On Bodish languages in Bhutan: Language contact, genetic inheritance and parallelism in drift

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Bhutan is located in the Eastern Himalayas, known as a hotspot of linguistic diversity. Bhutan shares a long border with India touching four states – Arunachal Pradesh to its east, Sikkim to its west, and Assam and West Bengal to its south. Bhutan also has a common border with Tibet to its north. It is estimated that more than 250 languages are spoken in the Himalayan region spanning several countries. Nineteen different languages are spoken in Bhutan with a population of less than a million. Eighteen of these are Tibeto-Burman (Trans-Himalayan). No focused studies have been conducted on the language contact situation in Bhutan. This paper deals with a comparison of a select set of phonological and grammatical features of four Bodish languages – Brokpa, Classical Tibetan, Dzongkha, and Tshangla – with a view to laying the groundwork for future work on language contact in Bhutan and beyond.

KEYWORDS: Bhutan, Bodish, consonant clusters, genetic inheritance, language contact, pitch assimilation, parallelism in drift, lexical compounding, serial verb construction, Tibeto-Burman, Brokpa, Classical Tibetan, Dzongkha, Tshangla.

1. Introduction¹

The four Bodish languages – Brokpa, Classical Tibetan, Dzongkha, and Tshangla – create an interesting language contact situation in Bhutan.

Brokpa and Dzongkha are closely related to each other, both belonging to the same lower-level genetic subgroup 'Central Bodish' (van Driem 1991, 1994, 1998; Shafer 1955, 1966), but these two languages are geographically not contiguous. However, Dzongkha is the national ('official') language of Bhutan, and it is taught in schools in Bhutan including the Brokpa-speaking areas. Since Dzongkha is the language of administration and a medium of instruction in Bhutan, the speakers of Brokpa are exposed to Dzongkha on a regular basis.

Brokpa and Tshangla are in direct contact, but are not closely related. Tshangla forms a linguistic subgroup on its own (see Figure 2) on a par with Central Bodish within the Bodish branch of the Tibeto-Burman language family. However, the speakers of Brokpa and Tshangla interact on a daily basis. In general, Brokpa speakers are fluent in both Dzongkha

and Tshangla, but Dzongkha or Tshangla speakers do not acquire even a basic command of Brokpa.

Classical Tibetan, known as Chökê in Bhutan, is no longer a spoken language, but it is the language of liturgy and, therefore, is used as a medium of instruction in monastic education in Bhutan. Classical Tibetan used to be taught in schools in Bhutan and this continues in some form to this day. Classical Tibetan influences all Bhutanese languages.

Note that 'Central Bodish' languages are also referred to as Tibetic languages, and the Central Bodish languages of Bhutan are placed under 'Southern Tibetic' (see Tournadre 2014). Out of the two names – 'Tibetic' and 'Central Bodish' –, the present author, as a Himalayan insider, prefers the latter because it is based on an endonym. DeLancey (2015) postulates some morphological evidence for a central branch within Trans-Himalayan languages. Similarly to proposing Trans-Himalayan to replace terms such as Tibeto-Burman or Sino-Tibetan, names such as 'Central/Eastern/Southern Trans-Himalayan' can more broadly and neutrally describe the languages of the lower-level groups. Figure 1 shows the languages of Bhutan.

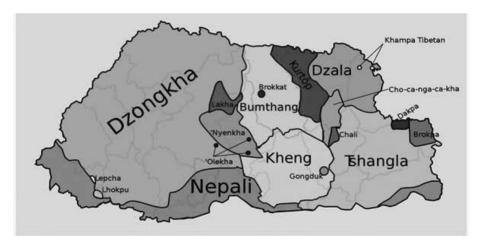


Figure 1. Languages of Bhutan.

All the languages of Bhutan, shown in Figure 1, belong to the Tibeto-Burman language family, save Nepali which is Indo-Aryan. Besides Brokpa and Dzongkha, four other Central Bodish languages are spoken in Bhutan: Chocangacakha, Brokkat, Lakha, and Tibetan (B'ökha).

Figure 2 gives the subgrouping of the Bodish languages of Bhutan based on Shafer (1955, 1966), van Driem (1998), and Eberhard *et al.* (2019).

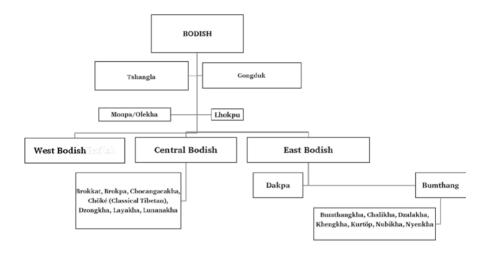


Figure 2. The Bodish languages of Bhutan.

Note that each of the four languages of Bhutan that are not associated with either Central Bodish or East Bodish in Figure 2 – i.e. Tshangla, Gongduk, Monpa/Olekha, and Lhokpu – forms a separate subgroup on their own within the Bodish branch of the Tibeto-Burman language family.

As can be seen in Figure 2, another language which is spoken in direct contact with Brokpa is Dakpa, 2 an East Bodish language (Shafer 1955; van Driem 1991, 1994; Hyslop 2013, 2017). Although Brokpa and Dakpa belong to separate groups within the Tibeto-Burman language family, the speakers of Brokpa and Dakpa trade, intermarry, and share many cultural features, and the two languages have influenced each other to a great extent. Most traditional songs in Brokpa actually contain Dakpa words. One can expect Brokpa and Dakpa to share a high percentage of vocabulary items. For example, the Brokpa word *poŋpoŋ* 'talk' is undoubtedly from Dakpa (East-Bodish); this is in addition to the Brokpa (Central-Bodish) word ló 'talk' which is the word used in other Central Bodish languages such as Dzongkha and Classical Tibetan. Furthermore, other East-Bodish languages such as Bumthang and Chali have p^h olap 'talk', cognate with the Dakpa *poŋpoŋ*.

Central Bodish languages of Bhutan (Brokpa, Classical Tibetan, Dzongkha, Chocangacakha, and Layakha) are very similar lexically, grammatically, and phonologically. The similarities are expected as these languages are more closely related at a lower-level of subgrouping. Tshangla is connected with Central Bodish languages only at a higher-level of subgrouping. Therefore, Tshangla has distinct lexical and grammatical forms, even though it shares structural patterns and certain lexical and grammatical forms with other Bodish languages.

Bhutan is a small nation with nineteen different languages spoken within a population of a little over half a million people and an area of less than 15,000 sq miles. All the languages of Bhutan are in some contact situation, especially in the capital city Thimphu, where the population consists of speakers of all the country's languages. For that reason, it is particularly difficult to determine whether similarities among the Bodish languages of Bhutan are due to genetic inheritance or to contact with one another. As Aikhenvald (2006a: 8) puts it, "Linguists ought not to be afraid to honestly say 'we do not know, and are never likely to know', whether a certain similarity is due to genetic origin or to geographical diffusion". She further notes:

If languages are genetically related, we expect them to develop similar structures, no matter whether they are in contact or not. And if genetically related languages are in contact, trying to prove that a shared feature is contact induced and not a 'chance' result of Sapir's drift may be next to impossible (Aikhenvald 2006a: 9).

While keeping these considerations and limitations in mind this paper attempts to determine if a particular parameter or a shared feature in four Bodish languages of Bhutan is due to genetic inheritance, areal contact, or 'parallelism in drift' (see Sapir 1921: 171-72 for a discussion of 'parallelism in drift'). In particular, we focus on Brokpa, Classical Tibetan, Dzongkha, and Tshangla and will examine a select set of phonological and grammatical features of these four languages.

2. Morphosyntactic and phonological features

Brokpa, Dzongkha, Classical Tibetan, Tshangla, and other languages spoken in Bhutan and the adjoining areas resemble one another in many categories and constructions. As noted in §1, these languages show a high degree of similarity; however, they also differ in certain phonological and grammatical parameters due to natural evolution and/or contact with

languages from other subgroups of Tibeto-Burman and other language families.

In this section we examine the morphology and syntactic functions of personal pronouns (§2.1), number marking (§2.2), and negation (§2.3); and we also look at some aspects of phonological and prosodic features including certain series of consonants and vowels (§2.3), tone (§2.5), and pitch assimilation (§2.6). 3

2.1. Personal pronouns

The four languages in question all have free pronouns. Brokpa, Dzongkha, and Classical Tibetan either share the same personal pronouns or their forms are strikingly similar, while the forms of the Tshangla personal pronouns are markedly different. However, the functions of the pronouns in these three languages are the same. A pronoun can function as head of NP; it can be substituted by a noun; and, in certain contexts, it can take modifiers. Table 1 gives the personal pronouns of Brokpa, Dzongkha, and Classical Tibetan.

	Br	Brokpa		Dzongkha	CLASSICAL TIBETAN	
	SG	PL	SG	PL	SG	PL
1 NONHON	ŋa	ŋi ~ ŋe	ŋa	$\eta at arphi arepsilon (=t arphi^h at arphi^h ap)$	nga, bdag	nged
1 HON					khyed	
2 NONHON	k ^h yo	k ^h yi	t¢ ^h ø	$t \varsigma^h \emptyset = t \varsigma^h a t \varsigma^h a p$	khyod	khyed
2 HON			na	na=bu		
3 иоинои м	k ^h o	k ^h oŋ	kho	$k^ho\eta(=t\varsigma^hat\varsigma^hap)$	kho	khong
3 NONHON F 3 HON	то	то			khong	

Table 1. Personal pronouns in Brokpa, Classical Tibetan, and Dzongkha (Central-Bodish).

