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# Kiranti languages

*Boyd Michailovsky*

## 1. Introduction

### 1.1 “Kiranti” languages and speakers

The Kiranti group consists of some thirty or more languages spoken in the Eastern Nepal hills, from the districts of Ramechhap and Sindhuli to Nepal’s eastern border, and beyond it into the Indian States of West Bengal (Darjeeling district) and Sikkim (West Sikkim). The name “Kiranti”, used here as a linguistic classification, is in origin a Sanskrit term (*kirāta*) apparently referring to non-Hindu Himalayan hill tribes in general; in Nepali, *kirāñī* (or *kirāñī*) serves as an exonym equivalent to “Rai-Limbu”.<sup>1,2</sup> An indigenous autonym *\*rakduŋ* is widely reported between Bahing *rɔdi* in the west and Limbu *jakthuy*<sup>3</sup> in the east.

In the Nepal National Census of 2011, roughly 800,000 respondents declared a Kiranti language as their “mother tongue”. The number of speakers is probably less than this. The Census of India (2001) reported 50,000 speakers of Limbu and ‘Rai’ in India (most in Sikkim) (*Linguistic Survey of India* n.d.).

### 1.2 Basic Typology

Kiranti languages share in the general word-order typology of the Indian linguistic area: SOV and modifier-head order, zero-pronominalization (no obligatory pronouns). Functional morphemes (postpositions, subordinating conjunctions, complementizers) follow the elements in their scope.

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<sup>1</sup> Shafer (IST 142-157) placed Hayu apart from his “East Himalayish” subgroup (otherwise equivalent to Kiranti as defined here), considering it to be closer to Chepang and Magar. I have included it in the Kiranti group.

<sup>2</sup> The label ‘Kiranti’ is also claimed by some other groups in Nepal and India.

<sup>3</sup> *Yakthung/jakthuy*: Language transcriptions (in italics in this article), have been regularized and converted to an IPA-based notation in a few important respects. Inconvenience to readers familiar with the area is regretted. In particular, *y*, used (as in traditional Indian romanizations) for *jod* in most (but not all) of the sources, has been changed to IPA *j*. Where “j” appeared in the original sources for voiced palatal [j], it has been changed to *j*. (Original “dz” has been preserved.) The remaining instances of *y* indicate a front rounded vowel. Non-italicized language and place names are in the modern roman transcription most current in Nepal in which vowels have pre-Great-Vowel-Shift values (“as in Italian”), the phonemes represented by Devanagari *a* and *ā* are both written “a”, “y” represents jod (IPA [j]), and “ch”, “chh”, “j”, and “jh” represent lamino-alveolar affricates.

Case of nominal core arguments (defined by verb agreement) or other participants is marked by postpositions. Case marking of core arguments is ergative: intransitive S[ubject] and transitive O[bject] are generally unmarked (absolutive case); transitive A[gent] is marked by an ergative/instrumental case-marker.

The main originality of the group is the agreement system, which indexes person and number (singular, dual, plural) and clusivity (1st person inclusive vs. exclusive) of core arguments (with variable precision).

Grammatical attention to location or direction on the vertical axis is another particularity.

### 1.3 Subgroups

A subgrouping of languages within the group was proposed by Michailovsky (1994) in a study of shifts in initial consonants. Opgenort (2005, 2011) has pursued this research, taking into consideration unpublished work by Sergei Starostin and adding lexical isoglosses (2011; see also Winter 1991). Subgrouping is not discussed in the present paper. I use provisional cover-terms (1) for subsets of the Kiranti group insofar as they show typological similarities.

(1) Kiranti: Rough typological grouping of languages cited

Western

Hayu

Core Western: Bahing-Sunwar, Thulung, Koyi, Wambule-Jero

West-Central: Dumki-Khaling

Eastern

East-Central: Kulung, Sangpang

South-Eastern: Chamling, Bantawa, Puma, Chhintang

Upper Arun: Mewahang, Lohorong

Far Eastern:

Yakkha group: Athpare, Belhare, Yakkha, Yamphu

Limbu

The number of common innovations that I can cite to justify the status of Kiranti as a clade within Sino-Tibetan remains disappointingly small. I can suggest the following (none of them shared by Hayu): (1) A possible lexical innovation, PK *\*del* ‘village’<sup>4</sup>, shared by all members of the Kiranti group and to my knowledge unknown elsewhere except in Lepcha. (2) The transformation of PST *\*mij* ‘name’ into PK *\*nij* (except in Limbu). (3) The etymon PK *\*rakduŋ* ‘Kiranti’.

### 1.4 Resources

The earliest, still useful work on Kiranti is that of Brian Hodgson (1857, 1858, 1857-1858). The Linguistic Survey of India (Grierson 1908:198-205, 283-398) has very uneven material on some 20 languages of the

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<sup>4</sup> Neither Proto-Kiranti (PK) nor PST (Proto-Sino-Tibetan) can be regarded as worked-out reconstructions.

group. Modern typological surveys of Kiranti languages include Ebert 1994, a detailed study, particularly of morphology and syntax in: 6 Kiranti languages and Ebert 2003, a short summary based on a dozen or so Kiranti languages, which appeared in the first edition of the present volume. Articles on specific issues and languages are mentioned below.

On Kiranti or Rai oral tradition, see Allen 2012; Gaenszle 1991, 2002; Ebert 2000; Ebert and Gaenszle 2008. The mythological “Orphan” cycle is shared by Western Kiranti (except Sunwar and Hayu), Southeastern, and Upper Arun languages, but not by the Far Eastern Languages.

Recorded texts with annotation are available in the archive of the Volkswagen Foundation DoBeS programme at the Max Planck Institute, Nijmegen (large collections in Puma and Chhintang); in the Pangloss collection of the Lacito research group, French National Research Centre (CNRS) (Hayu, Limbu, Bahing, Khaling, Koyi, and Thulung); and in the Endangered Language Archive (ELAR), SOAS, London (Koyi, Puma, and (in preparation) Yakkha).

## 2. Phonology

### 2.1 Syllable and Word Structure

Kiranti phonologies are best understood in the framework of a typical Kiranti inventory and syllable and word structure constraints. Syllables are maximally  $(C_i)V(C_f)^5$ , where  $C_i$  represents  $C_i(C_m)$ , i.e. an initial  $C_i$  or group  $C_i +$  medial.

### 2.2 Initials

The core inventories of  $C_i$  include between two and four manner series of stops and affricates, one of nasals, and j, w, r, l, s, h. Khaling has a relatively complete consonant inventory:

(2) Khaling consonant inventories (Jacques et al. 2012)

Syllable canon (segmental):  $(C_i(C_m))V(C_f)$

$C_i$ :  
p            p<sup>h</sup>            b            b<sup>h</sup>            m

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<sup>5</sup> Bickel et al. (2007:56) state that Kiranti languages disallow vowel-initial phonological words: “If there is no underlying consonant, a glottal stop is added.” It is not clear to me to whether such an element is a phonological segment. Cf. also the “consonant position” posited by Doornenbal (2009:28–31) in Bantawa.

t	t <sup>h</sup>	d	d <sup>h</sup>	n
k	k <sup>h</sup>	g	g <sup>h</sup>	ŋ
ts	ts <sup>h</sup>	dz	dz <sup>h</sup>	

j, w, r, l, s, h.

C<sub>f</sub>: p, t, k, m, n, ŋ, r, l, s, h, ç (before C<sub>i</sub> t in the following syllable of the word)

C<sub>m</sub>: r, l (only after velar or bilabial C<sub>i</sub> stop)

The opposition of voice is absent in Limbu and nearly so in the other Far Eastern languages. In these languages, syllable-initial stops are generally voiced in certain phonological contexts, including post-vocalic and post-nasal. In Limbu, syllable initial occlusives are voiced after a preceding vowel or nasal, even potentially across a word-boundary, unvoiced otherwise. (Some older speakers still apply this rule in speaking Nepali, however fluently.) Yamphu (Rutgers 1998) has the same distribution, except that word-initial *b* is reported in a few words in opposition to *p*. Yakkha (Schackow 2015) is also reported to lack phonological voicing. Belhare has an opposition between unaspirated voiceless and voiced initials (Bickel, this volume), but the latter are seen to be infrequent in his dictionary (Bickel 1997a).

South-Eastern languages have lacunary (or nearly lacunary) voiced series (*b, d, Ø; bh, dh, Ø*). Doornenbal reports that *dz, dz<sup>h</sup>, g, g<sup>h</sup>* are present, but rare in native Bantawa vocabulary. Ebert (1994:13) reports their rarity generally in Athpare, Bantawa, and Chamling; this appears to apply to Puma and Chhintang as well.

Aspiration is phonological in all languages. Among languages that have plain voiced series, voiced aspirates are absent (or absent in native vocabulary) in Hayu, Sunwar, and Kulung, and very rare except in loans in Wambule and Jero. Their opposition with plain voiced is described as unstable in Thulung (Allen 1975:12).

All languages have initial *m, n, ŋ, j, w, r, l, s, h*. Word-initial *ŋ* is replaced by *n* in Chhathare (Tumbahangphe 2011:24) and (apparently) Phedappe (Van Driem 1987) Limbu. Voiced breathy *m<sup>h</sup>, n<sup>h</sup>, l<sup>h</sup>, r<sup>h</sup>* occur in a few Chamling words; *ŋ<sup>h</sup>, m<sup>h</sup>* are reported as rare in Sangpang. Sources differ on the value of Puma *mh* ([m̥] or [m<sup>h</sup>]), *nh*. Hayu has voiceless *l* in a very few words.

Sunwar C+j clusters occur only with velar (including nasal) and sibilant initials, suggesting a complete palatal series *kj, khj, gj, ŋj, sj*. *f* (relatively frequent) and *fj* are also reported. Hayu has palatal initial stops (*c, ç*) in opposition with alveolar affricates *ts, dz*,<sup>6</sup> and a fricative initial *x*, realized [ç], [x], [x<sup>w</sup>], [x<sup>ϕ</sup>], depending on the following vowel and the dialect. The aspirated affricate *ts<sup>h</sup>* is lacking in Sunwar, Bahing (almost), Wambule, and

<sup>6</sup> In languages without palatals, the affricates *ts, dz* are often transcribed *c, ç*.

Jero; in Limbu, *ts<sup>h</sup>* occurs only as an allophone of *s* after dental finals. Hayu appears to have no opposition between aspirated members of the affricated (*ts*, etc.) and palatal series.

Preglottalized, implosive initial *ɓ* was reported in Bahing (*ba* ‘chicken’, *bar* ‘wound’) and in Sunwar in the 1970s (Michailovsky 1975, 1988b); in Sunwar, it has been replaced by *b* or *w* (Borchers 2008). Both *ɓ* and *d̥* are reported in Wambule (*bari* ‘wound’; *bisi* ‘eye’; *dwabu* ‘ear’) (Opgenort 2004). Preglottalized *ʔl* is reported from a Wambule dialect (Wamdya *ʔluŋ* ‘stone’). These initials are in opposition with plain voiced initials.

Retroflex initials are absent in most languages and marginal or limited to Nepali loans in the rest, except in Thulung, where *ɖ* appears regularly in native core vocabulary (*ɖuŋ*- ‘drink’, *ɖi* ‘egg’) in opposition to *d* (*duŋ* ‘liver’).

Initial C<sub>i</sub>C<sub>m</sub> groups of velar or bilabial stop + resonant (*l* and/or *r*) are found in the western languages (Hayu, Sunwar, Bahing, Wambule, Jero, Thulung, and Khaling), and (with unvoiced C<sub>i</sub> only) in western dialects of Chamling. They are absent in Dumi and in the eastern languages generally.

Initial clusters with medial approximants (C<sub>m</sub> *j* (or “*y*”), *w*) may be interpreted as indicating consonantal orders – such as palatals (as in Sunwar, above) or possibly labiovelars — or the glides may belong to the nucleus in some western languages (see below). In Limbu and Bantawa they are marginal. Doornenbal (2009:36–39) shows that their occurrence in Bantawa is strictly limited phonologically, and that they only occur in “paralexemic” or non-core vocabulary; in Limbu, they result from syncope (Limbu *c’wa:t* ‘water’, *t’jɛ* ‘he arrived’ (root |ta|, past stem *t’j-*)).

