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6 Clues to Kanashi prehistory 1: loanword adaptation in nouns and adjectives

Abstract: In this chapter we focus on a shared innovation of Kanashi and Kinnauri, the addition of characteristic suffixes – or adaptive markers – to Indo-Aryan loan nouns and adjectives. The distribution of this adaptive mechanism in related and unrelated languages in the western Himalayas is investigated, and we also discuss possible sources for the adaptive markers, with the goal of increasing our knowledge about the genealogical composition and structure of the West Himalayish subbranch of Sino-Tibetan.

Keywords: Kanashi, Kinnauri, Sino-Tibetan, Indo-Aryan, language contact, comparative linguistics, nominal morphology

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1 Introduction

There are several layers of Indo-Aryan (IA) borrowings in the two Sino-Tibetan (ST) languages Kanashi and Kinnauri. More recently borrowed IA nouns and adjectives in Kanashi and Kinnauri tend to have (almost) the same form as in the IA donor languages (e.g. *ma:pʰi* ‘apology’, *seb* ‘apple’), while there is an older loanword stratum in both languages, of borrowings with an additional ending $-(V)\eta$ or $-(V)s$ which we refer to in this volume as “adaptive markers” (e.g. Kanashi *kasəŋ* ‘bronze’; cf. Hindi *kās*, *kāśā*; Nepali *kāso* ‘bronze, pewter, white metal’).¹ The resulting stems have at least two syllables, while inherited ST noun and adjective stems ending in $-\eta$ or $-s$ in Kanashi and Kinnauri are generally monosyllabic.²

This is not a straightforward case of “necessary” adaptation of foreign elements to native phonotactics, since the adaptive markers in Kinnauri and Kanashi are added also to those IA loans which already conform to Kanashi or Kinnauri word structure. Also, we find a number of doublets, the same IA item both with and without the adaptive marker.

It is also not an obvious case of an original element present in some borrowed items which has been reinterpreted as a marker of “IA-ness” and subsequently introduced into other borrowings, since there is no evident IA source for the adaptive markers, as we will see below. There is also no obvious ST source for the adaptive markers, making this an intricate and interesting investigation.

Typically, in both Kanashi and Kinnauri nouns are borrowed as nouns, adjectives as adjectives, and verbs as verbs. However, occasionally we find that IA nouns such as *bat* ‘talk’ can form the basis of both nouns and verbs in the target language, which when they function as nouns in Kinnauri and Kanashi take the adaptive marker $-əŋ$ (Kinnauri *batəŋ* ‘talk (N)’), but when they function as verbs take either the transitive marker $-ja:$ or the intransitive marker $-e(d)$ (Kinnauri: *bat:ja:-mu* [talk-TR-INF]; *bat:en-nu* [talk-INTR-INF]) (see Chapter 7). Once the part of speech has been established in this way, the IA loans take the regular nominal or verbal inflectional endings of the recipient language.

¹ The three recognized distinct historical stages of IA are referred to in the literature as *Old Indo-Aryan* (OIA), *Middle Indo-Aryan* (MIA) and *New Indo-Aryan* (NIA). Kanashi and Kinnauri are closely related members of the West Himalayish (WH) subbranch of ST; see Figure 1 in this chapter.

² Most of the loanwords containing these adaptive markers are disyllabic, which seems to be preferred: When $-(V)\eta$ and $-(V)s$ are affixed to a di- or polysyllabic IA noun/adjective, the vowel of the stem-final syllable often undergoes syncope in both Kanashi and Kinnauri. e.g. *kulut* ‘(historical) Kullu kingdom’ > Kanashi *kultəŋ* ‘Kullu region’.

In this chapter we will first describe the adaptive markers on nouns and adjectives in Kanashi and Kinnauri. Next we will examine if other ST languages of the western Himalayas show any traces of this phenomenon. We will see that with the exception of the ST languages of Lower/Middle Kinnaur – which are closely related to Kanashi and Kinnauri – none of the ST languages of Himachal Pradesh and Ladakh show any traces of the adaptive markers. However, we find traces of similar adaptation strategies in some ST languages of the Uttarakhand region in India and in the adjoining Tehri region in western Nepal, raising questions regarding the prehistory of these languages and their genealogical classification. In order to gain a better understanding of the phenomenon, we will also examine if similar elements are attested in the Indo-Aryan, Dravidian and Munda languages spoken in this region (i.e. Himachal Pradesh, Uttarakhand in India and in the Tehri region in Nepal).

We begin with an examination of the adaptive markers in Kanashi and Kinnauri.

2 Nouns and adjectives ending in $-(V)\eta/-(V)s$ in Kanashi and Kinnauri

2.1 Background and overview

The Kanashi and Kinnauri lexicons contain a large number of borrowed IA nouns and adjectives.³ In both languages a subset of these IA nouns take an adaptive marker $-(V)\eta$ or $-(V)s$. Similarly, a subset of the IA adjectives in both languages take the adaptive marker $-(V)s$. In Kinnauri some IA adjectives, too, take the adaptive marker $-(V)\eta$. The adaptive marker in Kinnauri and Kanashi occurs on IA simple (i.e., non-compound) noun and adjective loans, never on a verb. In the IA languages these nouns and adjectives occur without the adaptive markers $-(V)\eta$ or $-(V)s$.⁴ See Table 1.

³ In the tables in this section, the following notational conventions are used. For etymologies, when given in the “Etymology” column, “Tnnnn” refers to entry number *nnnn* in Turner (1966). Most Kanashi and Kinnauri items are from our own fieldwork data. A few of the Kinnauri items are from B. R. Sharma (1976). These are indicated as follows: *item*[†].

⁴ One important characteristic of Kinnauri, according to Cunningham (1854: 223–224), is that nouns end in *-aŋ* or *-iŋ*, *-uŋ*. He further points out that Kinnauri is known as *Milchán* in the speech of Rampur (where an IA language is spoken), while the Kinnauri speakers themselves use the term *Milchanang* to refer to their language.

Table 1: Adaptive markers on IA noun and adjective loans in Kanashi and Kinnauri

Kanashi	Kinnauri	Gloss	Etymology
<i>da:ŋaŋ</i>	<i>ɖa:naŋ</i>	‘penalty, punishment’	T6128 <i>daŋɖá</i> m. ‘punishment’
<i>sargaŋ</i>	<i>sorgaŋ</i>	‘sky’	T13910 <i>svargá</i> m. ‘heaven’
<i>lokas</i>	<i>lokas</i>	‘non-Kanashi people’ / ‘people’	T11119 <i>lōká-</i> m. ‘world, people’
<i>laʔas</i>	<i>laʔas</i>	‘dumb’ / ‘dumb (male)’	T10917 <i>laʔta</i> m. ‘bad man’
<i>ka:ŋas</i>	<i>ka:nes, ka:naŋ</i>	‘blind’	T3019 <i>kāṇá</i> ‘one-eyed’
<i>piʔas</i>	<i>piʔas</i>	‘flour’	T8218 <i>piśá</i> ‘crushed, ground; flour’

Appendix A presents some more examples of nouns and adjectives in Kanashi and Kinnauri which show a similar pattern of adaptation (including the choice of the adaptive marker).

In our material there are many more instances of nouns and adjectives with the adaptive markers in Kinnauri than in Kanashi. This may simply be due to the fact that we have more Kinnauri data,⁵ but on the other hand, names of months and weekdays as discussed in Section 2.2.2, where we do have comparable data in the two languages, also show more adaptive markers in Kinnauri than in Kanashi. In both newer vocabulary (cf. Saxena 2022) and in the older Kinnauri lexicon (cf. Gerard 1842) the adaptive marker *-(V)ŋ* occurs much more frequently than the adaptive marker *-(V)s*.

2.2 Adaptive markers on nouns

2.2.1 Distribution and inflectional behavior

The distribution of the adaptive markers *-(V)ŋ* and *-(V)s* in Kanashi and Kinnauri is not morphophonologically conditioned, as can be observed in the examples provided here and in Appendix A, except that the vowel-less variants (*-ŋ* and *-s*) are added to items that end in a vowel in the donor language (e.g. Kanashi / Kinnauri *bitiŋ* ‘wall’, etymology: T9494 *bhittí* f. ‘panel, partition, wall’). There are, however, traces of a semantically-based distribution of the two adaptive markers *-(V)ŋ* and *-(V)s* when used with nouns in both Kanashi and Kinnauri, where *-(V)s* shows a preference for attaching to animate nouns and *-(V)ŋ* to inanimate nouns; see Table 2.

⁵ We have collected Kinnauri data over several decades in a number of previous projects and there are also more published materials on Kinnauri (Saxena 2022).

Table 2: Animacy sensitivity in the adaptive markers

Kanashi	Kinnauri	Gloss	Etymology
	<i>ḍoman</i>	‘name of a social subcaste’	T5570 <i>ḍōmba</i> m. ‘man of low caste living by singing and music’
<i>ḍaggis</i>	<i>ḍagis, ḍomes</i>	‘male member of this subcaste’	T5524 * <i>ḍagga</i> ‘defective’, ‘term of contempt for a blacksmith’
	<i>ṭfaman</i>	‘name of a social subcaste’	T4698 <i>carmakāra</i> m. ‘leatherworker’
<i>ṭfama:ras</i> <i>ḍzejṭʰan</i>	<i>ṭfama:res</i>	‘male member of this subcaste’	
		‘Malana parliament upper house’	T5285 <i>jyēṣṭa</i> ‘first, chief’
	<i>ḍzeṭʰrasʰ</i>	‘a committee of three persons appointed for 5 or 6 years to lead the work on the Dewaal festival’	
<i>kaniṭʰas</i> <i>kaniṭʰan</i>	<i>kanisʰas</i>	‘member of an IA subcaste’	T2718 <i>kaniṣṭhā</i> ‘youngest’
		‘Malana parliament lower house’	
	<i>kənorin</i>	‘Kinnaur (place name)’	
	<i>kənoras</i>	‘people/man of Kinnaur’	
<i>dukʰis</i>	<i>dukʰis</i>	‘disease, ill (person)’	T6375 <i>duḥkhā</i> n. ‘difficulty, pain’
<i>(dukʰ)</i>	<i>dukʰan</i>	‘misery, grief, sadness’	
	<i>ṭfa:rasʰ</i>	‘a group of four men who carry the devta’	T4655 <i>catvāraḥ</i> m. pl. ‘four’
<i>tisran</i>		‘third’	T6018 * <i>triḥsara</i> ‘triple’
<i>gitan</i>	<i>gitan</i>	‘song’	T4167 <i>gītā</i> n. ‘singing’
	<i>gitkaras</i>	‘singer’	Hindi <i>gitkar</i> ‘singer, the one who sings’
<i>hal</i>	<i>halan</i>	‘plough’	T14000 <i>halā</i> m.n. ‘plough’
	<i>ha:lesʰ</i>	‘one who ploughs’	
<i>laṭʰas</i>	<i>laṭas</i>	‘dumb’	T10917 <i>laṭṭa</i> m. ‘bad man’
<i>ka:ṇas</i>	<i>ka:nan, ka:nes</i>	‘blind, one-eyed’	T3019 <i>kāṇā</i> ‘one-eyed’

While the data presented so far suggest an original semantically-based distribution of *-(V)ṇ* and *-(V)s*, there are also many counterexamples to this. For example, Kinnauri *piṭʰas* ‘flour’, Kanashi *jaras* / Kinnauri *ājares* ‘darkness’. Similarly, there are some animate nouns which take the adaptive marker *-(V)ṇ*. E.g. Kanashi *bandran* / Kinnauri *bandres* ‘monkey’; Kanashi *fokkuran* / Kinnauri *fokran* ‘orphan’; and Kanashi *maṭʰan* / Kinnauri *morṭʰan* ‘man’.

