

Negation in Kho-Bwa

A typological comparison

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The Kho-Bwa languages Puroik (Sulung), Bugun (Khowa), Sherdukpen, Sartang, Khispi (Lishpa) and Duhumbi (Chugpa) are generally presumed to form a small, coherent cluster within the Sino-Tibetan language family. They are spoken in western and central Arunachal Pradesh in Northeast India. The latter four languages form an established sub-group, the Western Kho-Bwa languages.

The Kho-Bwa languages are characterized by a few typologically idiosyncratic negative forms and negation strategies. The inherited Kho-Bwa negation prefix is *ba, unlike basically all other Sino-Tibetan languages that have negation markers deriving from a bilabial nasal onset, *ma. The Kho-Bwa negation prefix is a real prefix, forming a single phonological unit with the verbal or deverbalised form it modifies. Unlike some neighboring languages, such as the Tani languages that have post-verbal negation, negation in the Kho-Bwa languages is predominantly, but not exclusively, pre-verbal, more like other neighboring languages, such as the Bodish and Hrusish languages.

Specific negation strategies that show variation within the Kho-Bwa languages and may serve as means to further sub-group them include the strategies for negation of derived adjectives, the negation of serial verb constructions, the negation of noun-verb compounds and the form of the negative imperative (prohibitive).

Keywords: negation; Kho-Bwa; Sino-Tibetan; typology; phylogenetics

1 Introduction

This paper aims to describe the negation strategies employed in a small group of languages known in the linguistic literature as the Kho-Bwa languages (van Driem 2001: 473), spoken in the western and central part of the state of Arunachal Pradesh in Northeast India. In this paper, I provide an example of how negation strategies can be a typological feature for the sub-classification of languages.

In section 1, I provide a short introduction into the Kho-Bwa languages, as this small cluster of

languages continues to be a rather unknown group within the Sino-Tibetan language family. I also explain the sources of my data. In section 2, I describe the standard Kho-Bwa negation marker, the marker that is used in declarative main clauses with verbal predicates. I show an example of an asymmetric negation paradigm in Duhumbi. I also place this marker in a comparative perspective from both a phonological and a morphosyntactic point of view, in order to illustrate the peculiarity of the marker. In section 3, I shortly discuss the Western Kho-Bwa prohibitive and compare this marker to the situation in the other Kho-Bwa languages and other Sino-Tibetan languages. In section 4, I give a concise description of the negative copula and copular verbs, focusing on Duhumbi, but also providing comparative examples from other Kho-Bwa languages. In sections 5, 6 and 7, I pay attention to the ways in which the Kho-Bwa languages negate noun-verb predicates, serial verb constructions, and the formation of negative adjectives, respectively. In section 8, I provide a typological summary of negation in Kho-Bwa, followed by some concluding remarks on the usefulness of negation strategies in the subclassification of these languages.

1.1 Kho-Bwa

The Kho-Bwa languages are a cluster of linguistic varieties spoken in western and central Arunachal Pradesh in India. Which of these varieties belong together as ‘languages’ and which varieties are ‘dialects’ is an unresolved matter. For the purpose of this article, I broadly follow the classification that has been used in our earlier publications (Bodt 2012, Bodt 2014, Lieberherr and Bodt 2017, Bodt 2019 and Bodt 2021) as well as the Glottolog (<https://glottolog.org/resource/languoid/id/khob1235>) and Ethnologue (<https://www.ethnologue.com/subgroups/kho-bwa>). This classification broadly follows the classification into ‘Scheduled Tribes’. The Puroik, the Bugun and the Sherdukpen have been recognized as Scheduled Tribes since Indian independence. The Sartang have more recently claimed a separate Scheduled Tribe status from an earlier submersion under the Monpa Scheduled Tribe, whereas the Khispi and Duhumbi are still part of the Monpa Scheduled Tribe. In this article, *Kho-Bwa* refers to the entire cluster of languages. *Western Kho-Bwa* refers to the varieties of Sartang and Sherdukpen and Khispi and Duhumbi. *Puroik* refers to the various varieties of Puroik, and *Bugun* refers to the varieties of Bugun. I will use these names also in preference over names such as Sulung (for Puroik), Khowa (for Bugun), Chugpa (for Duhumbi), Lishpa (for Khispi), Butpa (for Sartang) or Mey (for Sherdukpen). Table 1 presents the basic details of the Kho-Bwa varieties: names, sub-varieties, speaker numbers, and language codes.

Table 1. The Kho-Bwa varieties.

group/language	ISO 639-3	variety	speakers
Puroik	suv		
<i>Eastern Puroik</i>		Chayangtajo (+ Lasumpatte)	n.a.
		Kurung Kumey	n.a.
		Sario Saria	n.a.
<i>Western Puroik</i>		Rawa	n.a.
		Kojo-Rojo	n.a.
		Bulu	7-20
Bugun	bgg	Bichom (+ Ramu)	700
		Wangho (+ Dikhyang)	300
		Kaspi	100
		Namphri	200
		Singchung	700
<i>Western Kho-Bwa</i>			
Sartang	onp	Khoina	500
		Jerigaon	400
		Khoitam	500
		Rahung	600
Sherdukpen	sdp	Rupa	3,000
		Shergaon	1,500
Khispi	lsh		1,500
Duhumbi	cvg		600

The varieties of Puroik are actually so distinct from each other that they may rather qualify as distinct languages. They are spoken across large swathes of mountainous jungle in the eastern part of the Kho-Bwa area. Although estimates for the total number of Puroik speakers range between 5,000 and 10,000, Lieberherr and Bodt (2017) list individual speaker populations of the Puroik varieties as no more than a few hundred each. The handful of Bugun varieties are spoken by around 2,000 people in a confined geographical area. There is no description of the internal diversity and classification of the Bugun varieties, and the varieties mentioned here are largely based on Lieberherr and Bodt (2017). Sherdukpen is spoken in two varieties, Rupa and Shergaon, by a total of around 4,500 people. The Sartang varieties, Khoina, Jerigaon, Khoitam and Rahung are spoken by less than 2,000 people. Finally, Khispi and Duhumbi are spoken by some 1,500 to 2,000 people. Khispi and Duhumbi are largely mutually intelligible (Bodt 2020: 46-47). Figure 1 shows the approximate location of the Kho-

Bwa varieties.

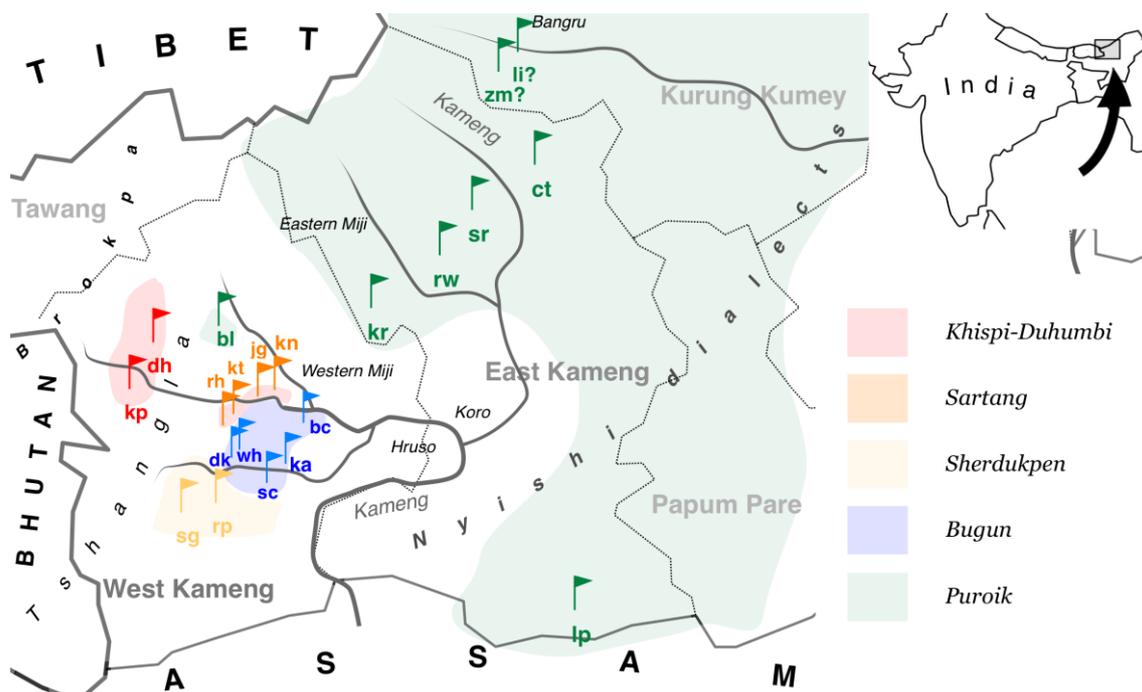


Figure 1. Linguistic map of Western Arunachal Pradesh with the Kho-Bwa varieties¹ (reproduced from Lieberherr and Bodt 2017).