### 2.3 Finals

Finals are typically limited in number (6 to 10), with a single series of C<sub>f</sub> stops. The latter are pronounced unreleased, with simultaneous glottal closure reported in many languages (Hayu, Bahing, Dumi, Wambule, Bantawa, Yamphu, Limbu). Final stops have voiced allophones before voiced stop C<sub>i</sub> in Hayu, Thulung, Jero and Wambule (not in Dumi). Phonological final glottal stop is reported in several languages; it may have developed from glottal-stop allophones or variants of oral final stops. Such allophones are reported in Hayu, Wambule, Dumi, and Limbu.

Sunwar is described by Bieri and Schulze as having no word-final consonants, except for syllable initials stranded in word-final position by apocope of the syllable vowel in fast speech. Final *n* in their transcription represents nasalization. Bahing and Chamling have no word-final stops.

A single  $C_i$  (or a complex  $C_iC_m$ ) can occur between two vowels ( $-VC_i(C_m)V-$ ). When a  $C_f$  is followed by a vowel-initial syllable there are various outcomes. In Limbu,  $C_f$  are geminated in this context, which arises very frequently before vowel-initial suffixes, postpositions or clitics: *kume:t* ‘his wife’; *kume:tti?* ‘his wife?’; *ammu:ttan* ( $[am-u:t-an]$ ) ‘they call us and...’. In Yamphu, the  $C_f$  may be geminated or not, but it remains unvoiced.

Word internal consonant groups occur at syllable boundaries, and are thus in principle limited to  $C_fC_i(C_m)$  combinations, but other combinations may occur as the result of syncope (loss of an internal vowel) leading to anomalous consonant groups, e.g. Limbu *car'pp'emba* ‘butterfly’. Anomalous word-finals result from apocope (loss of a final vowel) leaving a word-final cluster  $(C_f)C_i$ , e.g. Kulung *baks* ‘lightning’, Sunwar *lob* ‘younger brother’. Syllabic nasals occur infrequently in a few languages, sometimes as prefixes, e.g. Kulung *m̩* ‘3OBL’ and Chamling (Ch. 36) and Belhare (Ch. 35) *N̩-*.

## 2.4 Vowels

Between 5 and 10 vowel qualities are reported. Sunwar and the eastern languages Kulung, Athpare, Belhare, and Yakkha have *i, e, a, o, u*. Other eastern languages add a sixth vowel (not counting *ə* or *ɛ* if found only in Nepali loans, as is often reported): Puma has *ɛ*; Bantawa adds *i* (mainly an allophone of *i* before velars), as does Chhintang; Yamphu adds *æ*. Limbu, and Hayu in the west, have 7-vowel systems, with three degrees of aperture front and back.

Some western and central languages have richer inventories, although their distribution and alternations point to underlying 5-vowel systems enriched by both vowel harmony and the effect of tautosyllabic consonants, especially velar finals (Allen 1975, Michailovsky 1975, 2013, Jacques 2013). Bahing and Thulung have 10 vowels, Khaling 9, Dumi, Wambule and Jero 8: *i, e, ε (or ja), a, o, ɔ (or wa), u* (*ɛ* almost always in loans). Central or front rounded vowels and vowel harmony are reported in Bahing, Thulung, and Khaling.

Up-gliding diphthongs induced by coronal finals (Michailovsky 1975b) are reported in Sunwar, Bantawa, Chamling (Ch. 36), and Belhare (Ch. 35).

### *Vowel quantity*

Phonological length is reported in the western languages, and in Kulung, Yamphu, and Limbu. It is not reported in the South-Eastern languages. In Wambule and Jero long *a, i, u* are found in open syllables, and very

marginally in closed ones; the vowels *e*, *o* are the long partners of *ja/ε* and *wo/ɔ*. In Limbu, the mid vowels *e*, *o* are inherently long. In Hayu, Thulung, and Bahing, length is pertinent only on open syllables.

In the western languages length appears to be secondary: this is clear in verb paradigms, where open-syllable length compensates for the loss of consonant finals in some stem alternants (e.g. Bahing *glu:ta* ‘he came/went out’, root |gluŋ|). (See Hayu, Ch. 34, this volume), for a variation on this scenario that could be called “compensatory shortening”. In Limbu and Yamphu, however, length is clearly primitive in closed syllables with stop finals. Thus Limbu *ha:p-ma* ‘to weep’ vs. *thap-ma* ‘to give birth’. Length in open stem-syllables is pertinent only in stems derived from stop-final roots: *ha:b-ε* ‘he wept’ vs. *thab-ε* ‘it gave birth’, *pa:n* ‘speech’ (cf. |pa:tt| ‘speak’) (Michailovsky 1986, 2002).

## 2.5 Tone, Stress

In the 1970s and 1980s, tone was reported in Sunwar (Bieri and Schulze 1971a, 1971b, Genetti 1988), Thulung (Allen, 1975), and Khaling (Toba and Toba 1975), with indications of tonal morphophonology. More recent work on Sunwar (Borchters 2008) and Thulung (Lahaussais 2004) has failed to find tone, probably due to dialect or generational differences. But tone and tonal morphophonology in present-day Khaling have now been thoroughly described by Jacques et al. (2012). There is an opposition of level vs. falling tone on heavy syllables (i.e. syllables with resonant finals or open syllables with long vowels). In verb stem morphophonology falling tone reflects certain stop finals, and can also reflect a lost syllable (Jacques, forthcoming).

(3) Tonal oppositions in Khaling infinitives (Jacques et al. 2015)

*tsene* (toneless short vowel) (root |tse|) ‘to go bad (of flour)’

*tsē:ne* (level tone) (root |tseŋ|) ‘to sift’

*tsé:ne* (falling tone) (root |tsekt|) ‘to close’; (roots |tsek|) ‘to pluck’, ‘to be hard’

These three tonal languages occupy a contiguous area in Ramechhap, Okhaldhunga, and Solu Districts in the north-west of the Kiranti range.

A tonal opposition reflecting an underlying stem postfinal (§4.2) has been reported in verb forms of a Bantawa dialect, for some speakers only (Doornenbal 2009, cf. Winter 1997). A length and/or tonal opposition, attributed to an elided vowel, has also been reported in Puma, in the slow speech of older speakers (Bickel et al. 2007a:5).



Predictable, fixed stress has been described in several languages (e.g. Belhare, Dumi (van Driem 1993), Wambule); a stress opposition is reported on polysyllabic words in Sangpang (Huysmans 2007).

### 3. Non-verbal morphology

#### 3.1 Noun formation

Nouns can be of any length, with disyllables probably the most common; many have taxonomic derivational suffixes with meanings like ‘person’, ‘game (animal)’, ‘bird’, ‘male’, ‘female’, ‘child’, ‘fruit’ (4). (See also Opgenort 2004:127-138 for Wambule examples.)

(4) Bantawa taxonomic suffixes (Doornenbal 2009:65–69)

*chokkwasi* ‘orange’, *naŋsi* ‘hailstone’ (cf. *si* ‘fruit’)

*mukwa* ‘partridge’, *choŋwa* ‘bird’, *berawa* ‘parrot’ (cf. *wa* ‘chicken’)

*mikwa* ‘(eye-)tear’, *cakwa* ‘water’ (cf. *wa* ‘rain’)

*khissa* ‘deer’, *bwasa* ‘pangolin’, *maksa* ‘bear’ (cf. *sa* ‘flesh’)

#### 3.2 Nominal morphology

Number marking of nominals is not obligatory. Plural and (often) dual number of nouns, especially those with human referents, is marked by suffixes, e.g. Sunwar *nifi* ‘DU’, *paki* ‘PL’; Bahing *dɔsi* ‘DU’, *dɔ* ‘PL’; Limbu *haʔ* ‘PL (NSG)’, *si* ‘COLLECTIVE’: *a-mba-si* ‘my father’s generation’.

Articles are found in Far Eastern languages. Limbu has a suffixed singular definite article (*ɛ*)*n* (see examples 20, 31, 34, 51, 52). Yakkha also has suffixed markers implying countable, specific reference *na* ‘SG’ and *ci* ‘NSG’. Unlike Limbu (*ɛ*)*n*, they can appear in adnominal position, e.g. *to-na cuwa* (up-DF beer) ‘the (bowl of) beer up there’ (Schackow 2015:120-121; cf. Bickel (this volume, Ch. 35).

Limbu also has a full set (3SG is zero) of personal agreement markers suffixed to nominal predicates in identificational sentences (§4.6).

#### 3.3. Personal Pronouns and possessive prefixes

All languages have both independent personal pronouns and prefixed possessive pronouns. Third person pronominal forms are generally reserved for human referents. Bahing has complete paradigms, for all persons

and numbers (5). The dual and plural forms of the third person independent pronouns are formed with the same number suffixes as dual and plural lexical nouns.

(5) Bahing: Independent pronouns and possessive prefixes

	1SG	1DUEX	1PLEX	1DUIN	1PLIN	2SG	2DU	2PL	3SG	3DU	3PL
free	<i>gu</i>	<i>gusu</i>	<i>guku</i>	<i>gxsi</i>	<i>gxi</i>	<i>gr</i>	<i>gxsi</i>	<i>gxni</i>	<i>am</i>	<i>amdəsi</i>	<i>amdə</i>
prefix	<i>ɔ</i>	<i>wəsi</i>	<i>ɔke</i>	<i>isi</i>	<i>ike</i>	<i>i</i>	<i>isi</i>	<i>ini</i>	<i>a</i>	<i>asi</i>	<i>ani</i>

Examples: Bahing *ɔ-gy* ‘my hand’, and, with a genitive-marked nominal, *wam-ke a-pija* ‘the bear’s head’.

(Bantawa example: see (27).) In Wambule, number is neutralized in the free forms; in Hayu it is neutralized in the free forms *gu* ‘1’ and *kəmi* ‘3.HUMAN’. Limbu has only singular prefixed forms; non-singular possessors are represented by the full pronoun<sup>7</sup> placed before the noun: *ke-him* ‘your<sup>SG</sup> house’, *kheni phu<sup>?</sup> phəŋa* ‘your<sup>PL</sup> brothers and paternal uncles’. In Limbu, as in many eastern languages, 3rd person independent forms distinguish only singular and plural (non-singular).

Eastern languages insert a nasal between the prefix and certain kin terms with stop initials: Limbu *ku-mphu<sup>?</sup>* ‘his elder brother’. In addition to the independent and prefixed forms. Yakkha and Bantawa also have independent possessive pronouns based on the possessive prefix followed by the genitive suffix (Yakkha *ka*), e.g. Yakkha *akka* ‘my, mine’.

### 3.4 Deictics, Demonstrative and Interrogative pronouns

Proximal and distal demonstratives are based on deictic elements ‘this’ and ‘that’. These, often with an added nominalizer or the article, can be used as 3rd person pronouns, and can refer to inanimates. A third, anaphoric demonstrative is reported in Yakkha (Schackow 2015:93-97).

### 3.5 Adjectives

In general, attributes are expressed by verb forms or deverbal derivations, but a small class of adjectives is usually present. In Limbu, Athpare, Belhare and Bantawa, a number of notions, including ‘new’, carry the 3rd person possessive prefixes (suggesting “its newness”) (Michailovsky 2007): thus Limbu *kusəŋ him* ‘new house’, Bantawa *i-nijwa* ‘new’, *i-rokwa* ‘old (thing)’ (Doornenbal 2009:100). Colour terms may constitute a form class

<sup>7</sup> Limbu pronouns do not take the ergative/instrumental/adverbial/genitive marker *rɛ~lɛ*.

which requires special morphology as adnominal modifiers (Limbu *ku-het-la liŋ* (3-red-[COLOUR] thatch) ‘reddish thatch-grass’.) In many languages they are verbs themselves, or are used with a verb ‘to be like’ (active participles Limbu *het ke-lɔ<sup>2</sup>-ba* (red ACT-be.like-NML) ‘red’, Bahing *gigi mæ-ba* (green be.colour-ACT) ‘green’).

