

# Some Remarks on Wambule Historical Phonology

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## Introduction

Wambule is the name of a Kiranti language<sup>9</sup> which is spoken by more than 5,000 people living around the confluence of the Sunkosi and Dudhkosi rivers in eastern Nepal. The Wambule area comprizes the southernmost part of Okhaldhunga district, the westernmost part of Khotang district, the northernmost part of Udaypur district, and the northeasternmost part of Sindhuli district.

This paper is part of an ongoing investigation into the reconstruction of Proto-Kiranti (PK), the hypothetical ancestor language of the Kiranti family, and the internal classification of the various Kiranti languages (Opgenort 2004a, 2005, forthcoming). The goal of this paper is to examine a number of salient phonological developments which occurred in Wambule and which characterize it as a distinctive member of the Kiranti language family.

## Data

I compared the Wambule data which I personally collected in Nepal from 1996 to 2003 with data from other languages currently available in my Comparative and Etymological Kiranti Database (CEKiD). This database contains lexical and morphological material on many Kiranti languages as well as hundreds of reconstructed Proto-Kiranti etyma.

The language data used here are taken from the following publications: Bahing by Hodgson (1857); Bantawa by Winter (2003) and Doornenbal (2009); Chamling by Hodgson (1857) and Ebert (1997, 2003); Chepang by Caughley (2000); Dumi by Hodgson (1857) and Van Driem (1993); Hayu by Hodgson (1857) and Michailovsky (1981); Jero by Opgenort (2005); Khaling by Toba and Toba (1975) and Toba (1979); Kham by Watters and Watters (1973); Kulung by Hodgson (1857) and Tolsma (1999); Limbu by Van Driem (1987); Sunwar by Bieri and Schulze (1971, 1973a, 1973b) and Borchers (2007); Thulung by Allen (1975); Tilung by Toba (2004) and Rāpacā (VS 2065); Wambule by Opgenort (2004b); and Yamphu by Rutgers (1998).

In the present discussion, Western Kiranti (WK) comprizes the following languages: Hayu, Sunwar, Bahing, Jero, Wambule, Khaling and Dumi. Midwestern Kiranti (MK) includes Thulung and Tilung. Central Kiranti (CK) is represented by Chamling, Bantawa and Kulung, and Eastern Kiranti (EK) by Yamphu and Limbu.

## Phonological developments

The Kiranti languages can be divided into various subgroups on the basis of phonological developments regarding initial obstruents and sonorants, and innovations in the rhotic sphere and consonant clusters (van Driem 1990; Michailovsky 1994; Opgenort 2004a, 2005, forthcoming). I reconstruct the following Proto-Kiranti initial consonants. The consonants discussed in this paper are encircled by a dotted line.<sup>10</sup>

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<sup>9</sup> The Kiranti languages form a major family of Tibeto-Burman languages spoken in Nepal.

<sup>10</sup> In this paper, I will not discuss the development of front or apical \*r- to y- and that of back or dorsal \*ʃ- to y-. In Opgenort (forthcoming), I claim that innovations in the rhotic sphere seem to be rather irregular in Western and Central Kiranti, and cannot yet be successfully used for grouping non-Eastern Kiranti languages. By contrast,

*p-	*t-	*c-	*k-
*ʔp-	*ʔt-	*ʔc-	*ʔk-
*ph-	*th-	*ch-	*kh-
*b-	*d-	*j-	*g-
			*kw
*m	*n		*ŋ
(*ʔm)	(*ʔn)		
	*r		*ʃ
	*l		
	(*ʔl)		
*w		*y	*h
	*s		

The obstruents include three positions of articulation (bilabial, alveolar, velar) and one series of affricates (alveolar). I propose a four-way contrast in manner of articulation for obstruents: voiceless, preglottalized, voiceless aspirated and voiced. The two most salient series of obstruents that may be used for Kiranti subgrouping are the preglottalized proto-series \*ʔp-, \*ʔt-, \*ʔc- and \*ʔk- and the voiced proto-series \*b-, \*d-, \*j- and \*g-, since these series have undergone different developments in the various Kiranti languages. By contrast, the plain voiceless proto-series \*p-, \*t-, \*c- and \*k- and the voiceless aspirated proto-series \*ph-, \*th-, \*ch- and \*kh- are not used for subgrouping because the plain voiceless proto-series have remained essentially unchanged in the modern Kiranti languages (i.e. \*C > C) and the reconstruction of a voiceless aspirated series is somewhat doubtful. Still, the historical development of \*ch- may also be significant for the classification of Wambule within Kiranti.

Other developments that can be used for the classification of Wambule are that of labiovelar \*kw- and that of the preglottalized sonorant series \*ʔl-, \*ʔm- and \*ʔn-.