In inflection, the adaptive marker generally behaves as part of the stem, so that inflectional suffixes are added after it, e.g. Kanashi *ga:ɽiŋ* ‘river’ : *ga:ɽiŋ-u* [river-POSS], but there are also instances where the adaptive marker is partly integrated in the grammar of the language, and treated as some kind of suffix. Both in Kanashi and Kinnauri the plural ending or a case marker may sometimes replace the adaptive marker, e.g. Kinnauri *gitaŋ* ‘song’ : *git-a:* [song-PL]; Kinnauri *k^hakaŋ* ‘mouth’ : *k^hak-o* [mouth-LOC]. However, we also find instances of two forms of a noun, one where the plural and/or case marker is affixed to the full noun stem (i.e., including the adaptive marker), and another one where the same noun occurs without the adaptive marker when the plural/case marker is affixed, e.g. Kinnauri *bo:t^haŋ-o:-nu* ~ *bo:t^h-a:-nu* [tree-PL-DAT.PL]. Kanashi shows the same general pattern as Kinnauri, although with a much more pronounced preference for attaching number and case suffixes to the full noun stem, e.g. Kanashi *baŋiŋ-a:-p* [pot-PL-ACC]; *piŋaŋ-a:-p* [door-PL-ACC]. See Chapter 3 for more details.

2.2.2 An example: names of months and weekdays

A striking illustration of the role of the adaptive marker *-(V)ŋ* in the linguistic systems of Kanashi and Kinnauri is offered by words for time periods, in particular names of months and weekdays.

Both Kanashi and Kinnauri use the Hindu calendar, according to which the year begins on the vernal equinox (21st or 22nd of March) and then proceeds through 12 months with 30 or 31 days each. A consequence of this arrangement is that the Hindu months do not coincide with the Gregorian months, but overlap them. Table 3 shows the names of the months in Kanashi and Kinnauri in comparison to some neighboring IA languages of the same region and also the corresponding Sanskrit names (from Turner 1966).

Even though Kinnauri and Kanashi use the Hindu calendar and the forms of the month names are, to a large extent, similar to those found in IA languages, Kanashi and Kinnauri differ from IA languages in that in Kinnauri, all month names end with an *-aŋ*. In Kanashi, too, all month names, except three (*ʃe:it*, *buʃa:k*, *ka:te*) end in *-aŋ*. Distinct from this, none of the month names in Sanskrit, Kullu Pahari and Kotgarhi have a word-final *-aŋ*.

Kinnauri and Kanashi differ more noticeably from the IA languages Kotgarhi and Kullu Pahari regarding two of the month names (*ma:ŋ* ‘Jan–Feb’; *indramaŋ* ‘Sep–Oct’).

In the latter case, Kanashi and Kinnauri – and Kinnauri Pahari, but this is most likely a borrowing from Kinnauri – simply reflect a different item. The closest original form is the Sanskrit *indra*; *īndramaha* ‘festival for (the god) Indra during

Table 3: Month names in Kanashi, Kinnauri and neighboring IA languages

	Kanashi	Kinnauri	Kinnauri Pahari	Kotgarhi	Kullu Pahari	Sanskrit (Turner 1966)
Mar–Apr	<i>tfeit</i>	<i>tʃetran</i>	<i>tʃeta:r</i>	—	<i>tʃet(ə)r</i>	caitraḥ; caitrā
Apr–May	<i>buʃa:k</i>	<i>bɛʃakan</i> , <i>b^haɪʃak^haŋ</i>	<i>ba:ʃa:</i>	<i>bəʃn/a;</i> Koci: <i>bəʃā</i>	<i>bɛʃak^h</i>	vaiśākhā
May–Jun	<i>dʒeʃtan</i>	<i>dʒeʃtan</i>	<i>dzeʃth</i>	<i>dzɛtːh</i>	<i>dʒeʃt^(h)</i>	jyaiṣṭhaḥ
Jun–Jul	<i>aʃlan</i>	<i>a:ʃaran</i>	<i>a:ʃa:r</i>	<i>fāɭ</i>	<i>ʃaɭ</i>	āṣāḍhaḥ
Jul–Aug	<i>ʃauŋaŋ</i>	<i>ʃa(u)naŋ</i>	<i>ʃa:ma:n</i>	<i>fāuŋ</i>	<i>ʃauŋ</i>	śrāvaṇaḥ
Aug–Sep	<i>badraŋ</i>	<i>b^hadraŋ</i>	<i>ba:drɔ</i>	<i>bhɔddər</i>	<i>b^had(ə)r</i>	bhādra
Sep–Oct	<i>indraman</i>	<i>indramaŋ</i>	<i>indrɔma:ŋ</i>	<i>sɔɃ</i>	<i>(?) ʃodʒ</i>	indra; T1579a. īndramaha 'festival for (god) Indra during this month'; T1472 āśvinā
Oct–Nov	<i>ka:te</i>	<i>ka:tian</i>	<i>ka:tɪ</i>	<i>katɪ</i>	<i>ka:tɪ</i>	kārtikā
Nov–Dec	<i>mokʃiran</i>	<i>mokʃeraŋ</i>	<i>mɔgʃrɪ</i>	<i>maŋgʃər</i>	<i>mɔkʃar</i>	mārgaśirāḥ
Dec–Jan	<i>poʃaŋ</i>	<i>poʃaŋ</i>	<i>poʃ</i>	<i>pōʃ</i>	<i>poʃ</i>	pauṣaḥ
Jan–Feb	<i>ma:ŋ</i>	<i>ma:ŋ</i>	<i>maŋ</i>	<i>māg:</i>	<i>mag</i>	māgha
Feb–Mar	<i>p^hagɭaŋ</i>	<i>p^hagnan</i>	—	—	<i>p^hagan</i>	phālguna

this month' (Turner 1966: T1579a), and we probably see the outcome of a change *īndramaha-aŋ* > *īndramaŋ* in present-day Kanashi and Kinnauri.

In the case of 'Jan–Feb', we posit a similar process, i.e. OIA (Sanskrit) *māgha* > MIA (Prakrit) *māha* > *māha-aŋ* > *ma:ŋ*. This is confirmed by the name for this month provided by Gerard (1842): *mahang* 'January'.

As shown in Table 4, the month names in the WH languages Tinani and Bunan are quite different from those of Kanashi and Kinnauri and similar to each other, but still different from the forms found in Tibetic languages, such as Navakat.

The names of the weekdays are also IA loans in Kinnauri and Kanashi, in some of which we also find the adaptive marker *-aŋ*. This is also the case in Chhitkuli (D. D. Sharma 1992: 197–304). See Table 5. Interestingly, *-es* is attested in Kinnauri only in 'Saturday'. Furthermore, the form for 'Thursday' does not contain any adaptive marker in any of the three languages (Kinnauri, Kanashi and Chhitkuli).

To summarize this section:

- The calendar system as well as the month names in Kinnauri and Kanashi differ strikingly from those found in Tinani, Bunan and Navakat.
- Both Kanashi and Kinnauri use the IA calendar system as well as the month names; some (Kanashi) or all (Kinnauri) month names contain the adaptive marker *-(V)ŋ*.

Table 4: Month names in Tinani, Bunan and Navakat

	Tinani	Bunan	Navakat
First month of the calendar (='Mar–Apr')	<i>ts^hukzu la</i>	<i>tsukskisla</i>	<i>ndàva tàṇbo</i>
Second month of the calendar (='Apr–May')	<i>kunzu la, kunzla</i>	<i>kunsla</i>	<i>ndàva níva</i>
Fourth month of the calendar (='Jun–Jul')	<i>puṇa la, puṇla</i>	<i>punasla</i>	<i>ndàva zìva</i>
Eighth month of the calendar (='Oct–Nov')	<i>surla</i>	<i>sursla</i>	<i>ndàva gétpa</i>
Tenth month of the calendar (='Dec–Jan')	<i>k'ur la</i>	<i>k^hujsla</i>	<i>ndàva ṭṭúva</i>
Eleventh month of the calendar (='Jan–Feb')	<i>mindug la, mindzugla</i>	<i>tondzüksla</i>	<i>ndàva ṭṭúkṭikpa</i>

Table 5: Names of weekdays in Kanashi, Kinnauri and Chhitkuli

	Kanashi	Kinnauri	Chhitkuli
'Monday'	<i>soar, suāraṇ</i>	<i>suāraṇ</i>	<i>somarəṇ</i>
'Tuesday'	<i>maṇgal</i>	<i>maṇgla:raṇ</i>	
'Wednesday'	<i>bud(d)</i>	<i>buda:raṇ</i>	
'Thursday'	<i>brest</i>	<i>brespot</i>	<i>bresət</i>
'Friday'	<i>fukkar</i>	<i>fukaraṇ</i>	<i>šukaraṇ</i>
'Saturday'	<i>fuṇṭifare</i>	<i>fonferes</i>	
'Sunday'	<i>va:r</i>	<i>tva:r, tva:raṇ</i>	<i>itwarəṇ</i>

- The Kinnauri and Kanashi forms (especially for the two months 'Jan–Feb' and 'Sep–Oct') are more similar to each other than they are to any other IA and ST languages examined here.

It seems highly unlikely that the similarities that we have observed here in Kanashi and Kinnauri relating to the month names (or at least their introduction in the two languages), especially 'Jan–Feb' and 'Sep–Oct', are independent developments in the two languages. It is more likely that this adaptation of the month names took place in their common linguistic variety – before the two communities diverged. The pattern that we have observed here concerning month names is similar to the patterns observed regarding the adaptive markers $-(V)\eta$ / $-(V)s$ on IA loans in general in Kanashi, Kinnauri and some other ST languages, as discussed above. This raises the question regarding the etymologies of the adaptive markers $-(V)\eta$ and $-(V)s$.

Table 6: Kanashi and Kinnauri adjectives in *-(V)s*

Kanashi	Kinnauri	Gloss	Etymology
<i>dugas</i>	<i>duges</i>	‘deep’	T6368 dīrghā ‘long, tall, deep’
<i>sulus</i>	<i>mesaŋ, sulus</i>	‘slow’	T13512 sulabha ‘easy, trivial’
<i>kaŋfas</i>	<i>kaŋfas, kaŋfes</i>	‘unripe, uncooked’	T2613 *kacca ‘raw, unripe’
<i>k^hulas</i>	<i>k^hulas</i>	‘wide’	T3945 *khöll ‘to open’, *khull ‘to be open’
<i>sastas</i>	<i>sosta(s)</i>	‘cheap, less expensive’	

Table 7: Kanashi and Kinnauri adjectives with head nouns

Kanashi	Gloss	Kanashi [Adj N]	Etymology
<i>la:mes,</i> <i>la:mas</i>	‘long’	<i>la:mas kurti</i> ‘long shirt’ <i>la:m-a: kurti-ga:</i> [long-PL shirt-PL] <i>la:mas tʃ^hakts</i> ‘tall boy’ <i>la:m-a: tʃ^hakts-a:</i> [tall-PL boy-PL] <i>la:mas tʃimets</i> ‘tall girl’ <i>la:m-a: tʃimets-a:</i> [tall-PL girl-PL]	T10951 lamba ‘long’
<i>u^tras</i>	‘high’	<i>u^tras ka:t^hi</i> ‘high mountain’ <i>u^thr-a: ka:t^hi-ga:</i> [high-PL mountain-PL]	T1783 *uttāḍa ‘high’
<i>bellis</i>	‘wide’	<i>bellis bitiŋ</i> ‘wide wall’ <i>bellis bitiŋ-a:</i> [wide-PL wall-PL]	T11798 vipula ‘wide, extensive’
<i>garkas</i>	‘heavy’	<i>garkas baniŋ</i> ‘heavy pot’ <i>gark-a: baniŋ-a:</i> [heavy-PL pot-PL]	T4209 gurú ‘heavy’
Kinnauri	Gloss	Kinnauri [Adj N]	Etymology
<i>la:mes</i>	‘long’	<i>la:mes mi</i> ‘tall man’ <i>la:m-a: mi-go:</i> [tall-PL man-PL] <i>la:mes-a: mi-go:</i> [tall-PL man-PL] <i>la:mes mi-go:</i> [tall man-PL] <i>la:mes tshetsats</i> ‘tall girl’ <i>la:mes tshetsats-o:</i> [tall girl-PL] <i>la:m-a: tshetsats-o:</i> [tall-PL girl-PL]	T10951 lamba ‘long’
<i>solqes</i>	‘straight’	<i>solqes om</i> ‘straight path’ <i>solqes om-o:</i> [straight path-PL]	

2.3 Adaptive markers on adjectives

Next, we will examine the adaptive marker *-(V)s* on IA-origin adjectives in Kanashi and Kinnauri. Some examples are given in Table 6.

