

Directional Prefixes in Tangut and Mu-nya: A Contrastive Study*

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Summary

Tangut is an extinct language spoken during Xixia 西夏 dynasty (AD 1038–1227) by the people who settled in the northwestern part of China. Mu-nya (Muya 木雅) is a language spoken in the Sichuan Province in southwest China. These two languages belong to the Tibeto-Burman language group. Since the Mu-nya people share the same ethnic name with the ancient Tangut people, which corresponds to *Minyag* in written Tibetan, the relationship between these two languages concerns many scholars. They agree that these two languages share cognates and similar typological constructions, one of which is that both languages use “directional prefixes” in verb predicates. Approximately seven or eight morphemes act as verb prefixes to express different directions of motion or behavior in each language. This paper discusses the similarities and differences in the functions of their prefixes using sample sentences to expound on the features and grammatical behavior of these prefixes. First, we introduce an outline of the language and the function of directional prefixes in each language. Second, we compare the directional prefixes using morphological analysis. Finally, we discuss the comparison.

Key words: Tangut, Mu-nya, verb predicate, directional prefix, typology

關鍵詞：西夏、木雅、動詞謂語、方向前綴、類型學

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1. Introduction

1.1 Tangut and Mu-nya

The Xixia (Tangut) dynasty occupied a dominant position in the northwestern part of China (AD 1038–1227). The Tangut script was established for language by the emperor (AD 1036). Although the language and script of Tangut became extinct, many documents written in the Tangut script have enabled us to reconstruct its phonology and grammar. These are primarily Buddhist documents, but the Tangut documents found have diverse content, including translations of Chinese classics, law codes, treaties, poems, rhyme dictionaries, and other miscellanea. After the end of the dynasty, the Tangut language and scripts continued to be used until the 16th century. In the 20th century, the scripts were decoded by scholars mainly in Japan, Russia, and China.¹

Mu-nya (木雅, Muya) is a colloquial language spoken among Tibetan people living in the Sichuan Province. Some scholars have argued that this language is related to Tangut since those who speak it refer to themselves as Mu-nya, which corresponds to the racial/ethnic name of the Tangut people, which is transcribed as *mi nyag* in written Tibetan; some scholars believe this word consists of *mi* as ‘man’ and *nyag* ‘black’ etymologically. Ancient Tangut people called themselves as 𐞗𐞗 𐞗𐞗 ²mI: ²nya: (the word etymology must be ²mI: ‘man’ plus ²nya: ‘black’) in Tangut documents.²

Both languages share common typological features, one of which is directional prefixes in verb predicates. In this report, we analyze the basic function and grammatical features of directional prefixes in each language and describe the similarities and differences between them.