#### Retention of voiced \*b-, \*d-, \*j- and \*g-

The first phonological development, which sets Central and Eastern Kiranti apart from Western and Midwestern Kiranti, is the devoicing of the voiced proto-series \*b-, \*d-, \*j- and \*g-. The Wambule reflexes of the voiced proto-series have voiced obstruents. The retention of the voiced proto-series is typical for Western and Midwestern Kiranti.<sup>11</sup> Here are some examples:

**PK \*bit ‘cow’**

Eastern Kiranti is characterized by systematic innovations in the rhotic sphere, where both \*r- and \*ʃ- merge with \*y-. It may well be the case that in Eastern Kiranti \*r- initially merged with \*ʃ-, and that the resulting dorsal rhotic \*ʃ- eventually merged with \*y-. In Western Kiranti, by contrast, \*r- did not merge with \*ʃ- and \*y-, but was kept distinct. However, here the phoneme \*ʃ- seems to have been reanalysed: in some languages \*ʃ- was absorbed by \*r- or by \*y-, but in Kulung \*ʃ- became a voiced velar stop, except in the case of the word for the trade good ‘salt’, which is perhaps a loan word. The split of \*ʃ- into \*r- and \*y- remains largely unaccounted for.

<sup>11</sup> Note that shared retention is generally a weaker argument for subgrouping than a shared innovation.

WK/MK: Sunwar *bii*, Bahing *bing* ‘bull’, Jero *biya*, Wambule *biya*, Khaling *bay*, Dumi *bhi?i* (*b*-expected), Thulung *beno*, Tilung *bī*

CK/EK: Chamling *pyupa*, Bantawa *pit-ma*, Kulung *pi*, Yamphu *bik* (*p*-expected), Limbu *pit*

**PK \**del* ‘village’**

WK/MK: Bahing *dyal*, Jero *dəl*, Wambule *dyal*, Khaling *del*, Dumi *de:l*, Thulung *del*, *Del*

CK/EK: Bantawa *ten*, Kulung *tel*, Limbu *ten* ‘place’

**PK \**ja-* ‘eat’**

WK/MK: Hayu *dza-*, Sunwar ‘*dza-tsa*, Bahing *jáwo*, Jero *jacap*, Wambule *jacam*, Khaling *jō-nā*, Dumi *dzuni*, Thulung *jam* ‘food’, Tilung *jukhmā*

CK/EK: Chamling *ca-ma*, Bantawa *ca-(a)*, Kulung *cama*, Yamphu *ca-ma*, Limbu *cama*

**PK \**gup* ‘tiger’**

WK/MK: Sunwar *gupsu*, Bahing *gupsa*, Jero *gupso*, Wambule *gupso*, Thulung *gupsiu*

CK/EK: Bantawa *ki-wa*, Yamphu *ki-ba*, Limbu *keba*

Some other Wambule words that reflect Proto-Kiranti \**b-* are *bakcam* ‘to be, sit’, *bubu* ‘white’ and *bukcam* ‘to get up, stand up’. Proto-Kiranti \**d-* is reflected in e.g. *dukcam* ‘to shake’, *dumcam* ‘to become’ and *dwakcam* ‘to fall down’. Proto-Kiranti \**j-* is reflected in e.g. *japcam* ‘to buy’, *jikcam* ‘to break’ and *jawkcam* ‘to know’. Proto-Kiranti \**g-* is reflected in e.g. *gagbo* ‘crow’, *gucam* ‘to pick up’ and *gwakcam* ‘to give’.

**Deglottalization of preglottalized \**?p-*, \**?t-*, \**?c-* and \**?k-***

The second phonological development, which sets Central Kiranti apart from Eastern Kiranti, and Midwestern Kiranti apart from Western Kiranti, is the deglottalization of the preglottalized series \**?p-*, \**?t-*, \**?c-* and \**?k-*. The Wambule reflexes of the preglottalized proto-series have voiceless obstruents. The innovation of \**?C-* > *C-* is typical for Western Kiranti. By contrast, in Midwestern and Central Kiranti, the preglottalization of \**?p-* and \**?t-* was accompanied by voicing. Here are some examples:

**PK \**?pak* ‘pig’**

WK: Hayu *póg*, Sunwar *poo*, Bahing *po*, Jero *pa*, Wambule *pa*, Khaling ‘*po*, Dumi *po?o*

MK: Thulung *boa*, Tilung *bo*

CK: Chamling *bose*, Bantawa *bak*, Kulung *bo*:

EK: Yamphu *akma*, Limbu *phak*

**PK \**?tuŋ-* ‘drink’**

WK: Hayu *tū-ta* ‘drunk’, Sunwar *tuu-tsa*, Bahing *túgno*, Jero *tu:cap*, Wambule *tu:cam*, Khaling *tu-nā*, Dumi *tīŋŋi*

MK: Thulung *qu(ŋ)-*, Tilung *duŋma*

CK: Chamling *dungma*, Bantawa *duŋ-ma*, Kulung *du:ma*

EK: Yamphu *uŋma*, Limbu *thuŋma*

**PK \**?kaŋ-* ‘look’**

WK: Sunwar *koo-tsa* ‘see’, Bahing *kwó-gno* ‘see’, Jero *kicap*, Wambule *kwacam*, Khaling ‘*ko-nā* ‘know how to do something’

MK: Tilung *keimā* ‘see’

CK: Chamling *khanga-*, *khō-*, Bantawa *khaŋ-(u)*, Kulung *kho:ma* ‘see’

EK: Yamphu *khaŋma*

**PK \**?cik* ‘bird’**

WK: Sunwar ‘*tsiikbi*, Bahing *chikba*, Jero *cikmu*, Wambule *cwagbo*

MK: Thulung *cəkpu*

CK: Bantawa *choŋ-ga*, Kulung *chowa*  
 EK: Yamphu *soŋ(w)a*

Some other Wambule words that reflect Proto-Kiranti \*ʔp- are *paccam* ‘to cause to do’, *pwaccam* ‘to tie, bind’ and *picam* ‘to come across a horizontal plane’. Proto-Kiranti \*ʔt- is reflected in e.g. *teicam* ‘to make drink’, *tupcam* ‘to beat, strike’ and *twapcam* ‘to beat, play’. Proto-Kiranti \*ʔc- is reflected in e.g. *cicimo* ‘mouse’, and perhaps in *carja* ‘millet’ and *cumcam* ‘to catch’ (the latter two may also reflect \*c-). Proto-Kiranti \*ʔk- is reflected in e.g. *kuksyal* ‘cloud’, *kwakcam* ‘to bite, peck’ and *kwamcam* ‘to cover’.

#### Spirantization of Proto-Kiranti \*ch-

A additional sound change in the obstruent series that occurred in some Western Kiranti languages, including Wambule, Jero and Bahing, is the development of Proto-Kiranti \*ch- to s-, but the evidence for this development is still rather circumstantial. The change \*ch- > s- also occurred in Eastern Kiranti, but this is most likely an independent development.

#### PK \*cham ‘song’ (compound with -laŋ ‘language, word, speech’)

WK: Bahing *swálong*, Jero *sa:ʔleŋ*, Wambule *sa:laŋ*

MK: no data

CK: Bantawa *cham*, Kulung *cham*

EK: Yamphu *semluma*, Limbu *sam-lo*

#### Glottalization of labiovelar \*kw-

Another significant sound change that occurred in Wambule is reflected in words with bilabial implosive stops in Bahing (transcribed as ʔb-), Sunwar (transcribed as bw-), and Wambule (transcribed as b-), which might be traced back to Proto-Western Kiranti \*ʔw- (or \*ʔb-) corresponding to prior labiovelars because the preglottalized Western Kiranti segments correspond to velars in closely related and more distantly related Tibeto-Burman languages, in particular Kham and Chepang.

#### PK \*kwar- ‘wound’

Bahing ʔbar, Wambule *bari*

WK: Hayu *buʔma*, Sunwar *gaar*, Jero *mari*, Khaling *kwaar*, Dumi *kar*

MK: Thulung *par* ‘sore, skin lesion of any kind’

CK: Bantawa *khen*, Kulung *kher*

EK: Yamphu *huwa*, Limbu *ka:n*

Kham *khxtera*, Chepang *khay*

#### PK \*kwa- ‘to eat, bite’

Sunwar *bwa-*, Bahing ʔba-, Wambule *bacam*

WK: Jero *macap*, Khaling *bət-*

MK: Thulung *p(e)-*, Tilung *khemā*

CK: no data

EK: no data

Kham *kxya* ‘eat (chewy or hard things)’

Some other Wambule words that reflect Proto-Kiranti \*kw- are *bala* ‘shadow, spirit’ *bambu* ‘cheek’, *basyam* ‘shoulder’ and *bo* ‘chicken’. In Wambule, \*kw- > \*ʔw- > \*ʔm- > b-, whereas in Jero \*kw- > \*ʔw- > \*ʔm- > m-.

#### Innovation (or retention) of a preglottalized liquid

Some Wambule and Jero dialects share the presence of preglottalized ʔl-, which may either reflect Proto-Kiranti \*ʔl- or represent a typical ‘Chaurasia’ (i.e. the theoretical language unit combining Wambule and Jero) innovation for which no conditioning factors can be found, except prefixes that are no longer traceable.