Note that $k^ho\eta$ is the third person plural form of both the third person masculine k^ho and the third person feminine mo in Brokpa as well as in Dzongkha. In Classical Tibetan, the second person plural khyed can be used as the honorific form of the first person singular. Similarly, the third person plural khong can be used as the honorific form of the third person singular. It may seem a bit complicated but when one has a good understanding of this language one can easily identify the context in which a particular pronoun is used.

Brokpa does not have an honorific versus non-honorific distinction in its personal pronouns. Dzongkha has polite/honorific second person singular pronoun na and its plural form na = bu; the polite pronoun na can also take the plural marker $= tc^hatc^hap$.

Brokpa, Dzongkha, and Classical Tibetan (Central Bodish languages) share the root forms of personal pronouns, as shown in Table 1.

As can be seen from Table 1, Brokpa makes SG/PL number distinctions for first and second persons via vowel gradation, and for third person via consonant epenthesis. Specifically, the plural form for both first and second persons in Brokpa is derived by vowel fronting: /a/ to /i/ for first person, and /o/ to /i/ for second person.

For the third person, the plural form $-k^ho\eta$ – is derived by means of paragoge, adding a velar nasal $/\eta$ / to the third person masculine singular k^ho .

The techniques employed for deriving plural forms in Brokpa are apparently similar to Classical Tibetan, as can be seen in Table 1. Dzongkha follows the same rule of deriving the plural form, as Brokpa and Classical Tibetan, for the third person only.

Tshangla, a non-Central-Bodish language, has completely different forms of personal pronouns. Tshangla makes three number distinctions (SG/DU/PL) for all three persons, whereby the dual form refers to two and the plural to more than two. Table 2 gives personal pronouns in Tshangla.

	SG	DU	PL
1	dzaŋ	at¢ ^h iŋ	ai(=bak)
2	nan	nat¢ ^h iŋ	nai(=bak)
3	rok	rokt¢ ^h iŋ	rokte(=bak)

Table 2. Tshangla personal pronouns.

It can be seen, in Table 2, that Tshangla personal pronouns are markedly different from Brokpa, Classical Tibetan, and Dzongkha. Brokpa and Dzongkha have SG/PL distinction but they do not have dual pronouns. The dual in Brokpa and Dzongkha can only be expressed using the number word pi 'two'. The number word for 'two' in Tshangla is niktsip and, unlike Brokpa and Dzongkha, the number word for 'two' in Tshangla has fully merged with the roots of the personal pronouns. Dzongkha has innovated an honorific/polite form in its pronoun paradigm.

In terms of syntactic orientation, the personal pronouns in all the four languages prototypically display an ergative system. They behave like nouns and typically inflect on an absolutive-ergative basis: the transitive object O and the intranstive subject S both receive the same absolutive case marking, while the transitive subject A is treated differently and marked with ergative case. The following examples illustrate the ergative system of personal pronouns in the four languages:

```
(1) Brokpa
a. \eta a = e_A
1 \text{ s}_C = F
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.
$$na = e_A$$
 $[k^hyo = \emptyset]_O$ $[dun-gu-na]_{TR.PRED}$
 $1SG = ERG$ $2SG = ABS$ beat-FUT.IPFV-FACT
'I will beat you'.

b. $[\eta a = \emptyset]_S$ $[\eta a - li]_{INTR.PRED}$ 1SG = ABS sleep-PFV

'I slept'.

(2) Classical Tibetan

- a. $[bdag]_A$ gis $[chos = \emptyset]_O$ [[ston] $to]_{TR.PRED}$ 1SG ERG dharma = ABS teach FINAL 'I am teaching Dharma'.
- b. $[nga \quad rang = \emptyset]_S$ $gcig.pu \quad ['gro \quad rgyu \quad yin]_{INTR.PRED}$ 1SG REFL.EMPH = ABS alone go IPFV COP.EGO 'I will go alone myself'.

(3) Dzongkha

- a. $[\eta\acute{a}=gi]_A$ $[t\not c^h\not o=\emptyset]_O$ $[da\eta+\cancel{a}a-h\~{0}i]_{TR,PRED}$ 1SG=ERG 2SG=ABS beat+leave-POTENTIAL 'I will beat you'.
- b. te $[mo = \emptyset]_s$ $[\eta \acute{u}$ -yi $J_{\text{INTR.PRED}}$ te PART 3SG = ABS cry-PFV PART 'So she cried'.

(4) Tshangla

- a. $[rok = ki]_A$ $[solo = \emptyset]_O$ $[kam-pa]_{TR.PRED}$ 3SG = ERG chili = ABS eat-PFV 'He ate chillies'. b. $[dzaŋ = \emptyset]_S$ $[ŋar + dzoŋ-ma]_{INTR.PRED}$
- b. $[dzay = \emptyset]_S$ $[\eta ar + dzoy ma]_{INTR.PRED}$ 1SG = ABS laugh + GO-PFV 'I ended up laughing'.

The A arguments in the (a) examples in (1-4) are marked by ergative case for the personal pronouns in all four languages; in contrast, the O arguments in the same clauses are zero-marked for absolutive. The S arguments, as in the (b) examples, come to be zero-marked for absolutive, in the same way as the O arguments in the (a) examples. This pattern of marking may change only due to pragmatics such as contrastive focus in these languages.

In the four languages in question, personal pronouns typically occur on their own without modifying elements including adjectives. However, in certain discourse contexts, a personal pronoun may be modified by an adjective or a relative clause. For reasons of space, we will illustrate using examples from Brokpa only. Consider:

- (5) a. [?oti söra=di]_GIFTNP-0 [ŋa ?apsu-tçan=ge]_NP-A matakpal [khyo reba-tçan=ge]_NP-A mi-thop DEM:PROX gift=DEF 1SG luck-ADJ=ERG other_than 2SG hope-ADJ=ERG NEG-get 'Other than I, the fortunate, You, the expectant, will not get this gift', lit. 'Other than fortunate I, expectant you will not get this gift'.
 - b. $[garpatoonsum=di]_{CS}$ násmeti da $[k^ho$ $teneæ+k^hæpu]_{NP:CC}$ Wedding_MC=DEF very_much PART 3SG oration+skillful 'The Wedding MC, he is eloquent'.

In (5a), the first person pronoun ηa which is the head of the first A NP is directly modified by the derived adjective $2apsu-t \xi an$ (luck-ADJ) 'lucky/fortunate'. Similarly, the second person pronoun $k^h yo$ which is the head of the second A NP is directly modified by the derived adjective $reba-t \xi an$ (hope-ADJ) 'expectant/hopeful'.

Further, a personal pronoun in Brokpa may be modified by a relative clause. Consider:

(6) $[[zinga \quad run-gan]_{RC} \quad k^ho]_{NP:CS}$ kaktar na land guard-NMLZ 3SG.M tough COP.FACT 'He who is guarding the field is tough'.

The head of NP in CS function in (6) is the third person singular masculine pronoun k^ho which is modified by an RC. Classical Tibetan, Dzongkha, and Tshangla can have complex NPs with a personal pronoun as head, modified by a relative clause, as in Brokpa.

Personal pronouns in Brokpa and Tshangla can take enclitic $=ra\eta$, cognate with Classical Tibetan rang. In Dzongkha, the same enclitic is realized as an open syllable =ra. Note that, either as a result of contact-induced change or due to, in Aikhenvald's (2006a) words, 'typological naturalness', there is a tendency shared by many Bodish languages to drop the final consonants. In Brokpa and Tshangla too, as noted in §2.3, some speakers, especially the younger generation, tend to drop the final η / influenced by Dzongkha; however, synchronically, a majority of the speakers retain this final consonant.

When attached to personal pronouns, the enclitic $=ra\eta$ in Brokpa and Tshangla or =ra in Dzongkha has three functions: reflexive effect, autoreflexive effect, and emphatic and/or contrastive effect (see Wangdi forthcoming on the functions of $=ra\eta$ in Brokpa).

In a nutshell, the forms of personal pronouns in Brokpa, Dzongkha, and Classical Tibetan are the same or strikingly similar. However, personal pronouns in Tshangla are markedly different and have a different paradigm with dual forms for all persons. The emphatic and reflexive polysemy marked by $=ra\eta$ in Brokpa and Tshangla, and =ra in Dzongkha, are historically related to rang in Classical Tibetan. The functions and syntactic orientations of the personal pronoun are essentially the same in all four languages, which can be attributed to the common genetic origin at a higher level within Tibeto-Burman.

2.2. Plural marking

Brokpa and Dzongkha share the plural marker $= ts^h u$, which is a cognate with the Classical Tibetan plural tsho. Brokpa has innovated an allomorphic variant, = zu. Table 3 gives the morphemes marking plural number in these four languages: Brokpa (BR), Classical Tibetan (CT), Dzongkha (DZ), and Tshangla (TS).

BR	CT	DZ	TS
$=ba? \sim =bak$ (indefinite)	tsho, rnams, cag	$=tc^hatc^hap$ (human nouns)	=bak
$=ts^hu\sim =zu$ (definite)	dag (collective)	$=ts^hu$ (general)	
$=ts^ha\eta$ (associative)			

Table 3. Plural markers in Brokpa, Classical Tibetan, Dzongkha, and Tshangla.

Brokpa has innovated an associative plural $= ts^ha\eta$, as in examples (7a-b). The associative plural in Brokpa, in agreement with Moravcsik (2003) and Aikhenvald (2015: 89), is generally marked on proper names, kinship terms, and nouns with human reference and has the meaning or 'X and X's associate(s)':