As the examples in Tables 6 and 7 illustrate, the occurrence of *-(V)s* in Kanashi and Kinnauri adjectives is not sensitive to formal or semantic characteristics of the

head word (except that they may optionally inflect for plural in the same way as nouns, i.e. replacing *-(V)s* with the plural suffix).

Distinct from this, as shown in the Kanashi examples in Table 8 (reproduced from Chapter 3), there is a set of adjectives which end in *-(V)s*, where the adaptive marker appears only with masculine head nouns, while feminine head nouns show a number of different endings.

Table 8: Kanashi adjectives in *-(V)s*

SG	PL	SG	PL
<i>ka:ŋ-as madras</i> 'blind man'	<i>ka:ŋ-a: madr-a:</i>	<i>ka:ŋ beṭaṭi</i> 'blind woman'	<i>ka:ŋ-e beṭaṭi-ga:</i>
<i>moṭ^h-as ṭ^hakts</i> 'fat young man'	<i>moṭ^h-a: ṭ^hakts-a:</i>	<i>moṭ-eṇ beṭaṭi</i> 'fat woman'	<i>moṭ-eṇ-a: beṭaṭi-ga:</i>
<i>buṭ-as munuk</i> 'old man'	<i>buṭ-a: munuk-a:</i>	<i>buṭ-its beṭaṭi</i> 'old woman'	<i>buṭ-its-a: beṭaṭi-ga:</i>
<i>roṭ^h-as munuk</i> 'brave man'	<i>roṭ^h-a: munuk-a:</i>	<i>roṭ^h-ar beṭaṭi</i> 'brave woman'	<i>roṭ^h-ar-a: ~ roṭ^h-ar-e beṭaṭi-ga:</i>
<i>jobil-as biṇiṭ</i> 'beautiful husband'	<i>jobil-a: biṇiṭ-a:</i>	<i>jobil, jobilas beṭaṭi</i> 'beautiful woman'	<i>jobil-e beṭaṭi-ga:</i>
<i>matsl-is ṭaṇts</i> 'lazy boy'	<i>matsl-i ṭaṇts-a:</i>	<i>matsl-en beṭaṭi</i> 'lazy woman'	<i>matsl-en-e beṭaṭi-ga:</i>

2.4 Kanashi–Kinnauri mismatches

If both languages exhibit an adaptive marker, we generally find the same marker in Kanashi and Kinnauri with a particular IA noun or adjective (either *-(V)ŋ* or *-(V)s*). This holds for the majority of this set of IA nouns/adjectives in Kanashi and Kinnauri. Table 9 shows the only mismatches that we have found concerning the choice of the adaptive marker in the two languages.

There are also some instances where we find both *-(V)ŋ* and *-(V)s* as alternatives on the same item, without any apparent change in meaning (Table 10).

Table 9: Nominal adaptive marker mismatches between Kanashi and Kinnauri

Kanashi	Kinnauri	Gloss	Etymology
<i>bakras</i>	<i>bək"araŋ</i>	'goat' / 'she-goat'	T9153 bárkara m. 'kid, lamb'
<i>bandraŋ</i>	<i>bandres</i>	'monkey'	T11515 vānara m. 'monkey'
<i>kukaŋaŋ</i>	<i>kukkras</i>	'cock, rooster'	T3208 kukkuṭā m. 'cock'
<i>sa:mnas</i>	<i>somaŋ</i>	'flat, straight'	T13346 sāmaka '*even, *level'
<i>agraŋ</i>	<i>a:gles</i>	'beyond' / 'first'	T68 ágra n. 'top, summit'

Table 10: Nominal adaptive marker variation in Kanashi and Kinnauri

Kanashi	Kinnauri	Gloss	Etymology
	<i>galiŋ, gales</i>	'abuse'	T4145 gāli f. PL 'abusive speech'
<i>banīŋ</i>	<i>banīŋ, banes</i>	'dish, pot, cooking utensil'	T9440 bhāṇḍa n. 'pot, dish, vessel, ornament, wares'
<i>ka:ŋas</i>	<i>ka:nes, ka:naŋ</i>	'one-eyed, blind'	T3019 kāṇā 'one-eyed', Pa. Pk. kāṇā 'blind of one eye, blind'
<i>padras, padraŋ</i>	<i>podres</i>	'smooth, plain' / 'plain (land)'	T7767 *paddhara 'straight, level'

3 Adaptive markers in ST and non-ST languages of the region

It is conceivable – even likely (see below in this chapter and Chapter 8) – that $-(V)\eta$ and $-(V)s$ represent separate borrowing processes, thus possibly were active at different times and with different donor languages. This might also account for the variation that we observe (e.g. Kinnauri *banīŋ, banes* 'pot'; see Section 2.4).

In order to understand the introduction of the adaptive markers in Kinnauri and Kanashi and to throw light on the prehistory of Kanashi and Kinnauri, we need to explore the following two interrelated questions:

1. Do we find these adaptive markers in other languages in the region?
2. What is the source of the two adaptive markers? Is this a genealogical or an areal phenomenon?

In this section we will examine the distribution of the adaptive markers in other ST and non-ST languages of the region.

3.1 The linguistic neighborhood of Kanashi and Kinnauri

The surrounding Himalayas – depending on how wide we cast our net – are the home of three major language families which all have been present in the region for several millennia, Sino-Tibetan, Indo-Aryan (< Indo-European) and Dravidian, and marginally also a fourth major family: Munda (< Austroasiatic). The last-mentioned may have had a larger presence here in prehistoric times, as indicated by suggested Munda loans in Vedic (Witzel 1999; Southworth 2005). In addition, there are at least two language isolates, Burushaski to the northwest and Kusunda to the east. See Figure 4.⁶

Those languages where we have not been able to find evidence in the consulted sources that adaptive markers are used are listed in Table 11 (possibly apart from a sporadic instance, which is then given under “Comment” in the table).

3.2 Sino-Tibetan languages

The language contact between ST and IA in this region – with IA mostly in the dominant position – goes back at least two and a half to three millennia. Hence, all ST languages of the Indian Himalayas have IA loans – some languages – e.g. Darma, Kanashi, Kinnauri, Pattani, Raji, and Rongpo – have relatively more, while others – e.g. Bunan, Tinani, Darma, Byangsi, and Chaudangsi – relatively fewer.

In order to examine the spread of the phenomenon under investigation more systematically, we will examine the ST languages listed in Figure 1, which are spoken in this part of the Himalayas. We include at least one language of each recognized subbranch. The selection of languages included here is constrained by the availability of relevant data.

3.2.1 Sino-Tibetan languages of Himachal Pradesh and Ladakh

As we will see in this section, with the exception of the ST languages of Lower and Middle Kinnaur: Kinnauri, Chhitkuli and Shumcho (Labrang variety), none of the ST languages of Himachal Pradesh and Ladakh take the adaptive marker on IA loans, except for at most a few isolated examples.

⁶ The sources of the data presented in this section are various. For Kanashi, Kinnauri, Navakat and Kinnauri Pahari we have drawn upon our own fieldwork data. For other languages we have relied on secondary data sources, texts reflecting extremely varying degrees of editorial rigor, often in digital versions with differing legibility resulting from varying scanning conditions.

Table 11: Languages without adaptive markers

Language	Source	Comment
<i>Sino-Tibetan</i>		
Purik	(Bailey 1915)	—
Ladakhi	(Bettina Zeisler p.c.)	<i>balṭin</i> ‘bucket’ (with <i>-n</i> , and not <i>-ŋ</i>)
Navakat	(Saxena 2022)	<i>péran</i> ‘family’ (Kinnauri <i>peran</i> ‘family, clan’)
Nyamkad	(D. D. Sharma 1992: 98–196)	—
Pattani/Manchad	(Konow 1909; S. R. Sharma 1987)	—
Tinani	(Konow 1909: Chamba Lahuli)	—
Bunan	(Widmer 2017)	<i>pitan</i> ‘door’ (Kanashi and Kinnauri <i>pitan</i>); many village names end in <i>-(V)ŋ</i> (Widmer 2017: 20)
Chaudangsi	(Konow 1909; Krishan 2001a)	<i>morong</i> ‘door’
Rangkas	(D. D. Sharma 1989b: 195–254)	—
Yakkha	(Schackow 2015)	—
Thangmi	(Turin 2006)	<i>maṇa</i> ~ <i>maṇiṇ</i> ‘bread’
Baram	(Kanasakar et al. 2011)	—
Gurung	(Trail 1973)	—
<i>Dravidian</i>		
Brahui	(Andronov 1980)	—
<i>Language isolate</i>		
Burushaski	(Klimov & Ėdel’man 1970; Munshi 2006)	—
<i>Indo-Aryan</i>		
Kullu Pahari	(Anju Saxena’s fieldwork notes; Diack 1896; Hendriksen 1976; 1986)	—
Kotgarhi	(Hendriksen 1976; 1986)	—
Jaunsari	(Matthews 2008)	—
Kangri (Kángṛī)	(Bailey 1908)	—
Chinali	(S. R. Sharma 1991)	—
Kumaoni	(Apte & Pattanayak 1967; D. D. Sharma 1987)	—
Garhwali	(Chandola 1966)	—
Nepali	(Acharya 1990)	—
Bajjika	(Roy 2010)	—

ST				
	Bodish	W.Archaic Tibetan		Gurung Ladakhi Purik
		Late Old Tibetan	Lahuli-Spiti	Navakat Nyamkad
			Spiti-Jad	Jad
	West Himalayish	Western	Kinnauric	Chhitkuli Kinnauri Kanashi Shumcho
			Lahaulic	Pattani Tinani
		Eastern	Central	Bunan Rongpo
			Pithauragarh	Chaudangsi Byangsi Darma Rangkas
	Himalayish	Mahakiranti	Newaric	Dolakha Newar Kathmandu Newar
			Thangmi-Baram	Thangmi Baram
			Kham-Magar-Chepang	Magar
			Eastern Kiranti	Yakkha
	Raji-Raute			Raji Raute Rawat

Figure 1: Sino-Tibetan languages included in this study (classification [with some internal nodes omitted] according to Glottolog; Hammarström et al. 2021)

3.2.1.1 Western West Himalayish and Tibetic languages of Kinnaur

In Saxena & Borin (2013) we examined the linguistic distance among “Kinnauri dialects”, a cover term we used about ST varieties spoken in Lower, Middle and Upper Kinnaur (in the locations shown in the map in Figure 2). Relevant in the present context is that it is not only the Kinnauri variety of Sangla that shows adaptation of IA nouns/adjectives by adding *-(V)η/-(V)s*, but also several other ST varieties of Lower and Middle Kinnaur, while no varieties of Upper Kinnaur – those of Poo, Kuno and Nako (Navakat, already mentioned above) – use the adaptive markers. See Table 12.

This grouping of the languages of Kinnaur according to the prevalence of *-(V)η/-(V)s* in is visualized in the map in Figure 2 (based on data and calculations presented in Saxena & Borin 2013).

Figure 2: Sino-Tibetan language varieties in Kinnaur

Chhitkuli (Chitkul village)⁷ (Philippe Martinez p.c.; D. D. Sharma 1992: 107–304) and Shumcho (Gerard 1842: 548–551) are especially relevant in this regard. Both are spoken in Lower/Middle Kinnaur. In Shumcho (Gerard 1842: 548–551) we find examples of both adaptive markers, $-(V)s$ and $-(V)\eta$. For example, *oris* ‘carpenter’, *chamung* ‘shoemaker’, *domung* ‘blacksmith’, *golung* ‘neck’, *beeshung* ‘poison’, *shakrung* ‘fine sugar’, *palis* ‘shepherd’, *chorus* ‘thief’, *soorus* ‘hog’, *bundrus* ‘monkey’. There are a few examples of the adaptive marker in the Shumcho data reported by Huber (2014) too (*mɛtɛŋ* ‘earth’, *dɛɛŋ* ‘village’, *pɪtɛŋ* ‘door’). Chhitkuli has many instances of the adaptive marker $-(V)\eta$ (e.g. *sowarɛŋ* ‘Monday’; *dukhɛŋ* ‘pain’; *canɛŋ* ‘basket’; *boʂɛŋ* ‘year’ (all from D. D. Sharma 1992: 107–304), but no occurrence of the adaptive marker $-(V)s$ is attested in Chhitkuli.