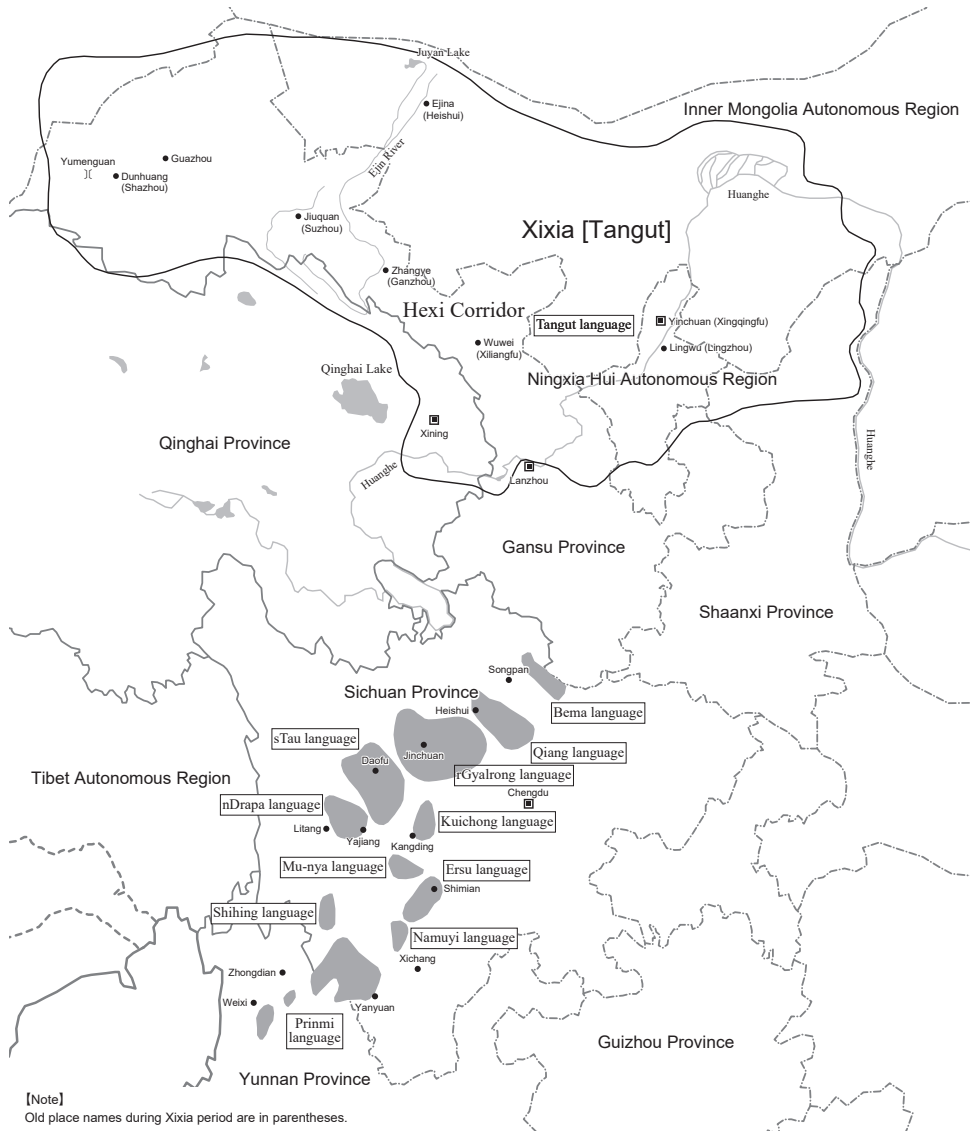
1.2 Tangut language

Tangut belongs to the Tibeto-Burman language family (TB) and has spread into most northwestern TB languages (see MAP). Although Tangut seems to be close to Qiangic/rGyalrongic languages,³ no language has been confirmed to be a direct descendant of Tangut. In terms of linguistic typology, Tangut uses a Subject–Object–Verb (SOV) sentence order and a Demonstrative–Noun–Adjective order for noun phrases. Tangut uses nonobligatory case marking.

¹ See Nishida (1989b) and Gong (2003) for Tangut language and see Nishida (2001) for Tangut script.

² In this paper, the reconstruction form of Tangut follows Arakawa (2014).

³ See Ikeda (2012), Jacques (2014).



Map The Realm of Ancient Tangut and the Distribution of the Qiangic Languages

Grammatically, Tangut sentences require only a verb stem in the verb phrase. Certain verbal forms have directional prefixes that indicate the direction of motion verbs, but are lexicalized perfective aspect markers with other verbs. The verb also has demonstrative-prefix and person-agreement suffixes. In some cases, verb phrases can be complicated. The basic scheme of the slots of verbal syntagma is as follows:

Table 1 Structure of the Tangut verb predicate (basic)

{Prefix A–Prefix B–Prefix C}–Verb stem–Auxiliary verb–Pronominal suffix–Particle
Prefix A: Prefix series 1 and 2 and Prefixes for Interrogative
Prefix B: Negation or Prohibition
Prefix C: Demonstrative
{ } means “prohibition of co-occurrence”

Tangut uses a variety of verb prefixes with different functions. The prefixes can be grouped into two series with similar consonants. The first series indicates the direction (or motion) or perfective, and the second series represents an optative meaning. The first series is usually called ‘Prefix series 1’ (hereafter, ‘Pref1’), and the second is called ‘Prefix series 2’ (hereafter, ‘Pref2’). According to Nishida,⁴ Pref1 originally functioned as a directional marker; it then developed into an aspect marker expressing a perfect aspect. Some Pref1s have pronunciations and functions similar to other TB languages.