In Limbu, a small subclass of intransitive verbs is distinguished by having a special adjectival form, used in adnominal or predicate position, marked only by the nominalizer *pa*, without the prefix *ke* of the S-agreeing active participle: thus *cu:k-pa mɔna* ‘small man’ vs. *ke-le-ba jeba* ‘knowledgeable shaman’ (cf. Van Driem 1987:21).

### 3.6 Numerals<sup>8</sup>

In many Kiranti languages (e.g. Jero, Wambule, Athpare) Nepali numbers have replaced the original Tibeto-Burman roots above ‘two’ or ‘three’ in adnominal use, if not in counting or reciting. Nevertheless the German Linguistic Survey of Nepal (1980-1984, see, e.g., Winter 1991) collected several systems still intact up to ‘ten’, and beyond (Limbu, Dumi). The majority pattern is a decimal system (Limbu, Kulung, Dumi, some varieties of Yakkha, some varieties of Bahing).

An interesting feature is the presence of quinary structures, lexically built on recognizable roots for ‘hand’ or ‘hand’ and ‘foot’, which are probably reflections of old systems with new roots in Yakkha, Bantawa of Ranitar in Panchthar (Gvozdanovic 1985), Hayu (Hodgson 1857:393). This system was believed to have been lost in Hayu, but an older speaker produced an example spontaneously during a recent enquiry in the village of Adhamara: *na'ung got kolu le* |two hands one foot| ‘fifteen’.

A vigesimal structure was reported for nineteenth century Bahing (Hodgson 1857:497), even making use of the typologically rare fractional count: *kwong ásim kwong áphlo* (one 20 one its-half, i.e. halfway to the next integral multiple of the base) ‘thirty’ (Mazaudon 2007). A vigesimal structure is also reported in Panchthar Bantawa varieties in general (Gvozdanovic 1985:188).

Many languages have sets of two classifier-suffixes, human vs. non-human, rarely a third classifier for round things (Chamling; see Ch. 36), occasionally also one for flat things: Bantawa *bop* ‘round’ (*ik-bop littim* ‘one guava’), *bak* ‘flat’ (Doornenbal 2009:113-114). In counting, the classifier-suffixes are generally omitted (Sunwar) or replaced by a different suffix (Kulung *ci*, Limbu *si* in numbers from two to nine). Classifiers are not used on demonstratives.

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<sup>8</sup> Thanks to Martine Mazaudon for this section.

### 3.7 Time ordinals

Kiranti languages have words identifying days and years as far as four steps into the past and future (Michailovsky 2003); see example (16).

### 3.8 Case marking

Case is marked by suffixes. All languages have ergative/instrumental, genitive, comitative, general locative, and ablative markers. The comitative marker may serve to coordinate nouns. Ablative and allative markers may be suffixed to the locative. Object marking is generally absent or limited to the optional use of the Nepali dative-accusative suffix *lāi* on personal objects. Case markers are not used on first and second person pronouns in Bahing, Thulung, or Chamling, or on any personal pronoun in Limbu.

#### 3.8.1 Direction marking and the vertical dimension

The vertical dimension is important in Kiranti grammar and lexicon (Allen 1972, Ebert 1994, Bickel & Gaenszle 1999). All of the languages seem to have separate verbs ‘come up’, ‘come down’, ‘come across (i.e. on the same level)’ (Bahing imperatives *kywø!*, *jywø!*, *piwø!*, respectively) and corresponding derived applicatives (Bahing *kytø!* ‘bring it up!’, etc.).

In Thulung and in eastern languages, “altitudinal” suffixes, related to directional adverbs ‘up’, ‘down’, ‘across’, may appear with deictic elements, e.g. Chamling *udhi* ‘up here’, *tjudhi* ‘up there’, or with nouns: *tujma-di* ‘up in the village’, *juja-ji* ‘down at the river’, *lam-ja* ‘over on the road’ (Ebert 1997b, Rai 1985). Only Limbu (Tamar Khola varieties) distinguishes gravitational from topographic ‘up’ and ‘down’: *than* ‘up’ vs. *tho* ‘uphill’, *mu* ‘down’ vs. *jo* ‘downhill, downstream’, *təl-than* ‘up on the upper storey’, *him-ettho* ‘up(hill) at the house’ (Michailovsky 2015).

Belhare (Bickel 1997c) and Yakkha (Schackow 2014:179-199) distinguish between demonstratives and directionals that are speaker-centered (Yakkha *tu* ‘up’, *ju* ‘across’, *mu* ‘down’) and those whose referential zero-point is displaced (*to*, *khe/jo*, *mo*).

### 3.9 Phonæsthetic manner-adverbs

Rich inventories of phonæsthetic expressions, which mainly serve as precisely defined manner-adverbs used in highly restricted verbal contexts, are found in all languages of the group, as well as in Nepali and other languages of Nepal. They are often set off intonationally like a direct quotation, no doubt because they are felt to be onomatopoeic. (See also Hayu Ch. 34 §5.6; Michailovsky 1988a). They may have marginal phonological elements, characteristic of ‘paralexemic’ vocabulary (§2.2), e.g. *kk*, *ə*, not found in Hayu core vocabulary, in (6).

(6) Hayu phonæsthetic adverbs (D23)

<i>hararararara</i>	<i>dokdo-ha</i>	<i>mi</i>	<i>bilu</i>	<i>bətəkkəi</i>	<i>mən</i>
[MANNER.of.flying]	fall.CONJ.CONV-ADV	DIST	tiger	[MANNER.stone.dead]	die.3SG.PST

‘Flying, flying through the air, that tiger fell and died stone dead.’

## 4. The verb

Basic verb forms are composed of a stem and affixes indicating person-agreement, tense, and polarity. A lexical verb may use more than one stem; it is often convenient to represent the root by an internally reconstructed form from which the stems can be derived. The lexical root can usually be represented morphophonologically as an extended monosyllable,  $|C_iV(C_f)(C_{pf})|$ , where  $C_i$  reflects the inventory of syllable initials of the language in question,  $C_f$  the syllable finals, and  $C_{pf}$  a postfinal  $|t|$  or  $|s|$ .

### 4.1 Noun-verb predicates

‘Noun-verb predicates’ composed of a preverb (often a noun) and a conjugated root, are found in most languages, e.g. in Limbu, *laŋ khek* ‘he walks’ (cf. *laŋ* ‘leg’), *ja raptu* ‘he sharpens it’ (*ja* ‘edge’). Although the verb morphology generally attaches to the verbal part of these expressions, in Chhintang the preverb can be integrated into the prefix string. Thus Chhintang *ja-a-cept-e* (PREVERB.call-2-call-PST) ~ *a-ja-cept-e* (2-PREVERB.call-call-PST) ‘you<sup>SG</sup> called’ (<  $|ja-cept|$  ‘call’) (Bickel et al. 2007:66).

### 4.2 Word-families of verbs

Word-families of roots are relics of two no longer productive processes that have created derived applicatives and causatives (Hodgson 1858:437-441; Michailovsky 1985). These are of two types:

(1) Pairs of roots in which an intransitive verb with a voiced stop initial has a transitive partner with an unvoiced initial, aspirated or not, e.g. Bahing *bok-ti* ‘I got up’ (root |bok|) vs. *pok-ti* ‘he got me up’ (root |pok|). A few such pairs occur in the western languages. In Belhare and Limbu, the opposition is between unaspirated and aspirated initials, the voicing opposition having been transphonologized to aspiration (Michailovsky 1994). Hayu (Ch. 34) also has a few pairs with non-occlusive initials.

(2) Families of roots differing in the postfinal element: postfinal |t| generally has an applicative sense, e.g. Bahing *la* ‘he goes’ (root |la|) vs. *lad-a* ‘he takes it’ (|lat|). Postfinal |s| has a causative sense, e.g. Limbu *ha:be* ‘he wept’, *ha:ptu* (applicative) ‘he mourned him’, *ha:psu* (causative) ‘he made him weep’. Verbs with the applicative postfinal |t| are found in all languages;<sup>9</sup> causatives with postfinal |s| only in Bantawa, Limbu, Kulung, and possibly Wambule. The majority of roots with postfinals are not members of word-families and are not applicative or causative in sense.

Productive syntactic means of benefactive and causative formation are discussed below (§§6.4, 7.3).

### 4.3 Agreement morphology

Suffixed agreement markers occur in all languages; prefixed ones in Khaling-Dumi, South-Eastern, and Far Eastern languages (except Yamphu).

Almost all affixes of the intransitive paradigm also appear in the transitive one. The transitive paradigm shows more or less precise agreement with two arguments except in many Sunwar dialects, which have agent agreement only (Borchers 2008). “Conjugations” that are identified in many descriptions generally reflect different root postfinals and stem alternations, not differing affix paradigms.

#### 4.3.1 Prefixed agreement markers

Prefixed agreement markers are less numerous than suffixed ones. 1SG>2, 1SG>3, and 3SG>3 forms are never prefixed. The most widely prefixed forms are those for a 2nd person argument (including intransitives, but excluding 1>2). Other prefixes have values like ‘1N’, ‘3PLAS’ and ‘3SGA’.

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<sup>9</sup> Hayu (this volume), has a functionally equivalent series of applicative suffixes in -t-.

Table 33.1 Khaling: Indicative paradigms of LOP vi (*loəmne*) ‘catch’ and SOP vi (*soəmne*) ‘have enough’ (Jacques et al. 2012:1102, 1115-1118, 1154)

TRANS.	1SG O	1DUIN O	1DUEX O	1PLIN O	1PLEX O	2SG O	2DU O	2PL O	3SG O	3DU O	3PL O
1sg A						loəm-ne loəm-teni	loəm-su loəm-tensu	loəm-nu loəm-tennu	lob-u lob-utla	lob-usu lob-utlasu	lob-unu lob-utlanu
1duin A									lep-i lep-iti		
1dutex A			tense:						lep-u lep-utu		
1plin A									loop-ki loop-tiki		
1plex A									loop-ka loop-taka		
2sg A	i-loəm-ŋa i-lep-ŋla								i-lê-b-ə i-lê-p-te	i-lê-p-su i-lê-p-tesu	i-lê-p-nu i-lê-p-tennu
2du A	i-loəm-ŋasu i-lep-ŋlasu								i-lep-i i-lep-iti		
2pl A	i-loəm-ŋannu i-lep-ŋlanu								i-loəm-ni i-lep-tennu		
3sg A	i-loəm-ŋa i-lep-ŋla	i-lep-i i-lep-iti	i-lep-u i-lep-utu	i-loop-ki i-loop-tiki	i-loop-ka i-loop-taka	i-loop i-lep-te	i-lep-i i-lep-iti	i-loəm-ni i-lep-tennu	lê-b-ə lê-p-te	lê-p-su lê-p-tesu	lê-p-nu lê-p-tennu
3du A	i-loəm-ŋasu i-lep-ŋlasu										
3pl A	i-loəm-ŋannu i-lep-ŋlanu										
REFL.	1SG S	1DUIN S	1DUEX S	1PLIN S	1PLEX S	2SG S	2DU S	2PL S	3SG S	3DU S	3PL S
	loəm-siŋa loəmvasu	lep-siŋi lep-siŋiti	lep-siŋu lep-siŋitu	loop-siki loop-sikiti	loop-sika loop-siktaka	i-loəm-si i-loəm-tesi	i-lep-siŋi i-lep-siŋiti	i-loəm-sini i-loəm-tennu	loəm-si loəm-tesi	lep-siŋi lep-siŋiti	loəm-sini loəm-tennu
INTR.	1SG S	1DUIN S	1DUEX S	1PLIN S	1PLEX S	2SG S	2DU S	2PL S	3SG S	3DU S	3PL S
	soəm-ŋa sep-ŋla	sep-i sep-iti	sep-u sep-utu	soop-ki soop-tiki	soop-ka soop-taka	i-soop i-sep-te	i-sep-i i-sep-iti	i-soəm-ni i-sep-tennu	soop sep-te	sep-i sep-iti	soəm-nu sep-tennu

Dumi and Khaling have only one agreement prefix, which marks 2nd person forms (except 1SG>2), but also 3>1 forms (see Table 33.1). This has given rise to the hypothesis of a conflation of ‘2nd person’ and ‘INVERSE’ prefixes.<sup>10</sup>

Yakkha is exceptional among the Far Eastern languages in having only one agreement prefix, an assimilating syllabic nasal indicating 3rd plural; it also has a homonymous negative prefix. The Yakkha (also Belhare) 2nd person suffix *ka* has the distribution mentioned above for the 2nd person prefix, unlike that of any other agreement suffix. Chhintang has eight prefixes (including the negative).