Several ideas set have been set forward about the affiliation between these languages ever since the contours of the cluster were first established by Tian-Shin Jackson Sun (Sun 1993). An overview of these ideas is provided in Lieberherr and Bodt (2017). In this paper, we show on basis of a comparison of shared core vocabulary that the Kho-Bwa languages form rather distinctive internal clusters. The heat map we generated clearly indicates three clusters: 1. Khispi, Duhumbi and the Sartang and Sherdukpen varieties, with Khispi and Duhumbi slightly apart from the Sartang and Sherdukpen varieties; 2. the Bugun varieties; and 3. the internally most diverse Puroik varieties. We also compared the core vocabulary of the Kho-Bwa varieties with that of other languages and reconstructed proto-languages of the region: Proto-Bodo-Garo, Proto-Tani, Proto-Kuki-Chin, Written Burmese, Bhutan Tshangla, Written Tibetan and Proto-Hruso. The resulting heat map shows that all the Kho-Bwa varieties share a higher percentage of core vocabulary with each other than with any of these other languages. The smallest differences are found between the Bugun varieties and Proto-Hruso and the Bugun varieties and the Sartang varieties, which is not entirely surprising given the fact that Hruso

¹ kp = Khispi, dh = Duhumbi, bl = Bulu, rh = Rahung, kt = Khoitam, jg = Jerigaon, kn = Khoina, shg = Shergaon, rp = Rupa, sc = Singchung, dk = Dikhyang, wh = Wangho, kap = Kaspi, bc = Bichom, kr = Kojo-Rojo, rw = Rawa, sr = Sario Saria, ct = Chayantajo, lp = Lasumpatte, zm? and li? = Kurung Kumey.

varieties like Miji and Hruso Aka are contact languages for Bugun and Sartang. In addition, sensitivity analysis showed that this result is robust and unlikely the result of mere chance.

The conclusions we draw from the paper (Lieberherr and Bodt 2017) are that the Kho-Bwa varieties most likely *do* form a coherent sub-group of the Sino-Tibetan languages, and that they are more closely related to each other than to any of the other languages and reconstructed proto-languages we included in our analysis. Our paper also showed that there are three clear sub-groups in Kho-Bwa: The Western Kho-Bwa varieties including Khispi, Duhumbi, the Sartang varieties and the Sherdukpen varieties; the Bugun varieties; and the highly diverse Puroik varieties. Our paper does not show that Bugun and Puroik group together in “Eastern” Kho-Bwa like the Western Kho-Bwa varieties do.

These broad conclusions are also the outset of this paper, and as this paper will show, the available data on negation provide additional evidence for the internal sub-grouping of the Kho-Bwa languages proposed in Lieberherr and Bodt (2017).

1.2 Data and Methodology

The majority of the data that I use in this paper are my own: Whenever no source is mentioned, the data are mine. I collected these data between 2012 and 2019 as part of my PhD and postdoctoral researches. The Duhumbi data have earlier been published in Bodt (2020). The Khispi and Sartang data are all my own, in the case of the latter, mainly because the only other available source (Dondrup 2004) does not differentiate between the four varieties of Sartang. The Sherdukpen data are my own, unless mentioned otherwise: I make use of Jacquesson’s 2015 description of Rupa Sherdukpen whenever my own data are incomplete or inconclusive. For Bugun, I use my own limited data, with additional reference to Lander-Portnoy 2013, Dondrup 1990 and Barбора 2015. For Puroik, I rely on Lieberherr’s 2017 description of Bulu Puroik. Sources for the comparative data from other languages are my own unless mentioned otherwise.

In general, I will provide examples of negation strategies for each of the Kho-Bwa varieties whenever these are available. In deciding on which negation strategies to focus, I broadly follow the various categories in Miestamo’s typological work (Miestamo 2007, 2017). I then compare these strategies to each other, as well as to those of other Sino-Tibetan languages.

From a semantic perspective, negation can be defined as an operator that changes the truth value of a statement to its opposite (Miestamo 2017: 405). Different languages employ different negative constructions. In typological work on negation, focus has primarily been on standard negation (section 2, 5 and 6), the negation of imperatives (section 3) and the negation of non-definite pronouns (not addressed in this paper due to insufficient data from the varieties under discussion). Less common in typological studies are negation in non-declarative sentences with copula (section 4) and negative adjectives (section 7). These two topics, as well as the specific cases of standard negation of noun-

verb predicates and in serial verb constructions, were included in this paper because of the importance of these grammatical phenomena in the Kho-Bwa varieties.

1.2 Glossary and Abbreviations

The following abbreviations and glosses are used in this paper.

Table 2. Glossary and abbreviations.

1PL	first person plural	ITT	iterative
1PL	first person plural	LOC	locative case marker
1SG	first person singular	NEG	negative affix
2SG	second person singular	NEG.COP.EQ	negative equational copula
3PS	third person plural subject pronominal marker	NEG.COP.EXIST	negative existential copula
3SG	third person singular	NEG.PRS	negative present
ADH	adhortative	NGP	no gap in time future / past
AK	newly acquired knowledge suffix	NOM	nominaliser
ALL	allative	OBJ	object
ANA	anaphoric	PFP	past tense
ANT	until now	PL	plural
COP	copula	PRF	perfective
COP.EQ	equational copula	PRMN	permansive
COP.EXIS	existential copula	PROH	prohibitive
EMPH	emphatic marker	PRS	present
ERG	ergative	PST	past
EXIST	existential	Q	question marker
FUT	future	SE	stem extender
GEN	genitive case marker	SEQ	sequential
IMP	imperative	SEQ	sequential
IND	indicative	TOP	topicaliser
IPFV	imperfective		
PWKB	Proto-Western Kho-Bwa	OTIB	Old Tibetan

PP	Proto-Puroik		PCN	Proto-Central-Naga
BUR	Burmese		PT	Proto-Tani
CHI	Chinese		TSH	Tshangla

2 Standard Negation

With standard negation I refer to negation in declarative main clauses with verbal predicates (Miestemo 2005: 39-45). Payne (1985) identifies three types of negative markers: negative affixes, negative particles, and negative verbs. The Kho-Bwa languages are characterised by standard negation with negative affixes, and are hence canonical Sino-Tibetan languages with morphological rather than syntactic negation.

2.1 Standard Negation in Kho-Bwa

Standard negation in declarative main clauses takes place in the Kho-Bwa languages with a basic negative prefix. All the Western Kho-Bwa varieties and all the Puroik varieties have a negative prefix for verbal predicates derived from a reconstructed prefix **ba-*. Because of the iambic rhythm of the Sartang and Sherdukpen varieties, the vowel of the inherited prefix is commonly reduced to a schwa, with additional harmonisation between the vowel of the negative prefix and the vowel of the verb root it modifies. On basis of the available data, Bugun is the only exception among the Kho-Bwa languages, having a negative prefix *a-*.

Table 3. Kho-Bwa negative prefixes.

(proto-)language	source	negation prefix
<i>Proto-Western Kho-Bwa</i>	Bodt 2019	<i>*ba-</i>
Khispi		<i>ba-</i>
Duhumbi		<i>ba-</i>
Sartang		<i>bə-</i>
Sherdukpen		<i>bə-</i>
<i>Proto-Puroik</i>	Lieberherr 2015	<i>*ba-</i>
Bugun		<i>a-</i>

The only anomaly can be found among some speakers of Rupa Sherdukpen, who have a bilabial nasal onset of the negative prefix, rather than a bilabial plosive onset, as is shown in example (1). This observation was also reported by Jacquesson (2015: 120).

(1)

- a. t^hyk-go-ṣ hũ bə-mṣ-ba
 village-LOC-GEN salt NEG-get-NOM
 In the village (we) don't get salt.
- b. t^hyk-go-ṣ hũ mə-mṣ-ba
 village-LOC-GEN salt NEG-get-NOM
 In the village (we) don't get salt.

The reason for this variation is unknown, perhaps it is a Tibetan or Tshangla contact language influence among older, religiously educated speakers.

2.2 Morphology of Standard Negation

Negation in the Kho-Bwa languages is pre-verbal, as these positive and negative example sentences (2a) to (2o) show.

(2)

- a. Duhumbi: ga dɛn-deʔ
 1SG know-PRS
 I know.
- b. ga **ba**-dɛn
 1SG NEG-know
 I don't know.
- c. Khispi: ga dɛn-de
 1SG know-PRS
 I know.
- d. ga **ba**-dɛn
 1SG NEG-know
 I don't know.
- e. Khoina gu mǎ-p^hṣ
 1SG get-PRF
 (I) got.
- f. gu **bə**-mǎ
 1SG NEG-get
 (I) did not get.
- g. Khoitam: gu dɛn

- 1SG know
I know.
- h. gu **bə-dɛn**
1SG NEG.know
I don't know.
- i. Rupa: dzap-ma
 be.good-IPFV
 (It) will be good.
 ba-dzap-ma
 NEG-be.good-IPFV
 (It) won't be good.
- j. Shergaon: dzap-pa
 be.good-NOM
 (It's) good.
- k. **ba-dzap-pa**
 NEG-be.good-NOM
 (It's) not good.
- l. Puroik: dɛ̃
 know
 (I) know (Lieberherr 2017: 359)
- m. gu **ba-dɛ̃**
1SG NEG-know
I don't know (Lieberherr 2017: 275)
- n. Bugun naŋ
 drink
 to drink (Dondrup 1990: 19)
- o. **a-naŋ**
 NEG-drink
 (to) not drink² (Dondrup 1990: 19)

In the Khoina, Khispi, Duhumbi and Khoitam examples, but also in comparative examples from other languages of the region in section 2.4, any additional tense or aspect marking in an affirmative declarative sentence, such as a present marker, an imperfective marker or a copula, is lost in the

² Note, that Dondrup (1990: 19) glosses this example as 'do not drink', i.e. a prohibitive, however, given the context of these examples 'a is prefixed to the verb to indicate negation', I presume he refers to standard negation here, i.e. the negated form of 'to drink', 'to not drink'.

negated declarative sentence.