In Gerard’s (1842) vocabulary both the adaptive markers $-(V)\eta$ and $-(V)s$ occur also in T,heburskud (Shumcho). The following examples of words appearing

⁷ In English-language official documents the name of the village is given as “Chitkul”, whereas the language variety is normally written “Chhitkuli”. We will adhere to this convention here.

Table 12: Distribution of $-(V)\eta/- (V)s$ among ST languages of Kinnaur (written Tibetan items added for comparison)

Sense:	‘snake’	‘ear’	‘seed’	‘night’
Variety				
Nichar	<i>sapɔs:</i>	<i>kanɔŋ</i>	<i>bijaŋ</i>	<i>ratɪŋ</i>
Kalpa	<i>sapas</i>	<i>kanan</i>	<i>bijaŋ</i>	<i>ratɪŋ</i>
Sangla	<i>sapes</i>	<i>kanan</i>	<i>bijaŋ</i>	<i>ratɪŋ</i>
Ropa	<i>savas:</i>	<i>kanan</i>	<i>bijaŋ</i>	<i>ratɪŋ</i>
Chitkul	<i>sapa</i>	<i>rɔɕts</i>	<i>bijaŋ</i>	<i>mɔnima</i>
Labrang	<i>savasəs</i>	<i>repaŋ</i>	<i>pɔdzad</i>	<i>mɔŋɲa</i>
Poo	<i>kʰalva</i>	<i>nam ɟɔk</i>	<i>saŋon</i>	<i>goŋmo</i>
Kuno	<i>ʈɔl:</i>	<i>nam ɟɔk</i>	<i>saŋɔn</i>	<i>ʈɬamo</i>
Nako	<i>(n)ɖul</i>	<i>namɟɔ(k)</i>	<i>saŋon</i>	<i>goemo</i>
Written Tibetan	<i>sbrul</i>	<i>rna</i>	<i>sa sŋon</i>	<i>dgoŋ no ~ dgoŋs mo, mtshan</i>

in his vocabulary in both Kinnauri and Shumcho are illustrative: *palis* ‘shepherd’; *sonarus* ‘goldsmith’; *chorus* ‘thief’; *gulung* ‘throat’; *galing* ‘abuse’; *deshung* ‘village’; *burshung* ‘year’. Note the names of weekdays in Kinnauri and Shumcho (Gerard 1842: 511): *aetwarung* ‘Sunday’; *soarung* ‘Monday’; *munglarung* ‘Tuesday’; *shookarung* ‘Friday’; *shunsheerus* ‘Saturday’.

Based on what we have seen so far, Lower/Middle Kinnaur could be the home of a posited common Kanashi-Kinnauri proto-language (see Chapter 8 for a discussion). We still need to take a look at the ST languages spoken further east, in the Indian state of Uttarakhand and in the neighboring regions in Nepal.

3.2.1.2 Eastern West Himalayish

Pattani (Francke 1917)

Francke (1917: 13) states that Lahaul was a much-travelled pathway, linking Tibet/Ladakh and Kullu. This continued up until the Sikhs took control over Lahaul. This probably explains a large number of Tibetan and IA loans in Pattani (the lingua franca of this region, the largest population group among Pattani, Tinani and Bunan speech communities). Despite this long-standing contact with IA, none of Bunan (Widmer 2017: 129–130), Tinani or Pattani show any signs of adaptation strategies on nouns and verbs which we have observed in Kanashi and Kinnauri.

3.2.2 Sino-Tibetan languages of Uttarakhand and Nepal

Traces of the adaptive marker $-(V)\eta$ are found in some ST languages of Uttarakhand and Nepal, and in some of them – the Raji-Raute languages – even more than just traces. On the other hand, $-(V)s$ is found only exceptionally (one instance in Jad and possibly a few instances in Dolakha Newar).

3.2.2.1 Late Old Tibetan

Jad (S. R. Sharma 2001c):

Jad is spoken in Jadang, Nilang and a few other villages in Uttarakhand (India). Note that the village name Jadang (and possibly also Nilang) seems to have the adaptive marker $-a\eta$. If so, this is consistent with place names found in Kinnauri and in Kanashi. The only nouns which end in $-(V)\eta$ in Jad are shown in Table 13.

Table 13: Adaptive markers in Jad

Jad	Gloss	Jad	Gloss
<i>piriŋ, pi-tiŋ</i>	‘baby’	<i>ghəsiŋ</i>	‘good, better’
<i>ciŋiŋ</i>	‘bell’	<i>padraŋ, (padras)</i>	‘flat, plain (surface)’

In Jad we also find one item with the adaptive marker $-as$: *padras* ‘flat’ (Kanashi *padras*, Kinnauri *podres*; Etymology: T7767 *paddhara ‘straight, level’; Turner 1966).

Table 14: Adaptive markers in Rongpo

Rongpo	Gloss	Etymology
<i>phiŋiŋ, phəŋ</i>	‘ashes’	T11348 *varta ‘roundstone’
<i>jəbəŋ, jəməŋ</i>	‘meal, food’	T10431 yāya m. ‘barley’
<i>kənu:ŋ, kənu:ŋ</i>	‘ear’	T2830 kārpa m. ‘ear’
<i>qasa:ŋ</i>	‘bed’	T6896 dhvāmsati ‘falls to pieces’
<i>gəŋəm, gəŋəm</i>	‘river’	T3981 *gaḍḍa ‘hole, pit’
<i>pijaŋ</i>	‘seeds’	T9250 bī’ja n. ‘seed, semen’

3.2.2.2 Eastern West Himalayish

Rongpo (S. R. Sharma 2001b; Zoller 1983):

Rongpo has a large number of IA nouns and adjectives, e.g. *os* ‘dew’; *des* ‘country’; *p^hul* ‘flower’; *bɔŋ* ‘forest’; *b^hiti* ‘wall’; *muskil* ‘difficult’; *k^hara:b* ‘bad’; *nilo* ‘blue’. As seen in these examples, most of the IA loans in Rongpo do not have any adaptive marker.

However, there are some IA loans in Rongpo, which end in *-ŋ*, *-n*, *-m* or *-g*, which may possibly be related to the Kinnauri/Kanashi adaptive marker *-(V)ŋ*, as shown in Table 14.⁸

There are no clear adjective examples with an adaptive marker in Rongpo.

Darma (Willis Oko 2019; Krishan 2001b; S. R. Sharma 2001c):

As shown in Table 15, Darma exhibits a small number of nouns ending in *-(V)ŋ*, at least some of which seem to contain the adaptive marker.

Table 15: Adaptive markers in Darma

Darma	Gloss	Etymology
<i>homaŋ</i>	‘darkness’	
<i>ceejaŋ</i>	‘pot, kettle’	
<i>khoyang</i>	‘pot, copper’	
<i>paləŋ</i>	‘spinach’	T8126 pālakyā f. ‘Beta bengalensis’
<i>kibaŋ</i>	‘meeting place, temple’	
<i>marong</i>	‘door’	T10160 *mukhaghāṭā ‘entrance frame’
<i>lasəŋ</i>	‘goat’	
<i>kolaŋ</i>	‘bell’	T12580 śṛṅkhalam. n. ‘chain’
<i>bəyəŋ</i>	‘nest’	T11591 vāsā m. ‘abode’
<i>khuyəŋ</i>	‘plait’	

Byangsi (S. R. Sharma 2001a):

Byangsi has relatively few IA loans overall. All the words with the final syllable *-(V)ŋ* found in the wordlist are listed in Table 16.

⁸ *-niŋ* is suffixed to kinship terms as a marker of honorificity. *a:pa>apniŋ*, *enŋ* ‘father’, *a:ma > amniŋ* ‘mother’, *byəd > byəniŋ* ‘brother’. This is the case in several ST languages of the Himalayas. This *-niŋ* is not the same as the adaptive marker *-(V)ŋ*.

Table 16: Adaptive markers in Byangsi

Byangsi	Gloss	Byangsi	Gloss
<i>serɔŋ, saro, saru</i>	'forest'	<i>mithaŋ</i>	'mother's younger brother'
<i>mayan</i>	'basket'	<i>lasaŋ</i>	'male goat'
<i>duklaŋ</i>	'food'	<i>kacaŋ</i>	'pubic hair'
<i>ma:saŋ</i>	'meat, sheep'		

3.2.2.3 Raji-Raute

The Raji-Raute ST subgroup consists of a small cluster of closely related varieties spoken in Uttarakhand in India and in western Nepal. Glottolog and Ethnologue classify these into three languages (“languoids” in Glottolog): Raji (rji), Raute (rau), and Rawat (jnl). Looking at descriptions of Raji of India (e.g. Krishan 2001c) and Raji of Nepal (e.g. Dhakal 2019), it is clear that the differences between these varieties are significant. Since it is equally clear, and agreed in the literature (e.g. Fortier 2019), that all the varieties form a distinct ST subgroup, their exact number and the precise genealogical relations among them are not crucial for our particular purposes here, where the position of Raji-Raute as a whole in relation to Kanashi and Kinnauri is the primary focus.

Raji (D. D. Sharma 1990; Krishan 2001c; Rastogi 2012; Dhakal 2019; Fortier 2019):

Raji has many instances (about one hundred) of nouns and adjectives ending in $-(V)\eta$, many of which are obvious IA loans, both older (e.g. *xunəŋ* ‘gold’) and newer loanwords (e.g. *pjaləŋ* ‘cup’; *taliŋ* ‘plate’).⁹ See more Raji examples in Appendix B.1 to this chapter. In some nouns, the adaptive marker is realized as nasalization of the final vowel (e.g. *kəjã* ‘body’). As the examples in Table 17 show, Raji is very similar to Kanashi and Kinnauri regarding the use of the adaptive marker $-(V)\eta$.

Raute (Bista 1978; Khadka 2006; Fortier 2019):

Raute, too, has many instances of the adaptive marker $-(V)\eta$.

Bista (1978) provides a list of Raute words (the Swadesh 100 concept list). In the following Raute words there seems to be an adaptive marker $-m/-w$, occurring

⁹ This has been previously noted by Rastogi (2012), who refers to the element $-əŋ$ in Raji as one of “a few markers of nativization [of Kumauni and Hindi words]” (Rastogi 2012: 4).

Table 17: Adaptive markers in Raji

Raji	Kanashi	Kinnauri	Gloss	Etymology
<i>haḍəŋ</i>	<i>haḍḍaŋ</i>	<i>haraŋ</i>	'bone'	T13952 haḍḍa n. 'bone'
<i>uhəŋ</i>	<i>oḥaŋ</i>	<i>oḥaŋ</i>	'dew'	T855 avaśyā f. 'frost, dew'
<i>manəŋ</i>	<i>baṇaŋ</i>	<i>boniŋ, baunaŋ</i>	'forest'	T11258 vána n. (once m.R.) 'single tree', RV. 'forest, timber'
<i>bisəŋ</i>	<i>bijaŋ</i>	<i>bijaŋ</i>	'poison'	T11968 viṣā n. 'poison'

where Kinnauri and Kanashi (and also other varieties of Raute) show the adaptive marker $-(V)\eta$: *ha·řəm* 'bone'; *sikkəm* 'horn'; *mḥwəm* 'tongue'; *gḥəwəw* 'hot'.¹⁰

Raute is spoken mainly in the mid-western and far-western region of Nepal. Some Rautes are hunter-gatherers, while other groups are settled communities, and some dialectal differences are noted between the hunter-gatherer and settled communities (Khadka 2006). The description by Khadka (2006) seems to be based on the speech of the settled Rautes of Dudeldhura, but he also provides a small core vocabulary comparison between the two varieties. As we can see in Table 18, both varieties use the adaptive markers.

Table 18: Adaptive markers in Raute varieties

Settled Raute/Boto Boli	Hunter-gatherer Raute	Gloss
<i>dud^həŋ</i>	<i>dəduŋ, dudəu</i>	'milk'
<i>gaməŋ</i>	<i>monəŋ, gaməŋ</i>	'hot'
<i>gaɽəŋ</i>	<i>garum</i>	'girl, daughter'
<i>geŋ</i>	<i>(bəsaḥa)</i>	'clarified butter, ghee'
<i>guməŋ</i>	<i>(d^hum)</i>	'wheat'
<i>haḍḍəŋ</i>	<i>harəŋ</i>	'bone'
<i>manəŋ</i>	<i>manəŋ</i>	'forest'

A cumulative list based on the descriptions by Bista (1978), Khadka (2006) and Fortier (2019) of the Raute and Rawat items containing the adaptive marker $-(V)\eta$ is given in Appendix B.2 to this chapter.