```
(7) a. te
              num \eta a = i
                                  ?ot ?ani
                                               2aza\eta = ts^ha\eta lo?
                                                                       jar + ga-so\eta
        PART night 1SG = GEN DEM aunt uncle = ASPL again
                                                                       run + go-PFV.DIRECT
        'So, at night, my parents-in-law and all went back'.
                    çi-m-gin = tshan
                                                             dok-p<sup>h</sup>i-na
     b. ?azaŋ
                                         ?un
                                                  ja = la
                    die-LK-NMLZ = ASPL before up = LOC arrive-PFV-FACT
        uncle
        'In the past, the late uncle and all the others have been up there (to Tibet)'.
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Interestingly, the Brokpa indefinite plural marker $=ba?\sim =bak$ is shared with Tshangla. It is reasonable to infer that Brokpa has borrowed this plural marker from Tshangla (Wangdi 2019) because the plural markers in Central Bodish languages including Brokpa, Classical Tibetan, and Dzongkha typically commence with an aspirated voiceless affricate $/ts^h/$, as can be seen in Table 3. Further, the Dzongkha plural tc^hatc^hap can be historically related to the Classical Tibetan plural cag.

Brokpa retains its native plural marker $=ts^hu$ but also innovated a free variant =zu. Further, it created a definite versus indefinite plural

distinction, with the marker $= ts^h u$ typically marking definite and = ba? indefinite NPs. Consider:

```
    (8) a. den 20 lam+lukse=di=zu
        PART DEM way+tradition=DEF=PL
        'those traditions'
    b. bar+tçhaŋ=gi temre=di=zu tsi+zin-ni=daŋ...
        middle+wine=GEN celebration=DEF=PL observe+finish-PFV=COM
        'After completing the Barchang (Middle Drink) celebrations...'
```

In (8a-b), the plural marker =zu applies to a definite NP. Replacing this with the plural =ba? is odd and unacceptable, *lam + lukse = di = ba?, *temre = di = ba?. Examples of =ba? occurring with indefinite NPs include:

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    (9) a. phama = ba? = khi dø + ton = næ parpuntshan = ba? = khe dø + ton = næ...
        parent = PL = ERG counsel + show = ABL.SEQ sibling = PL = ERG counsel + show = ABL.ERG
        'Parents give advice, and siblings give advice...'
        b. mí teloŋ doriri = ba? purtçi tshur = la joŋ = næ...
        person young energetic = PL all hither = ALL come = ABL.SEQ
        'All young and energetic people came this side...'
```

In (9a-b), the plural marker =ba? is added to a noun used in an indefinite sense. While it is not entirely ungrammatical for the plural $=ts^hu$ to occur with an indefinite NP, only one instance of it occurring with an indefinite NP is found in my corpus of more than 5,000 clauses: $y\acute{a}$? =zu (yak = PL) 'yaks'.

In Dzongkha, the plural $=ts^hu$ can occur either with a definite NP, as in $mi=di=ts^hu$ (person = DEF = PL) 'persons', or with an indefinite one, as in $pyntc^ha=ts^hu$ (sibling = PL) 'siblings'. Tshangla has only one grammaticalized plural marking, that is =bak. Brokpa enjoys the luxury of several plural markers and, in addition, it innovated a definiteness distinction in its number marking system.

2.3. Negation

Brokpa, Classical Tibetan, Dzongkha, and Tshangla share the same negation prefix, *ma*-. The negation prefix **ma*- is reconstructed to the proto-Tibeto-Burman family (see, among others, Matisoff 2003: 121). Interestingly, most Bodish languages distinguish two forms of negation prefixes: *ma*- vs *mi*-.

In Brokpa and Dzongkha, the prefix *ma*- is used in perfective aspect and prohibitive (negative imperative) mood, while *mi*- is used in the imperfective aspect. This distinction between the two negation prefixes according to tense/aspect has been reported for other Bhutanese languages

such as Kurtöp (Hyslop 2017). However, Tshangla has only one form *ma*in both perfective and imperfective aspect, as well as in prohibitive mood. Classical Tibetan also makes this distinction.

Note that in all the four languages in question, and perhaps in all Bodish languages, the negation marker is phonologically dependent on the host verb it attaches to, and is almost always realized as a prefix.⁴ Consider:

(10) Classical Tibetan

- a. na.tsha ma byung disease NEG arise
- 'The disease did not spread (PERFECTIVE)'.
- b. phar la ma 'gro there LOC NEG go 'Don't go there (PROHIBITIVE)'.
- c. bdag gis ni khrims.'gal gtan.nas mi byed 1SG ERG TOP law.contradiction absolutely NEG do 'I will never do anything illegal (IMPERFECTIVE)'.

(11) Brokpa

- a. 7ou = ge $p^ha = te = ye$ má- $t\varphi^hi$ -ti boy = ERG there = ALL = EMPH NEG-go-PFV 'The boy did not go there also (PERFECTIVE)'.
- b. $k^h y_0$ -ran to: ma-za: 2SG-REFL.EMPH food NEG-eat 'You don't eat food! (PROHIBITIVE)'.
- c. ηa -ra η = ge $n\acute{a}smeti$ = zi? $m\acute{i}$ -ge:

 1SG-REFL = ERG very_much = INDF NEG-know

 'I myself don't know very much (IMPERFECTIVE)'.

(12) Dzongkha

- a. $\eta \acute{a} = gi$ pem = lu má-l $\acute{a}p$ 1SG = ERG Pem = DAT NEG-tell 'I did not tell Pem (PERFECTIVE)'.
- b. tf^hø na ma-dø 2SG here NEG-stay 'You don't stay here (PROHIBITIVE)'.
- c. ya $p^ha = ta$ mi-dzo1SG there = all NEG-go 'I will not go that side (IMPERFECTIVE)'.

Examples (10-12) show negation in Classical Tibetan, Brokpa, and Dzongkha in perfective and imperfective aspects, and in prohibitive mood. The predicate of the clauses in perfective aspect in these three languages is negated using the prefix ma-, as in the (a) examples, and those of prohibitive clauses also take the negation prefix ma-, as in the (b) examples. In contrast, the predicate of the imperfective clauses take the negation prefix

mi-, as in the (c) examples.

In contrast, Tshangla uses only the negation prefix *ma*- in all the contexts. Consider:

(13) Tshangla

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a. dzi = gi rok = ka ma-jek-tçi

1SG = ERG 3SG = DAT NEG-tell-PFV

'I did not tell him/her (PERFECTIVE)'.
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b. non t^ho = la ma-di:

2sg up = LOC NEG-go

'You don't go up there (PROHIBITIVE)'.
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c. Karma = gi unu má-se-du

Karma = ERG DEM NEG-know-possibility

'Karma may not know (IMPERFECTIVE)'.

As can be seen in examples (13a-c), the negation of the predicates in perfective, imperfective, and prohibitive constructions, are all achieved by the same prefix ma-. Tshangla does not use the negation prefix mi- in the imperfective aspect like Brokpa, Classical Tibetan, and Dzongkha.

Interestingly, Dzongkha now has a tendency to express negation in all the construction types with the prefix *ma*-. Consider:

(14) Dzongkha

The native speakers of Dzongkha, especially the younger speakers, can be heard using the negation prefix ma-, and not mi-, even in imperfective and/or future contexts, as in (14). The motivation for this change in Dzongkha can be immediately linked to contact with Tshangla. Even though Dzongkha and Tshangla are not geographically contiguous, there are thousands of Tshangla speakers living in the capital city Thimphu, and these two languages are in regular contact. The contact situation is also enhanced by generations of intermarriage between the speakers of Dzongkha and Tshangla.

Note that Brokpa, Dzongkha, and Tshangla exhibit 'pitch assimilation' across the negation prefix and the verb root boundary. This is discussed in §2.6.

2.4. Phonology

Brokpa, Classical Tibetan, Dzongkha, and Tshangla have contrasting voiced and voiceless phonemes for all of the obstruent manners of articulation (stop, fricative, affricate). These languages also have all four nasals, reconstructed at the Proto-Tibeto-Burman level – *m, *n, *n, and $*\eta$ (Benedict 1972: 18; Matisoff 2003: 36). However, only Brokpa and Dzongkha distinguish four phonation types for stops: voiceless, aspirated, breathy-voiced/devoiced (partially aspirated), and voiced (see Wangdi forthcoming on Brokpa; Watters 2018: 25, and van Driem & Tshering 2019: 27-32

on Dzongkha). Tshangla has only three contrasts for stops: voiceless, aspirated, and voiced (see Wangdi 2004: 18; Andvik 2010: 8).

Pitch is not lexically contrastive in Tshangla, but it is in Brokpa and Dzongkha. There is a clear correlation between pitch distribution and onset types in most Bodish languages (see Wangdi 2020 for discussion of the correlation between pitch and voicing in Brokpa and some Bodish languages).

There is a voicing contrast for laterals in Brokpa, Dzongkha, and Tshangla. For instance, all these languages include lexemes la 'mountain' and la 'deity', which contrast in voicing in their vocabulary. The word la 'deity' in the modern spoken languages is undoubtedly a Classical Tibetan loanword since it is connected with spirituality, and is used to refer to the various deities of the Buddhist secret mantra system. Interestingly, only Brokpa has voicing contrast for rhotic, e.g. ra 'goat' vs ra 'hair'.

The series of erstwhile apico-alveolar plus rhotic onset clusters has become a series of retroflex stops in Brokpa, Dzongkha, and Tshangla. This could be a convergent development or due to contact with the Indo-Aryan languages such as Hindi. Hindi used to be taught in Bhutan until the early 1960s. Hindi has a series of retroflex consonants and voiceless rhotics (see, among others, Koul 2008: 12), and Hindi words containing retroflex, such as *ghanţa* 'hour', have entered into the vocabulary of almost all the Bhutanese languages. Besides, no retroflex consonants have been reconstructed for proto-Tibeto-Burman – see, among others, Benedict (1972). Moreover, as Matisoff (2003: 21) notes, "retroflexes do not occur in written Tibetan". On the other hand, clusters such as /tr/, /dr/ were postulated for Tibetan (Benedict 1972: 42). Therefore, the retroflex series in these languages must have developed relatively recently.

Brokpa allows stop plus liquid and stop plus glide clusters in the onset position. Brokpa also allows stop plus fricative and nasal plus fricative clusters in the coda position, albeit marginally. Table 4 gives examples of allowable consonant clusters in the onset and coda positions.

ONSET	CLUSTERS	CODA CLUSTERS		
EXAMPLES	MEANING	EXAMPLES	MEANING	
preŋbu	'poor'	?otçins	'like this'	
p ^h rædo mwoitçuspu	ʻjealousy' ʻwoman'	?okç tç ^h u + dzuks	'dewlap' 'channel'	
ploi	'to roll'	k ^h aps	'lucky'	

Table 4. Onset and coda consonant clusters in Brokpa.

Tshangla allows a series of two consonants in the initial position (Wangdi 2004; Andvik 2010: 14). Dzongkha has no consonant clusters (Watters 2018: 57). Table 5 gives some cognate lexemes in Brokpa, Classical Tibetan, Dzongkha, and Tshangla.

BR	CT	DZ	TS	MEANING
bru	'br	bdzu	budaŋ	'grain (rice, wheat)'
gleŋ	glang	lớ:	dzats ^h a	'ox'
$p^h\!r\!xe$	phrad	pt¢⁴ε:	rum-	'to meet'
breŋtoŋ	brang	bdza:kʰɔ	braŋtoŋ	'chest'

Table 5. Cognate lexemes in Brokpa, Classical Tibetan, Dzongkha, and Tshangla.

As can be seen in Table 5, Brokpa preserves initial stop plus liquid consonant clusters, which are quite close to the orthography of Classical Tibetan. Dzongkha has lost consonant clusters almost entirely. The Tshangla lexemes, given in Table 5, are markedly different from the other languages, save *branton* 'chest'. Tshangla has stop plus liquid clusters in the onset position.

Proto-Tibeto-Burman nasal clusters such as *ŋr, *mr, *ml, etc. (Benedict 1972: 42) are lost in Brokpa and also in Dzongkha. These nasal clusters are retained in the Classical Tibetan orthography. Interestingly, Tshangla has /mr/ clusters in the word-initial position, e.g. mrekpe 'to be smeared with', mras 'pimple', mrase 'kiwi (fruit)'.

However, Brokpa displays a tendency to reduce consonant clusters, e.g. $tsambrok \sim tsamdor$ 'pasture', $tabran \sim taban$ 'horse race', $glen \sim golen$ 'ox'. In the same manner, Tshangla shows a tendency to reduce initial clusters in certain words, such as budan 'grain'. Some Brokpa speakers also show a tendency to reduce the final syllable in certain disyllabic words, e.g. $p^hama \sim p^ham$ 'parents'.

Brokpa and Tshangla retain all nine final consonants -p, -t, -k, -m, -n, -ŋ, -r, -l, and -s reconstructed for Proto-Tibeto-Burman (Shafer 1966; Benedict 1972; Matisoff 2003). Dzongkha has lost most of them. In Brokpa,

the voiceless aspirated stops occur in both word-initial and word-final positions in Brokpa.⁶

All four languages have the five Proto-Tibeto-Burman vowels – *i, *u, *e, *o, and *a – (Shafer 1966: 57-73; Benedict 1972: 57-70; Matisoff 2003: 389), as well as the semi-vowels *w and *y. Dzongkha has developed nearfront rounded vowels [y] and [ø]; other Bhutanese languages, including Brokpa and Tshangla, probably borrowed these two vowels from Dzongkha and gradually nativized. Brokpa, Dzongkha, and Tshangla have innovated a near-open front unrounded [&] and/or an open-mid front unrounded [&].

Further, vowel length is not contrastive in Tshangla, while it is in Brokpa and Dzongkha. However, Brokpa has vowel length contrast only in open syllables, e.g. tsa 'grass' vs tsa 'to search'. On the other hand, Dzongkha has vowel length contrast in closed syllables too, e.g. p^hap 'to reduce' vs p^hap 'pig' – this same language also shows vowel length contrast in open syllables, e.g. ga 'saddle' vs ga 'to be happy'.

One of the reasons why Dzongkha has vowel length contrast in closed syllables, as opposed to the vowel length contrast only in open syllables in Brokpa, is that historically disyllabic lexical cognates between Brokpa and Dzongkha are realized as disyllables in Brokpa, but as monosyllables in Dzongkha (see Wangdi 2020).

The tendency to reduce onset consonant clusters, and to drop coda consonants in the word-final position in Brokpa and Tshangla can be due to Dzongkha influence.

2.5. Tone prosody

Brokpa has two register tones distinguished by pitch height. Register tone is contrastive in lexemes with sonorant-initials only, as shown in Table 6. Obstruent initials are characterized by inherent higher or lower register. Synchronically, in Brokpa, pitch is not distinctive on words commencing with an obstruent or an affricate.

Lo	OW TONE	HIGH TONE		
EXAMPLE	EXAMPLE MEANING		MEANING	
man	NEG.COP	mán	'medicine'	
na	COP.FACT	ná	'promise'	
<i>ŋe</i>	1 _{PL}	ŋé	'anvil'	
la	'hill'	lá	'leaf'	
jo	'puffed rice'	jó	'to pour'	

Table 6. Contrastive tone on sonorant-initial lexemes in Brokpa.

Tshangla does not have lexical tone, but its phonation types are typically associated with certain pitch heights. That is, a word can have a high pitch or a low pitch, but the meaning distinction is achieved by the phonemic contrasts and not by the difference in pitch height. The pitch of a syllable in Tshangla can largely be predicted on the basis of its onset phonation. Also, if Tshangla has certain minimal pairs which show tonal contrasts, such as lam 'footpath' and lám(a) 'lama', they must be due to influence from Dzongkha. If not, Tshangla must be in a very early stage of tonogenesis, which can be considered an instance of parallelism in drift in conformity with other languages in the neighbourhood.

Old Tibetan, the predecessor of Classical Tibetan, historically had no lexical tone. We cannot tell whether Classical Tibetan has developed tone synchronically, since the pronunciation of a Classical Tibetan word today is determined to a large extent by the phonology and the prosody of the speaker's native language.

The tone in Dzongkha is, as Watters (2018: 67) describes, "incipient with a strong correlation between pitch distribution and onset type and rhyme type". Similar to Brokpa, tone is lexically contrastive on words which begin with a sonorant in Dzongkha.

Tone has not been reconstructed at the Proto-Tibeto Burman level (see, for example, Benedict 1972 and Matisoff 2003). However, modern spoken languages are said to be showing evidence for tonal development, ranging from toneless to fully tonal (Sun 1997). Brokpa and Dzongkha, and possibly Tshangla, are in a fairly early stage of tonogenesis. This phenomenon of tonogenesis is an instance of parallel development in most of the Tibeto-Burman languages (see, among others, Bartee 2007 on Dongwang; Hyslop 2009 on Kurtöp; Matisoff 2003: 18, on Sani, a Loloish language of the Tibeto-Burman family).

2.6. Pitch assimilation

Brokpa has a process of leftward shift of high pitch which can be called 'pitch assimilation', as mentioned in §2.3. If a verb root begins with a lower pitch initial, it takes the negation prefix *ma*- or *mi*- with a low pitch; but if the root has a high pitch initial, then the high pitch shifts leftward to the negation marker, and realizes as *má*- or *mí*-, as shown in Table 7.

The pitch assimilation applies to lexemes beginning with a sonorant with a lexically contrastive tone, as well as to lexemes beginning with an obstruent with an inherent high register (but without lexically contrastive tone), hence 'pitch assimilation' instead of 'tone spreading'.

LOW TONE	GLOSS	HIGH TONE	GLOSS	COMMENT
ma-gjuk	NEG-run	má-jú?	NEG-shake	triggered by high-tone initial
mi-laŋ	NEG-be_sufficient	mi-láŋ	NEG-raise	sonorant
та-диі	NEG-drag	má-ţuk	NEG-stir	triggered by inherently high-
mi-gon	NEG-wear	mí-kon	NEG-be scarce	register initial obstruent

Table 7. Pitch assimilation in Brokpa.

The pitch assimilation from the root to the negative prefix is also found in Dzongkha, as illustrated by $ma-b\varepsilon^7$ (NEG-do) 'don't do' versus $m\acute{a}$ - $t\varepsilon$ (NEG-lean/trust) 'don't lean/trust'; and it is also found in Tshangla, as shown by ma-di (NEG-go.IMP) 'don't go' versus $m\acute{a}$ -ti (NEG-open) 'don't open', even though Tshangla does not have lexical tone because the high pitch on the negative prefix is triggered by the inherently high-register stem. This phenomenon is also reported for Kurtöp (Hyslop 2017).

Pitch assimilation is a shared innovation in Brokpa, Dzongkha, and Tshangla, and possibly all other Bodish languages of Bhutan; it can be one of the characteristics of parallelism in drift in Brokpa and other Tibeto-Burman languages of Bhutan.

3. Structural features

Brokpa, Classical Tibetan, Dzongkha, Tshangla, and other Tibeto-Burman languages of Bhutan share similar features at all levels of 'grammatical hierarchy', as postulated by Dixon (2010: 27): morpheme, grammatical word, phrase, clause, and sentence. The structural similarities of these languages may extend beyond a sentence to the level of an 'episode' or paragraph, as well as to a discourse level. The hierarchy of grammatical units is a vast topic and it is beyond the scope of this paper to deal with all the units.

While it is notoriously hard to discern whether a shared feature of the Bodish languages in Bhutan is an areal borrowing or a common inheritance, we will examine the forms and structure of some construction types in Brokpa, Dzongkha, and Tshangla, and compare them with Classical Tibetan in order to understand their synchronic and diachronic connections.

3.1. Predicate structure

In all four languages, Brokpa, Classical Tibetan, Dzongkha, and Tshangla, the head of a predicate can either be a simple verb root or a complex verb stem. The predicate head formed by a single verb root, or 'simple predicate' for ease of reference, is discussed in §3.1.1, and the complex predicate in §3.1.2.

3.1.1. Simple predicate

A simple predicate can be formed by a verb stem in the imperative mood or a verb stem plus a TAM marker. Consider the predicates in the following examples formed by a simple verb stem in these four languages:

(15) Brokpa

- a. $k^h yo$ $2up^h i$ ri = la zo 2SG DEM:DIST mountain = LOC climb.IMP 'You climb that mountain'.
- b. na Tashigang = la tç^hi-ti
 1SG Tashigang = ALL go-PFV
 'I went to Tashigang'.

(16) Classical Tibetan

- a. rta la chag byin
 horse DAT fodder give.IMP
 'Give fodder to the horse'.
- shing.sgam bzo rgyu wood.box make IPFV 'I will make a wooden box'.

(17) Dzongkha

- a. $t \mathcal{C}^h \emptyset$ na ço: 2SG here come.IMP 'You come here'.
- b. ani $\eta \acute{a} = gi$ be-niDem:Prox 1sG = ErG do-Inf
 'I will do this'.

(18) Tshangla

- a. nan leŋ di: 2SG thither go.IMP 'You go over there'.
- b. dza meme tor-ba
 1SG.POSS grandfather pass_away-PFV
 'My grandfather passed away'.

In examples (15-18), the heads of the predicates formed by a simple verb stem are deitalicized. A verb stem in the imperative form alone can make up a full predicate, as in the (a) examples. Similarly, a predicate can consist of a simple verb root as head followed by a TAM marker, as in the (b) examples.

3.1.1. Complex predicate

A complex verb stem, or complex predicate, can be formed by noun incorporation or a serial verb construction. The Bodish languages examined can be said to have a 'lexical compounding' type of noun incorporation (see Aikhenvald 2007, 2015: 146 and Mithun 1984, 1986 on types of noun incorporation). In all four languages complex verb stems, formed by lexical compounding, fill the predicate head slot. Consider:

(19) Brokpa

- a. $[zayzen = ge]_A$ $[tc^hay]_O$ $[bro + tæ-p^hi]_{TR.PRED}$ brother_in_law = ERG wine taste + see-PFV 'Brother-in-law tasted the wine'.
- b. $[\eta a = e]_A$ $[k^h yo]_O$ $[16 + tso\eta p^h i]_{TR.PRED}$ 1sG = ERG 2sG rationality + sell-PFV 'I embarrassed you'.

The head of the predicate in (19a) is formed by incorporating the noun bro 'taste' into the verbal word $t\alpha$ 'to see'. The complex verb stem $bro + t\alpha$, despite having an incorporated noun, functions as the head of the transitive predicate with a separate noun $tc^ha\eta$ 'wine' in the O argument function. The verbal meaning 'to taste' is achieved only when the incorporated noun bro 'taste' and the verb root $t\alpha$ 'to see' are treated as a lexical unit.

In (19a), the incorporated noun may be interpreted as semantically related to the O core argument $t\varsigma^h a\eta$ 'wine', as the taste is typically associated with a liquor. However, in (19b), the incorporated noun $l\delta$ 'rationality, intellect' is not related to $k^h yo$ '2sG' (the O argument) in any way, nor can it be in an instrumental peripheral argument function: one cannot say * $l\delta = ge tso\eta$ (rationality = ERG sell) 'Sell with/by rationality'.

Complex verb stems formed by noun incorporation with similar structure as Brokpa are also attested in Dzongkha, Tshangla, and perhaps in all other Bodish languages of Bhutan. Compare the two Dzongkha sentences in (20):

(20) Dzongkha

- a. $p^ha=gi$ ciy=di $tc^h\phi=gi$ gitcu=gi to 2+tay there 2+tay cut+do. Imperoval of the contraction of the contraction
- b. $k^h o = gi$ de = di gi + sop + bdzin-nu 3sG = ERG demon = DEF knife + pierce + give-PST'He stabbed the demon'.

The noun *gitçu* 'knife' in the Dzongkha clause (20a) is in an instrumental function, shown in deitalicized characters, marked by the instru-

mental case marker = gi. In (20b), the erstwhile peripheral argument in instrumental function becomes part of the predicate. See also Watters (2018: 225-230) for a discussion of noun incorporation including light verb constructions in Dzongkha.

Further, compare the two Tshangla sentences in (21):