2.3 Asymmetric Negation

In Duhumbi the imperfective form of the verb does not have a negated form. Instead, the negated form of an imperfective clause in the past tense is the same as the negated form of the past perfective. This is an example of an asymmetric paradigm, where the paradigm in the affirmative has a distinction which is no longer shown in the negative. In asymmetric negation, we generally observe structural differences between affirmatives and negatives in addition to the presence of negative markers (Miestemo 2017: 407). The particular case of Duhumbi reflects the relationship between aspect and negation discussed in detail in Miestamo and van der Auwera (2011). The Duhumbi case also lends additional evidence against, among others, Schmid’s (1980) claim that the perfective aspect would be excluded from negation and that the imperfective aspect would appear instead: In Duhumbi, the opposite holds.

An example from Duhumbi can be found in (3), where the affirmative answer b. to question a. uses the imperfective in *-da* IPFV, but the negative answer c. uses a negated past perfective marked by the nominaliser in *-ba* NOM. The imperfective is used here in the affirmative because it describes an event or action that occurred over a certain period of time, but was completed in the past; the action, and not the duration or the outcome, is emphasised. If the result or outcome of the event or action that began and ended at a particular time in the past is of importance to the speaker at the moment of speaking or if that result or outcome is otherwise emphasised, then the past perfective in *-ba* NOM would have to be used.

(3)

- | | | | | | | |
|----|---|------------------------------|-----------|-----------------------------------|-----------|----------------------------------|
| a. | naŋ | deju | brukpa | filem | doj-da | k ^h ip- ba =ɲi |
| | 2SG | yesterday | Bhutanese | movie | look-IPFV | cry-NOM=Q |
| | Did you cry watching the Bhutanese movie yesterday? | | | | | |
| b. | oŋ | k ^h ip- da | | | | |
| | Yes | cry-IPFV | | | | |
| | Yes, (I) cried. | | | | | |
| c. | boju | ba-k^hip-ba | | {† ba-k^hip-da } | | |
| | NEG.COP.EQ | NEG-cry-NOM | | {†NEG-cry-IPFV} | | |
| | ‘No, (I) did not cry.’ | | | | | |

Unfortunately, I do not have comparative data on a similar phenomenon for the other Kho-Bwa languages. Future research may reveal that asymmetric negation is more common in the Kho-Bwa languages.

2.4 Comparing Standard Negation

The bilabial plosive onset for the standard negation marker is a unique phonological innovation of the Kho-Bwa languages. From West to East, all the Sino-Tibetan languages have a bilabial nasal onset for the negative prefix, as is illustrated by the selected examples in Table 4.

Table 4. Selected negative markers in Sino-Tibetan languages.

language	source	negation affix
<i>Kho-Bwa</i>		
Proto-Western Kho-Bwa	Bodt 2019	*ba-
Proto-Puroik	Lieberherr 2015	*ba-
(Bugun		a-)
<i>Other ST</i>		
Bunan	Widmer 2014	ma-
Kham	Watters 2004	ma-
Limbu	van Driem 1987	mɛ-
Lepcha	Plaisier 2007	ma- (PROH)
Tibetan		ma- (PROH / PST)
Dhimal	King 2009	ma-
Galo	Post 2007	-máa
Mongsen Ao	Coupe 2007	mə̀-
Kyom-kyo rGyalrong	Prins 2016	ma-
Qiang	LaPolla and Huang 2003	mə̀-
Chinese	Baxter and Sagart 2014	無 <i>mju</i> < *ma ‘not have’

Unlike the phonological form of the standard negation marker, the Kho-Bwa preverbal negation is common among Sino-Tibetan languages. It is also found in basically all the neighbouring languages, as the examples from Miji, Tshangla and Tawang Monpa in (4) show. Notice, again, how all these languages have a negative prefix with a bilabial nasal and also, how the negated declarative sentences commonly lose the tense and aspect markers that are present in the affirmative sentences.

(4)

- a. Miji: naŋ ni-ne
 1SG know-?
 I know. (Simon 1979: 13)

- b. ɲaŋ **ma-ɲi**
 1SG NEG-know
 I don't know. (Simon 1979: 13)
- c. Tshangla: dzaŋ se-n-tea
 1SG know-SE-COP
 I know.
- d. dzaŋ **ma-se-la**
 1SG NEG-know-COP
 I don't know.
- e. Tawang Monpa: ɲe: kan.dur
 1SG know.PRS
 I know.
- f. ɲe: **ma-kan**
 1SG NEG-know
 I don't know.

To my current knowledge, there are only three exceptions to the Sino-Tibetan negative prefix with a bilabial onset, and all three are found in postverbal, rather than preverbal position. The first one seems to concentrate among the languages spoken in the plains of the Brahmaputra, such as Karbi and the Boro-Garo languages such as Rabha and Atong, as is illustrated in Table 5. The negation postfix in these languages is rather consistent and may therefore represent an old retention or independent innovation.

Table 5. Negation postfixes in selected languages of the Brahmaputra valley.

language	source	negation postfix
Karbi	Konnerth 2014	<i>-C̄</i>
Rabha	Joseph 2007	<i>-ca</i>
Atong	Breugel 2014	<i>-ca</i>
Proto-Bodo-Garo	Joseph and Burling 2006	*-ya ⁰

Another exception is evidenced by a rather motley and geographically diverse group of languages that have a different postfix that may be cognate. Some languages that show this marker are presented in Table 6.

Table 6. Negation postfixes in selected languages.

language	source	negation postfix
Milang	Modi 2017	<i>-ŋə</i>
Lepcha	Plaisier 2007	<i>ma-V-ne</i>
Limbu	van Driem 1993	<i>-nen</i>
Liangmai	Widinibou 2017	<i>mak-V-ngei</i>

Notice, how Lepcha and Liangmai combine this postfix with a negative prefix that seems to derive from the inherited Sino-Tibetan prefix **ma-*. This type of what is sometimes referred to as ‘double negation’, with the simultaneous presence of two markers of negation, is not uncommon, and is also found in, for example, French *je ne sais pas* ‘I don’t know’ (Dryer 2013 [2005]). In the languages of Table 6, the dental or velar nasal suffix may originally have functioned as an emphatical element, with the original inherited negative marker with nasal prefix preserved in Lepcha and Liangmai but lost in Milang and Limbu. This is known as the Jespersen Cycle and was originally reported from Germanic languages (Jespersen 1917).

Finally, there is another group of exceptions where we find postverbal rather than preverbal negation, but with a negation postfix with a bilabial nasal. These are the Tani, some Kuki-Chin and the Angami-Pochuri languages spoken to the East and Southeast of Kho-Bwa, which all have postverbal negation, as the examples (5a) and (5b) from Galo and Poumai Naga show.

(5)

- a. Galo *ɲii* *kəbə* *káa-máa*
 person other have/exist-NEG
 There wasn’t anyone else. (Post 2007)
- b. Poumai Naga *mai* *bo* *təu=ly=mò-kini*
 people rice.storage eat=SEQ=NEG-while
 While the people (the owner) do not eat... (Veikho 2019)

Post (2007: 570) indicates that this Galo postverbal negator *-máa* derives from a Proto-Tani postverbal marker **maŋ*, which is also confirmed by Sun’s reconstruction (Sun 1993: 270). A similar negative postfix can be found in the Kuki-Chin language Purum *-mong* (Meitei 2017).

In this respect, it is curious to note that the Kho-Bwa language Duhumbi has a postverbal marker *-baŋ* which denotes a negative present. The present marker in *-deʔ* PRS and its negated form in *-baŋ* NEG.PRS describe a present action over which the agent has no control, or a habit or custom over which the speaker has no control. Examples of the affirmative and negated present are provided in

(6).

(6)

a. *woj* *tʰematsʰe* *εa* *tɛha-deʔ*
 3SG always meat eat-PRS
 (S)he always eats meat.

b. *woj* *adaŋ=raŋ* *εa* *tɛʰa-baŋ*
 3SG when=EMPH meat eat-NEG.PRS
 (S)he never eats meat.

Cognates of this marker have not yet been identified from the other Kho-Bwa languages, but as we will see later on, it may derive from the negative Duhumbi copular verb *baŋ*- ‘to be not’. Because the change from bilabial nasal to bilabial plosive is presumed old, Duhumbi may have retained this old negation postfix in this specific context, whereas it was lost in other Kho-Bwa varieties.

The correspondence between the reconstructed Proto-Western Kho-Bwa and Proto-Puroik initial bilabial plosive and the other Sino-Tibetan initial bilabial nasal is regular, as the examples in Table 7 show: There are at least four additional concepts in which the reconstructed Proto-Western Kho-Bwa and Proto-Puroik onset contains a bilabial plosive, whereas other attested or reconstructed Sino-Tibetan languages have a bilabial nasal: ‘fire’, ‘dream’, ‘name’, and ‘person’ or ‘other person’. Characteristically, the Bugun forms for ‘fire’, ‘dream’, ‘name’ and ‘human’ also evidence this sound correspondence, despite not having it in the negative prefix.