Pref2 has the same initial consonants as Pref1, but all Pref2s have the same vowel (reconstructed in this paper as “-e”) with an optative function. Nishida suggested that Pref2 derived from Pref1.

Table 2 shows the sets of Pref1 and Pref2 from Nishida (1989a: 419).

Table 2 The sets of Pref1 and Pref2

Direction	Pref1	Pref2
‘upward’	𐰇 𐰇 ¹ a?- (1A)	𐰇 ¹ e:- (2E)
‘downward’	𐰇 ¹ na:- (1N)	𐰇 ² ne:- (2N)
‘to here’	𐰇 𐰇 ¹ ki:- (1K)	𐰇 ¹ ke:- (2K)
‘over there’	𐰇 ² wi:- (1W)	𐰇 ² we:- (2W)
‘inward’	𐰇 𐰇 ² da:- (1D)	𐰇 ² de:- (2D)
‘outward’	𐰇 ² ri:- (1R)	𐰇 ² ryeqr’- (2R)

⁴See Nishida (1989a: 418) on the Tangut prefixes and see Nishida (1989b: 806–807) on the topic of other TB languages.

The prefix 𐰇²dI:- is irregular. Each scholar has a different view of this prefix. According to some scholars and Arakawa,⁵ one irregular prefix, 𐰇²dI:-, belongs to Pref1. Nishida (1989a: 420l) supposed that Pref2 derived from Pref1. Table 3 shows the schema.

Table 3 The derivation of the verb prefixes (Nishida’s hypothesis)

Structure	Function
Pref1 + verb stem	> directional marker > aspect marker (perfect).
Pref2 (<Pref1 + 'e:.) + Verb stem	> optative markers

Here, we introduce an example sentence that includes the function of indicating the direction of motion.⁶

- (1) 𐰇 𐰇 𐰇 𐰇 𐰇 𐰇 𐰇 𐰇 𐰇
²me: ²de: ²ri:r ¹ne:' ²lyenq ²rI:r ¹ge:' ²dzu' ²ti:q
 NEG have yet get heart enjoy P1 jump sit place
- 𐰇 𐰇 𐰇 𐰇 𐰇 𐰇
¹a? ¹wor ¹tha ²yu ²rI:r ²shi:
 P1 stand up Buddha front P1 go

‘(He) obtained an unprecedented experience and became pure in mind and joyful. He immediately rose from his seat and went into the presence of the Buddha’ (SP4, Arakawa 2018: 84)

We may posit that the prefix indicates “motion upward.” Certainly, it co-occurs with verbs such as “to go upward, to raise, to happen” and generally represents the perfective of the motion. However, its directional function is secondary. In common sentences, the prefix 𐰇¹kI:- indicates perfectiveness rather than direction.

- (2) 𐰇 𐰇 𐰇 𐰇 𐰇 𐰇
²gyan ¹chyu ¹e: ¹kI: ¹gyu ²dza:r
 people CM P1 relieve

‘He liberated the people into nirvāṇa’ (VP, Arakawa 2014: 224)

⁵Кепинг (1985), Gong (2003), and Arakawa (2012). Nishida (1989b: 420r) regards it as an optative marker that is out of the set.

⁶Hereafter, we emphasize Pref1 and Pref2 with frames, underlined verb stems, and double-underlined pronouns and pronominal suffixes.

1.3 Mu-nya language

Mu-nya belongs to the Qiangic branch of the Tibeto-Burman language family. Qiangic languages are distributed throughout southwest China, where the so-called “the ethnic corridor” extends from Qinghai to Yunnan through the western part of the Sichuan Province. In terms of linguistic typology, Qiangic languages follow the SOV sentence order and the DNA order for noun phrases. These features are also common between Tangut and Mu-nya.

First, we will focus on the verb structure of Mu-nya. A Mu-nya verb consists of a directional prefix and a stem. Directional prefixes are indispensable for verbs, except for the verbs for existence in Mu-nya.