```
(21) Tshangla
a. rok = ki p^hai l\acute{u}\eta = gi p^he-wa-la
3SG = ERG house stone = INS do-PFV-DIRECT
'He/she built the house with stones'.
b. Ji = gi rok l\acute{u}\eta + tar + bi-wa
1SG = ERG 3SG stone + throw + give-PFV
'I stone him', lit. 'I stone-throw-give him/her'.
```

Akin to Brokpa and Dzongkha, a noun in a core or a peripheral argument function can be incorporated into a verbal word in Tshangla, as in (21b).

Classical Tibetan also has complex verb stems formed by lexical compounding, as in:

```
(22) Classical Tibetan

chos-la yid.ches bskyed pa

dharma-LOC trust bring_about PFV

'(I) trusted in Dharma'.
```

In (22), the head of the predicate is realized by a complex verb stem formed by incorporating the noun *yid.ches* 'trust' to the verbal word *bskyed* 'to bring about'.

All the languages examined here productively derive complex predicates, involving lexical compounding type of noun incorporation. They may share the same forms or may have different forms of the components of noun incorporation, but the pattern is the same, N+V. Since this pattern is also found in Classical Tibetan and in Tshangla, it has to be due to their shared origin at a higher Bodish, and not just at the lower Central Bodish, level. It is also possible that Old Bodish borrowed this structure, perhaps from the Indo-Aryan languages such as Sanskrit during the early stages of translating Buddhist scriptures from Sanskrit and then it gradually entered into other languages since the seventh century CE.

Also, in Brokpa, Dzongkha, and Tshangla, and potentially in all other modern spoken Bodish languages of Bhutan, a complex predicate can be formed by serial verb construction (SVC).

In an SVC, two or more verb roots are combined in a single predicate and describe a single action (see Aikhenvald 2006b, 2018: 3-4; Dixon 2010:

406 for general properties of SVC). Brokpa certainly makes use of SVCs. An SVC fills the head slot of a predicate, akin to a complex predicate formed by noun incorporation. Note that the auxiliary verbs which are often the markers of different modalities occupy the slots outside of the one filled by an SVC within a predicate. Consider the following example from Brokpa:

In the predicate in (23), only the sequence of two verb roots, shown in deitalicized characters, form an SVC which occupies the head slot of the predicate. The two modal auxiliary verbs, -go expressing the deontic modality of OBLIGATION and -fion the epistemic modality of POTENTIAL or POSSIBILITY, although they can function as full verbs elsewhere, are not part of the SVC or predicate head. An auxiliary verb such as -go and -fion functions as a grammaticalized marker of modality and behaves more like a suffix, following the analysis by Wangdi (forthcoming).

As example (23) illustrates, the sequences of verbs in Brokpa duly qualify as SVCs. The two verbs – di 'to ask' and ta 'to see' – function as head of a single transitive predicate. The SVC formed by these two verbs is monoclausal sharing the same A argument, lale 'some', shown by ergative case. The components of the SVC also share the same O argument, tcik 'one', which is zero-marked for absolutive. Similarly, they also share the same extended transitive argument (E), 2ou 'boy', marked by dative case. There is no marker of coordination or subordination between the two verb roots within this SVC.

The two verbs in an SVC together describe a single action, that of 'asking', effectively functioning as the head of a single predicate, along the lines of Aikhenvald (2006b: 4, 2018: 2). The second verb ta 'to see' in (23) has become, in the words of Givón (2001: 83), a "semantically-bleached grammaticalized verb".

Similar to Brokpa, the head of a predicate in Dzongkha and Tshangla can also be occupied by a complex predicate formed by SVC. Consider first the following examples from Dzongkha:

```
(24) Dzongkha
a. mo ya = lu la b\varepsilon + d\phi - nu
3SG up = LOC work do + stay - PST
'She was working up there'.
b. \eta a = gi k^ho = lu s\phi ri dzin + ta\eta - yi
1SG = GEN 3SG = DAT tips give + send - PFV
'I gave him tips'.
```

The head of the predicate in (24a) is filled by a complex verb stem realized by an SVC in which the second verb $d\emptyset$ 'to stay, to sit' indicates a progressive aspect. Similarly, in (24b), the SVC formed by the verb dz in 'to give' and $ta\eta$ 'to do' is the head of predicate. Note that the verb $ta\eta$ in Dzongkha is shared with Brokpa. Furthermore, the verb $ta\eta$ has two senses, 'to do' and 'to send', in Dzongkha and Brokpa. When the verb $ta\eta$ in Dzongkha occurs in an SVC with the meaning 'to do', it indicates a high degree of certainty.

Examples of complex verb stems formed by SVCs in Tshangla include:

```
(25) Tshangla
a. dzi rok = ka jek + got-pe
1SG.ERG 3SG = DAT tell + see-IPFV
'I will tell him'.
b. dzay t^ha = ga jip + tc^ho-wa-tca
1SG here = LOC sleep + stay-PFV-EGO
'I am sleeping here'.
```

In (25a), two verb roots jek 'to tell' and got 'to see' form an SVC which describes a single event 'to tell', the meaning of the first verb. The second verb got 'to see' makes a further semantic specification of 'trying', akin to the verb ta 'to see' in Brokpa and Dzongkha. In (25b), the verb roots jip 'to sleep' and tc^ho 'to stay/sit' form an SVC and occupy the head slot of the predicate. The second verb root, tc^ho , makes a secondary specification of progressive aspect.

As the two examples in (25) show, Tshangla has the same patterns of SVCs as Brokpa and Dzongkha. However, the forms of the verbs are distinct in Tshangla, while they are mostly shared between Brokpa, Classical Tibetan, and Dzongkha. Complex verb stems formed by SVC are not found in Classical Tibetan texts. This may be because Classical Tibetan is a written language, and when two main verbs occur in juxtaposition, they may be separated by a marker of coordination or subordination such as a *lhag. bcas* marker (see §3.4). Note, however, that if there is a sequence of two verbs in Classical Tibetan, the second verb is semantically grammaticalized and occurs outside of the predicate head slot and codes grammatical categories such as modalities, and is not an instance of verb root serialization. Consider the following examples from Classical Tibetan:

```
(26) Classical Tibetan
rgyu.nor la gces.spras byed dgos
wealth LOC esteem do OBLIGATION
'The wealth must be taken care of'.
```

In (26), the predicate head is formed by the noun *gces.spras* 'esteem/love' plus the light verb *byed* 'to do'. The morpheme *dgos*, originally a lexical verb, functions as a grammaticalized marker of modality and occurs outside of the predicate head slot. In Brokpa for example, as in example (23), we have seen that the head slot of the predicate is already filled by a sequence of two verbs before the modal auxiliary *-go*, cognate with Classical Tibetan *dgos* as in (26). In a nutshell, Classical Tibetan does not seem to have SVCs. This shows that SVC is a recent development in the spoken Bodish languages.

Note that the predicate in these languages can include other optional markers such as modality markers, and grammaticalized markers associated with the grammar of knowledge including egophoricity and evidentiality in all the Bodish languages of Bhutan. These are not discussed for want of space.

3.2. Noun phrase structure

Typically, adjectives follow the head noun within an NP in all of the four languages: Brokpa, Classical Tibetan, Dzongkha, and Tshangla. Other modifiers such as number words, plural marker, and the marker of (in)definiteness follow adjectives within an NP in all these languages. Only the head noun is the obligatory element, all other modifiers are optional. Examples include:⁸

```
(27) Brokpa

kyespho çukçin = ba?

man strong = PL

'strong men'
```

(28) Classical Tibetan

bya.ba bzang.po zhig action good INDF 'a noble action'

(29) Dzongkha

tçharo tçhamtoto ní friend intimate two 'two intimate friends'

(30) Tshangla

kota p^horap t^hur boy handsome one 'a handsome boy'

Dryer (2008), using Das Gupta (1968) and Andvik (2003) as sources, gives the order of adjective and noun in Tshangla as ADJ N; likewise,

Andvik (2010: 78) points out that adjectives can either precede or follow the head noun in Tshangla. It is unusual for an adjective to precede the head noun in Tshangla in a normal discourse. For example $kota\ p^horap$ (boy handsome), with a postposed adjective, as in (30), is normal; the reverse order, $p^horap\ kota$, is odd. An adjective may precede the head only for pragmatic effect, such as in a copula construction, but the prototypical slot of an adjective within an NP is following the head noun in Tshangla and all other languages in question.

In contrast, relative clause typically precedes the head noun within a complex NP in these languages. Consider the following examples from the four languages:

```
(31) Brokpa [d^6o\text{-}gan]_{RC} [mi]_{HEAD} stay-REL person 'person who lives'
```

(32) Classical Tibetan

[chu la rkyal mkhan] $_{\rm RC}$ [nya] $_{\rm HEAD}$ water LOC to_swim REL fish 'fish that swims in water'

(33) Dzongkha

[dzoŋ-mi]_{RC} [aŋge]_{HEAD} to_die-REL grandmother 'grandmother who passed away'

(34) Tshangla

 $[lela = ga gep-k^han]_{RC} [waktsa]_{HEAD}$ there = LOC cry-REL baby 'baby that is crying there'

Note that the order of a relative clause and the head noun within a complex NP may be reversed only for pragmatic reasons.

All the languages in question make use of 'relators' (relator nouns) which specify spatial or temporal location on NPs and in clause linking. A relator occurs following the head noun, and other optional modifiers, preceding the case marker within an NP. When a relator *naŋ* 'inside' occurs with a peripheral spatial or locational NP, the locative case marker becomes optional. Examples include:

```
(35) Brokpa mera? nan(=la) d^ha-ti-yo Merak inside(=LOC) stay-PFV-EXIST.EGO 'I am staying in Merak'.
```

```
(36) Classical Tibetan
```

tshogs.khang nang (la) 'dzoms nas... assembly.hall inside (LOC) meet.PFV ABL.SEQ 'By meeting in the Assembly Hall...'

(37) Dzongkha

 $t g^h im$ bom = t g i ? na(=lu) $d \theta - y \theta$ house big = INDF inside(=LOC) stay-EXIST.EGO'(I) am living in a big house'.

(38) Tshangla

```
daq duq zemug=thur naq(=ka) tg^ho-le 1SG village small=INDF inside(=LOC) stay-IPFV 'I will live in a small village'.
```

In summary, all four languages in question consistently show the same order of head noun, adjectives and other modifiers within an NP, and the same goes for the order of relative clause and head noun. This is undoubtedly due to genetic inheritance.

It is interesting to look at the order of demonstrative and noun within an NP in these four Bodish languages. Classical Tibetan has two nominal demonstratives with deictic effect, proximal di 'this' and the distal de 'that', which can occur as any core argument or as a modifier of a head noun within an NP.

In Classical Tibetan, the demonstrative occurs after the head noun, as in *dpe.cha 'di* (scripture DEM:PROX) 'this scripture', *sa.cha de* (place DEM:DIST) 'that place'. If there are lexical modifiers of the head noun, the demonstrative occurs after all the lexical modifiers but before the grammatical elements such as the plural or the topic marker within an NP, as in *mi ngan.pa de tsho* (person bad DEM:DIST.PL) 'Those bad people'.

The Classical Tibetan demonstratives di and de are shared by Brokpa and Dzongkha, but not Tshangla. Tshangla has different forms of demonstratives: the proximal ut^hu 'this' and the distal unu 'that'. In contrast to Classical Tibetan, the demonstrative precedes the head noun within an NP in Tshangla, e.g. ut^hu p^hai katan (DEM house big) 'this big house'.

Brokpa and Dzongkha, which share demonstratives di and de with Classical Tibetan, have another set of nominal demonstratives, also with deictic effect. Brokpa has *?oti* 'this' and *?up^hi* 'that', and Dzongkha has *ani* 'this' and ap^hi 'that'. These different sets of demonstratives precede the head noun within an NP in both Brokpa and Dzongkha. Consider:

(39) Brokpa