Table 7. Sound correspondence Sino-Tibetan *m-, Kho-Bwa *b-.³

concept	PWKB	PP	Bugun	OTib	Tsh	Bur	PT	PCN	Chi
fire	baj	bai	bo:ɛ	mye	mi	mīḥ	mə	may	燬 < *ṃajʔ
dream	ban	baŋ	ə.bɔŋ.bɔŋ	∅	mɔŋ.ɛi	mak	jup- maŋ	maŋ	夢 < *C.məŋ-s
name	a.bieŋ	a.bjeŋ	ə.beŋ	myiŋ	miŋ	maññ < *meñ	mun	miŋ	名 < *C.meŋ

³ OTib and Bur from Hill (2019), PCN from Bruhn (2014), PT from Sun (1993), Chi from Baxter and Sagart (2014).

other person	bi	bi ⁴	bi.jou ⁵	myi ⁶	mi ⁷	Ø	mi:	mii	Ø
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Curiously, however, we find a preverbal negation marker *ba-* and an emphatic form *baŋ-* in the Austroasiatic language Santali, as the examples in (7) show. We will see examples of negation with *baŋ-* in Duhumbi in section 4.

(7)

- a. Santali: *ba-ko* *baɖae-a*
 NEG-3pS know-IND
 They don't know. (Neukom 2001: 149)
- b. *baŋ-ko* *baɖae-a*
 NEG-3pS know-IND
 They certainly don't know. (Neukom 2001: 149)

3 The Prohibitive

In a typological study on prohibitives (second person singular negative imperatives), van der Auwera and Lejeune ([2005] 2013) and van der Auwera (2006, 2010a) found that there is a strong tendency for prohibitives to show negative marking different from declaratives. Indeed, most of the Western Kho-Bwa languages have a dedicated negative imperative or prohibitive prefix derived from Proto-Western Kho-Bwa **t^ha-*, as is evidenced by the forms for PROH.do ‘don’t do!’ in Table 8. Like the negative prefix, in the Sherdukpen varieties, the vowel of the prohibitive prefix tends to harmonise with the vowel of the verb root it modifies: Whereas *də-raʔ* is realised as [daʔ-raʔ], *də-zij* PROH.sleep ‘don’t sleep’ would be realised as [di-zij].

Table 8. Western Kho-Bwa prohibitives.

variety	prohibitive marker	example
PWKB	* <i>t^ha-</i>	
Khispi	<i>t^ha-</i>	<i>t^ha-le</i>
Duhumbi	<i>t^ha-</i>	<i>t^ha-li</i>
Jerigaon	<i>t^hə-</i>	<i>t^h-reʔ</i>

⁴ ‘human’.

⁵ ‘human’.

⁶ ‘person’.

⁷ ‘person’.

Khoitam	<i>tʰə-</i>	<i>tʰ-rɛʔ</i>
Rahung	<i>tʰə-</i>	<i>tʰ-rɛʔ</i>
Rupa	<i>də-</i>	<i>də-raʔ</i>
Shergaon	<i>də-</i>	<i>də-raʔ</i>

The Sartang variety Khoina and Puroik, however, do not have a dedicated negative imperative, as is illustrated in example sentences (8a) to (8f), and the situation in Bugun has not yet been described.

(8)

- a. Puroik: amjɛɛ rii-jan-bo
 good stay-PRMN-IMP
 Stay well!
- b. dʒi=buu²=ku² **ba-njaʔ-bo**
 ANA=dog=OBJ NEG-make.noise-IMP
 To the dog [he said]: Don't make noise! (Lieberherr 2017: 236)
- c. Khoina: ra²-məʔ
 do-IMP
 Do (it)!
- d. **b-ra²-wa-dɛ**
 NEG-do-?-COP
 Don't do (it)!
- e. tsʰu²-məʔ
 eat-IMP
 Eat (it)!
- f. **bə-tsʰu²-wa**
 NEG-eat-?
 Don't eat (it)!

The Western Kho-Bwa negative imperative prefix has cognates in several Sino-Tibetan languages, indicating it is an inherited prefix.

Table 9. Sino-Tibetan prohibitives

(proto-) language	prohibitive	source
Proto-Bodo-Garo	* ta ⁰ -	Joseph and Burling 2006
Bunan	<i>tʰa-</i>	Widmer 2014

(proto-) language	prohibitive	source
Kham	<i>ta-</i>	Watters 2004
Atong	<i>ta</i>	van Breugel 2014
Mongsen Ao	<i>tà-</i>	Coupe 2007
Qiang	<i>tɛV-</i>	LaPolla and Huang 2003

Unlike the prohibitive, Duhumbi (and Khispi) negates all the other moods, such as the adhortative and the jussive, with reflexes of the standard negation marker ***ba-**, as is shown in the Duhumbi adhortative in (9).⁸ The situation in other Kho-Bwa languages has not been described in detail yet.

(9)

- a. Duhumbi: *ɛa* *tur-ɲu*
 meat chase-ADH
 Let's hunt!
- b. *ɛa* **ba-tur-ɲu!**
 meat NEG-chase-ADH
 Let's not hunt!

4 Negative Copula and Copular Verbs

Eriksen (2011: 277) found that that many languages use a strategy different from standard negation for the negation of non-verbal predicates, for which he posits the Direct Negation Avoidance (DNA) principle: '[a]ll non-standard negation of non-verbal predicates is a means to negate such predicates indirectly'. To some extent, we observe this strategy in the Kho-Bwa languages as well: there are several unique negative copulas that do not derive from a negated form of an affirmative copula. In other cases, however, the negated form of a copula is formed through negation of the affirmative form of a copula or a copular verb. However, we can observe significant variation between the various Kho-Bwa varieties. Because most Kho-Bwa varieties are still data-deficient, this section will succinctly present the negative copula in some of the Kho-Bwa varieties, before paying closer attention to the specific situation in Duhumbi. Table 10 presents the equational and existential copula in the Kho-Bwa varieties. The only missing forms are the Jerigaon negated existential and the Bugun negated equational copulas.

Table 10. Affirmative and negative equational and existential copula in Kho-Bwa languages.

⁸ It may be useful to note that with regard to interrogative sentences, another frequently encountered non-declarative sentence type, the Kho-Bwa languages construct negative interrogative sentences in the same way as declarative sentences, i.e. with the standard negation marker *ba-* (Bugun *a-*).

variety	affirmative	gloss	negative	gloss
Duhumbi	<i>beʔ</i>	COP.EXIS	<i>baŋ</i>	NEG.COP.EXIS
	<i>gitcha</i>	COP.EQ	<i>boju</i>	NEG.COP.EQ
Khispi	<i>be</i>	COP.EXIS	<i>baŋ</i>	NEG.COP.EXIS
	<i>gitcha</i>	COP.EQ	<i>boju</i>	NEG.COP.EQ
Khoina	<i>beʔ</i>	COP.EXIS	<i>baʔaʔ</i>	NEG.COP.EXIS
			<i>byʔy</i>	NEG.COP.EQ
Jergaon	<i>beʔ</i>	COP.EXIS	?	
			<i>byʔy</i>	NEG.COP.EQ
Khoitam	<i>beʔ</i>	COP.EXIS	<i>boʔoʔ</i>	NEG.COP.EXIS
			<i>byʔy</i>	NEG.COP.EQ
Rahung	<i>beʔ</i>	COP.EXIS	<i>boʔoʔ</i>	NEG.COP.EXIS
			<i>byʔy</i>	NEG.COP.EQ
Rupa	<i>baʔ</i>	COP.EXIS	<i>boʔoʔ</i>	NEG.COP.EXIS
			<i>beʔe</i>	NEG.COP.EQ
Shergaon	<i>baʔ</i>	COP.EXIS	<i>boʔoʔ</i>	NEG.COP.EXIS
			<i>biʔi</i>	NEG.COP.EQ
Puroik	<i>baʔ</i>	COP.EXIS	<i>wεε</i>	NEG.COP.EXIS
	<i>ʒuu</i>	COP.EQ	<i>boo ~ ba-boo</i>	NEG.COP.EQ
Bugun	<i>um</i>	COP.EXIS	<i>oi</i>	NEG.COP.EXIS
			?	

The Khispi, Duhumbi, Sartang and Sherdukpen negative equational copula is thought to derive from a Proto-Western Kho-Bwa form *ba-ju. This form combines the standard negation marker *ba- with a no longer existent affirmative equational copula *ju, which may, however, be reflected in Bulu Puroik equational copula *ʒuu*. The Sartang, Sherdukpen negative existential copula and the Bulu Puroik negative equational copula are also cognate, likely derived from a Proto-Kho-Bwa form *ba-aʔ. The Khispi and Duhumbi negative existential copula *baŋ* may also be cognate with this form, although the phonological process resulting in this form is not regularly attested.