Fortier (2019) provides a comparative Raji-Raute Swadesh list (100 concepts) with two Raute varieties of Nepal, two Raji varieties of India and three Raji varieties of Nepal. From this comparison we see that: (1) Raji has more instances

¹⁰ There seems to be variation among – or even within – Raute varieties, where word-final $-\eta$ alternates with $-m$ or $-u/-w$; cf. the item 'milk' in Table 18.

overall of the adaptive marker $-(V)\eta$ than Raute (which is also the picture given by Appendix B.1 to this chapter); and (2) the Raji varieties of Nepal show many more instances of $-(V)\eta$ than the varieties spoken in India.

3.2.2.4 Mahakiranti

Magar (Beames 1870; Bhattari 2011):

In the description of Magar by Bhattari (2011), there is a large number of IA loan-words (including kinship terms), but none of them shows any adaptive marker.

Newar (Genetti 2007; Hargreaves 2017):

As far as characteristic adaptation of IA nouns and adjectives is concerned, Kathmandu Newar does not have $/\eta/$ in its phoneme inventory (Hargreaves 2017). It exists in Dolakha Newar (Genetti 2007), and in the word list provided by Genetti (2007) (about 1,100 entries), there is a handful of items ending in $-\eta/-s$ (see Table 19). Except for those marked as Nepali by Genetti (see below), we could only find similar IA forms for two: *caukos* ‘doorframe’ (Hindi: *caukhaṭ*) and *dupās* (Hindi: *dhūp*). If it is true, then Dolakha Newar has some examples of the adaptive marker $-(V)s$.

Table 19: Possible adaptive markers in Newar

D. Newar	Gloss	D. Newar	Gloss
<i>bajaṇ</i>	‘hookah’	<i>lāṇtā, laiṇtāṇ</i>	‘naked’ (Nepali: <i>nāṅgo</i>)
<i>bārpāṇ</i>	‘tomato’	<i>māṇas</i>	‘dream’ (Nepali: <i>sapnā</i>)
<i>bujīṇ</i>	‘housefly’	<i>nakas</i>	‘first’ (Nepali: <i>pahilo, pratham</i>)
<i>caukos</i>	‘doorframe’	<i>nimtiṇ</i>	‘benefit’ (Nepali: <i>fāida, lābh</i>)
<i>dupās</i>	‘wick’ (for puja)	<i>pāṇ, paṇgu</i>	‘fruit’
<i>gāntāṇ</i>	‘thin; emaciated’		

3.2.3 Summary

The above description shows that only a few ST languages of Uttarakhand/Nepal show some plausible traces of adaptive markers akin to the Kinnauri and Kanashi adaptive markers. There is, however, one crucial difference: With the possible exception of Dolakha Newar and Jad, these ST languages do not show any instance of the adaptive marker $-(V)s$. This means that items that take $-(V)s$ in Kinnauri and Kanashi, will have the adaptive marker $-(V)\eta$. This is exactly what we find in Raji, e.g. Kanashi *kaṭfas*; Kinnauri *kaṭfas, kaṭfes*; Raji *kətsuṇ* ‘raw, unripe, uncooked’.

3.3 Munda languages

Santali (Macphail 1983):

Santali is spoken mainly in Central India, but it also has a fair-sized speaker community in Nepal (about 50,000 speakers, according to both the 2011 Census of Nepal and Eberhard et al. 2021). We find a small number of items ending in *-ŋ* (see Table 20), some of which can be assigned plausible IA etymologies (e.g. ‘voice’; T1309 āraṇa m. ‘cry, howl’; ‘front’ T12982 saṁmukhá ‘facing, present’).

Table 20: Adaptive markers in Santali

Santali	Gloss	Santali	Gloss
<i>alaŋ</i>	‘tongue’	<i>raḇaŋ</i>	‘cold’
<i>aṛaŋ</i>	‘voice’	<i>samaŋ</i>	‘front’
<i>holaŋ</i>	‘flour’	<i>setaŋ</i>	‘heat’
<i>maṛaŋ</i>	‘big, old’	<i>tetaŋ</i>	‘thirst’

3.4 Dravidian languages

Two Dravidian languages are spoken in or close to the Himalayas: Brahui to the west in Pakistan, Kurukh (also Kurux, Dhangar) in Nepal (the last-mentioned is also spoken in Jharkhand, India). As noted in Table 11, Brahui shows no evidence of the adaptive markers.

Kurukh (Dhangar) (Hahn 1911; Gordon 1973; Yadava 2001):

Kurukh does not seem to possess the adaptive marker *-(V)ŋ*, even though there are many IA loans in the language. But interestingly, in Kurukh *-s* occurs with masculine human nouns: *mabus*, *babus* ‘boy’; *kukuwas* ‘son’; *engris* ‘younger brother’ (cf. *engri* ‘younger sister’). This *-s* is also affixed to IA loans (*co:ras* ‘thief’; *ra:jas* ‘king’; *laṛkas*, *laṛka* ‘boy’; as well as IA male proper nouns which end in a vowel). Plural and case markers are affixed to the full noun stem (e.g. *babus-uthir* [boy-PL]). *-s* does not occur with feminine or inanimate nouns (e.g. *bo:ra* ‘sack’; *cutti* ‘hair’). Hahn (1911) describes *-as* as a masculine definite marker affixed to nouns, originally identical to the masculine third person singular pronoun.

3.5 Language isolates

Kusunda (Watters 2006):

There are some Kusunda nouns and adjectives (some of them recognizably IA) which end in *-(V)ŋ*, but none in *-(V)s* (Tables 21 and 22).

Table 21: Adaptive markers in Kusunda nouns

Kusunda	Gloss	Kusunda	Gloss
<i>əubaŋ</i>	‘nostril’	<i>dibaŋ</i>	‘mountain, cliff’
<i>ataŋ</i>	‘footprint’, ‘track’	<i>eyəŋ</i>	‘upper back’
<i>dib^haŋ</i>	‘crowd’	<i>haŋnuŋ</i>	‘shadow’
<i>gidaŋ</i>	‘water, sap’	<i>iŋ, inəŋ</i>	‘eye’
<i>gidzaŋ</i>	‘body’	<i>ihəŋ, ehəŋ</i>	‘Newar’
<i>gilaŋ, gelaŋ</i>	‘forest’	<i>idaŋ</i>	‘hunger’
<i>gitaŋ</i>	‘sweets’	<i>hugyaŋ</i>	‘spade, shovel’
<i>gotaŋ, gotəŋ</i>	‘soup’	<i>hilaŋ</i>	‘a kind of tree’
<i>iŋdzū, idziŋ, idzaŋ</i>	‘tongue’	<i>məŋ, maŋ, maŋlaŋ</i>	‘song’
<i>ipi gidzaŋ</i>	‘horn’	<i>onʃtaŋ</i>	‘smoking pipe’
<i>kəbdzaŋ, kəpdzaŋ</i>	‘gold’	<i>p^heladaŋ</i>	‘lentil’ (Nep: <i>gagat</i>)
<i>kəpaŋ</i>	‘turmeric, besar’	<i>sidzaŋ</i>	‘beer’, brew’
<i>katəŋ</i>	‘itch’	<i>yunʃū, gusuŋ</i>	‘tail’
<i>laʒʃaŋ, laŋ</i>	‘village’		

Table 22: Adaptive markers in Kusunda adjectives

Kusunda	Gloss	Kusunda	Gloss
<i>olaŋ</i>	‘sweet’, tasty’	<i>paŋdzaŋ</i>	‘five’
<i>dzaŋ, (a)dzəŋəŋ</i>	‘new’	<i>kya.aŋ</i>	‘thin’, skinny’
<i>p^helaŋ</i>	‘flat’	<i>guluŋ</i>	‘round’ (Nep. <i>gulu</i>)
<i>p^hurluŋ</i>	‘red’		

3.6 Indo-Aryan languages

Since the adaptive markers occur on IA loans in Kinnauri and Kanashi, we will now examine nouns/adjectives in IA languages of this region as well as forms attested in Sanskrit with relevance to the adaptive markers to examine if any of

these languages could be the source of the adaptive markers in Kanashi and Kinnauri.¹¹ Again, the selection of languages is constrained by the data available to us; see Figure 3 for IA languages examined here. See the map in Figure 4 for their geographical distribution.

Figure 3: Indo-Aryan languages included in this study (classification according to Glottolog; Hammarström et al. 2021)

Kinnauri Pahari (Saxena 2022):

Kinnauri Pahari is very similar to Kinnauri in this regard: We find the same adaptive markers as in Kinnauri, and we find them on the same items (see Table 23). Until recent times, Kinnauri has been the language of wider communication in Lower and Middle Kinnaur, as well as the sociolinguistically dominant language in interactions between speakers of Kinnauri and speakers of Kinnauri Pahari, with the latter being bilingual as a matter of course, but not the former. Thus, it is very likely that these items are loans from Kinnauri rather than original inherited words, despite their clear IA etymology.

¹¹ For ease of exposition, we will continue to refer to these elements as “adaptive markers” even outside ST, although they may not function as such in other language families (in particular IA).

Table 23: Adaptive markers in Kinnauri Pahari

Kinnauri Pahari	Kinnauri	Gloss	Kinnauri Pahari	Kinnauri	Gloss
<i>mult^haŋ</i>	<i>məlt^haŋ</i>	‘roof’	<i>si:maŋ</i>	<i>si:maŋ</i>	‘boundary’
<i>kuaŋ</i>	<i>kuaŋ</i>	‘well (N)’	<i>ɖɔlaŋ</i>	<i>ɖɔlaŋ</i>	‘twin’
<i>ʈʰodaŋ</i>	<i>ʈʰodaŋ</i>	‘waterfall’	<i>masaŋ</i>	—	‘meat’
<i>lɛmkaŋ</i>	<i>ləpəŋ</i>	‘flame’	<i>ʃi:taŋ</i>	<i>ʃə:taŋ</i>	‘snot’
<i>mɛsaŋ</i>	<i>mɛʃiŋ</i>	‘match(stick)’	<i>pa:traŋ</i>	<i>pa:ʰraŋ</i>	‘leaf’
<i>du:saŋ</i>	<i>du:saŋ</i>	‘chimney’	<i>va:maŋ</i>	<i>va:maŋ</i>	‘wrong, fault’
<i>jo:ɖaŋ</i>	<i>jo:ɖaŋ</i>	‘tool’	<i>tsu:ʈkaŋ</i>	<i>tsu:ʈkaŋ</i>	‘quiet’
<i>kʰo:ɖaŋ</i>	<i>kʰo:ɖaŋ</i>	‘left’	<i>ʃiŋga:raŋ</i>	—	‘proud’
<i>pa:les</i>	<i>pa:les</i>	‘herdsman’	<i>ʈʰika:sa</i>	<i>ʈʰisa:ŋ</i>	‘flour’

Kullu Pahari (Anju Saxena’s fieldwork notes; Diack 1896; Hendriksen 1976; 1986):

As noted in Table 11, Kullu Pahari does not have any instance of the adaptive markers. Kullu Pahari is the IA language of the villages surrounding Malana (where Kanashi is spoken), and the language in which historically Kanashi speakers have interacted with the outside world. Hence, we provide some examples to illustrate this difference between the Kullu Pahari and Kanashi vocabularies (Table 24).