```
Poti telon kjaptg^hokpa = di

DEM boy handsome = DEF

'this handsome boy'
```

Pema Wangdi

```
(40) Dzongkha

ap<sup>h</sup>i bum dzarim = di

DEM girl beautiful = DEF

'that beautiful girl'
```

The Classical Tibetan demonstratives *di* and *de* have merged into a single *di* form in Brokpa and Dzongkha and functions as a marker of definiteness, as shown in deitalicized characters in (39) and (40), respectively. In Brokpa and Dzongkha the demonstratives which are different from Classical Tibetan precede the head noun, possibly to match the order of demonstrative and head noun in Tshangla.

3.3. Constituent order

The preferred order of phrasal constituents in all four languages in question is predicate final in both dependent and main clauses. This is very much a Tibeto-Burman feature (Dryer 2008), and not something which is unique to Bodish languages. Typically, in a transitive clause, the subject argument A precedes the transitive O argument. Examples include:

(41) Brokpa

(42) Classical Tibetan

[khyod kyis]_A [byis.par]_E [zas]_O [byin]_{E.TR.PRED} 2SG ERG child.DAT food give.IMP 'You give food to the child'.

(43) Dzongkha

 $[n\acute{a}=gi]_{A}$ $[ts^{h}\acute{g}m=t \acute{e}i?]_{O}$ $[tso-yi]_{TR.PRED}$ 1SG=ERG curry=INDEF cook-PFV 'I prepared a curry'.

(44) Tshangla

 $[dzi]_A$ $[k^haran]_O$ $[tcos-pa]_{TR.PRED}$ 1SG.ERG corn_meal cook-PFV 'I cooked cornmeal'.

In all the clauses above, the transitive subject A precedes the transitive O argument. If a clause is an extended transitive, as in the Classical Tibetan example (42), the transitive subject A typically precedes the E argument. However, because the A argument in all these languages is shown by ergative case, the order of the A and O arguments can be changed with no difference in meaning. The predicate prototypically occurs in

the clause-final position, in both transitive and intransitive clauses. The predicate may only be fronted or clefted for pragmatic effects. All these features associated with the constituent order, such as the predicate in the clause-final position and A preceding O, are due to shared genetic inheritance.

3.4. Clause linking

All four languages – Brokpa, Classical Tibetan, Dzongkha, and Tshangla – have similar clause linking constructions. One common feature associated with clause linking in these languages is the use of the local case markers as clause linkers. A case marker may have spatial or temporal locational sense when it occurs with an NP, but may mark relative time when applied to a clause. In addition to the versatile case markers, these languages have a wealth of sentential conjunctions, derived from other words such as verbs and demonstratives. The case markers and/or conjunctions serve to link phrases, clauses, sentences, and chunks of discourse in these Bodish languages. It is beyond the scope of this paper to discuss the syntax and semantics of all the clause-linking types in these languages.

In this section we will briefly examine the clause chaining constructions in the four languages. As might be the case with any Tibeto-Burman language, or any predicate-final language for that matter, the languages of Bhutan exhibit, what Longacre (2007) refers to as 'medial-final chaining' structure. This is too broad a concept to be anything special, as all languages with clause chaining construction have either a 'medial-final chaining' or an 'initial-consecutive chaining' structure (Longacre 2007).

Of relevance here are the synchronic and diachronic connections of the markers of clause chaining in the four languages in question. Classical Tibetan has a set of grammaticalized morphemes known as *lhag.bcas kyis sgra* 'continuative markers' (lit. 'sounds of residue') or simply *lhag.bcas* 'connectives'. There are three *lhag.bcas* markers conditioned graphemically:

```
te following a verb stem ending in letter <n>, <r>, <l> or <s>;^9 ste following a verb stem ending in letter <g>, <ng>, <b>, <m>, or <'>; and de following a verb stem ending in letter <d>.
```

In addition, Old Tibetan and Classical Tibetan make use of the morpheme *nas* to carry out the same clause chaining function. The morpheme *nas* is originally the ablative case, but it occurs as a very frequent clause chain marker in Classical Tibetan.

In Classical Tibetan, several clauses can be joined to the main clause by these morphemes -te (and its allographs ste and de) meaning 'when, after, as, so that, thus', and nas meaning 'from, after, due to' - applying

directly to the medial verbs. A chain can be equal to a paragraph or sometimes a body of discourse in Classical Tibetan. A Classical Tibetan scholar remarked jocularly to the present author that an entire book written in Classical Tibetan can be just a single sentence. This claim may be far from the truth, but a clause chain can be extraordinarily long not just in Classical Tibetan but also in Brokpa, Dzongkha, and Tshangla. Sometimes, the length of a clause chain in narratives in these languages can be determined by how long the speaker can hold their breath. A listener may get the main clause only when the speaker runs out of breath.

Brokpa has two morphemes, $= n\alpha$ and -zin, which occur frequently and attach directly to the verb stem of the dependent or medial clauses.

In Brokpa, the enclitic $= n\alpha$ codes sequential events and marks temporal succession type clause linkage with a meaning including 'then', 'and then', 'by doing X' in which X is an action described by the medial verb. It signals a sequence relationship with the following clause. Examples include:

```
(45) Brokpa
    den
           ηa
                 lo?
                         p^h a = la
                                    ?iskul
    PART 1SG again
                         there = ALL school
                 tco + k^h er = næ
                                              lo?
                                                      tc^hin = næ
                                       te
    inside = LOC reach + take = ABL.SEQ PART
                                              again go.PFV = ABL.SEQ
    ?oti=næ den da
                               lópon + gonmæ
                                                   den
    DEM = ABL PART
                       PART teacher + head.ERG
                                                   PART
          tc^he=zi?
                       rup + lan-pʰi
    PART little=INDF
                        anger + arise-PFV
```

'I was again taken there to the school, then went there, then the head teacher got a little angry'.

Sentence (45) consists of two co-dependent or medial clauses linked to the main clause via chaining marked by the enclitic $=n\alpha$. Only the predicate of the main clause bears the aspect marking, the perfective $-p^hi$ in this instance. The clause chain marker $=n\alpha$ on a medial verb does not make aspectual distinction per se, but because the main clause ends in the perfective aspect, the perfective stem tc^hin 'go.PFV' is used instead of the imperfective do 'go.IPFV'. This indicates that the medial verb must agree in aspect with the main clause.

The suffix -zin occurs in a temporal clause, marking a 'relative time' clause linkage, following (Dixon 2009), or 'temporal overlap' to use Longacre's (2007) terminology; it has a sense of 'while', 'when', 'at the time of', etc., as in (46):

```
(46) Brokpa y\acute{a}? ya = la \quad k^her\text{-zin} \quad te \quad punbo \quad len \quad den \quad ter\text{-go-}p^hi  ok up = ALL take-RT PART grass collect PART give-OBLIGATION-PFV 'While taking the yaks up, we had to feed them collecting grass'.
```

Brokpa also has a medial suffix *-te* (homonymous with the discourse particle *te*) which attaches directly to the verb stem of a medial clause, but it is not as frequent as $= n\omega$ and *-zin*. Further *-te* tends to code manner adverbial, as in (47):

```
(47) Brokpa t \varepsilon^h a \eta na \eta k^h o i len-te mar z a n t \varepsilon^h a \eta t e k^h e r - g y u = s e wine inner_pot scoop-ADV butter_dough wine PART take-IPFV = QUOT 'It is said, that we have to take butter dough and wine for scooping from the inner pot'.
```

The Brokpa $= n\alpha$ is cognate with Classical Tibetan nas. Like the Brokpa $= n\alpha$, the Classical Tibetan nas is used as a marker of clause chain, as in (48), in addition to marking spatial and temporal location on NPs:

```
(48) Brokpa

byis.pa nyal nas gnyid log
child sleep SEQ sleep fall
'The child went to sleep, and fell asleep'.
```

The form of the ablative marker in Tshangla is = gai, which is completely different from that of the Classical Tibetan or the Brokpa ablative. However, Tshangla uses the suffix $-ne \sim -ni$ (for some speakers, it is realized as $-ne \sim -ni$), and not its ablative marker = gai, to mark clause chain, as in (49):