In Khispi and Duhumbi, we find both an equational and an existential copula, with both having their respective negated forms, as the examples from Duhumbi in (10a) to (10d) show. However, the situation is different in the Sartang and Sherdukpen varieties. In these varieties, an equational phrase simply juxtaposes the predicate to the subject, without any verb or copula, as is shown from the Rupa Sherdukpen example in (10e). Whereas this is also attested in Duhumbi and Khispi (see Bodt 2020: 329-330), these two varieties more commonly use one of the copulas or copular verbs of sections 4.1

and 4.2. A negated equational phrase, however, needs a negative equational copula even in the Sartang and Sherdukpen varieties, as the example from Rupa Sherdukpen in (10f) shows. Like in Khispi and Duhumbi, in the Sartang and Sherdukpen varieties, there is a dedicated existential copula, with a negated variant, as the Rupa examples in (10g) and (10h) show.

(10)

- a. Duhumbi: ηa $be^?$
 fish COP.EXIS
 There is fish.
- b. ηa **baŋ**
 fish NEG.COP.EXIS
 There is no fish.
- c. ga $duhutma$ $gite^ha$
 1SG woman COP.EQ
 I am a woman.
- d. ga awu **boju**
 1SG elder.sister NEG.COP.EQ
 I am not the elder sister.
- e. Rupa: $ju^?$ $ba^?$
 fish COP.EXIS
 There is fish. (Jacquesson 2015: 85)
- f. $ju^?$ **boʔo**
 fish NEG.COP.EXIS
 There is no fish. (Jacquesson 2015: 85)
- g. gu gi amu snu
 1SG TOP woman lucky
 I am a lucky woman. (Jacquesson 2015: 84)
- h. gu gi $anukhao$ **be-e**
 1SG TOP elder.sister NEG.COP.EXIS
 I am not the elder sister. (Jacquesson 2015: 83)

Like in Duhumbi, the use of the Rupa copula seems to be have an evidential and epistemological basis, which considers the source and nature of the evidence there is for a statement, rather than simply a distinction between equational and existential functions of the copula. Also, the Rupa existential copula $ba^?$ and its negated form $boʔo$ seem to be more like copular verbs rather than like copula in the true sense of the word, because like the Duhumbi copular verbs $du-$ and $bay-$, the Rupa copula $ba^?$

and *bɔ-ɔʔ*, in a contracted form *bɔʔ*, participate to some extent in inflection like other verbs.

As far as described, the situation in Bugun mirrors the situation in the Sartang and Sherdukpen varieties: There is no affirmative equational copula but simple juxtaposition of noun and predicate, as in (11a). Bugun also has an existential copula (11b) and a negative existential copula (11c). The negative equational copula of Bugun, presuming it exists, has not yet been described.

(11)

- a. Bugun: oi buphua bajo weeya
 3SG boy very good
 He is a very good boy (Barbora 2015: 86)
- b. sruwa um
 salt COP.EXIS
 There is salt. (Dondrup 1990: 34)
- c. sruwa **oi**
 salt NEG.COP.EXIS
 There is no salt. (Dondrup 1990: 33)

Like Khispi and Duhumbi, Bulu Puroik (Lieberherr 2017: 158) makes a distinction between an affirmative and a negative equational and an affirmative and a negative existential copula, as is shown in examples (12a) to (12d).

(12)

- a. Bulu Puroik: guu p^hɛNbu ʒuu=ro
 1SG Phembu COP=EMPH
 I am Phembu. (Lieberherr 2017: 191)
- b. guu p^hɛNbu **babɔ**
 1SG Phembu COP.NEG
 I am not Phembu. (Lieberherr 2017: 191)
- c. priNdəə dɨʃidilu=ku baʔ-bjao-na
 Puroik Bulu=LOC COP.EXIS-COP.FOC-NPST
 Only in Bulu there are Puroiks. (Lieberherr 2017: 344)
- d. la **wɛɛ**
 CONJ NEG.COP.EXIS
 But (he) is not there. (Lieberherr 2017: 197)

In addition to the negative copula *bɔɔ*, the form *ba-bɔɔ* of the Bulu Puroik negative copula is what Lieberherr calls ‘hypercharacterised’: It is the negative copula *bɔɔ* preceded by the negative prefix *ba-*, but his data seem to indicate that *ba-bɔɔ* is more commonly used than simply *bɔɔ*. The existential copula in Puroik has a curious feature, namely that the copula *wɛɛ* functions as affirmative ‘there is’ in the Eastern Puroik varieties, but as negative existential copula ‘there is not’ in the Western Puroik varieties. For a more detailed overview of the Bulu Puroik copula, I refer to Lieberherr’s 2017 work.

4.1 Duhumbi Affirmative Copula

The Duhumbi copula presented in Table 10 are an oversimplification of the actual situation in the language. Duhumbi has four affirmative copulas, *beʔ*, *gite^{ha}*, *ɛi* and *le* and one affirmative copular verb, *ɖzu-*. The use of these copula is determined by factors of epistemological, evidential, emphatic, and assertive nature, rather than on basis of which relation they express in the non-verbal clause.

The copula *beʔ* is used to describe simple facts that are observable or otherwise objectively verifiable and expresses relations of existence, attribution, equation, possession. In this, the existential relation seems to be the most important and original function of the copula. The copula *le* expresses: new, recently acquired and currently relevant information and is found expressing inclusion, existence, equation and possession. The equational relation seems to be the most original function of the copula. The copula *gite^{ha}* expresses an inherent, inalienable identity and is often used in a kind of emphatic sense in relations expressing inclusion or possession. This copula in its form and function appears to be a loan from Tshangla. The copula *ɛi*, asserts and confirms the truth of statement and is mainly used in relations expressing equation, attribution and possession.

Finally, Duhumbi has the copular verb *ɖzu-*. This copular verb is used in copular sentences that express accumulated, prior or general knowledge and is found in relations expressing existence, equation, attribution and possession. Like other verbs, this copular verb can be modified by markers of tense, aspect, mood as well as evidentiality and information structuring markers. The copular verb *ɖzu-* is likely derived from the verb *ɖzu* {*da*} ‘to sit, to stay, to live, to reside’.

4.2 Duhumbi Negative Copula

Duhumbi has two negative copular verbs and one derived negative copula. In (6b), we have seen the root of the copular verb *baŋ-* as the marker for the negative present. The copular verb *baŋ-* is the most commonly attested negative copula, negating the affirmative copula and the affirmative copular verb in their existential, attributive and possessive sense. On the other hand, the copular verb *boju-* can be used in a negative equational sense, to express a lack of identity or inclusion, and to express a lack of possession, in which the negative equational sense is the most common.

The verbal origin of the copular verbs *baŋ-* and *boju-* can be concluded from the fact that they can

both be modified by the Duhumbi nominaliser. Because the nominaliser is used to express the past perfective, the copular verbs *baŋ-* and *boju-* can also occur in sentences referring to a past tense. The negative copular verb *boju-* has only been attested modified by the nominaliser, whereas the negative copular verb *baŋ-* has also been attested with other tense/aspect markers, such as the preterite in *-ŋi*, the non-past perfective in *-baʔ* and the non-past potential in *-ɕu-tʰeʔ*. This seems to indicate that *boju-* actually is a true negative copula that has expanded into the verbal domain, whereas *baŋ-* is originally a verb that has expanded into the copular domain.

The copula *balan* is rarely attested and refers to something or someone that was there but no longer is. The copula is the copular verb *baŋ* in the perfect with *-loŋ*.

The negative copular verbs *baŋ-* and *boju-* have a limited conjugational flexibility. This is also characteristic of the affirmative copular verb *ɕu-*. The copular verbs do not, for example, occur modified by markers that are used in present tense situations, such as the imperfective in *-da* or the present in *-deʔ*. This is rather intuitive, because in present tense situations, the copula themselves will fulfil all the functions. In future contexts, the copular verbs *baŋ-* and *boju-* are often replaced by forms of the verb *lon* ‘to come’, in a sense of ‘to become in the future and then to be’.

What this short introduction into the Duhumbi affirmative and negative copula and copular verbs may illustrate, is that the actual situation of copula in Kho-Bwa languages may be more complex than the situation described in Table 10. Lieberherr’s work on Bulu Puroik (2015: 188-197) also gives indications of this complexity. The description that hitherto exists for Rupa Sherdukpen (Jacquesson 2015) either indicates the situation in this language is much simpler, or that the description itself is incomplete. None of the earlier sources on Bugun or the Sartang varieties pays any attention to copula, and the examples it contains are incomplete, unclear, or otherwise not useful for typological comparison.

5 Negation of Noun-Verb Predicates

Complex predicates of a noun and a verb common in the Kho-Bwa languages. All the Kho-Bwa languages of which descriptions exist have the same way of negating noun-verb predicates, namely by negating the verbal part of the predicate. In (13), we find three examples.