**Table 33.1** Khaling: Indicative paradigms of LOP vt (*loômne*) ‘catch’ and SOP vi (*soômne*) ‘have enough’

ABOUT HERE

#### 4.3.2 Suffixed agreement markers

Suffixed agreement marking systems are highly diverse, although several individual morphemes are widely identifiable across the group. In transitive paradigms, two partly conflicting principles are often reported as governing suffixal agreement (excluding the Yakkha 2nd person suffix mentioned above): (1) “hierarchical” agreement: the first agreement suffix on a transitive verb indexes the argument which ranks highest on a person hierarchy 1>2>3, regardless of its case role, and (2) role-marking agreement, which generally includes markers for the configurations ‘1SG>2’ and ‘3O’ and overrides hierarchical agreement. (3) When the higher-ranking argument is singular, the number of the hierarchically lower-ranking argument may be marked by a secondary number marker, which may be different from the number-markers for primary arguments.

Table 33.2 shows selected forms of an intransitive and a transitive verb in Khaling and in Bahing, two western Kiranti languages. The forms show the agreement markers with hierarchically ranking arguments of particular persons and numbers (rows in the tables) according to their syntactic function (S, O, or A: columns in the tables). In both Khaling and Bahing, for 1st and 2nd person non-singular arguments (here represented by 1PLEX and 2PL), S and A agreement use identical stems and identical hierarchical agreement suffixes (columns 1

<sup>10</sup> The ‘inverse’ part of a double-agreement paradigm corresponds to situations where the A is outranked by the O in the person hierarchy 1>2>3 (for example); the other half of the paradigm is ‘direct’. Ebert (1991, 1994:26-28; Ch. 36 this volume) makes the case for attributing ‘direct’ or ‘inverse’ semantics to a number of agreement markers in Kiranti languages; her interpretation of Bantawa is contested by Doornenbal (2009:150n).



and 3 for each language). This identity is broken for singular arguments (rows 1SG and 2SG) because these forms show 3d person object agreement (they also show object agreement in 1SG>2 forms).

**Table 33.2** Selected forms of Khaling and Bahing

X=	KHALING			BAHING		
	X is S	X is O	X is A	X is S	X is O	X is A
	X has enough	he catches X	X catches him	X stands	he beats X	X beats him/them
1SG	soðm-ŋʌ	i-loðm-ŋʌ	lob-u	ram-ŋʌ	tym-ji	tub-u
1PLEX	soɔp-kʌ	i-loɔp-kʌ	loɔp-kʌ	rap-ka	typ-ki	typ-ka
2SG	i-soɔp	i-loɔp	i-lə:b-ʌ	ram-e	tym-e	tyb-i
2PL	i-soðm-ni	i-loðm-ni	i-loðm-ni	ram-ni	tym-ni	tym-ni
3SG	soɔp	lə:b-ʌ	lə:b-ʌ	ram	tyb-a	tyb-a

Further, in Khaling, for 1st and 2nd persons, S and O agreement are identically marked (columns 1 and 2) (this is also true in Dumi and in Hayu), so that, for singular arguments, all three columns have identical markers. This is not the case for Bahing (or for Thulung or Wambule). In Bahing, the markers for 1st person arguments in S and O functions (columns 1 and 2) are different. This gives an idea of structural differences in the paradigms. Still another structure is found when 3rd person object agreement is marked for agents of all numbers, not singular only, as in many languages.

Where the highest-ranking argument is singular, the number of the other core argument can be indicated by a ‘secondary number marker’ (Khaling: *su* ‘DU’, *nu* ‘PL’: see table 33.1).

A particularity of paradigms in many languages is that 3>3 forms show number agreement with the argument with the highest number (see Table). The notations ‘3>3 (DU)’ and ‘3>3 (PL)’ indicate such agreement.

#### 4.3.3 ‘Impersonal’ or detransitivized 1st person object forms

Several researchers (e.g. Allen 1975:49) have remarked that speakers had difficulty producing 2>3NSG>1NSG and 1NSG>2 forms, often responding with non-finite forms. This difficulty may account for apparent paradigm simplifications and the existence of alternative forms in these and certain other parts of the agreement paradigm.

In Limbu the 2SG>1SG form is *kɛ-dzok-ŋʌ* (2-do-1sgSO.NPST) ‘you<sup>SG</sup> do to me’, as might be expected (the past is similarly formed), but there is a single 2>1(NSG) form *a-kɛ-dzok* (1PLIN-2-do), with only the prefix *a-*

(normally ‘1INCLUSIVE’, but clusivity is neutralized in this context) to indicate 1st person. (In contrast, Limbu 3>1 forms are fully marked for 1st person number and clusivity, and 3SG>1 forms identical to 1st person intransitive forms (as in Khaling).) In Yakkha there are similar, unique nonsingular forms for both 2>1(NSG) and 3>1(NSG). The only person marker on the 2>1(NSG) form in Yakkha is a 2nd person marker, and there is no explicit person marker on the 3>1(NSG) form. Although both of these Yakkha forms turn out to be identifiable, because they are unique in the paradigm, many distinctions are neutralized.

In parallel with these apparent neutralizations in the paradigm, ‘impersonal’ or ‘detransitivized’ 1st person-object forms are found, sometimes as optional or dialectal variants of the appropriate part of the regular 23>1 agreement paradigm, in the South-Eastern and Far Eastern languages (Ebert 1991; see Belhare and Chamling in this volume). An intransitive form agreeing with the A (which retains ergative marking) is accompanied by a (usually) preposed element, often related to a word for ‘person, other’, indicating a 1st person (especially non-singular) object. In (7) (Limbu), a formally intransitive form, *mehakte* (cf. transitive *mehaktu* ‘they sent it’) with a preposed element (*japmi/napmi* ‘person, other’), indicating a 1st person non-singular object, occurs in the same sentence and with the same referents as a regular 3PL>1PLEX transitive form.

(7) Limbu: transitive and detransitivized 1st plural object forms (DANCES15)

*anige nurik me-mett-ige-an*                      *ciŋhi japmi me-hakt-e*

1PLEX well 3PL.AS-do-1PLEX-CONJ letter 1NSG.O 3PLAS-send-PST

‘They [a group of dancing partners] treated us<sup>PLEX</sup> well and sent us letters.’

It is not clear that these forms are “detransitivized” since, as we have seen, the regular 3>1 forms in, e.g., Limbu, Khaling, and Hayu are already identical to intransitive forms. ‘Depersonalized’ (because personal agreement with the object is lost) would perhaps be more accurate.

#### 4.4 Tense morphology

Two basic tenses, usually roughly labeled ‘past’ and ‘non-past’, are identified in most languages. In the Western languages Khaling (table 33.1), Sunwar, Bahing, and Thulung, past tense is marked in the suffix string by *t* (somewhat disguised in Thulung); in Dumi, the forms are very similar to those of Khaling, its closest relative, except that *t* marks non-past. Tenseless finite forms are reported in some contexts in some languages (cf. the

Belhare ‘zero-marked form’ (Ch. 35). There are also various composite tenses with auxiliaries. Ebert 1994:29-46 is a useful review of tenses and their negations.

Verbs in Eastern languages have morphophonologically related past and non-past stems. In Limbu and Bantawa, the present stem has the form of a phonological syllable  $C_iV(C_f)$  and can stand alone, while the past stem ends with the initial of an obligatory following syllable  $C_iV(C_f)C_i-$ , e.g. Limbu *jɛp~jɛb-* ‘weep’, *khem~kheps-* ‘to hear’ (cf. Doornenbal 2009:126-129 for Bantawa). The two stems are commonly referred to, respectively, as ‘preconsonantal/pre-pause’ and ‘prevocalic’ (e.g. Van Driem 1987:71), but this is only a (not entirely accurate) statement of their distribution (see Michailovsky 1986, 2002); in fact, final *p* never has the allophone *b* in Limbu (see §2.3) and no phonological rule explains the alternation *m~ps*.<sup>11</sup> The phonological characterisation obscures the fact that these are morphologically distinct stems.<sup>12</sup>

In several languages the non-past with present sense is marked as progressive (e.g. by a compound verb, §4.7) and the simple ‘non-past’ stem is only found in negative forms. The progressive auxiliary appears to have become part of the stem in some languages, and many descriptions identify distinct negative stems as well.

The semantics of tense is not discussed in the present article. Bickel (1996) analyses the semantics and pragmatics of tense in Belhare.

#### 4.5 Negation

All languages except Athpare have a negative prefix, and some a suffix, used with finite verbs. Bahing, Thulung and Khaling only have prefixed negation. In Dumli, finite verbs are negated by the suffix *nə*; preterite negative forms also have the prefix *mə*: *tsikh-a* ‘it happened’, *mə-tsikh-i-nə* ‘it didn’t happen’. Non-finite forms use only the prefix. (Van Driem 1993:149).

The negative prefix (*mVn*) is also limited to past forms in Yamphu, Kulung, and Bantawa, and no suffix is found on these forms. The non-past has a suffix. In Limbu, all finite forms have both a negative prefix and suffix. Many languages have a special negative prefix for non-finite forms and nominals (Hayu *maan*, Kulung *man*, Bantawa *maʔaŋ*, Limbu *mɛ:n*). Only Hayu has a special prohibitive ‘don’t!’: *tha phi!* ‘don’t come!’.

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<sup>11</sup> The non-past stem appears before a vowel in the 1SG.NPST forms *jɛpp-ɛ* ‘I stand’, *khemm-ɛ* ‘I hear’; van Driem (1987:96) transcribes the suffix *ɛ* (and many other suffixes or postpositions) with an initial glottal stop (*ʔɛ*) (e.g. in (19)) to account for the regular phonological gemination of pre-vocalic  $C_f$  (see §2.3).

<sup>12</sup> The stems are identified as ‘S1’ (non-past) and ‘S2’ (past) in the glosses of Limbu texts on the Pangloss website, but not in the present chapter. In Limbu, the labels ‘past’ and ‘non-past’ are roughly justified where this opposition is not neutralized.

Negation of past forms is often based on a present or perfect form. Thus in Bahing the negative form in (8) is based on the non-past *ba-ŋa* ‘I eat it’, which itself resembles an intransitive form, e.g. *pi-ŋa* ‘I come’ (cf. *ba-tɔŋ* (eat-1SG>3PST) ‘I ate it’). The past marker *t* is replaced by an irrealis *wa*, as also in Thulung and Khaling (Ebert 1994).

(8) Bahing negative past (RANGADIPs7)

*ma! gu ma-ba-ŋa-wa em bebatsa-dɔ*  
 NEG 1 NEG-eat-1SGNPST-(NEG) PROX-NOM child-PL

‘No! I didn’t eat the children!’

Athpare negation is marked by a suffix; past forms are compounded with a specialized auxiliary, which carries the negative marking (9).

(9) Athpare negative of *khad-a-ŋ-e* (go-PST-1SG-PST) ‘I went’ (Ebert 1994)

*khat-ni-ŋ-get-ni-ŋ-na*  
 go-NEG-1SG-NEG.AUX-NEG-1SG-NMLZ

‘I didn’t go’

In Bantawa the past negative is marked by a prefix and special suffix morphology reflecting a negative auxiliary (Doornenbal 2009:161-172). See (10) below for a Chhintang example.

Some languages have a specialized negative for the existence predicate: Limbu *hop/hopte* ‘there is/was none’, Bantawa *matdiŋ*, Chamling *paina*. In others, the existence predicate is negated regularly.