Table 24: Absence of adaptive markers in Kullu Pahari

Kullu Pahari	Kanashi	Kinnauri	Gloss
<i>ha:ʈke</i>	<i>ha:ɖaŋ</i>	<i>haraŋ</i>	‘bone’
<i>os</i>	<i>o:faŋ</i>	<i>o:faŋ</i>	‘dew’
<i>baŋ, bōŋ</i>	<i>ba:ŋaŋ</i>	<i>boniŋ, baunaŋ</i>	‘forest’
<i>dhār</i>	<i>da:raŋ, da:ʈaŋ</i>	<i>da:raŋ</i>	‘mountain edge, mountain top’
<i>śākhrā</i>	<i>ʃakra:sa</i>	<i>ʃakra:sa</i>	‘kid (M)’
<i>kʰu:ʈ</i>	<i>kʰu:ʈaŋ</i>	<i>kʰu:raŋ</i>	‘cattleshed’
<i>na:li</i>	<i>na:liŋ</i>	<i>na:liŋ</i>	‘chimney’
<i>njara</i>	<i>ja:ra:sa</i>	<i>āja:ra:sa</i>	‘darkness’
<i>mo:ʈa</i>	<i>mo:ʈa:sa</i>	<i>mo:ʈʰe:sa</i>	‘fat’
<i>fo:ra</i>	<i>fo:ra:sa, fo:re:sa</i>	<i>fo:re:sa</i>	‘father-in-law’

Other Indo-Aryan languages of the region

In two volumes, Bailey (1908; 1915) presents grammar sketches and wordlists of a number of IA varieties spoken in the northwestern Himalayan region (e.g. Himachal Pradesh). These varieties are classified by Bailey (1908; 1915) as belonging

to the Himachali (Glottolog; also called Western Pahari) and Northwestern-zone (Glottolog; including Dardic and Sindhi-Lahnda) subbranches of IA. None of the IA languages described in Bailey (1915) show any trace of nouns with the adaptive markers.

In Bailey (1908) and Grierson (1928), the picture is a bit more complex. In Table 25 we list some possible instances of adaptive markers (from Bailey 1908).

Table 25: Possible parallels to the adaptive markers in IA languages of the northwest

Language	Word	Gloss	Etymology
Bhagati	<i>juāṇas</i> (< <i>jaṇā</i>)	‘woman’ (< ‘man’)	T5098 <i>jāna</i> m. ‘race, person’
Inner Siraji	<i>kutt-an</i>	‘dog’	T3275 <i>*kutta</i> ‘dog’
Gaddi	<i>bāīñ, bāñ</i>	‘covered well’	T11529 <i>vāpī</i> f. ‘pond, tank’, WPah. <i>ktg bā</i> (obl..i), <i>bai</i> f. ‘tank, stonebuilt reservoir fed by spring’
	<i>chúṛāñ</i>	‘parched rice’	
	<i>dhíúñ</i>	‘a kind of tree’	
	<i>ghuṇḡaníāñ</i>	‘parched wheat’	
	<i>hiúñ</i>	‘snow’	T14096 <i>himá</i> ‘cold, frost, snow’, WPah <i>bhal. heū, N. hyū</i> ‘snow, ice’
	<i>kíúñ</i>	‘common bean’	
	<i>kunnúñ</i>	‘stack of rice’	
	<i>māhnúñ</i>	‘man’	T9827 <i>mánusa</i> m. ‘man’, cur. <i>mēhñū</i>
	<i>mancháñ</i>	‘flying fox’	
	<i>bhittāñ</i>	‘(shut the) door’	T9493 <i>bhitta</i> n. ‘*split timber’, ‘fragment’
Rambani	<i>babbañ</i>	‘father’	T9209 <i>*bāba</i> ‘father’
Torwali	<i>pashiin</i>	‘bird’	T7636 <i>pakṣin</i> ‘winged’ m., bird’
Poguli	<i>pachhañ</i>	‘bird’	T7627 <i>pakṣá</i> ‘wing, feather, fin’

4 Summary thus far: distribution of the adaptive markers

As we have seen in this chapter, the $-(V)\eta$ element attached to IA loans in Kanashi and Kinnauri is attested to various degrees in some other languages in this region. Generalizing somewhat, we can classify these languages into three subsets (see the map in Figure 4):

1. languages with many clear instances¹² of $-(V)\eta$: Kanashi, Kinnauri, the various Raji-Raute varieties (with increasing incidence of $-(V)\eta$ as we move east) and Kusunda (marked by enclosing circles in the map in Figure 4);
2. languages with a handful (around five) of clear instances of $-(V)\eta$: Darma, Rongpo, Byangsi, Kinnauri Pahari, Gaddi (marked by enclosing squares in Figure 4);
3. languages with none or an occasional clear instance of $-(V)\eta$: the remainder (no special marking in Figure 4).

The other adaptive marker $-(V)s$ is far less frequent than $-(V)\eta$ even in Kanashi and Kinnauri. There are a few isolated instances in some ST languages of this region. The Dravidian language Kurukh has an $-s$ element characteristic of masculine nouns, which is also added to IA loans. A closer look at Dolakha Newar, Shumcho and Jad is needed.

Map design by Anna Sjöberg

Figure 4: Locations of all languages examined in this study with indication of presence of adaptive markers

¹² By “clear instances” we mean instances where an IA etymology is likely.

5 Possible origins of the adaptive markers: $-(V)s$ and $-(V)\eta$

We will now explore what could be the source of the adaptive markers $-(V)\eta$ and $-(V)s$.

The two markers, when they appear in ST languages, are similar in that they only attach to (IA) loanwords, and are not as far as we can ascertain found in inherited ST vocabulary items. However, and as noted already above, they are likely to have different histories. Hence, they are treated separately in the following sections.

Wichmann & Wohlgemuth (2008: 97) note that whenever the etymology is known of a loan verb accommodating affix, it turns out to have been borrowed from another language as part of a loan verb. It is not inconceivable that the same could hold for the adaptive markers in the nominal domain discussed here.

5.1 Possible sources of $-(V)s$

5.1.1 In Indo-Aryan

D. D. Sharma (1989a) proposes that the source of the adaptive marker $-(V)s$ could be the masculine nominative singular marker which occurred in Old Indo-Aryan, but he does not provide any supporting arguments. This proposal is problematic for a number of reasons.¹³

While it is true that the nominative singular of most masculine nouns in OIA had an ending that ultimately is traceable back to Proto-Indo-European $-s$, the actual exponents found in OIA are mostly different from this, due to the effects of sound change, the most common ones being $-o$ and $-\bar{h}$, while $-s$ is comparatively rare. Basically the same situation is seen in Old Iranian. Thus, the scenario implied by D. D. Sharma (1989a) would have to have played out no later than Proto-Indo-Iranian, and consequently predate the arrival of IA speakers in South Asia by centuries.

Further, even the few remaining instances of OIA $-s$ had changed into $-e$ and $-o$ already in the earliest attested MIA (3rd century BCE), while the IA loanwords in Kanashi and Kinnauri exhibit clear New Indo-Aryan phonetics, which makes such a scenario even more unlikely.

¹³ We would like to thank Rainer Kimmig (University of Tübingen) for his detailed comments on D. D. Sharma's proposal.

Another, more plausible suggestion for an IA source of the adaptive marker *-s* could be that it is related to the dative marker *-as/-is* found in some IA languages. In Bailey (1908) there are several IA languages which have *-as* as the dative marker. In Kishtawaarii and in Poguli the singular dative marker is *-is* (Bailey 1908). Further, as in Kanashi (see Chapter 3) and to some extent in Kinnauri, Poguli too seems to exhibit free variation between *-as*, *-us* and *-is*. In the various Romani languages, which show some affinities with Northwestern IA, masculine nouns have an oblique singular form in *-es/-as*, i.e. the form which is used by itself to indicate animate direct objects and some other syntactic roles, and which is also the basis for secondary case inflection (Matras 2002).

5.1.2 In Dravidian

Another plausible source of the adaptive marker *-(V)s* could be the Kurukh masculine singular nominative marker *-(a)s*, which occurs with both indigenous and IA nouns. In Malto its corresponding form (for [M.SG.NOM]) is *-h*. Both the form and its function are reminiscent of the function of *-(V)s* in Kinnauri. However, Kurukh and Malto (which belong to the same subgroup) do not seem to show any sign of the noun adaptation marker *-aŋ*, despite there being a lot of IA nouns in Kurukh.

When contemplating a likely historical scenario and a possible direction of borrowing, the following two facts are relevant.

First, *-as* [M.SG.NOM] is attested in both the Nepal variety and in the Jharkand variety of Kurukh. This suggests that *-as* in the Kurukh variety of Nepal is not the result of borrowing after it split either from the common-Malto-Kurukh language or from the Kurukh of central India.

Second, according to van Driem (2001: 1028), “[t]he Kurukh language communities in Nepal are splinter groups which migrated relatively recently to Nepal and settled near the Kośi river”.

Together, these two facts make Kurukh fairly improbable as the source of the adaptive marker *-(V)s* in ST.

5.1.3 In Sino-Tibetan

We find no plausible family-internal source of the adaptive marker *-(V)s* (which of course does not rule out this alternative). A number of ST languages spoken in the

area have an ergative (/agentive) suffix $-(V)s$,¹⁴ including Kanashi (see Chapter 3), as well as Kinnauri and Navakat (Saxena 2022). On the one hand, an origin as a repurposed ergative marker would fit with the observed preference of $-(V)s$ to attach to animate nouns, but on the other hand, the ergative suffix attaches freely after the adaptive marker $-(V)s$ in Kanashi and Kinnauri, and does not replace it. All in all, this hypothesis does not seem likely.

5.2 Possible sources of $-(V)\eta$

5.2.1 In Indo-Aryan

Similarly to the suggestion cited above about an source of the adaptive marker $-(V)s$, both Thomas (2011: 140) and D. D. Sharma (1984) suggest that the $-(V)\eta$ element found in IA loans in Kanashi and Kinnauri has its origin in OIA $-\bar{m}$, a nominative singular ending of thematic neutral nouns ($-am$), and also an accusative ending common to several different declensions.¹⁵ The neuter ending appearing in some IA loanwords would have been reanalyzed as a suffix signalling non-animacy, a development which has parallels in Dravidian loans from OIA:

[...] numerous loanwords in Dravidian languages with the Neuter ending $-am$, $-amu$ referring to inanimates, which are not Neuter in proper Sanskrit: e.g., Telugu *ankam* ‘number’, *tapamu* ‘heat, hot season’, *deśamu* ‘country’ = Skt *ankaḥ*, *tapah*, *dēśaḥ*. (Masica 1991: 220f)

But while the shape of the Telugu words cited in the quote clearly reflects their OIA origin (e.g. *tapah*, which corresponds to MIA *tāva* and NIA *tāu*, *tā*, etc.), again the nouns and adjectives in Kanashi and Kinnauri which take the adaptive marker $-(V)\eta$ exhibit NIA phonetics. This excludes also the possibility that $-a\eta$ goes back directly to OIA (or MIA) $-am$, which in NIA had already lost nasalization and turned to $-u$ (except for languages like Gujarati and Marathi – spoken far away from the Himalayas – which preserved the old neuter gender and nasalization).

In Bailey (1908), some nouns are provided with citation forms that end in $-a\eta$ in the word list. Gaddi and some other IA languages of the northwestern region in Bailey (1908) have $-a\eta$ as the oblique inflectional marker on nouns (e.g. *bhit-tāt* ‘(shut the) door’). See Table 25. Since the oblique is an object case and since prototypical objects are inanimate, this would fit with the adaptive marker $-(V)\eta$ originally being used on inanimate loan nouns.

¹⁴ Which in some of the languages also expresses the instrumental.

¹⁵ Again we are grateful to Rainer Kimmig for his comments on D. D. Sharma’s proposal.

5.2.2 In Munda

D. D. Sharma (2003) notes that both Kinnauri and some Munda languages use a similar suffix to “naturalize” borrowed stems. In Mundari it is *-ŋ* and *-m*; in Sora it is *-n*. Notably, Kinnauri has *-ŋ* and *-s*, where the former occurs with inanimate nouns and the latter with animate nouns, but in Munda languages a distinction between animate and inanimate with regard to noun adaptation is not made. This is surprising, since Munda languages generally make this distinction. D. D. Sharma (2003) speculates that could this be a sign that Munda languages have borrowed this from Kinnauri rather recently. According to him the adaptation marker occurs only in Kinnauri.