The Duhumbi example (13a) shows that the negation prefix precedes the verbal predicate *chat*, and not the nominal part *kʰotʰoŋ* of the noun-verb predicate *kʰotʰoŋ tɛʰat* ‘to mind something’. Although the noun *kʰotʰoŋ* means ‘hat, cap or headgear’ and *tɛʰat* means ‘to be tired; to be absent; or to be severed’, this is not a native Duhumbi noun-verb predicate. Instead, it is of borrowed origin and derives from Tshangla *kʰoday tɛʰat* ‘to mind something’ which ultimately goes back to the Tibetan *khothag cod* ‘to make up one’s mind’. Whereas the affirmative form of the noun-verb predicate can be glossed as a single form ‘to mind’, when negated and split by a negation marker, it has to be glossed

- a. Puroik: grii kuN **ba**-vuu-mueN
 1PL up **NEG**-go.from.base-can
 We can't go up. (Lieberherr 2017: 142)
- b. Rupa: wa **bo**-ong-nyu-re
 3SG **NEG**-go-want-ITT
 He does not want to go. (Jacquesson 2015: 101)
- c. Khoitam: gɔ dʒɔŋ **bə**-te^{hi}-ma-dɛ
 1SG.ERG fine **NEG**.give-finish-PRS
 I have not finished paying the fine.
- d. Duhumbi: gar lej-ta wa-**ba**-t^hup
 1PL up-ALL move-**NEG**-can
 We can't go up.

Duhumbi seems to show Bodish contact influence in the negation of serial verb constructions, as the comparative examples from Bhutan Tshangla (16b) and Dzongkha (16c) show. Although Dzongkha was not a contact language for Duhumbi, Duhumbi was influenced by other Central Tibetan varieties that have similar constructions, such as Üke and Brokpa.

(16)

- a. Duhumbi: war lerim=gi te^hot-**ba**-t^hup-ba
 3PL plan=TOP make-**NEG**-can-NOM
 They were unable to make that plan.
- b. Bhutan Tshangla: rokte-bak lerim teot-**ma**-re-ba-la
 3PL-PL plan make-**NEG**-can-NOM-COP
 They were unable to make the plan.
- c. Dzongkha: འཚར་གཞི་དེ་ བཟོ་མ་ཚུགས་བས།
 charzhi-d'i zo-**ma**-tshu-bä
 plan-this make-**NEG**-can-[AK]
 [They] were unable to make the plan. (van Driem 1993: 243)

7 Negative Adjectives

Finally, adjectives in the Kho-Bwa languages can be divided in inherited native adjectives, derived native adjectives, and borrowed adjectives. I will only focus on the native adjectives here because the language contact situation for the various Kho-Bwa languages is too diverse and complicated to focus on all the borrowed forms as well.

7.1 Inherited Negative Adjectives

In the Kho-Bwa languages, inherited native adjectives are marked by an adjective prefix. This adjective prefix is *o-* or *u-* in Duhumbi and Khispi, with vowel harmony determining the exact prefix; the schwa *ə-* in Bugun; and *a-* (occasionally *ə-* or *u-*) in the other Western Kho-Bwa languages and Puroik.

Some inherited native adjectives that express an attribute have unique antonyms that do not rely on negation. Examples are the pairs ‘good’ and ‘bad’, ‘heavy’ and ‘light’ and ‘old’ and ‘new’ presented in Table 11. The only marked exception here is Bugun, which in some adjectives, such as the example of ‘bad’, has the negative prefix *a-* that replaces the adjective prefix *ə-*.

Table 11. Adjectives and their negated forms.

variety	good	bad ⁹	light	heavy	new	old
Duhumbi	<i>o-dzop</i>	<i>u-zan</i>	<i>(jaŋ-pu)</i> ¹⁰	<i>u-li</i>	<i>ɔ-kʰɔn</i>	<i>ɔ-mɛn</i>
Khispi	<i>(nak-pa)</i> ¹¹	<i>u-zan</i>	<i>(jaŋ-kan-ma)</i>	<i>u-li</i>	<i>ɔ-han</i>	<i>ɔ-mɛn</i>
Khoina	<i>a-dʒaʔ</i>	<i>a-zã-dy ~ a-nu</i>	<i>a-ruŋ-du</i>	<i>a-li</i>	<i>a-fɛn</i>	<i>a-mɛn</i>
Jerigaon	<i>a-dʒɛʔ</i>	<i>a-nu</i>	<i>a-ruŋ-du</i>	<i>a-li</i>	<i>ə-hɛn</i>	<i>a-mɛn</i>
Khoitam	<i>a-dʒap</i>	<i>a-zɔ̃ ~ a-nu</i>	<i>a-ruŋ-du</i>	<i>a-li</i>	<i>a-fan</i>	<i>a-man</i>
Rahung	<i>a-dʒap</i>	<i>a-zɔ̃ ~ a-nu</i>	<i>a-ruŋ-du</i>	<i>a-li</i>	<i>a-hɛn</i>	<i>a-mɛn</i>
Rupa	<i>a-dʒap</i>	<i>a-zɔ̃ ~ a-ŋu</i>	<i>a-ruŋ-du</i>	<i>a-li</i>	<i>a-fan</i>	<i>a-man</i>
Shergaon	<i>a-dʒap</i>	<i>(bə-dʒap-paʔ¹²~) a-ŋu</i>	<i>a-ruŋ-du</i>	<i>a-li</i>	<i>u-fan</i>	<i>a-man</i>
Dikhyang Bugun	<i>ə-viə</i>	<i>a-viə</i>	<i>ə-tʰow</i>	<i>ə-lai</i>	<i>ə-vɔ̃</i>	<i>ə-hɛk</i>
Bulu Puroik	<i>a-mjɛɛ</i>	<i>a-lao</i>	<i>a-tɔɔ</i>	<i>a-lii</i>	<i>a-fɛN</i>	<i>a-mɛn</i>

Other inherited native adjectives, that do not have exact antonyms, can only be negated in a negated copular sentence with the positive attribute. This is, for example, the case with colour terms. The colour terms ‘black’ and ‘white’ all have distinctive forms in the Kho-Bwa languages, as is shown in Table 12.

⁹ There are clearly two roots for ‘bad’ in the Western Kho-Bwa varieties, one deriving from Proto-Western Kho-Bwa *a-niʉ ‘bad (not good)’ and the other from Proto-Western Kho-Bwa *a-zʷan ‘poor, weak’.

¹⁰ This, and the Khispi form, are Tshangla loans.

¹¹ This is a Tawang Monpa loan.

¹² This is the negated form of ‘good’, with a nominalising suffix *-paʔ* and the negative prefix *ba-* replacing the adjective prefix *a-*.

Table 12. Example of adjectives without antonym.

variety	black	white
Duhumbi	<i>u-tɛ^ham</i>	<i>jaŋ-kar^{d3}</i>
Khispi	<i>u-tɛ^ham</i>	<i>jaŋ-kal</i>
Khoina	<i>a-tɛ^hũ</i>	<i>a-zã</i>
Jerigaon	<i>a-tɛ^hõ</i>	<i>a-zã</i>
Khoitam	<i>a-tɛ^hũ</i>	<i>a-zõ</i>
Rahung	<i>a-tɛ^hũ</i>	<i>a-zõ</i>
Rupa	<i>a-tɛ^hũ</i>	<i>a-zõ</i>
Shergaon	<i>a-tɛ^hõ</i>	<i>a-zõ</i>
Dikhyang Bugun	<i>ə-sai</i>	<i>ə-mau</i>
Bulu Puroik	<i>a-hⁱɛN</i>	<i>a-rjuN</i>

But although ‘heavy’ is the antonym of ‘light’, ‘black’ is not the antonym, or a negated form of ‘white’. Hence, to say that the attribute of a house is ‘not black’, or ‘not blue’, requires a negative copula, as the examples from Duhumbi, Rupa and Bulu Puroik in (17a) to (17f) show.

(17)

- a. Duhumbi: wam ute^ham be?
house black COP.EX
The house is black.
- b. wam ute^ham **baŋ**
house black NEG.COP.EXIS
The house is not black.
- c. Rupa: gu yam gi oho Ø
1SG house TOP blue Ø
My house is blue. (Jacquesson 2015: 84)
- d. gu yam gi oho **be’e**
1SG house TOP blue NEG.COP.EXIS
My house is not blue. (Jacquesson 2015: 84)
- e. Bulu Puroik: hiN ham a.hⁱɛN ba?
near house black COP.EXIS
This house is black. (cf. Lieberherr 2017: 194)
- f. hiN ham a.hⁱɛN **bɔɔ**

¹³ This, and the Khispi form, are Bodish loans.

near house black NEG.COP.EQ
 This house is not black. (cf. Lieberherr 2017: 194)

7.2 Derived Negative Adjectives

In most Kho-Bwa languages, adjectives that describe an attribute can be derived from intransitive verbs that have a property concept, such as ‘to be warm’, ‘to be big’, or ‘to be broken’. In the Western Kho-Bwa languages derivation of adjectives from verbs most commonly takes place through nominalisation. The nominaliser is *-ba* or *-pa*, as the examples of Duhumbi, Khoitam, Shergaon, Rupa and Rahung show. These nominalised verbs functioning as adjectives can then be negated with the standard negation marker *ba-*. But as the example of Khoitam shows, there is a second strategy in which a positive adjective becomes a negative adjective in a copular clause with a negative copula. Khoitam here mirrors the situation in Bulu Puroik, where, according to Lieberherr (2017: 104), derived adjectives, unlike inherited adjectives, can either be negated with the negative prefix *ba-* or with a negative copular predicate.