#### 4.6 Free prefix ordering

Free ordering of prefixes is reported in Bantawa (Rai 1985) and in Chhintang (Bickel et al. 2007b), where it is reported that the three prefixes (*u*, *kha*, *ma*) in (10) can appear in any of the six possible orders without any semantic or stylistic difference. Note that of the three prefixes, only one, *u*, is strictly pronominal: *kha* is the ‘impersonal’ object of a detransitivized 1NS object form (§4.2.1), while *ma* is the negative prefix linked to the negative auxiliary *jokt*. ‘Preverbs’ of noun-verb predicates can also get permuted.

(10) Chhintang (Bickel et al. 2007b:44)

*u-kha-ma-cop-jokt-e*  
 3NSGA-1NSO-NEG-see-NEG-PST

‘They did not see us.’

## 4.7 Copulas

All Kiranti languages have one or more copulas, which can be omitted in straightforward, 3rd person singular identificational contexts (e.g. the second part of (11) below).

Limbu also has a full set of agreement markers that are suffixed to nominal predicates, e.g. *a* ‘1SG’, *adi* ‘1IN’, *adige* ‘1EX’, *ne* ‘2SG’; the 3SG form is zero. Yakkha and Belhare have very incomplete sets of such markers.

(11) Limbu <TRADEs267>

*ani-’tna*            *tɔksɔŋ*        *kɛ-wa<sup>2</sup>-ba-adi*        *ɛtna*            *kɔ*        *seŋga*  
1PLIN-LEVEL.LOC    highland    ACT-be-NOM-1PLIN    here.LEVEL    TOP    plains

‘Over in our<sup>PLIN</sup> place, we<sup>PLIN</sup> are highland dwellers; here it’s lowlands.’

Limbu uses a variety of posture verbs to indicate canonical location/existence (fields ‘lie’, houses ‘sit’, livestock ‘stands’, limbs are ‘hung on’) in addition to a more general verb of existence or circumstantial presence (van Driem 1987:61-68).

Dumi (van Driem 1993:168) and Khaling (Jacques et al. 2015) have separate existence/location ‘be’ for animate and inanimate subjects.

The verb ‘be’ exist is usually negated in the same way as other finite verbs. For special negative forms, see §4.5.

## 4.8 Periphrastic tenses: perfect and progressive

Perfect tenses are formed of nominalized forms or converbs with auxiliaries ‘to be’, or by compounding with vectors ‘sit/remain’ or ‘put/keep’. The pluperfect uses the past tense of the auxiliary.

In Thulung, both the perfect and the progressive use a nominalized finite verb with an auxiliary ‘be’; the progressive can also use a simultaneous converb and auxiliary (Allen 1975:85; Lahaussis 2002:176-177). In perfect forms, the auxiliary is impersonal. In Wambule, the perfect is composed of a past/passive participle (a nominalized finite form) followed by an impersonal form of the verb |bak ~ ba:| ‘be/sit’: *lwa-ŋ-mei ba:-Ø-m* (go-1SG-FCT be-23SG-AFF) ‘I have gone’ (Opgenort 2004:318).

In Dumi (van Driem 1993:237-243), the perfect is made up of a nominalized finite past form followed by a present auxiliary. The auxiliary with transitive verbs is an impersonal form of *gini* ‘to exist, be (attributorial)’;

with intransitive verbs, the auxiliary *mini* ‘be (locational)’ agrees with the subject. The progressive is expressed by compounding with a vector ‘to continue’.

In the Limbu perfect (van Driem 1987:163-169) the verb is a finite past form, with the conjunctive subordinator *-aŋ* (§8.1) (van Driem’s “perfect gerund”) followed by a non-past copula. If the verb is intransitive, the copula has the same (i.e. subject-agreeing) form as the verb; if it is transitive, the copula is impersonal.

(12) Limbu perfect with impersonal auxiliary (MARIs100)

*the-the ke-thakt-um-aŋ wa??*  
 what-what 2-bring.up-2PL>3-CONJ be.NPST

‘What-all have you brought up [as bride-price]?’

Limbu perfects and progressives can choose among posture-verb copulas. Thus, for example, the use of the auxiliary *pət* ‘be suspended’ in (13) suggests that the speaker expects to get back his money.

(13) Limbu perfect with auxiliary ‘be suspended’ (SOGHAs175)

*khonn-aŋ səi jaŋ pur-uŋŋ-aŋ pət*  
 that.one-CONJ 100 rupee give-1SG>3-CONJ be.suspended

The use of the posture-verb ‘lie’ in *ness-uŋ-aŋ ne* (lay-1SG>3SG-CONJ lie) ‘I’ve laid it out [the money]’ suggests the resultant state. Progressives use the conjunctive or simultaneous subordinator with a non-past or past verb form and an auxiliary of the same tense. For example, *me-imm-aŋ me-ne* (3PL-sleep-CONJ 3PL-PROG) ‘they are sleeping’, or, with the simultaneous subordinator, (14).

(14) Limbu simultaneous subordinator with auxiliary *juŋ* (< ‘sit’) (NAROs135)

*blastiŋ me-phəksu-’lle bela inga tək ca-ŋ-lə juŋ-aŋ, bara bədze*  
 explosives 3PL-set.off-DEF-GEN time 1SG meal eat-1SG-SIMUL PROG-1SG, twelve o’clock

‘When they set off the explosives, I was eating my meal, at 12 o’clock.’

Bantawa uses the auxiliaries *juŋma* ‘sit/remain’ ~ *jukma* ‘put down’, either compounded with the verb as vectors or with a nominalized complement to form the perfect. Yakkha languages use vectors: Yamphu *mindep-pe-t-c-w-e* (forget-RESULT-PERF-DU-3O-FACTITIVE) ‘They<sup>DU</sup> have forgotten it’ (Rutgers 1998:221).

Negative perfects use a negative perfect converb (§4.8.5), which also is used in ‘adverbial’ subordinate clauses ‘without Ving’, or negative perfect vectors. The negative perfect often appears as the standard past tense negation (8).

## 4.9 Non-finite forms

All Kiranti languages have infinitives, converbs, and a present active participles; many also have a past/passive participle.

### 4.9.1 Infinitive

The infinitive is a monosyllabic stem with a suffix such as *ma*, *mu*, *ca*. Infinitives are used as nouns, e.g. as the heads of propositional sentence arguments (36) and of propositional complements with modal and perception verbs. The infinitive can have arguments, and can have a suffix indicating plurality of an object or reflexivity, e.g., in Limbu: *khɔn-haʔ thak-ma-si poŋ* (3-PL bring.up-INF-PL must) ‘[we] must bring them up here’; *cum-cum tɔŋ-ma-siŋ poŋ* (friend-friend agree-INF-REFL must) ‘friends must agree among themselves’.

### 4.9.2 Purposive

The purposive (or ‘supine’) is also marked by a suffix (such as *si*, *sɛ* in the eastern languages). It occurs mainly as a complement of motion verbs. In Limbu (15), Chamling, and Thulung it can have a possessive pronominal prefix, indicating its logical object.

(15) Limbu purposive (SOGHAs133)

*a*        *himdaŋmʼ-ɛl-lɛ*    *ku-la-sɛ*                      *peg-aŋ-aŋ...*  
1.OBL   wife-DEF-GEN    3.OBL-bring.home-PURP   go-1SG.SO-CONJ

‘I went to bring home my wife and ...’

In a parallel Kulung example, the wife appears in the absolutive case: *m-to:ma lam-s kʰa-let-a* (3OBL-wife find-PURP go-away-PST) ‘He went off to find his wife’.

### 4.9.3 (Present/)active participle

All languages have a non-finite active participle, which functions as the head of an adnominal relative expression referring to the actor (A or S) of its clause. In Hayu (suffix *ji*, Ch. 34) and Yamphu (suffix *khu-khuba*) the active participle of an intransitive verb signifies non-past tense: Yamphu *hedayna-beʔ peŋ-ghu*

(H.-LOC sit-ACT) ‘(the one) who is staying in Hedangna’ as opposed to a past/passive participle (below). Active participles in other languages are not reported to indicate tense.

(16) Bahing tenseless active participle <BEGINs133>

*santho niware-ŋ bek-ba ɔsi loba*  
 last.year year.before.last-INTENS die-ACT 1DUIN younger.brother

‘our<sup>DUIN</sup> brother who died years ago’ (cf. finite *bekta* (die-3SG.PST) ‘he died’)

In South-Eastern languages and Limbu the active participle has a prefix *kV*: Bantawa *ka-tok* ‘respected (man)’ (< *tok* ‘receive’); *ka-tuk mina* ‘sick man’. Bantawa lexicalized actor-nominals add the nominalizing suffixes *pa* ‘MASC’/*ma* ‘FEM’: *ka-d<sup>h</sup>uk-pa-ci* (ACT-hit-MASC-PL) ‘blacksmiths’. Limbu has the prefix *kε*, always with the suffix *pa/ma*, which, as in most Kiranti languages, is adnominal.<sup>13</sup> Dumi has suffixed (*k*)*pi*: *ma-tsa:p-pi* (not-able-ACT) ‘incapable’. The participle can be marked for reflexivity: *tsem-si-kpi-mil* (play-REFL-ACT-PL) ‘players’. Kulung has the suffix *pa*.

(17) Kulung active participle (Tolsma 2006:161)

*bajar k<sup>h</sup>ai-p i:bum mis-lo tup-a-t<sup>h</sup>e*  
 market go-ACT one person-COM meet-PST-REPORT

‘He met a man who was going to the market.’

#### 4.9.4 Past/passive participle

Non-finite past/passive participles (past with intransitive verbs) are less common; their function may be filled by patient nominals or by a general clause nominalizer. Examples are found in Hayu (suffix *ta*), Yamphu (*praʔa*), Kulung (*mpa*), Limbu (*muna*). Some of these can refer (as in Hayu) to any clause participant except A.

(18) Yamphu past/passive participle on an intransitive clause (Rutgers 1998:205).

*kani miju-ra lem-braʔa-ji-ro*  
 1PLIN DIST.across.MED come-PPT-NSG-REPORT

‘we<sup>PLIN</sup> who came from over there (they say)’

For the Yamphu past/passive participle of a transitive verb, see (46) (‘given’).

<sup>13</sup> The exceptions are Camling and Bantawa. In: which syntagms marked by *pa/ma* cannot function as adnominal modifiers, only as nominal heads. In the other languages, they can function as nominal heads, like all adnominal modifiers.



Limbu *muna* serves as an action noun: *thi pi-muna-si-ba cələn* (beer give-ACTN-PL-NMLZ custom) ‘the custom of giving them beer’ (DANCES139). Note that this form can take the plural suffix. With the addition of the prefix *mən* it becomes the negative of the active participle (Van Driem 1987:207-209).

#### 4.9.5 Converbs

By ‘converb’ is generally meant a non-finite form that serves, usually with a suffixed function-marker, as the head of an ‘adverbial’ subordinate clause. Ebert, in her articles on converbs in general and in Kiranti (2008ab) cites van Avera: converbs are –argumental, -adnominal, +dependent and –finite, but has some reservations concerning the last of these. Finite subordinators are usually considered as being governed by subordinating conjunctions, but where they are marked by a suffix or postposition attached to the verb, the latter may resemble a converb. But, like Ebert, I will not use the term ‘converb’ (or, a fortiori, ‘gerund’) for such finite forms.

Ebert identifies a negative converb in seven Kiranti languages.

(19) Limbu conjunctive subordinator and negative converb (van Driem 1987:182 cited by Ebert 2008:79)

mɛ-dho:kt-u=aŋ      mɛ-dzo-i?      —      mən-dho:k-ʔe      mɛ-dzo.  
 3pl.SA-cook-3O=CONJ    3pl.SA-eat-Q?      —      NEG-cook-NEG.CONV    3PL.SA-eat

‘Do they cook it and eat it? — They eat it without cooking it.’

The same converb is found in negated perfects. Thus Limbu *mɛm-be:k-ʔe wa:-ʔe* (NEG-go-NEG.CONV be-1SG.NPST) ‘I have not gone.’ Cf. *pe:g-aŋ=aŋ wa:-ʔe* (go-1SG.PST-CONJ be-1SG.NPST) ‘I have gone.’ (Ebert 2008:84). Positive perfects are formed variously: either with a converb and auxiliary, as in the Limbu example just cited, or by a compound verb.

