". In: Thurgood, Graham; and LaPolla, Randy (eds.), *The Sino-Tibetan Languages*, 490-502. London and New York: Routledge.
- Sun, Jackson T.-S (孫天心). 2015. "黑水縣沙石多嘉戎語動詞人稱範疇的特點 (Remarkable features in the verb agreement system of Sastod Rgyalrong in Khrochu Country)". *Language and Linguistics 語言暨語言學* 16: 731-50.
- Watters, David. 2004. *A grammar of Kham*. Cambridge (UK): Cambridge University Press.
- Wilkins, David P. 2006. "Towards an Arrente grammar of space". In: Levinson, S. C.; and Wilkins, D. (eds.), *Grammars of space: Explorations in cognitive diversity*, 24-62. New York: Cambridge University Press.
- Zhang, Shuya. 2016. *La phonologie et la morphologie du dialecte de Bragdbar du rgyalrong situ*. MA thesis, Université Paris III.

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