Table 4 Structure of verb predicate (basic)

Dir Prefix - Stem	(=Suffix) / (=Modal)	Declarative
	(aspect) / (mood)	evidentiality
Verb		

- (3) $\eta\mathbf{u}^{55}$ $la^{55}sa^{55}$ = $tsu^{33}ku^{55}$ $ngu^{33}-t^ho^{55}$ ni^{35}
 I Lhasa =from DIR- come DEC

‘I came from Lhasa.’

The verb / $ngu^{33}-t^ho^{55}$ / consists of a directional prefix { ngu^{33} -} ‘toward the speaker’ and a stem $\sqrt{t^ho^{55}}$ in Sentence (3). This DIR { ngu^{33} -} expresses the literal direction.

- (4) ηi^{33} $\eta e^{55}tsu^{33}$ = le^{33} k^ha^{55} $tu^{33}-de^{55}$ = po^{33} ni^{35} .
 I [ERG] s/he =DAT speech DIR- talk =SFX:impft DEC

‘I (will) talk to him/her.’

The verb / $tu^{33}-de^{55}$ / consists of a directional prefix { tu^{33} -} ‘upward’ and a stem $\sqrt{de^{55}}$ in Sentence (4). This DIR { tu^{33} -} expresses a metaphorical association with the stem rather than a real direction. Mu-nya has eight types of directional prefixes, as follows:

Table 5 Directional prefixes in Mu-nya

Direction	prefix	Direction	prefix
1. upward	$tu-$ Vstem	5. toward the speaker	$ngu-$ Vstem
2. downward	$ne-$ Vstem	6. away from the speaker	t^he- Vstem
3. toward upstream	$yu-$ Vstem	7. rounding	$ru-$ Vstem
4. toward downstream	$fa-$ Vstem	8. non-specific	q^hu- Vstem

These prefixes express the directions of an action. However, some verbs take a fixed combination of prefixes with no regard for the real direction such as /ru³³- tɕu⁵⁵/ ‘put; place’. Besides, stative verbs do *not* take any directional prefix, such as /ndzɛ⁵⁵/ ‘have’ or /nɛ⁵⁵/ ‘know.’

2. Comparison of the Prefix between in Tangut and Mu-nya

2.1 Directions and forms of Tangut and Mu-nya prefixes

Both languages have the same or similar directional distinctions indicated by the prefixes. Some have the same or similar pronunciations (for example, “downward” and “away from the speaker (?)”).

Table 6 Directions and forms of Tangut and Mu-nya prefixes

Direction of the motion	Tangut	Mu-nya
upward	𐞗 1'a?-	tu ³³ -
downward	𐞗 1'na:-	ne ³³ -
here?	𐞗 1'kl:-	
there?	𐞗 2'wl:-	
upstream		yu ³³ -
downstream		fi ³³ -
toward the speaker		ngw ³³ -
away from the speaker?	𐞗 2'da:-	t ^h e ³³ -
?	𐞗 2'dl:-	
neutral?	𐞗 2'rl:r-	q ^h u ³³ -
around (?)		ru ³³ -

Table 6 shows the directionals used by both languages directly. The Tangut directionals reflect the new results of a recent study.⁷ If we classify them according to the semantic field and put them in order, consulting the derivation between Pref1 and Pref2 in Table 2, the basic/primary pairs of directional concepts indicated Nishida (1989a: 419) are as follows:

‘upward’ vs. ‘downward’; ‘to here’ vs. ‘over there’; ‘inward’ vs. ‘outward’

On the other hand, in Mu-nya, the /q^hu³³-/ ‘no specific direction’ and /ru³³-/ ‘round’ do not form a pair of opposite concepts in direction; they are used in a fixed combination with specific verbs and do not express literal direction. Therefore, the basic/primary pairs

⁷ In Arakawa (2022), 𐞗 2'da:- and 𐞗 2'rl:r- were analyzed differently from previous studies.

of directional concepts in Mu-nya are as follows:

‘upward’ vs. ‘downward’; ‘upstream’ vs. ‘downstream’; ‘toward speaker’ vs. ‘away from’

If we compare the directional categories, T/M ‘upward’ vs. ‘downward’ is common, and T ‘to here’ vs. ‘over there’ might relate to M ‘toward the speaker’ vs. ‘away from the speaker’ and the semantic field overlap between T and M. However, the T pair of ‘inward’ vs. ‘outward’ does not have any counterpart in Mu-nya, nor does the M pair of ‘upstream’ vs. ‘downstream’ have any counterpart in Tangut.