```
(49) Tshangla dzi=gi petc^ha lap-ne yók thur 1sg.erg=erg book study-seq job one lam-ne p^hama=ga dzaptcor+a-le search-seq parent=DAT support+do-IPFV 'I will study, and I will find a job, and then I will support my parents'.
```

The Tshangla clause-chain marker -ne is undoubtedly cognate with the Classical Tibetan nas and the Brokpa = næ. It is interesting to note that Tshangla, which typically has different forms of grammatical elements from the Central Bodish languages, has the same clause chain marker.

The temporal clause marker *-zin* in Brokpa is historically related to Classical Tibetan *bzhin*. In Classical Tibetan, *bzhin* has two functions: It functions as a postposition meaning 'like' or 'such' and can occur with nominals including demonstratives, as in *de bzhin* 'like that'. It can also attach to verbs and code progressive aspect, as in *gsung bzhin du* 'while speaking'. The function of *-zin* in Brokpa is transparently related to the second function of *bzhin* in Classical Tibetan. In Brokpa too, as can be seen in (46), the suffix *-zin* adds a sense of progressive aspect, but the temporal

or aspectual specification is dictated by the predicate of the main clause.

In written Dzongkha, the same *lhag.bcas* morphemes of Classical Tibetan are used for marking adjoining clauses. However, in spoken Dzongkha, *te* and *ste* are neutralized into the suffix *-te*, the same as in Brokpa. Brokpa has an additional ablative marker $=l\alpha$, which is the same as the Classical Tibetan *las* pronounced [læ].

Note that Classical Tibetan has two ablative markers: nas and las. Dzongkha shares this same ablative marker = lae with Brokpa and Classical Tibetan. Dzongkha uses its ablative = lae to mark Cause and Reason clause linkage types, but uses the suffix -be to mark clause chains and adverbial clauses.

In summary, the use of ablative case markers to achieve clause linking in Brokpa is due to genetic inheritance, as it is the same in Classical Tibetan and Old Tibetan. The Tshangla clause chain marker *-ne* is apparently a borrowing from Classical Tibetan and/or Brokpa, because it has a different form of ablative marker. Although Dzongkha shares the ablative case marker with Brokpa and Classical Tibetan, it uses a different morpheme, *-be*, to mark clause chains. This could be a change due to an internal process. It appears that the Dzongkha clause chain marker has grammaticalized from its lexical verb $b\varepsilon$ 'to do'.

4. Conclusion

In this paper we have looked at some aspects of phonological and morphosyntactic features of Brokpa, Classical Tibetan, Dzongkha, and Tshangla. These Bodish languages show a great deal of similarities in forms and patterns. Table 8 gives a summary of points related to language contact, genetic inheritance and parallelism in drift involving four Bodish languages of Bhutan, discussed in this paper.

FEATURE	INHERITANCE	CONTACT- INDUCED	INNOVATION	DRIFT	COMMENTS
Segmental phonology	BR, CT, DZ, TS share basic consonants and vowels	Retroflex series, possibly due to areal diffusion and/or contact with Indic languages	Near-front rounded vowels (DZ, CT, TS), voiceless rhotic (BR)	Tendency to reduce clusters and coda consonants	Four phonation types in BR and DZ, three in TS

Tonogenesis				yes (BR, DZ, TS)	TS has no tone synchronically, but may be in an early stage of development
Pitch assimilation				yes (BR, DZ, TS)	
Personal pronouns	BR, CT, DZ				TS has different forms
Plural marking	BR, CT, DZ have cognate forms of plural markers	BR borrows the TS plural marker = bak	BR innovated associative plural, and definite/ indefinite plural distinction		TS has different forms
Negation	Prefix ma- and mi- in BR, CT, DZ	Tendency to replace <i>mi</i> by <i>ma</i> - in DZ, due to contact with TS			TS uses <i>ma</i> - in all contexts
Predicate structure	BR, CT, DZ, TS				No SVCs attetsed in CT
Noun incorporation	BR, CT, DZ, TS				Mostly distinct noun and verb forms in TS
Serial verb constructions	BR, DZ, TS				Forms mostly distinct in TS
NP structure	BR, CT, DZ, TS			The CT demonstratives as definite article in BR and DZ	TS does not have cognates for CT demonstratives
Constituent order	BR, CT, DZ, TS				Typically AOV, SV in all
Clause linking	BR, CT, DZ, TS employ similar syntax and semantics of clause linking	TS has a distinct ablative marker, but uses a cognate form of BR and CT ablative marker to mark clause chains	DZ shares ablative marker with BR and CT, but employs a distinct clause chain		

 $\textbf{Table 8.} \ A \ summary \ of \ language \ contact, \ genetic \ inheritance \ and \ drift \ in \ BR, \ CT, \ DZ, \ and \ TS.$

Aikhenvald & Dixon (2001) provide five possible reasons for languages showing similarities in forms and patterns: (i) universal properties or tendencies; (ii) chance; (iii) borrowing or diffusion; (iv) genetic retention; and (v) parallel development (or convergent development).

Among other forms and functions, the conservative phonology of Brokpa and Tshangla is an instance of 'genetic retention', and the development of tone in Brokpa and Dzongkha an instance of 'parallel development'. The retroflex consonant series in the modern spoken languages including Brokpa, Dzongkha, and Tshangla can be either due to a parallel development or could even be a result of contact with the languages outside of the Tibeto-Burman family. The development of near-front rounded vowels in Dzongkha is an instance of innovation, such as through the loss of coda consonants. Its spread to other languages including Brokpa and Tshangla is undoubtedly an instance of areal diffusion. The shared structures of phrases, and phrases filling slots in clause structure and the similar syntax and semantics of clause linking, can only be due to genetic inheritance in all the Bodish languages.

Abbreviations

1 = first person; 2 = second person; 3 = third person; A = transitive subject; ABL = ablative; ABS = absolutive; ADJ = adjective/adjectival; ADV = adverb(ial); ALL = allative; ASPL = associative plural; BR = Brokpa; CC = copula complement; COM = comitative; COP = copula; CS = copula subject; CT = Classical Tibetan; DAT = dative; DEF = definite; DEM = demonstrative; DIRECT = direct (or visual) evidential; DIST = distal; DU = dual; DZ = Dzongkha; E = extension to core, extended argument; EGO = egophoric; EMPH = emphasis; ERG = ergative; EXIST = existential verb; FACT = factual (knowledge distinction); FINAL = clause-final marker; FUT = future; GEN = genitive; GIFT = gift (semantic role); HEAD = head NP or argument; HON = honorific; IMP = imperative; INDF = indefinite; INF = infinitive; INS = instrumental; INTR = intransitive; IPFV = imperfective; LK = linker; LOC = locative case; M = masculine; N = noun; NEG = negation; NMLZ = nominalizer; NONHON = non-honorific; NP = noun phrase; O = transitive object; OBLIGATION = obligation (modality); PART = particle; PASS = passive; PFV = perfective; PL = plural; POSS = possessive; POSSIBILITY = possibility/probability (modality); POTENTIAL = potential (modality); PRED = predicative; PROX = proximal; PST = past; PURP = purposive; QUOT = quotative; RC = relative clause; REFL = reflexive; REL = relative clause marker; RT = relative time; S = intransitive subject; SEQ = sequential; SG = singular; SVC = serial verb construction; TOP = topic; TR = transitive; TS = Tshangla.

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Notes

- The data on Brokpa comes from the author's fieldwork in the villages of Merak, Gengo, Sakteng, and Jonkhar in 2014 and 2018. The author is a Tshangla/Dzongkha bilingual speaker. The Dzongkha data is taken from the corpus collected for Dzongkha Parts-of-speech tagging. The author also has studied Classical Tibetan and has done bilingual dictionary works from Classical Tibetan to Dzongkha. The Classical Tibetan data is derived from the dictionary materials and Buddhist texts. The Tshangla data is derived from the several texts the author has collected over the years.
- Dakpa is left out for lack of data.
- 3 In this paper, the diacritic (´) over a vowel indicates high tone (or high pitch). X+Y shows that X and Y are the two components of a stem formed by compounding, noun incorporation, or serial verb construction. To maintain consistency, the phonological transcriptions of Brokpa, Dzongkha, and Tshangla are shown using the IPA symbols. The orthography of Classical Tibetan is shown using the Wylie (1959) transliteration scheme, which has become a standard system of dealing with Classical Tibetan. Whereas the Wylie transliteration system renders the spellings of traditional orthography of Classical Tibetan, it represents an earlier stage of Classical Tibetan and Old Tibetan, and therefore it is useful to compare the modern spoken languages with the orthography of Classical Tibetan to make synchronic and diachronic comparisons.
- ⁴ In Classical Tibetan, while negation marker precedes the verb, there is no way of indicating its phonological dependence on the verb.
- ⁵ Note that phonemic representations such as /bdj/ in Dzongkha are not a cluster of sequential segments, but a bilabialized affricate or a heteroganic affricate.
- ⁶ Examples are not given for every feature discussed to keep the paper to a reasonable size.
- ⁷ Note that the symbol ' before a letter in the Wylie transliteration scheme represents [fi], but this sound is silent in Classical Tibetan when it is added to another letter forming a complex onset.
- 8 The code of the language is given within parentheses after the free translation.
- The term 'letter' is used here because the reference is to the traditional orthography of Classical Tibetan. It is instructive to examine the orthography of Classical Tibetan because it shows an earlier or present, or both, stage of the Bodish languages and sheds light on the diachronic and synchronic matters of these languages. The symbols < > show graphemic representations.

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