Table 13. Adjective derivation from verbs

variety	verb root	positive adjective	negative adjective	gloss
Duhumbi	<i>get</i> ‘break’	<i>get-ba</i> ‘broken’	<i>ba-get-ba</i> ‘unbroken’	NEG-break-NOM
Khoitam	<i>juŋ</i> ‘be ripe’	<i>juŋ-ba</i> ~ <i>a-juŋ</i> ‘ripe’	<i>ba-juŋ-ba</i> ~ <i>a-juŋ</i> <i>bɔ.ɔ</i> ‘unripe’	NEG-ripe-NOM ~ ripe NEG.COP.EXIS
Rahung	<i>dʒet</i> ‘break’	<i>dʒeʔ-ba</i> ‘broken’	<i>bə-dʒeʔ-ba</i> ‘unbroken’	NEG-break-NOM
Rupa	<i>gat</i> ‘break’	<i>gat-pa</i> ‘broken’	<i>ba-gat-pa</i> ‘unbroken’	NEG-break-NOM
Shergaon	<i>dʒap</i> ‘be good’	<i>a-dʒap</i> ‘good’	<i>ba-dʒap-pa</i> ‘bad’	NEG-good-NOM
Puroik	<i>min</i> ‘ripen’	<i>a-min</i> ‘ripe’	<i>ba-min</i> ~ <i>a.min</i> <i>ba.bɔɔ</i> ‘unripe’	NEG-ripe ~ ripe NEG.COP.EQ
Tshangla	<i>pʰɔt</i>	<i>pʰɔt-pa</i>	<i>pʰɔt-pa ma-la</i>	broken-NOM NEG.COP (<i>ʔma-pʰɔt-pa</i>)

Notably, as the last row in Table 13 shows, Tshangla follows the Puroik pattern of negating derived adjectives with a negative copula, and not with the negative prefix. In Tshangla, *maphotpa* would mean ‘won’t break’, not ‘unbroken’, whereas *maphotpa la* would mean ‘it did not break’, not

‘unbroken’.

Neither own data nor the available secondary sources (Dondrup 1990, Lander-Portnoy 2013, Barбора 2015) has any detailed description of adjective formation in Bugun. Dondrup (1990: 77-83) is the most extensive list of Bugun adjectives. A quick comparison shows no analogies with the Western Kho-Bwa and Puroik strategies of the formation of derived negative objectives. All Bugun adjectives are either unique lexical forms (*phiyang* ‘long, tall’, *dun* ‘short’; *niyap* ‘smooth’, *sūwa* ‘rough’; *gong* ‘strong, hard; bright, clear’, *zīya* ‘weak’), or their antonym formed in the manner as described in 7.1 (*wie* ‘good, kind’, *a-wie* ‘bad, vile, worst’; *khie* ‘beautiful’, *a-khia* ‘ugly’; *gun-chit* ‘useful’, *gun-a-chit* ‘useless’), or simply the verb root (*ru-um* ‘fear’, *rum* ‘afraid’; *i* ‘die’, *i* ‘dead’; *bing* ‘close v.’, *bing* ‘closed (adj.)’; *shong* ‘be stale, rotten’, *shong* ‘wet, muddy’ but *e-shong* ‘rotten’).

8 Concluding Remarks

All the Kho-Bwa varieties except Bugun have pre-verbal negation with a negative prefix that drives from Proto-Kho-Bwa ***ba-**, which displays a uniquely Kho-Bwa phonological innovation compared to the other Sino-Tibetan languages that have a negative marker with a bilabial nasal *ma-* or related forms. Although the Bugun negation prefix *a-* is distinct from that of the other Kho-Bwa varieties, the negation in Bugun is pre-verbal, like in the other Kho-Bwa varieties, and indeed in most Sino-Tibetan languages.

All the Western Kho-Bwa languages except Khoina have a dedicated prohibitive derived from Proto-Western Kho-Bwa ***tʰa-** with cognates in several Sino-Tibetan languages. Dedicated prohibitive markers are typologically not uncommon. However, Puroik and Khoina use the regular negative prefix for the prohibitive mood and the situation in Bugun is undetermined.

All Kho-Bwa varieties have negated copulas to express negation in non-verbal predicates. The negated equational copula in Khispi and Duhumbi is cognate with the negated equational copula in the Sartang and Sherdukpen varieties and the negated existential copula in the Sartang and Sherdukpen varieties is cognate with the negated equational copula in Puroik. The Khispi, Duhumbi and the Puroik negated existential copula do not have cognates in the other varieties. This indicates that both semantic change and innovation have occurred. Again, Bugun has a poorly described but at first sight distinct set of copulas.

Whereas the negative prefix precedes the verbal component of complex noun-verb predicates in all Kho-Bwa languages of which descriptions exist, there is a distinction in the way in which serial verb constructions are negated. The negation before the last verb in the verb string that we observe in Duhumbi is likely an influence from the Bodish languages or Tshangla, whereas the negation before the entire verbal string as seen in the other Kho-Bwa varieties appears to be the inherited structure.

The derived native adjectives, formed through nominalisation, can be negated with the negation

prefix in Western Kho-Bwa languages. Derived adjectives in Puroik are not formed through nominalisation, but their negation can either be in copular clauses with a negative copula or with the negation prefix. This combination of two strategies is, however, also reported from Khoitam Sartang. A Bugun derived adjective appears to be simply the verb root from which it is derived: Information on negative derived adjectives is lacking. These typological features are presented in Table 14.

Table 14. Comparison of negation strategies in Kho-Bwa, with the aberrant varieties in bold.

feature / variety ¹⁴	Duh	Khi	Khn	Jer	Kht	Rah	Rup	Sher	Bug	Pur
negation marker *ba-	Y	Y	Y	Y	Y	Y	Y	Y	N, a-	Y
pre-verbal negation	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
prohibitive marker *t ^h a-	Y	Y	N, ba-	Y	Y	Y	Y	Y	?	N, ba-
negative equational copula *ba-ju	Y	Y	Y	Y	Y	Y	Y	Y	?	YNC
negative existential copula *ba-a?	YNC?	YNC?	Y	Y	Y	Y	Y	Y	YNC	YNC
negation of N-V predicates before the V	Y	Y	(Y)	(Y)	(Y)	(Y)	Y	(Y)	?	Y
negation in SVC before entire string	N	N	(Y)	(Y)	Y	(Y)	Y	(Y)	?	Y
unique negative adjectives	Y	Y	Y	Y	Y	Y	Y	Y	Y, most	Y
negation of adjectives through copular clauses	Y	Y	(Y)	(Y)	(Y)	(Y)	Y	(Y)	?	Y
negative derived adjectives with negative prefix	Y	Y	(Y)	(Y)	Y	Y	Y	Y	?	Y
negative derived adjectives in copular clauses	N	N	(Y)	(Y)	Y	(Y)	(Y)	(Y)	?	Y

¹⁴ Duh = Duhumbi, Khi = Khispi, Khn = Khoina, Jer = Jerigaon, Kht = Khoitam, Rah = Rahung, Rup = Rupa, She = Shergaon, Bug = Dikhyang Bugun, Pur = Bulu Puroik. Y = yes, N = no, YNC = yes, not cognate, (Y) is expected yes, ? = unknown. N = noun, V = verb, SVC = serial verb construction.

Based on these typological observations, Bugun is the most data-deficient but also the most aberrant Kho-Bwa variety, having a distinct prefix for standard negation and the negation of adjectives and a negative copula that does not appear cognate with the other Kho-Bwa varieties. Bulu Puroik is in many respects similar to the Western Kho-Bwa varieties, except for its lack of a dedicated prohibitive marker, a feature strangely enough shared by the Western Kho-Bwa variety Khoina. Within the Western Kho-Bwa languages, the distinctiveness of the Khispi and Duhumbi negation strategies, such as the negation of serial verb constructions, can be explained through contact with the Bodish languages or Tshangla. This confirms the slightly distinct position of these two varieties versus the Sartang and Sherdukpen varieties. Hence, this comparison of Kho-Bwa negation strategies confirms the results of our earlier lexicostatistical study (Lieberherr and Bodt 2017).

Less can be concluded regarding the position of the Kho-Bwa cluster within the Sino-Tibetan language family: Indeed, except for Bugun, the Kho-Bwa negation strategies surveyed here are not much distinct from the majority of Sino-Tibetan languages. The main distinctive feature, the denasalised onset of the standard negation marker, is a phonological feature, not a morphological or syntactic one.

However, there are some caveats to this analysis. Detailed descriptions of the Sartang varieties, Bugun and the varieties of Puroik other than Bulu Puroik are lacking. Some of the negation strategies and particular features of negation, such as the rich system of negative copula and the asymmetric negation described from Duhumbi, could not be compared to the other Kho-Bwa varieties. In particular, data from Bugun on several negation strategies, such as the prohibitive, the negation of noun-verb predicates and the negation of serial verb constructions, are absent, making a comparison in these respects impossible. And finally, Bulu Puroik is the westernmost Puroik variety, spoken close to the Sartang varieties. In addition, three of the handful of Bulu Puroik speakers have mothers who were Sartang speakers (Lieberherr 2017: 274). We may, hence, suspect some level of linguistic influence of Sartang on Bulu Puroik. From this perspective, a comparison with negation strategies of other Puroik varieties spoken further East may provide a more balanced overview. Unfortunately, the available sources on these varieties of Puroik either lack sentences (Remsangpuia 2008, Soja 2009), lack glosses (Tayeng 1990), or are written in Chinese (Lǐ 2004), limiting their accessibility.