Now let us consider the possibility of correspondence from a different point of view: comparing the word form—that is, the pronunciation of the directional. There is only one such corresponding directional: T 'na:- and M /nɛ³³-/ (‘downward’). However, other than this, we cannot point out any other obvious similarity between them.

Nevertheless, it is not strange that we cannot find an obvious correspondence for directional categories or word forms between Tangut and Mu-nya. All the Qiangic languages have directional prefixes in a common typological structure, but the way they mark (i.e., the category of direction and word forms) is different for each. Below we will consider some examples of directional markers from the Prinmi 普米, sTau 道孚, Lyuzu 吕蘇, and rGyarong 嘉戎 languages to compare with Mu-nya. Note that they share a similar word form */nə- ~ nɛ-/ only in the directional category ‘downward’.

Table 7 Directional markers in other Qiangic languages

	Prinmi	Mu-nya	sTau	Lyuzu	rGyarong
1. ‘upward’	tə ⁵⁵ -	tu ³³ -	rə-	dɛ ³⁵ -	to-
2. ‘downward’	nə ¹³ -	nɛ ³³ -	nə-	nɛ ³⁵ -	na-
3. ‘to upstream’	—	ɣu ³³ -	gə-	k ^h e ³⁵ -	ku-
4. ‘to downstream’	—	ɦa ³³ -	ɣə-	ŋɛ ³⁵ -	di-
5. ‘toward the speaker’	də ¹³ -	ngu ³³ -	—	—	—
6. ‘away from the speaker’	t ^h ə ¹³ -	t ^h ɛ ³³ -	də-	t ^h e ³⁵ -	—
7. ‘inside’	xə ¹³ -	—	(gə-)	—	(ku-)
8. ‘outside	k ^h ə ¹³ -	—	(ɣə-)	—	(di-)
9. ‘to mountain’	—	—	—	—	ro-
10. ‘to river’	—	—	—	—	rɛ-
11. ‘clockwise’	—	—	—	—	—
12. ‘counterclockwise’	—	—	—	—	—
13. ‘around’	—	(ru ³³ -)	—	—	—
14. ‘nondirection’	—	q ^h u ³³ -	—	—	jə-

In addition to the 14 directionals shown in Table 7, Guichong 貴瓊 has another ‘backward’ marker, and Namuyi 納木義 has another ‘horizontal’ marker. Therefore, it is natural to say that they developed these features independently and made up their own characteristics.

2.2 Derivational prefixes from the directional prefixes

As stated above, Tangut has two series of directional prefixes. Tangut Pref2 is derived from Pref1 through phonological changes (the main vowel in Pref1 shifts “-e” in Pref2), as in this example:

𑖇𑖂 ²da: > 𑖇𑖂 ²de:

If we consider this as a kind of vowel ablaut phenomenon in directionals, we can regard this as a common feature between T/M two languages. However, the types of phonological changes and reflected grammatical functions differ. As stated above, there are two series of directionals in Tangut: Pref2 is an independent series of directional prefixes derived from Pref1, and the altered vowel e is fixed rather than being a tentative vowel change caused by any grammatical operation. Furthermore, Pref 2 in Tangut functions as not directional but optative.

(5)	𑖇𑖂	𑖇𑖂	𑖇𑖂	𑖇𑖂	𑖇𑖂	𑖇𑖂	𑖇𑖂	𑖇𑖂
	¹ ryur	¹ tha	¹ tsyer	² ngo:r	² ngo:r	² ryeqr'	¹ me:	² nga
	Every	Buddha	dharma	all		Pref2	gather	Suf.1sg

‘(I) wish to gather all dharmas of Buddha’ (AV77, Arakawa 2011: 192)

However, some intransitive Mu-nya verbs cause vowel alternation in directional prefixes; this phenomenon is a temporal vowel change reflecting grammatical operations that express the verbs’ transitivity.