He provides some examples of putative parallels to the adaptive markers found in the Munda languages Mundari and Sora (see Table 26). According to him, there are parallel formations in Mundari both in *-(V)ŋ* and in *-m*. However, the formations in *-m* have corresponding items in Dravidian (illustrated by Telugu in Table 26), and are most likely Dravidian loans,

Table 26: Putative parallels to adaptive markers in Mundari and Sora

Mundari	Gloss	Mundari	Gloss	Telugu
<i>gotəŋ</i>	‘clarified butter (ghee)’	<i>bhārom</i>	‘load’	<i>bhāramu</i>
<i>ḍhilaŋ</i>	‘loose’	<i>desum</i>	‘countryside’	<i>dēšamu</i>
<i>diriŋ</i>	‘horn’	<i>jālom</i>	‘fishing net’	<i>jālamu</i>
<i>dumaŋ</i>	‘drum’	<i>ka?som</i>	‘cotton’	—
<i>duraŋ</i>	‘song’	<i>kaṛkom</i>	‘crab’	<i>karkaṭamu</i>
<i>halaŋ</i>	‘brain’	<i>sutam</i>	‘thread’	<i>sūtram</i>
Sora	Gloss			
<i>man(d)rā-n</i>	‘a person’			
<i>pe-sij-an</i>	‘a child’			
<i>on-lid-an</i>	‘a bird’			
<i>sorōn</i>	‘a grain’			

He also points out that there is a borrowed IA noun which takes the same adaptive marker in both Kanashi/Kinnauri and Mundari, with the same meaning at least in Mundari and Kinnauri: Mundari *samundrang* ‘river’, Kanashi *samudra*, *samudraŋ* ‘sea; ocean’, Kinnauri *somodraŋ* ‘sea, ocean, river’.

According to Ramamurti (1931: 16), as reported in D. D. Sharma (2003: 25), Sora nouns in the nominative case have the ending *-(ə)n*, while to Anderson & Harrison (2008: 307–309) this is not a case marker, but a “multipurpose noun suffix”.

It behaves somewhat similarly to the adaptive marker $-(V)\eta$ in Kanashi and Kinnauri in that it may be replaced by some other suffixes. However, a similar suffix has not been noted for Mundari (Osada 2008; Kobayashi & Murmu 2008), which would have made more geographical sense: There are some Mundari speakers in eastern Nepal, according to Anderson (2008: 2, Map 1.1),¹⁶ while Sora is spoken much further away from the region of interest here.

5.2.3 In Sino-Tibetan

In the Raji dictionary by Dhakal (2019), most verb entries end in $-\eta$, which is obviously a suffix, seen if we compare these entries with verb entries in other Raji or Raute word lists, where verbs are listed in their stem form. If we make the reasonable assumption that this suffix is intended to express the infinitive, it is most likely some kind of nominalizer. In Khatri (2012), the Raji verbal suffix $-tin\eta$ is glossed as NFNT (non-finite) and NMLZ (nominalizer). Fortier (2019: 47) identifies the Raute and Rawat suffix $-a\eta(a)$ as a nominalizer glossed as ‘that which is’ and suggested deriving it from PTB $*ka\eta$ ‘which, like, deictic’ (Matisoff 2003: 488). Recall that among the languages that we have investigated, Raji and Raute have the largest number of IA loanwords with the adaptive marker $-(V)\eta$ apart from Kanashi and Kinnauri.

The Raute-Rawat suffix cited by Fortier appears in both indigenous and borrowed vocabulary: “*nā khāmaja gunāka*, listen to [that which is] my speech. RW: *phulan*, flower (“that which blooms”)” (Fortier 2019: 47), where “*khāma* RT n., adj. language, speech, talk; Raute language” is of ST origin (Fortier 2019: 123), while “*phul*, *phulan* RW, DR n. flower” is a Nepali loanword (Fortier 2019: 152).

This may indicate that the adaptive marker $-(V)\eta$ in fact is of ST origin – even in other ST languages where it only occurs on borrowed items – but more research is needed.

¹⁶ According to Ethnologue (Eberhard et al. 2021), the number of Mundari speakers in Nepal is about 8,000 (2006). The 2011 Census of Nepal does not list Mundari in the mother tongue statistics. Interestingly, the 2011 Census of India shows 684 speakers of Mundari and 403 speakers of “Munda” in Himachal Pradesh. However, these have presumably come from other parts of India to work on the many large construction projects going on in the state.

6 Conclusion

To conclude, the shared innovation studied in this chapter – the distribution of adaptive markers on borrowed IA nouns and adjectives in languages of the western Himalayas – has hopefully given us better grounds for an investigation of the prehistory of Kanashi and Kinnauri, as well as of the genealogical relationships among the ST languages of this part of the Himalayas. This will be the topic of Chapter 8, but before that we now turn to a similar description of adaptation mechanisms for borrowed verbs, in the next chapter.

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A Similar corresponding nouns and adjectives with adaptive markers in Kanashi and Kinnauri

In this appendix we list nouns and adjectives in Kanashi and Kinnauri showing the adaptive markers $-(V)\eta$ and $-(V)s$. The main source of the data is our own field-work notes, but we have also used published descriptions of the two languages. In

those cases when the gloss is different for Kanashi and Kinnauri, two glosses are shown in the “Gloss” column, separated by “/” (Kanashi gloss / Kinnauri gloss).

(POS: part of speech; A: adjective; N: noun; P: proper noun)

Kanashi (xns)	Kinnauri (kfk)	POS	Gloss
<i>alesis</i>	<i>lises</i>	A	lazy
<i>aŋka:laŋ</i>	<i>(aŋ)ka:laŋ</i>	N	famine
<i>aŋlaŋ</i>	<i>a:faŋaŋ</i>	P	a month name
<i>aɖaŋ</i>	<i>ãɖaŋ</i>	N	intestines
<i>badraŋ</i>	<i>badraŋ</i>	P	a month name
<i>bakras</i>	<i>bək^haraŋ</i>	N	goat / she-goat
<i>bandraŋ</i>	<i>bandres</i>	N	monkey
<i>baŋiŋ</i>	<i>baŋiŋ, banes</i>	N	pot (utensil)
<i>baŋɖa:raŋ</i>	<i>baŋɖa:raŋ</i>	N	treasury, storage room
<i>baŋaŋ</i>	<i>boŋaŋ</i>	N	year
<i>baŋaŋ</i>	<i>boniŋ, bonar</i>	N	forest
<i>bijaŋ</i>	<i>bajaŋ</i>	N	wedding
<i>bijaŋ</i>	<i>bijaŋ</i>	N	seed
<i>bitiŋ</i>	<i>bitiŋ</i>	N	wall
<i>bifaŋ</i>	<i>bifaŋ</i>	N	poison
<i>borar</i>	<i>borar</i>	N	sack, luggage
<i>be:tiŋ</i>	<i>bo:t^haŋ</i>	N	tree
<i>bumiŋ</i>	<i>bubiŋ</i>	N	floor / storey
<i>badraŋ</i>	<i>badraŋ</i>	N	a month name
<i>da:ŋaŋ</i>	<i>ɖa:naŋ</i>	N	penalty
<i>da:ɽaŋ, ɖa:raŋ</i>	<i>da:raŋ</i>	N	cliff
<i>deoraŋ</i>	<i>deoraŋ, deoriŋ</i>	N	temple (Hindu)
<i>defaŋ</i>	<i>defaŋ</i>	N	village, country
<i>duk^his</i>	<i>duk^his</i>	A	sick, ill, sad
<i>dumaŋ</i>	<i>dumaŋ</i>	N	smoke, fog
<i>dupaŋ</i>	<i>dupaŋ</i>	N	incense
<i>uvaŋ</i>	<i>eniŋ, aínaŋ</i>	N	udder
<i>galaŋ</i>	<i>galaŋ,</i>	N	talk
<i>gallas</i>	<i>golɖes</i>	N	eagle, vulture
<i>gant^haŋ</i>	<i>gant^haŋ</i>	N	bell
<i>garkas</i>	<i>garkas</i>	A	heavy
<i>ga:tas</i>	<i>ga:tes</i>	A	narrow
<i>ga:taŋ</i>	<i>go:taŋ</i>	N	watermill
<i>ga:ɽiŋ</i>	<i>ga:raŋ</i>	N	river
<i>gitaŋ</i>	<i>git^haŋ</i>	N	song
<i>golaŋ</i>	<i>golaŋ</i>	N	neck, throat
<i>ga:taŋ</i>	<i>go:taŋ</i>	N	water mill
<i>gra:maŋ</i>	<i>gra:maŋ</i>	N	village
<i>halgaɖiŋ</i>	<i>halgaŋ</i>	N	potato

Kanashi (xns)	Kinnauri (kfk)	POS	Gloss
<i>taləŋ</i>	<i>(həs)taləŋ</i>	N	palm of the hand
<i>haḍḍəŋ</i>	<i>harəŋ</i>	N	bone
<i>heɽəŋ</i>	<i>erəŋ</i>	N	hunting
<i>indromanəŋ</i>	<i>indromanəŋ</i>	P	a month name
<i>nihares, jaras</i>	<i>ājares</i>	A	darkness
<i>kaməŋ</i>	<i>kamanəŋ</i>	N	work
<i>kanɪʃtʰas</i>	<i>kanɪstʰas</i>	N	member of a social subclass
<i>kaʈfas</i>	<i>kaʈfas, kaʈfes</i>	A	raw, unripe, uncooked
<i>ka:səŋ</i>	<i>ka:səŋ</i>	N	bronze
<i>ka:ŋas</i>	<i>ka:nes, ka:nəŋ</i>	A	one-eyed, blind (person)
<i>kesarəŋ</i>	<i>ke:səŋ</i>	N	yolk (egg)
<i>kolanəŋ</i>	<i>kolanəŋ</i>	N	memory
<i>ku:ɽɪŋ</i>	<i>kuaŋ</i>	N	(water) well
<i>kukaɽəŋ</i>	<i>kukkɽas</i>	N	cock, rooster
<i>kʰakaŋ</i>	<i>kʰakaŋ</i>	N	mouth
<i>kʰiraŋ</i>	<i>kʰiraŋ</i>	N	milk
<i>kʰolanəŋ</i>	<i>kʰolanəŋ</i>	N	husk
<i>kʰulas</i>	<i>kʰulas</i>	A	wide
<i>kʰuḍəŋ</i>	<i>kʰuraŋ</i>	N	cellar, cattleshed, stable
<i>laʈʰas</i>	<i>laʈas</i>	A	dumb
<i>la:laŋ</i>	<i>la:laŋ</i>	N	drool
<i>la:mas</i>	<i>la:mes</i>	A	tall, long
<i>lokas</i>	<i>lokas</i>	N	(non-Kanashi) people / people
<i>maɽəŋ</i>	<i>moɽʰəŋ</i>	N	man
<i>maḍəŋ</i>	<i>maḍəŋ</i>	N	middle
<i>matsis</i>	<i>maʈʰes</i>	N	fish
<i>mokʃiraŋ</i>	<i>mokʃeraŋ</i>	N	a month name
<i>mulaŋ</i>	<i>molaŋ</i>	N	cow dung
<i>monəŋ</i>	<i>monəŋ</i>	N	temple / desire, heart
<i>moʈas</i>	<i>moʈʰes</i>	A	thick, fat (animate entities)
<i>na:ges</i>	<i>na:ges</i>	N	cobra / mythical, invisible snake
<i>na:laŋ</i>	<i>na:laŋ</i>	N	stream, brook
<i>na:liŋ</i>	<i>na:liŋ</i>	N	chimney, weaving shuttle
<i>na:maŋ</i>	<i>na:maŋ</i>	N	name
<i>oʃəŋ</i>	<i>oʃəŋ</i>	N	dew
<i>pakres</i>	<i>pakres</i>	N	people
<i>pakʰiŋ</i>	<i>pakʰəŋ</i>	N	wing, feather
<i>pardeʃəŋ</i>	<i>pardeʃəŋ</i>	N	foreign country
<i>paʈəŋ</i>	<i>paʈʰəŋ</i>	N	leaf
<i>pa:laŋ</i>	<i>pa:les</i>	N	herdsman
<i>piʈəŋ</i>	<i>piʈəŋ</i>	N	gate, door
<i>piʃtiŋ</i>	<i>piʃtiŋ</i>	N	back
<i>piʈʰas</i>	<i>piʈʰas</i>	N	flour
<i>padras</i>	<i>podres</i>	A	flat
<i>poŋukes</i>	<i>poŋukes</i>	N	guest