Ebert finds a simultaneous (‘while Xing’) converb in six of the languages, and an equivalent form with a finite verb and the suffix *rɔ* in Limbu (see also the Limbu example (14)).

(20) Limbu finite simultaneous subordinate (SOGHAS283)

khɔ-n-ɛtyo-nu      khɔn      ku-samm-ɛn      lɛm-u-rɔ      thakt-u  
 DIST-DF-downhill-from    DIST-DF    3-soul-DF      coax-3SG>3SG-PROG    bring-up-3SG>3SG...

‘[The shaman] brought it up, brought his soul up from down below, coaxing it...’

Again, progressive tenses in some languages are based on this form, e.g. Limbu *sɔŋs-umbɛ-rɔ jag-igɛ* (sell-1PLEX>3-PROG be.in-1PLEX) ‘we were engaged in selling it’.

Hayu has two unique reduplicated converbs, and a number of others consisting of verb stems with suffixes, most of them ordinary nominal case markers (see Ch 34).

#### 4.9.6 Derived nouns

Specialized actor, patient, place, etc., nominals, are based on non-finite forms. Hayu has an unusually complete set (Ch 34). In Yamphu (Rutgers 1998) there is a second actor nominal (suffix *jaŋ*) used for professional rather than conjunctural actors: *na seʔ-jaŋ-ji* (fish kill-AGT-PL) ‘fishermen’; a locative/instrumental nominal (suffix *tha~tham*): *wawa pen-dham jaksa* (brother stay-LOC/INST hut) ‘shed where elder brother stays’; *sap-tha* ‘pen’; a patient/instrument nominal based on *cira* ‘thing’ (cf. Bantawa *kha*): *cet-cira* ‘plow’. In Sunwar, we find *tike* ‘INSTRUMENT’: *b|e-tike* ‘pen’, and *cī* ‘TEMPORAL’: *dhol p|ui-cī nati* (drum loosen-TEMP day) ‘day when the drums are loosened’. These are basically nouns, but may bring along some arguments, and in some cases serve as adnominals (like the modifiers of ‘shed’ and ‘day’ above).

#### 4.10 Compound verbs

The term ‘compound verb’ is used in the Indian linguistic area for a special type of serial verb in which the main verb, V1, a stem form expressing the main semantic content of the compound, is followed by a “vector” or “light” verb, V2 (often related to a full verb), which contributes a peripheral meaning in the areas of direction or aspect. In principle, the compound verb is the predicate of a single clause, with a single argument structure, and designates a single action or situation, but in the absence of a clear functional definition I have not specified strict morphological criteria for the identification of “compound verbs” in Kiranti. The typology of these constructions in Nepal has been studied by Pokharel (1991) (for Nepali), Ebert (1994), Bickel (1996), and Doornenbal (2009).

In Indo-Aryan, non-finite V1 are the rule, but in Kiranti the tendency is for V1 to be a finite form, except in Hayu and some western languages. Vectors in Kiranti usually have both intransitive and transitive forms, which facilitates morphological harmony between V1 and V2. Vectors are also often observed to have somewhat irregular morphology.

In Hayu, compounding is not very prominent: the most plausible candidate vector is *lat* ‘go’, which functions as a ‘motionalizer’ (*lon laxtsem* ‘he ran off’) and in the *go*-passive (see Ch 34 §6.8).

In Bahing, as in Hayu, V1 is a stem form, here (21) with the ‘ponent’ vector.

(21) Bahing (NINAMs152)

*cacar-than bhāḍo tok dzyl-tase ne*  
four.REDULP-CLF pot drop put-3DU.PST REP

‘They each dropped off four cooking pots.’ [‘Dropped’ in part because the agents are airborne.]

Wambule has a number of ‘auxiliary verbs’ with vector-like semantics. With the ‘dispatching’ and ‘ponent’ auxiliaries, the V1 is marked by a connector: *uj kimsul hwal-ti co-η-m* (1ERG door open-CONN send-1SG-ASS) ‘I opened the door’ (Opgenort 2004:420). “Motionalizers” directly follow a root form of the V1.

In Thulung (Allen 1975:72-77), Dumi, and all the eastern languages, both V1 and V2 have some agreement morphology. In Dumi (van Driem 1993:197-214), the agreement prefix (when required) appears before the compound, and the full suffix string after it, suffixed to V2. V1 has the regular stem alternant appropriate to the complete form, and an abridged suffix string depending on the shape of the stem. Dumi: *aj dza: dza-η-pət-t-ə* (I rice eat-1SG-ALLATIVE-NPT-1SG) ‘I’m going to eat’ (‘go’ implies displacement here); in many Kiranti languages ‘to eat’ would be a non-finite purposive complement. Three verbs with phasal *Aktionsart* semantics, ‘to begin’, ‘to finish’ and ‘to be about to’, are identified as “pseudo-aspectivizers” by van Driem because they function as main verbs with an infinitive complement (e.g. *tsyet-ni lo:* (ache-INF begin) ‘it began to ache’) and not as V2 vectors.

In Athpare, agreement prefixes appear only before V1 but the tense-marking suffix can appear only after V2.

(22) Athpare (Ebert 1997a:71)

*a-mund-um lett-um-e*  
2-forget-2PL V2:TELIC-2PL-PST

‘You<sup>PL</sup> completely forgot it.’

Limbu is the only language that compounds whole forms with prefixes: *kemm-oʔr-i kem-sur-i*

(3PL>2-burn.PA-2PL 3PL>2-finish.PA-2PL) ‘They<sup>PL</sup> already informed on you<sup>PL</sup>’ (TRADES247).

Example (23) has two compound verbs: the vector is aspectual in the first, directional (a ‘motionalizer’) in the second. (Note that *nu:ksi* is abbreviated from *nu:ksige* ‘we<sup>PLEX</sup> returned.’)

(23) Limbu intransitive vectors ‘finish’ and ‘come.down’ (MARIs119)

*pa:n-en toj-ε cur-ε-aŋ jammu anige εtjo nu:ks-i jʃε-ige.*  
speech-DF agree-PST finish-PST-CONJ again we.PLEX here.down return-1PL come.down-1PLEX

‘Once the affair was agreed, we<sup>PLEX</sup> came back down here.’

In the same Limbu text we find the conjunctive subordinate (§8.1) syntagm *nu:ks-i-aŋ j'je-ige* (MARIs77), with the linker *aŋ* ‘and’, apparently with the same meaning as the compound of (23).

The division of labor between compound verbs, verb-complement constructions, and conjunctive subordinate constructions is highly variable between languages.

#### 4.11 Complement-taking verbs

Modals, phasal aspectuals, and verbs of expression and perception may take clausal complements, either non-finite or finite.

The transitivity and argument structure (agreement) of a complement-taking verb may be largely determined by the semantics of a non-finite complement. Thus in (24), ‘quit’ shows object agreement with the object of ‘push’, its infinitive complement.

(24) Wambule: Agreement of complement-taking verb (Opgenort 2004:418)

*uŋ un njap-si pli-ni-m*

1 2 push-INF quit-1SG>2SG-ASS

‘I will stop pushing you<sup>SG</sup>.’

### 5. Transitivity frames and diatheses

#### 5.1 Intransitive

Intransitive (including reflexive) subjects are unmarked. Opgenort (2004 149–152, Ch. 37) reports that the Wambule ‘source’ case-marker, which is clearly analogous to the ergative/instrumental of other Kiranti languages, is used on both intransitive subjects and transitive agents to draw attention to their active role, and may be omitted otherwise.

#### 5.2 Transitive

Ergative case-marking of transitive agents is usual in Kiranti languages, but its Wambule equivalent, the “source” marker, may be omitted if the agentivity is regarded as obvious or unimportant. Case-marking of the agent of impersonal 1<sup>st</sup> person object forms (§4.3.3) and antipassives (§5.3.2) varies between languages.

(25) Bahing transitive (KOKTISALAs13-14)

“...ɔ-wa-dɔsi-m                      gu    sa:-jisi                      ɔ-sami-dɔsi-mi”  
 ...1SG-elder.sibling-DU-ERG    1    kill-23DU>1SG.NPST    1SG-sister-DU-ERG

‘My elders will kill me, my two sisters will!’

In this transitive sentence, the A (‘siblings’) is marked as ergative; the object (‘me’) is absolutive; the A is repeated as an anti-topic (‘sisters’).

Verbs of transfer and giving can have two absolutive objects. The recipient or beneficiary is identified as a core argument, the ‘primary object’ (PO) (Dryer 1986), by the verb agreement morphology.

The basic transitive argument structure admits some variation. Most Sunwar dialects lack object agreement morphology, and human objects are marked by *kali*. Transitive objects in several languages (Thulung, Wambule, Jero, Chamling, Bantawa, Puma, Athpare) may optionally be marked by the Nepali dative/accusative postposition *lāi* (33). The optional use of ergative-marking on subjects and agents in Wambule has been mentioned above.

### 5.3 Diatheses

Van Driem (1987:271) remarks that Limbu transitive verbs can be “labile”, that is, conjugated as intransitive in certain uses and transitive in others. Weidert & Subba (1985:82-83) recognized the Limbu antipassive.

Doornenbal (2009:221-229) distinguishes three valence lowering configurations in Bantawa.

#### 5.3.1 Middle or ‘break’ verbs

‘Break’ (cf. Fillmore 1970) or ‘middle’ verbs have both intransitive and transitive forms, such that the S in the intransitive use (e.g. *the glass* in *The glass broke*) corresponds to the O of the transitive (*He broke the glass*), which alone can have an A (cf. Fillmore 1970).

(26) Bantawa middle or ‘break’ verb (Doornenbal 2009:228)

<i>samba</i>	<i>ker-a</i>	vs	<i>kho-sa-ɔa</i>	<i>samba</i>	<i>ker-u</i>
bamboo	break-PST (intransitive)		he-PRN-ERG	bamboo	break-3>3(SG) (transitive)
‘the bamboo broke’			‘he broke the bamboo’		

### 5.3.2 Antipassive

In the antipassive diathesis, a transitive proposition (27) is related to an intransitive one in which the S corresponds to the transitive A (28). The action is presented as an activity; the object, whether mentioned or not, does not have definite reference. Doornenbal remarks that the case marking of the antipassive agent is ‘doubtful’: either absolutive or ergative (similarly, in Limbu, van Driem 1987:271-273 note 7 and exx. 20, 27).

(27) Bantawa transitive (Doornenbal 2009:224)

*sjam-ʔa      i-pa-ʔo                  i-jaŋ                  khis-u*  
syam-ERG    3OBL-father-GEN    3OBL-money    steal-3>3(SG)

‘Syam stole [transitive form] his father’s money.’

(28) Bantawa antipassive (Doornenbal 2009:224)

*sjam                  khis-a*  
Syam                  steal-PST

‘Syam steals (?stole) [intransitive form].’

Verbs of the ‘break’ type can only be given an antipassive sense (‘he breaks stuff’) by including an indefinite pronominal object (Bantawa *kha*) immediately before the intransitive form of the verb. The verb then indexes the actor as S.

(29) Bantawa antipassive of a ‘break’ verb (Doornenbal 2009:226)

*k<sup>h</sup>o-ci-ʔa                  k<sup>h</sup>a                  mi-hit*  
3-PL-ERG                  ANTIP                  3PL-scorch [intransitive form]

‘They burn things.’ [Cf. transitive *i-hit* ‘they<sup>PL</sup> burn it’, *mi-hitt-uci* ‘they<sup>PL</sup> burn them<sup>NS</sup>’]

Doornenbal (2009:431) also cites *nam-ʔa kha hitt-a* (sun-ERG ANTIP burn-3.PST) ‘the sun was burning (yesterday)’. Note that in both examples the verb form is 3rd person intransitive, but the indexed nominal is ergative-marked.

According to Schikowski (2013:111-119), the antipassive in Kiranti is limited to the South-Eastern and Far Eastern groups.