Hopefully, in the coming years more descriptions of the Kho-Bwa varieties, and in particular Sartang, Bugun and Puroik, will become available, which will enable further typological comparisons and phylogenetic studies based on them.

References

- van der Auwera, Johan. 2006. Why languages prefer prohibitives? *Journal of Foreign Languages* 1: 1–25.
- van der Auwera, Johan. 2010. Vers une typologie du prohibitif. In Franck Floric and René Lambert-Brétière (eds.), *La négation et les énoncés non susceptibles d'être niés*. Paris: CNRS Éditions. 155–72.
- van der Auwera, Johan and Ludo Lejeune. [2005] 2013. The prohibitive. Matthew S. Dryer and Martin Haspelmath (eds.), *World atlas of language structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. Available online at: <http://wals.info/chapter/71>. First published by Oxford University Press, 2005.
- Barbora, Madhumita. 2015. *Bugun Nyo Thau – Bugun Reader*. Guwahati: EBH Publishers.
- Baxter, William H. and Laurent Sagart. 2014. *Old Chinese: a new reconstruction*. New York: Oxford University Press.
- Bodt, Timotheus Adrianus. 2012. *The New Lamp Clarifying the History, Peoples, Languages and Traditions of Eastern Bhutan and Eastern Mon*. Wageningen: Monpasang Publications.
- Bodt, Timotheus Adrianus. 2014. Ethnolinguistic survey of westernmost Arunachal Pradesh: A fieldworker's impressions. *Linguistics of the Tibeto-Burman Area* 37.2: 198–239.
- Bodt, Timotheus Adrianus. 2019. The Duhumbi perspective on Proto-Western Kho-Bwa rhymes. *Die Sprache* 52 (2016 / 2017) 2: 141-176.
- Bodt, Timotheus Adrianus. 2020. *Grammar of Duhumbi*. Languages of the Himalayan Region. Leiden: Brill.
- Bodt, Timotheus Adrianus. 2021. The Duhumbi perspective on Proto-Western Kho-Bwa onsets. *Journal of Historical Linguistics*.
- van Breugel, Seino. 2014. *A grammar of Atong*. Leiden: Brill.
- Bruhn, Daniel Wayne. 2014. *A Phonological Reconstruction of Proto-Central Naga*. Ph.D. dissertation. Berkeley: University of California.
- Coupe, Alex. 2007. *A grammar of Mongsen Ao*. Berlin/New York: Mouton de Gruyter.
- Dondrup, Rinchin. 1988. *A Handbook on Sherdukpen Language*. Itanagar: Government of Arunachal Pradesh.
- Dondrup, Rinchin. 1990. *Bugun Language Guide*. Itanagar: Government of Arunachal Pradesh.
- Dondrup, Rinchin. 2004. *An Introduction to Boot Monpa Language*. Itanagar: Government of Arunachal Pradesh.
- Driem, van, George. 1987. *A grammar of Limbu*. Berlin/New York/Amsterdam: Mouton de Gruyter.
- Driem, van, George. 2001. *Languages of the Himalayas - An Ethnolinguistic Handbook of the Greater Himalayan Region*. Vol. 2. Leiden: Brill.
- Dryer, Matthew S. 2013 [2005]. Negative morphemes. Matthew S. Dryer and Martin Haspelmath (eds.), *World atlas of language structures online*. Leipzig: Max Planck Institute for Evolutionary

- Anthropology. <http://wals.info/chapter/112/>. First published by Oxford University Press, 2005.
- Eriksen, Pal Kristian. 2011. 'To not be' or not 'to not be': The typology of negation of non-verbal predicates. *Studies in Language* 35(2): 275–310.
- Hill, Nathan W. 2019. *The Historical Phonology of Tibetan, Burmese, and Chinese*. Cambridge University Press.
- Post, Mark W. 2007. *A Grammar of Galo*. PhD thesis. Bundoora: La Trobe University. Research Centre for Linguistic Typology.
- Jacquesson, François. 2015. *An introduction to Sherdukpen language*. Diversitas Linguarum 39. Bochum: Universitätsverlag Dr. N. Brockmeyer.
- Jespersen, Otto. 1917. *Negation in English and other languages*. (Kongelige Danske Videnskabernes Selskab. Historisk-filologiske Meddelelser I,5). Copenhagen: Høst.
- Joseph U.V. 2007. *Rabha*. Brill's Tibetan Studies Library. Languages of the Greater Himalayan Region Vol. 5/1. Leiden/Boston: Brill.
- Joseph U.V. and Robbins Burling. 2006. *The comparative phonology of the Boro Garo languages*. Mysore: Central Institute of Indian Languages.
- King, John Timothy. 2009. *A grammar of Dhimal*. Leiden: Brill.
- Konnerth, Linda A. 2014. *A grammar of Karbi*. PhD dissertation. Oregon: University of Oregon.
- Lander-Portnoy, Maury. 2013. *Let Buguns be Buguns: A Preliminary Phonetics, Phonology, and Morphology of the Bugun Language*. MA thesis, Swarthmore College.
- LaPolla, Randy with Chenglong Huang. 2003. *A grammar of Qiang with annotated texts and glossary*. Mouton Grammar Library 31. Berlin/New York: Mouton de Gruyter.
- Lǐ, Dàqín. 2004. *Sūlóngyǔ yánjiū [Research on Puroik]*. Běijīng: Mínzú chūbǎn shè [National Minorities Publisher].
- Lieberherr, Ismael. 2017. *A Grammar of Bulu Puroik*. PhD thesis. Bern: Institut für Sprachwissenschaft, Universität Bern.
- Lieberherr, Ismael and Timotheus Adrianus Bodt. 2017. Sub-grouping Kho-Bwa based on cognate core vocabulary. *Himalayan Linguistics* Vol. 16(2): 2-40.
- Meitei, Elangbam Manimohon. 2017. *Purum chong kinchuna jedetrubu. A learner's book of the Purum language*. Tezpur: Centre for Endangered Languages, Tezpur University.
- Miestamo, Matti. 2005. *Standard negation: The negation of declarative verbal main clauses in a typological perspective*. (Empirical Approaches to Language Typology 31). Berlin: Mouton de Gruyter.
- Miestamo, Matti. 2007. Negation – An Overview of Typological Research. *Language and Linguistics Compass* 1/5 (2007): 552–570.
- Miestamo, Matti. 2017. Negation. Alexandra Y. Aikhenvald and R.M.W. Dixon (eds.) *The Cambridge Handbook of Linguistic Typology*. Cambridge: Cambridge University Press. 405-439.

- Miestamo, Matti and Johan van der Auwera. 2011. Negation and perfective vs. imperfective aspect. Jesse Mortelmans, Tanja Mortelmans and Walter De Mulder (eds.) *From now to eternity*. (Cahiers Chronos 22). Amsterdam: Rodopi. 65–84.
- Modi, Yankee. 2017. *The Milang Language: Grammar and Texts*. Ph.D. dissertation. Bern: University of Bern.
- Neukom, Lukas. 2001. *Santali*. München: Lincom Europa.
- Payne, John. R. 1985. Negation. Timothy Shopen (ed.), *Language typology and syntactic description, Vol. I: Clause structure*. Cambridge University Press. 197–242.
- Plaisier, Heleen. 2007. *A grammar of Lepcha*. Brill's Tibetan Studies Library 5: Languages of the Greater Himalayan Region 5. Leiden: Brill.
- Prins, Marielle. 2016. *A Grammar of rGyalrong, Jiăomùzú (Kyom-kyo) Dialects. A Web of Relations*. Languages of the Greater Himalayan Region, Volume: 16. Leiden: Brill.
- Remsangpuia. 2008. *Puroik Phonology*. Shillong: Don Bosco Center for Indigenous Cultures.
- Schmid, Maureen Alicia. 1980. *Co-occurrence restrictions in negative, interrogative, and conditional clauses: A cross-linguistic study*. PhD dissertation. Buffalo: State University of New York.
- Simon, Ivan Martin. 1979. *Miji language guide*. Shillong: Directorate of Research (Philological Section) Government of Arunachal Pradesh.
- Soja, Rai. 2009. *English-Puroik dictionary*. Shillong: Living Word Communicators.
- Sun, Tianshin Jackson. 1993. *A Historical-Comparative Study of the Tani (Mirish) Branch in Tibeto-Burman*. PhD thesis. Berkeley: Department of Linguistics, University of California.
- Tayeng, Aduk. 1990. *Sulung Language Guide*. Itanagar: Directorate of Research, Government of Arunachal Pradesh.
- Veikho, Sahiini Lemaina. 2019. *A grammar of Poumai Naga*. PhD dissertation. Bern: University of Bern.
- Watters, David E. 2004. *A grammar of Kham*. Cambridge: Cambridge University Press.
- Widinibou, Charengna. 2017. *Liangkhun ketibu Khuang. A learner's book of the Liangmai language*. Tezpur: Centre for Endangered Languages, Tezpur University.
- Widmer, Manuel. 2014. *A descriptive grammar of Bunan*. PhD dissertation. Bern: Universität Bern.