$t^h e^{33} \cdot \text{ɹa}^{55} [vi]$ ‘(sth.) dry’ → $t^h e^{33} \cdot \text{ɹa}^{55} [vt]$ ‘dry (sth.)’

(6)	$p e e^{33} \cdot \text{ɹe}^{55}$	$t e^{33} \cdot \text{ɹa}^{55}$	= $s u u^{33}$.
	towel	DIR- dry	=SFX:pft

‘The towel dried.’

(7)	ηi^{55}	$p e e^{33} \cdot \text{ɹe}^{55}$	$t e^{33} \cdot \text{ɹa}^{55}$	ηe^{33} .
	1sg.[ERG]	towel	DIR- dry	DEC

‘I dried the towel.’

$t\ddot{u}^{33}-ts^h\ddot{u}^{55}$ [vi] ‘(sth.) boil’ → $t\dot{i}^{33}-ts^h\ddot{u}^{55}$ [vt] ‘boil (sth.)’

(8) $t\dot{c}u^{55}$ $t\ddot{u}^{33}-ts^h\ddot{u}^{55}$ $\text{ɿ}\Lambda^{33}$.
 water DIR- boil DEC

‘The water has boiled.’

(9) ηi^{55} $t\dot{c}u^{33}tse^{55}$ $t\dot{i}^{33}-ts^h\ddot{u}^{55}$ ηe^{33} .
 1sg.[ERG] water hot DIR- boil DEC

‘I boiled the water.’

2.3 Derivational prefixes and verbs

From Arakawa’s (2012) research, we know that Tangut verbs’ directions of movement or actions are expressed as follows:

- 1A: raise, promote, finish...
- 1N: subtract, demote, set...
- 1K: belong to, indicate, dispatch, drop...
- 1W: go out, send, go over, stop...
- 1D: lose, throw away, give (way), declare, damage...
- 1R: do, make, go/come...
- 2E: raise, promote, finish, prepare, fight...
- 2N: fall, believe, set...
- 2K: inform, pay, reach, gather, fall into, dispatch...
- 2W: draw back, repay, receive, take (off), send...
- 2D: give, kill, do, get, take, lose, have, go...
- 2R: do, live, tell, go/come...
- 3D: steal, get illegally...

Below, we discuss the prefixes from the point of view of their meaning. Verbs rarely require multiple prefixes. However, some verbs demand particular prefixes. Since a trace of the ‘direction of the movement’ might exist in the meaning of a verb, the verb requires prefixes with the same meaning from the series of Pref1/Pref2, whose initial consonants are the same. Some examples follow.

𐵑 ¹ a?- 1A	-	𐵑 ¹ e:- 2E	𐵑𐵑: 𐵑𐵑 ‘arise, raise’
𐵑 ¹ kI:- 1K	-	𐵑 ¹ ke:- 2K	𐵑𐵑: 𐵑𐵑 ‘hit’
𐵑 ² wI:- 1W	-	𐵑 ² we:- 2W	𐵑𐵑: 𐵑𐵑 ‘take (away)’
𐵑 ² rI:- 1R	-	𐵑 ² ryeq’2- 2R	𐵑𐵑: 𐵑𐵑 ‘do’

Mu-nya, in contrast, the main directional prefixes are free to combine with any verb that expresses action or movement, although some verbs take a fixed metaphorical/specific directional prefix. The representative metaphorical combination is the verb /fi^{a33}-ndz^{w55}/ ‘eat’. This is fixed combination: the verb stem ‘eat’ always takes the directional prefix /fi^{a33}-/ ‘toward downstream’. We believe that the original idea might be analogous to the direction of the swallowing, as in ‘to the stomach’.