### 5.3.3 Passive

Passives are not prominent in Kiranti. The Hayu *go*-passive has been mentioned (Ch. 34 §5.8); Belhare has a similar construction (Ch. 35). There is also apparently a Hayu *beg*-passive, which has an exact Nepali parallel (*kuti māgyo* (beat begged) ‘got a beating’).

(30) Hayu *beg*-passive (PALIs7)

"mima uŋ pat-ji tɔp-ji dip-ji siŋtɔŋ lɛ tʰɔŋ-tɔ,  
 thus 2OBL fight-AGT beat-AGT crush-AGT man also bring-IMPER.3SGO

dip bin-ji<sup>14</sup> lɛ tʰɔŋ-tɔ!" paha tahale pəkrai pa pĩ:-kɔ  
 crush beg-AGT also bring-IMPER.3SGO COMP officer arrest do CAUS-3SG>3SG.

“Produce both the man who fought, who beat, who crushed [the other], and the one who was crushed!” So saying, he [the headman] had the officer make the arrests.’

The Limbu invariable passive auxiliary *tet* (van Driem 1987:215-218) is used mainly with the modal ‘to be able’ or with perception verbs like ‘to see’ and a complement (‘be perceived as’). Note that the A of the passivized clause can be retained.

(31) Limbu: passive (SOGHAs49)

‘set-ma suk tet jeba-’l-lɛ’ lɔʳ-ɛ  
 kill-INF be.able PASS shaman-DEF-ERG say-PST

“It can be killed, by the shaman,” he said.’

Allen (1975:74) mentions a passive construction in Thulung, e.g. *dem-la seosimu* ‘to get a beating’, based on *dep* ‘strike’, a (nasalizing) suffix *la*, an otherwise unattested verb *seo(m)*, and the middle/reflexive vector *si(t)*; his informants translated it by the Nepali *beg*-passive.

## 5.4 Causative

Besides the unproductive derivational causatives in some languages (§4.2), all Kiranti languages have productive means of causative formation. Many have chosen to grammaticize the causative or the applicative of

<sup>14</sup> This form is unattested elsewhere: the active participle of ‘beg’ is *bi-ji*.

a verb ‘do’ as a general causative auxiliary. Thus Bahing *pa-ŋa* ‘I’ll do it’, *gu nu pad-u* (I be.good CAUSE-1>3) ‘I’ll make it well’. (See also the Hayu causative |piŋ| (< ‘send’) §5.3.3 and Bantawa |mett| (§5.5).

### 5.5 Deponent/unaccusative

Formally transitive ‘unaccusative’ (Perlmutter 1978) or ‘deponent’ verbs agree with their sole argument as a transitive object (Michailovsky 1997). An example is ‘to boil’:

(32) Limbu (Tamar Khola) Unaccusative verb ‘boil’ (Michailovsky 1997)

*cakwa*      *lokt-u*  
 water      boil-3O  
 ‘the water boiled’

The cognate verbs in Thulung (*loqdiu* ‘it boiled’, Allen 1974:42), Bantawa (*lokt-u*), and Yakkha (Schackow 1915:335-336) have the same property. An ergative agent cannot appear with these verbs unless with a causative auxiliary, thus Bantawa: *cakwa lok-mett-uj* (water boil-CAUS-1SG>3SG) ‘I boil the water.’

With other verbs of this type, e.g. Limbu ‘to be fat’, ‘to get something in one’s eye’, ‘to be soiled’, a (non-agentive) personal argument can appear, indexed by object-agreement morphology on the verb. An instrumental (sometimes labeled “impersonal agent”) may also be present (33), but there is no possibility of an ergative personal agent.<sup>15</sup>

(33) (Limbu) Deponent verb with object-agreement and instrumental (Michailovsky 1997)

*khamm-ɛl-le*    *ne:kt-usi*  
 earth-DF-INST    soil-3>3NS  
 ‘they got soiled with earth’

It is significant that verbs of this type in Limbu, Thulung, and Bantawa all have lexical roots with the postfinal *t* (§4.2); in Hayu (this volume) they have applicative morphology.

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<sup>15</sup> Van Driem (1987:275-276) and Kainla (2002) list several of these Limbu verbs as having either intransitive or transitive forms. This may reflect a dialect difference with Tamar Khola Limbu (Michailovsky 2002).



## 6. Other case frames

### 6.1 Experiencer constructions

Emotional or physical experience is coded in various ways in Kiranti. Bickel has reviewed the ‘possessive of experience’ construction in Belhare (1997b) and experiencer constructions in general in the wider Himalayan context (2004); cf. also Matisoff 1986 for Southeast Asia. We have seen ‘experiencer as goal’ examples among unaccusative verbs (33).

In possessive of experience constructions, the experiencer is coded as the possessor of the supposed site (Matisoff’s ‘arena’) of a physical or psychological feeling, or of the feeling itself; this site or feeling can become the subject of an intransitive verb, e.g. (Limbu) *a niŋwa t’j-ε* (1OBL-mind arrive-PST) ‘I am content/satisfied’; *a luŋwa tuk* (1OBL-liver ache) ‘I miss it’; *a-sik la:k* (1OBL ?hunger sting) ‘I’m hungry’. In Limbu, in the basic, intransitive construction, the stimulus can appear as an absolutive, and the person of the experiencer is not indexed on the verb (34); in a causative construction (‘make-happy’), agreement is with the site of the experience, not with the experiencer (35).

(34) Limbu possessive of experience with absolutive stimulus (SOGHAs157)

*ku-təkkatt-enn-aŋ-mu sarik ku-luŋma tuk ness-ε*  
3OBL-stick-DEF-CONJ-EMPH very 3OBL-liver ache continue-PST

‘He still sorely missed his walking-stick, as well.’

(35) (SOGHAs140)

*ke-niŋwa tas-umbe phe-aŋ ku-ŋg’wa-re mettu*  
2OBL-mind cause.to.arrive-1PLEX>3 COMP-CONJ 3OBL-mat.uncle-ERG say-23SG>3SG

‘‘We will satisfy you,’’ his uncle said.’

Note that in (35) the uncle’s proposed role is not that of the stimulus that will satisfy his nephew (or his nephew’s mind), but that of the agent who will produce the stimulus (etc.). The stimulus is not mentioned or indexed.

In a few examples in Limbu, experiencer-agreement is found on the verb rather than on the site NP. Compare (36) with the more common construction *a-sira thaŋ* (my-?liking comes.up) ‘I am pleased’.

(36) Limbu (DANCES30)

*khombhɛ kha-n-ha<sup>2</sup>-nu wa<sup>2</sup>-ma sira a-dhaŋ pek ləchə ni*  
 thus DIST-DEF-PL-COM be-INF liking 1PLIN-come.up go EVID y'know

‘So one comes to enjoy being with them.’

In the parallel Bantawa expression, the experiencer is both the site-possessor and the (unexpressed) core argument (S) of the verb: *iŋ-niŋa no-ŋa* (1OBL-mind be.good-1SG) ‘I am pleased.’ (Doornenbal 2009:219). As in (36), the site-possessor (experiencer) displaces the site as core-argument of the verb. The experiencer can simply be thought of as the subject of the complex expression, PRON-*niŋa no-ma* ‘PRON be pleased’.

Bantawa also can treat the experiencer as agent and the stimulus (here human) as object: *iŋka-ʔa som tuk-na* (1-ERG lung hurt.for-1SG>2SG) ‘I feel for you’, alternatively *iŋ-som tuk-na* (1OBL-lung hurt.for-1SG>2SG) (same meaning). A similar construction, with the experiencer as agent (indexed on the verb), is cited in Limbu (van Driem 1987 s.v. *luŋma*, cited by Bickel 1997b:149): *a-ndzum-in sa:ʔrik a-luŋma hi:pt-uŋ* (1OBL-friend much 1OBL-liver yearn-1SG>3SG) ‘I miss my friend very much.’ Bickel remarks that agreement with the experiencer is pervasive in Belhare, but that in Limbu, agreement is more often with the site, e.g. the 3rd person object of *tasumbe* (35).

Schackow (2015:274-288) has a thorough discussion of ‘possessive of experience’ constructions in Yakkha and lists some 50 such noun-verb predicates in five classes defined by frames of argument realization. As an example, we may consider what she calls an ‘unexpected pattern’, ‘which leads, oddly enough, to a literal translation “my disgust brings up bee larvae”’ for (37). Her realization frame for the four expressions of this class (omitting the possessive+site element that is common to all ‘possessive of experience’ expressions) is: {P[stim]-nom V-a[3].p[P]}.

(37) Yakkha

*thaŋsu=ga u-cya=ci a-chippa ket-wa-ci=ha*  
 bee=GEN 3SG.OBL-child=NSG 1SG.OBL-disgust bring.up-NPST-3>3NSGP=NMLZ.NSG

‘I am disgusted by the bee larvae.’

Schackow notes (1) that psych-nouns with this class of verb do not take ergative marking, (2) that there is an alternative formulation in which the verb is *ket-waŋ-ciŋ=ha*, a 1SG>3PL form, showing agent agreement with the experiencer. We can retain that *a-chippa keʔma* is an complex NP+PREDICATE expression ‘I loathe —’, and that

in the alternative formulation the predicate explicitly indexes the experiencer in place of the psych-NP, just as in the Limbu and Bantawa examples above.

## 6.2 Reflexive

Reflexive clauses have a single absolutive core argument occupying the functions of both A and O or A and PO (e.g. beneficiary). In the latter case, the Second Object (theme), also absolutive, may also be present.

(38) Khaling reflexive (with second object) (Jacques et al. 2015 s.v. *kārne* (*kʰr*) ‘carry’)<sup>16</sup>

*ʔuŋ dzaklʌ kār-si-ŋʌ*

1[ABS] food carry-REFL-1SG

‘I carry food for myself.’

In some languages (e.g. Thulung, Wambule, Bantawa), the reflexive is one reading of a general ‘middle’ form.

Reflexive verbs are formed either by a stem-augment (Bahing), by special agreement suffixes, or by a vector V2. Reflexive suffixes are found in Limbu, Bantawa, Chamling, Chhintang and the western languages Hayu (Ch 34), Khaling (Table 31.1), and Wambule. Often there is no single reflexive marker found in the same position in all forms. Reflexive vectors are used in the Yakkha group (cf. Belhare, Ch. 35).<sup>17</sup> The Yamphu reflexive vector is |cimmu-s ~ cimmu| (39); Yakkha has a reflexive vector *ca* (< ‘eat’) and a ‘middle’ vector *siʔ*, clearly related to reflexive suffixes in other languages, used in cases of ‘low intentionality and volitionality’.

(39) Yamphu reflexive (Rutgers 1998:169)

*maik toŋ-jimmu-l-lo*

black make-REFL-NPST-REPORT

‘She painted herself black.’

(40) Sunwar reflexive (Borchers 2008:140)

*go gup-sa-ŋ*

1SG wear-REFL.PST-1SG

‘I put it [a hat] on.’

<sup>16</sup> This Khaling reflexive is also related to an applicative *kārne* (*kʰrt*) ‘bring for someone’.

<sup>17</sup> A reflexive suffix or stem-extension followed by intransitive affixes could resemble a vector. I have taken regularity of distribution and placement of the reflexive marker as a criterion for vector-hood in this case.

### 6.3 Benefactive

Benefactive constructions are realized in different ways across Kiranti. In Hayu (Ch. 34) the recipient may be marked by *li:si* ‘for’ (and indexed or not on the verb), but more often, in Hayu as elsewhere, the beneficiary is unmarked, but is indexed on the verb as (primary) object.

In Hayu, the ditransitive construction can be used with most verbs. An applicative form of the verb is used if available (Ch. 34).

In Bahing, the verb ‘give’ is used with a converb.

(41) Bahing benefactive with converb <NINAMs143>

*nani gyp-ti gi-ji!*  
child pick-CONV give-2SG>1SG.IMP

‘Child, pick it [a tick] off for me!’

In both Thulung and Dumi (Van Driem 1993 205–206), verb compounds with benefactive V2 are found

(42) Thulung benefactive V2 *saŋ* (Lahaussais 2002:212–214)

*go oram nem a-lwak-lai di-saŋ-pu*  
1SG this house 1OBL-y.brother-DAT leave-BEN-1SG>3SG

‘I leave this house to my brother.’