Kanashi (xns)	Kinnauri (kfk)	POS	Gloss
<i>poʃaŋ</i>	<i>poʃaŋ</i>	P	a month name
<i>poʃaŋ</i>	<i>peʃiŋ, peʃaŋ</i>	N	stomach, belly
<i>puʃʰaŋ</i>	<i>putsunin, paʃniŋ</i>	N	tail
<i>pʰagɹaŋ</i>	<i>pʰagnaŋ</i>	N	a month name
<i>pʰolaŋ</i>	<i>pʰolaŋ</i>	N	fruit
<i>bijaŋ</i>	<i>bajaŋ</i>	N	wedding
<i>ra:tiŋ</i>	<i>ra:tiŋ</i>	N	night
<i>roʃʰas</i>	<i>roʃʰas</i>	A	brave
<i>samudraŋ</i>	<i>somordaŋ</i>	N	sea, ocean, river
<i>sargaŋ</i>	<i>sorgaŋ</i>	N	sky
<i>sastas</i>	<i>sostas</i>	A	cheap, less expensive
<i>saŋgis</i>	<i>saŋgis</i>	N	friend
<i>sa:mnas</i>	<i>somaŋ</i>	A / N	flat, straight (e.g. path) / plain (land)
<i>soraŋ</i>	<i>soraŋ</i>	N	pond
<i>suāraŋ</i>	<i>sva:raŋ, suŋa:raŋ</i>	N	Monday
<i>talaŋ</i>	<i>talaŋ</i>	N	sole of foot
<i>aɖʒaŋ</i>	<i>ā:ɖʒaŋ</i>	N	intestines, guts
<i>ɖaggis</i>	<i>ɖagis</i>	N	male member of a specific social subgroup, blacksmith
<i>ɖaliŋ</i>	<i>ɖalaŋ</i>	N	plant
<i>da:ŋaŋ</i>	<i>ɖa:naŋ</i>	N	penalty, punishment
<i>ɖibiɹiŋ</i>	<i>ɖibaliŋ</i>	N	pond; well (water) / swamp
<i>ɖugas</i>	<i>ɖuges</i>	A	deep
<i>ʃakras</i>	<i>ʃakras</i>	N	calf
<i>ʃauŋaŋ</i>	<i>ʃonaŋ</i>	P	a month name
<i>ʃaŋaŋ</i>	<i>ʃʰanaŋ</i>	N	ice
<i>ʃokkuraŋ</i>	<i>ʃokraŋ</i>	N	orphan
<i>ʃauŋaŋ</i>	<i>ʃonaŋ</i>	N	a month name
<i>ʃores, ʃoras</i>	<i>ʃores</i>	N	father-in-law
<i>veraŋ</i>	<i>ʃupelaŋ</i>	N	evening
<i>ɖʒeʃtaŋ</i>	<i>ɖʒeʃtaŋ</i>	P	a month name
<i>ɖʒeʃʰas</i>	<i>ɖʒeʃʰas</i>	N	elder, senior
<i>tsokʰas</i>	<i>tsokʰes</i>	A	clean
<i>ʃama:ras</i>	<i>ʃama:res</i>	N	name of a social subgroup
<i>ʃoras</i>	<i>ʃoras, ʃores</i>	N	thief
<i>ʃotraŋ</i>	<i>tso:riŋ</i>	N	council platform / (ceremonial temple) platform

In some instances Kinnauri and Kanashi use two different IA nouns – but in both languages these items occur with an adaptive marker:

<i>na:iŋ</i>	<i>ga:raŋ</i>	N	river
<i>re:tiŋ</i>	<i>ba:liŋ, ba:laŋ</i>	N	sand
<i>sa:laŋ, barfaŋ</i>	<i>bofaŋ</i>	N	year

B Nouns and adjectives in Raji-Raute with (potential) adaptive markers

In this appendix we list nouns and adjectives in Raji (Section B.1) and Raute-Rawat (Section B.2) which potentially contain the adaptive marker $-(V)\eta$ (and its variations).

B.1 Adaptive markers in Raji

(A: adjective; N: noun)

<i>abəŋ, ābaŋ</i>	N	mango	<i>guləŋ, guraŋ</i>	N	jaggery, molasses
<i>aitsun, aifun,</i>	A	small	<i>guntʰaŋ</i>	N	heel
<i>aifjaŋ</i>			<i>gəlaŋ</i>	N	echo
<i>āitsun</i>	A	short	<i>haɖəŋ</i>	N	bone
<i>adaiŋ</i>	A	two and a half	<i>hiʔəŋjaŋ</i>	N	beggar
<i>bʰa:riŋ, purau</i>	A	full	<i>hokinjaŋ</i>	N	snake
<i>bʰokʰrajaŋ</i>	N	Adam's apple	<i>hələŋ, halaŋ</i>	N	plough
<i>bisəŋ</i>	N	poison	<i>həriəũ</i>	A	green
<i>bjaŋ, bijaŋ</i>	N	seed, seedling	<i>kadʰaŋ</i>	N	shoulders
<i>blaŋ</i>	N	person from hills	<i>kaʔʰaŋ</i>	N	firewood
<i>breunaŋ</i>	N	Tharu people	<i>kʰokʰəŋ</i>	N	a kind of fish
<i>brin</i>	N	name	<i>kʰolejaŋ</i>	A	open, spacious
<i>bruŋ</i>	N	honey	<i>kʰopinjaŋ</i>	A	overturned
<i>bərəŋ, baraŋ,</i>	A	big, strong	<i>kopriŋ</i>	N	head
<i>barəŋ, bwarəŋ</i>			<i>kwaŋ, kwon</i>	A	black
<i>bərjaŋ</i>	A	eldest (woman)	<i>kəjā</i>	N	body
<i>bəsejaŋ</i>	A	stale	<i>kəlaʔjaŋ</i>	N	seller
<i>bəʔaŋ</i>	N	rice	<i>kəraŋ</i>	N	rib
<i>dudʰəŋ</i>	N	milk	<i>kətsun</i>	A	unripe
<i>dumnjaŋ</i>	A	rich, to be full	<i>kətsəŋ</i>	A	pure, untouched
<i>dʰjuŋ</i>	N	day	<i>kətsəŋ</i>	N	money
<i>dʰumaŋ</i>	N	smoke	<i>mhalnjaŋ</i>	A	warm
<i>ɖatəŋ</i>	N	caste	<i>miʔtaŋ</i>	N	wife
<i>ɖʒuluŋ</i>	N	cradle (of baby)	<i>mohləŋ</i>	N	pestle
<i>ɖʒəmpʰilaŋ</i>	N	tide	<i>moʔiŋ</i>	N	pearl
<i>galiŋ</i>	N	abuse	<i>mutuŋ</i>	N	heart
<i>garəŋ, garouŋ</i>	N	girl	<i>məɖaŋ</i>	A	healthy
<i>gʰiaŋ, gʰiŋ</i>	N	clarified butter	<i>məilejaŋ</i>	A	dark
<i>gʰoʔenjaŋ</i>	N	Badi ethnic group	<i>manəŋ, mənəŋ</i>	N	forest
<i>gʰumaŋ</i>	N	wheat	<i>naniŋ</i>	N	children
<i>gʰuŋraŋ</i>	N	curly (hair)	<i>na:wəĩ, na:wəĩ,</i>	A	new
<i>giroŋ</i>	N	husband	<i>noŋ</i>		
<i>goʔʰəŋ, toʔʰəŋ</i>	N	ground floor	<i>nihəŋ, mihaŋ</i>	N	finger nail
<i>grenjaŋ</i>	N	Magar (ethnic group)	<i>nokna:ŋ</i>	A	good
			<i>nəsjaŋ</i>	N	nerve
<i>grin</i>	N	brother in law	<i>pa:laŋ, plaŋ,</i>	A	white, yellow
		(elder sister's husband)	<i>pʰlaŋ, pəlaŋ</i>		
			<i>pa:tsʰjaũ, pəʔʰiaũ,</i>	N	tail
<i>gudəŋ</i>	N	belly	<i>puʔʰiũ</i>		

<i>p^huləŋ</i>	N	flower	<i>trijaŋ</i>	N	money
<i>p^həliŋ</i>	N	plain land	<i>ʃʃalok k^hronnjan</i>	N	cobbler; ethnic
<i>pjaləŋ</i>	N	cup			Sarki
<i>pokiaŋ</i>	A	dry	<i>ʃʃanjan</i>	N	player
<i>preniŋ</i>	N	big leaf plate	<i>ʃʃarlan</i>	N	skin
<i>pənoŋ</i>	N	bow	<i>ʃʃikainjan</i>	N	sneezing
<i>reunjan</i>	N	Tharu	<i>ʃʃikinjan gləŋ</i>	N	to be suffered
<i>rowhā</i>	N	feather			from a witch
<i>rukaŋ, ruk^hā</i>	N	tree	<i>ʃʃuiniŋ</i>	A	red
<i>rəpnjan</i>	N	ford	<i>tsumnjan</i>	A	cold, wet
<i>sioəŋ, sioaŋ</i>	N	horn	<i>uhəŋ</i>	N	dew
<i>sjaŋ</i>	N	sickle	<i>qarəŋ</i>	N	stone
<i>sujaŋ</i>	A	rotten	<i>ʃot^hjan</i>	N	uvula
<i>sureikaŋ</i>	N	sigh (in pain, tiredness)	<i>ʃuku reʃnjan</i>	N	Gaine people
			<i>ʃukəŋ</i>	N	neck
<i>sutsiŋ</i>	N	needle	<i>ʃwaŋ</i>	A	light
<i>taliŋ</i>	N	plate	<i>ʃənəŋ</i>	N	forehead
<i>tarniŋ</i>	N	liquor	<i>xunəŋ</i>	N	gold
<i>trēijā</i>	N	star			

B.2 Adaptive markers in Raute-Rawat

(A: adjective; N: noun; R: adverb)

<i>abləŋ</i>	N	mango	<i>hmaŋ</i>	N	face, mouth
<i>balin, b^hliŋ, baləŋ</i>	N	hill people, farmers	<i>ik^huŋ</i>	N	sugarcane
<i>batliŋ</i>	N	broom (v. sweep)	<i>kabaŋ, kabəŋ</i>	N	post, pole
<i>bisjan</i>	N	poison	<i>karijeŋ</i>	N	niece
<i>daliŋ</i>	N	leader ?	<i>katuŋ, kaʃaŋ</i>	N	wood, cutting
<i>drimaŋ</i>	A	first, eldest	<i>k^haraŋ</i>	N	north
<i>dud^hləŋ</i>	N	milk	<i>maŋ</i>	N	song
<i>d^hjoŋkod^hjoŋ</i>	R	daily	<i>mriŋ, miŋ</i>	N	name
<i>galuŋ</i>	N	center, hearth	<i>muk^huŋ</i>	N	face
<i>gamaŋ</i>	N	village	<i>m^hwəŋ</i>	N	tongue
<i>gamləŋ</i>	A	hot	<i>mənəŋ, manəŋ,</i>	N	forest
<i>gamləŋ</i>	N	sun	<i>manləŋ, maŋ</i>		
<i>gaʃoŋ</i>	N	girl	<i>ni^hləŋ, hnihaŋ,</i>	N	(finger)nail
<i>geŋ</i>	N	ghee	<i>hnihaŋ, ni^hāo</i>		
<i>gjuŋ</i>	N	insect, worm	<i>nomaŋ</i>	A	last, eldest
<i>gliŋ</i>	A	heavy	<i>p^hjan</i>	N	granddaughter
<i>guduŋ, gudəŋ</i>	N	stomach, belly	<i>p^hul, p^hulaŋ,</i>	N	flower
<i>gumaŋ</i>	N	children	<i>p^huləŋ</i>		
<i>gumləŋ</i>	N	wheat	<i>rahoŋ</i>	A	bright
<i>gut^haŋ</i>	N	shed, stall, hut, pen	<i>sehaŋ</i>	A	all
		husband	<i>sigləŋ, sikkəŋ,</i>	N	horn
<i>gəroŋ, giroŋ</i>	N	bone	<i>ʃigaŋ</i>		
<i>hadaŋ, haduŋ,</i>	N		<i>tuniŋ</i>	N	today
<i>harəŋ, hareŋ,</i>			<i>xroŋ</i>	N	light, dawn
<i>haqdaŋ, hařəm</i>			<i>xroŋ</i>	N	candle
<i>haddaŋ</i>	N	kingfisher	<i>ʃidarəŋ</i>	N	net
<i>haləŋ</i>	N	plough	<i>ʃansaŋ</i>	A	bad
<i>haraŋ</i>	N	body			