/fi^{a33}-ndz^{w55}/ ‘eat’ ← fixed combination: /fi^{a33}-/ ‘toward downstream’

Some verbs do not logically take a specific direction, so the neutral direction is the default combination:

/k^hu³³-ri⁵⁵/ ‘write’ ← combination as default: DIR /k^hu³³-/ ‘non-specific direction’

But it is possible to take other directional prefixes occasionally to express literal direction:

/ne³³-ri⁵⁵/ ‘write’ ([Chinese characters] vertically): DIR /ne³³-/ ‘downward’

Furthermore, some verbs take a fixed combination with a specific directional prefix; it is difficult to change to other directionals. However, the semantic reason for combining with is not clear.

/ru³³-tɕu⁵⁵/ ‘put’ ← fixed combination: DIR /ru³³-/ ‘rounding(?)’

Earlier studies consider DIR /ru³³-/ to indicate the direction of ‘rounding/around’ 圓周方.⁸ We do find DIR /ru³³-/ used in the fixed combination with the verb stems of ‘fill/scoop’, ‘crawl’, and ‘consult / agree on’, but the combination is restricted to such a few verbs where the specific direction of the motion is obscure. Note that this DIR /ru³³-/ is not free to combine with other verbs.

/ru ³³ -khu ⁵⁵ /	‘fill/scoop’
/ru ³³ -qa ⁵⁵ /	‘crawl’
/ru ³³ -to ⁵⁵ /	‘consult / agree on’

⁸ See Huang (1994) and others. Mu-nya surely has some words concerning ‘around’ using the morpheme /ru⁵⁵/ to mean /nɿ³³ rɿ⁵⁵/ ‘turn (around)’ and /ke³³ ru⁵⁵/ ‘surrounding’ and so on. However, the morpheme /ru⁵⁵/ is not a directional prefix but a verb stem that means ‘round’ in these words. We think analogies for these words might have caused misunderstandings among researchers and consultants.

It is possible that DIR /ru³³-/ is a fossil directional left over from the old Mi-nya, but we have not yet found any fixed combination of directionals and verbs in Mu-nya corresponding to Tangut.

3. Concluding Remarks

This paper presented an outline and descriptive analysis of directional prefixes in the Tangut and Mu-nya languages. Through a contrastive study, we observed that Tangut and Mu-nya share common features in their directional prefixes:

- 1) Similar phonological forms and functions
- 2) Combination with particular verbs
- 3) Derivation through vowel alternation of prefixes

However, a detailed check revealed that the two languages differ significantly. Our contrastive study between Tangut and Mu-nya sought to determine whether there was any relationship. Nevertheless, we should note that this comparison was necessarily removed from contemporary times. Our reconstructed Tangut words were based on documents written mainly in the 12–13th century, and Mu-nya is a modern spoken language, making direct comparisons as challenging as comparing the Middle English in Chaucer’s *Tales of Canterbury* (written between 1387 and 1400) with a dialect of modern spoken English. The time gap between Chaucer’s English and Modern English is approximately 600 years, whereas that between Tangut and Mu-nya is even longer—approximately 800 years. This time scales are just like the comparisons of the languages between well-known Song literature 宋文 written in classical Chinese and modern colloquial Chinese or comparisons of the languages in *Azumakagami* 吾妻鏡 (a famous historical document from the Kamakura 鎌倉 period), written in old Japanese, and modern colloquial Japanese.

We can say that the nature of these comparisons is common: every comparison was between examples of old written language from documents hundreds of years old and a modern spoken language. Therefore, it is not strange that we found many significant differences between the two languages despite their general commonalities. Modern colloquial languages represent drastic changes from their earlier forms in their phonology, morphology, and syntax. Thus, we must look beyond the appearances and focus on constructions reflecting historical changes to identify the languages’ firm structural frames in typological analyses.

Abbreviations of Tangut Sources

AV77: *Avatamsaka Sūtra* vol. 77 from Arakawa 2011

SP4: *Saddharma Puṇḍarīka Sūtra* vol. 4 from Arakawa 2018

VP: *Vajracchedikā-prajñāpāramitā* from Arakawa 2014

Abbreviations

CM	case marker	Pref1/2	prefix series 1, 2 {'P1' in the gloss}
DEC	declarative	S	subject
DEM	demonstrative	SFX	suffix
DIR	directional prefix	V	verb
ERG	ergative	1sg.	first-person singular
NEG	negative	2sg.	second-person singular
O	object		

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