This is also the usual construction in the eastern languages. Yamphu is reported to have three ‘dative auxiliaries’, a general ‘DAT’, ‘help’, and ‘bring for’ (33).

(43) Yamphu benefactive (Rutgers 1998:179)

*na.ni, joŋa jaŋ-ghik-khaŋ-m-e!*  
child water carry-bring.for-CONATIVE-1O-IMPER

‘Child, see if you can’t bring me some water!’

The 1st person beneficiary (‘me’, here not represented by a pronoun) is indicated as primary object by the agreement morphology of the compound verb; the theme (‘water’) is the second object. The benefactive vector ‘bring.for’ is itself an applicative derivative *khi?ma* related to *khi:ma* ‘carry’. The example contains a second vector *khaŋ* ‘CONATIVE’, related to the independent verb ‘see’. Taken separately, the three verbs have quite different argument structures.

In Yakkha, benefactive compounds are formed with the vector *pi?* (< ‘give’). Shackow (2015:371) reports that in this construction V1 stems of certain shapes are regularly augmented by *t* (if they do not already have postfinal *t*), which she considers to reflect the applicative suffix, hitherto believed to have become unproductive in Kiranti. Stems of the shape *CVk(s)* become *CVkt*, while *CVp(s)* remains unaffected.

(44) Yakkha benefactive (Schackow 1915:373)

*eko japmi=ga o-ken en-d-hak-t-u-bi-na*  
 one person=GEN 3OBL-tooth uproot-BEN-V2.SEND-BEN-3O-V2.GIVE[3O.PST]=NMLZ.SG

‘He pulled out someone’s tooth.’

Limbu is exceptional in that the two verbs may diverge in object-agreement (do-it benefit-you), together reflecting the ditransitive argument structure of the compound.<sup>18</sup>

(45) Limbu <SOGHAs115>

*nu-rik cog-uj pi-nij*  
 good-MANNER do-1SG>3SG give-1SG>2PL

‘I’ll go a good job for you<sup>PL</sup>.’

## 7. Nominalization

Kiranti languages make frequent use of “nominalization” of verbs, locative or temporal adverbs, and clauses, creating nominals or adnominal modifiers which, in the absence of a head, can function as nominals. Clausal nominalizations with finite or non-finite predicates can serve as relative clauses, sentence complements, or subordinate clauses. Examples can be found in the articles on Hayu, Chamling, and Belhare in this volume. Hayu (this volume) has a particularly rich set of deverbal derivations nominalizing participant roles like agent/actor, patient, manner, place. Watters (2008) discusses nominalization in a dozen Kiranti languages, Kham, and a few other Nepal languages.

Free-standing nominalization of complete sentences, which Matisoff (1972) described in Lahu, is common in Kiranti and has been viewed as related to information structure, e.g. by Ebert 1994 and Bickel 1999. Rutgers (1998) shows that one use of the Yamphu “factive” nominalizer in narrative is to focus on a whole situation as relevant background to a main sequence of events (cf. Lambrecht 1994 on “sentence focus”).

<sup>18</sup> As suggested earlier, I have held off limiting the definition of compound verb *a priori*.

(46) Yamphu (Rutgers 1998:246)

*ikko toŋara cɛss-uŋ.      ikko toŋara jaŋ-ma-nuŋ      khad-iŋ.      ikko ja:ket*  
one stick cut-1SG>3SG one stick carry-INF-SOC go-1SGSO one jacket

*wa:wa-æ      pi:-ʔa-braʔa,      akko caks-uŋ-æ.*  
e.brother-ERG give-PURP-PP that put.on-1SG>3SG-FACT

‘I cut a stick [finite]. I went with a stick in my hand [finite]. I had put on a jacket, the one elder brother had given me [nominalized sentence].’

For a Belhare example in conversation see Ch. 35, ex. (10).

Van Driem (1987, 1993) considers that in Dumi and Limbu nominalizing suffixes on independent sentence verbs are in fact the mark of imperfective aspect, unmarked verbs being perfective. (He also discusses the problem of distinguishing nominalization from aspect-marking.) This analysis has not been widely adopted (see Ebert 1994:35, Doornenbal 2009:205).

Ebert notes that questions in Athpare are nominalized, and this appears to be the case in other languages of the Yakkha group, and to be common in Bantawa (Doornenbal 2009:195) and Panchthare Limbu (47).

(47) Limbu (Panchthare): Nominalized question (Weidert and Subba 1985:315)<sup>19</sup>

*ta:ndik      kɛ-be:k-p'-i?*  
tomorrow 2-go-NML-Q

‘Will you go tomorrow?’

(A reading with argument focus, ‘Is it tomorrow that...?’ is probably also possible.) Tamar Khola Limbu prefers a variant without nominalization (*ta:ndik kɛ-be:kk-i?*).

Nominalization of total questions suggests a higher predicate ‘Is it that...?’ with the whole proposition as complement. This depersonalizes the question, making it less intrusive (cf. Watters 2008).

## 7.1 Relatives

Relative clauses are generally marked by a nominalizer, which in fact most often marks them as adnominal modifiers. The nominalizer is suffixed to the verb of the relative, which may be a finite or a gerundive form.

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<sup>19</sup> These authors simply gloss *pi* ‘interrogative particle’. Another apparently nominalizer-based question particle, *pe*, is glossed as a politeness marker.

Examples of relative clauses with non-finite active or passive participles have been presented in §§3.5, 4.9.3, 4.9.4.

In Hayu (this volume) and Bahing all relatives have non-finite verb forms: an actor-nominal/active participle (Bahing suffix *ba* ‘ACT’) (16), or a general passive participle (Bahing *na* ‘PPT’).

(48) Bahing relative <BEGINs139>

*mɛm sa:-na tɛlpø-kha-di dzhək-tase*  
 that kill-PPT kinsman-place-in arrive-PST.3DU

‘They<sup>DU</sup> arrived at the place of the kinsman who had been killed.’ (cf. *sa:ta* ‘he killed him’)

Wambule similarly has active and passive participle markers. Note that the passive participle in the example refers to the location, not the object.

(49) Wambule (Opgenort 2004:370)

*nana-m si-co mujo le-bumco lam-no*  
 before-NMLZ die-ACT person take-PPT road-LOC

‘on the road on which the dead person was carried’

Thulung relatives can be formed similarly (markers *pa* ‘ACT’, *ma* ‘PPT’). But it also has relative clauses with finite verbs and the general nominalizer *m/mi* (Allen 1975, Lahaussais 2004).

A widespread pattern in Dumi, Khaling, and the eastern languages is a non-finite active participle, used when the head has the function of S or A in the relative, and a general nominalizer with a finite verb when the head is an O or a non-core argument. Compare the use of the Limbu non-finite active participle (prefix *kɛ*) in (50, 51) with that of the unprefix finite form (52); both have the nominalizing suffix *pa*.

(50) Limbu <SOGHAs206>

*kɛ-si-ba ku-lamsa*  
 ACT-die-NMLZ 3-nephew

‘his dead nephew’

When the relative itself functions as head, it can carry the Limbu definite article (51).

(51) Limbu <SOGHAs126>

*kɛ-si-b'-ɛn kɔ ha:p he:kt-ɛ*  
 ACT-die-NOM-DEF TOP weep begin-23SG.PST

‘The dead man began to weep.’

The nominalized finite verb is used to form a non-actor relative.

(52) Limbu <ROADs42>

*anige kam cog-umbɛ-ba pəisa-n a-bɛr-ɛ*  
1PLEX work do-1PLEX>3-NMLZ money-DEF 2>1(NSG)-give-IMP

‘Give us the money we worked for!’

In Yakkha, the active participle is non-finite, marked by the suffix *khuba*, while the verb of non-S/A relatives is a finite form, followed by one of the general nominal markers *na* ‘SG’ or *ha* ‘PL’. (These resemble the Limbu definite article and plural marker, but the Limbu morphemes can only mark NP heads.)

(53) Yakkha (Schackow 2014:399)

*paip pek-khuba babu*  
pipe break-ACT boy

‘the boy who breaks/broke pipe’

(54) Yakkha (Schackow 2014:404)

*beula-ha khut-u-ha tephen*  
groom-ERG bring-3O-NMLZ.PL clothes

‘the clothes brought by the groom’

In Bantawa, both active and passive participles are reported. The active participle is a non-finite prefixed form, as in Limbu, but with the suffix *ba* it usually indicates a profession or other lexicalized meaning. The passive participle is also a non-finite form, composed of the infinitive with the added suffix *yʰn* ‘word, thing’ and specialized to indicate a patient. The most versatile adnominal modifier is a genitive-marked finite form; the two participles seem more like actor and patient nominals. This is close to the situation in Thulung.

## 8. Subordinate clauses

In a review of Kiranti converbs (i.e. non-finite, non adnominal forms), Ebert (2008) found that the majority of subordinate clauses used finite verbs, except in Hayu (Ch. 34 §6.9).

### 8.1 The conjunctive subordinate

The equivalent of the ubiquitous Nepali conjunctive converb in *-era* is non-finite only in Hayu.



Clauses which are parallel in frequency and distribution to the Nepali conjunctive clause are identified in several languages (Ebert 2003a). In Hayu, this is a reduplicated converb, i.e. non-finite as in Nepali (Ch. 34 §6.9). In Thulung there are several candidates: Lahaussais (2005:239-283) distinguishes ‘sequencers’ (*ma* ‘anterior’,<sup>20</sup> *lo* ‘simultaneous’), which govern finite verbs, from converbs (*saka* ‘anterior’, *to* ‘simultaneous’), which mark stem gerunds; both link their clause to a matrix clause. Example (55) is a Thulung version of the well-known ‘— having said, he said’ conjunctive complementizer (cf. Nepali ‘—’ *bhānera bhānyo*).

(55) Thulung anterior sequencer used as a complementizer (Allen 1975:79)

‘—’    *rək-ta-ma*                      *rək-sod-dy*  
 —    speak-3SG.PST-ANTERIOR    speak-DEFINITIVE-3SG>3SG.PST  
 ‘He said “—”.’

## 8.2 Converbs

Negative converbs (‘without —ing’) are non-finite forms in all languages; simultaneous converbs (‘while — ing’) are non-finite in all but Limbu (cf. Yamphu ‘carrying a stick’ (36)).

## 8.3 Adverbial subordinates

Subordinated clauses are generally nominalized and marked as non-core arguments of an embedding clause. In Limbu, the most common subordinating suffix is (*ε*)*lle*, a combination of the definite article, *εn*, used as a nominalizer, and the ergative/instrumental/adverbial marker *rε*. In Hayu, the verb of the subordinate is a non-finite root gerund; in the other languages it is finite.

(56) Limbu <DANCES48>

*jaʔ*    *ra:kt-i*    *peg-ige-'lle*    *anige*    *nu-ba*                      *nis-umsimbe*                      *menchia-haʔ*  
 paddy    dance-1PL    go-1PLEX-SUB    1PLEX    good-NOM                      see-1PLEX>3PL                      woman-PL

‘As we went on dancing, we saw them as beautiful, the women.’

<sup>20</sup> Thulung *ma*, like Limbu *ay*, also functions as a postclitic conjunction ‘too, also’. Note that the Nepali conjunctive suffix *era* combines a perfect stem-marker *e* with *ra* ‘and’.

## 9. Information structure and focus

All of the languages have sets of frequently-used topic and focus particles ('INTENSIVE', 'only', 'CONTRARY TO EXPECTATION') and discourse particles ('reported', 'evidential/inferential' (borrowed from Nepali), 'REASSURING', 'ANIMATING'). Topical elements may appear with lowered intonation after the verb in an anti-topic position (25, 31).

### Web resources

DoBeS portal: <http://dobes.mpi.nl>

ELAR: <http://elar.soas.ac.uk>

Pangloss: [http://lacito.vjf.cnrs.fr/pangloss/index\\_en.ht](http://lacito.vjf.cnrs.fr/pangloss/index_en.ht)

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