**PK \*ʔlaŋ ‘foot, leg’**

Jero *ɔsu* (possibly \*ʔɔsu)<sup>12</sup>, Wambule *ʔɔsu, lwasu*

WK: Hayu *le*, Sunwar *-li* in *khoyli*, Bahing *-li* in *kho'li*, Khaling *-l* in *syál*, Dumi *-lɪ* in *phoʔlɪ*

MK: Thulung *-l* in *khel*, Tilung *philuk*,

CK: Chamling *-lu* in *phílú*, Bantawa *laŋ*, Kulung *ɔŋ*

EK: Yamphu *laŋ*, Limbu *laŋ*

Some other Wambule words that reflect Proto-Kiranti/Proto-Chaurasia \*ʔl- are (*ʔ*)*la* ‘arm, hand’, (*ʔ*)*lam* ‘road, path’, (*ʔ*)*lima* ‘lie’ and (*ʔ*)*li:cam* ‘to sell’.

**Innovation (or retention) of preglottalized nasals**

The most important phonological difference between Wambule and the other Kiranti languages is the presence of implosives *b̥-* and *d̥-*, corresponding to nasal *m-* and *n-* in other Kiranti languages. The glottalization of *m-* and *n-* in Wambule may either reflect Proto-Kiranti \*ʔ*m-* and \*ʔ*n-* or represent a typical Wambule/Chaurasia innovation for which no conditioning factors can be found, except prefixes that are no longer traceable. In Jero, Proto-Kiranti/Proto-Chaurasia \*ʔ*m-* and \*ʔ*n-* appears to have been deglottalized.

**PK \*ʔmik ‘eye’**

Wambule *bisi*

WK: Hayu *mé-k*, Sunwar *miiiksi*, Bahing *michi*, Jero *misɪ*, Khaling *mas*, Dumi *miksi*

MK: Thulung *miksi*, Tilung *mikc̄*

CK: Chamling *micu*, Bantawa *múk*, Kulung *muksi*

EK: Yamphu *mik*, Limbu *mik*

**PK \*ʔniŋ ‘name’**

Wambule *dí*

WK: Sunwar *ne*, Bahing *ning*, Jero *ni*, Khaling *nang*, Dumi *nɪ*

MK: Thulung *nəŋ*, Tilung *nung*

CK: Chamling *nung*, Bantawa *nūŋ*, Kulung *niŋ*

EK: Yamphu *niŋ*, Limbu *miŋ*

Some other Wambule words that reflect Proto-Kiranti/Proto-Chaurasia \*ʔ*m-* are *beiso* ‘buffalo’, *bico* ‘female’ and *bulum* ‘tail’. Proto-Kiranti/Proto-Chaurasia \*ʔ*n-* is reflected in e.g. *ducam* ‘to be good’, *dusum* ‘nose’ and *dwabu* ‘ear’.

**Retention of consonant clusters**

Most Western Kiranti languages, including Wambule and Jero but excluding Dumi, have /Cr-/ and /Cl-/ clusters which consist of an initial bilabial or velar plosive plus \*l or \*r. Central and Eastern Kiranti languages such as Bantawa, Kulung, Yamphu and Limbu lack these clusters. The lack of clusters is a non-Western Kiranti innovation.

**PK \*blo ‘arrow’**

WK: Hayu *blo*, Sunwar *-bra* in *libra*, Bahing *blá*, Jero *blu*, Wambule *blo*

MK: Thulung *blə* ‘metal arrow head’

CK: Bantawa *bhe* (*be* expected), Kulung *bei*

EK: Yamphu *-la* in *thula*, Limbu *-la* in *to:ŋ-la* ‘arrow-stick’

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<sup>12</sup> In written Jero, the phoneme /ʔl/ is found in \*ʔlā ‘hand’, which corresponds to Wambule \*ʔla.

Some other Wambule words that exemplify the retention of consonant clusters are *brikcam* 'to break, burst', *glwamcam* 'to lie down', *gramji* 'hate', *kraccam* 'to bite, gnaw', *plyacam* 'to leave, quit' and *prwakcam* 'to run'.

### Conclusion

Wambule shows traces of various phonological changes that occurred in the Kiranti language family. Firstly, Wambule exemplifies a number of typical Western Kiranti features, such as the retention of the voiced proto-series \**b-*, \**d-*, \**j-* and \**g-* and that of /*Cr-*/ and /*Cl-*/ consonant clusters, innovations in (i.e. deglottalization of) the preglottalized series \**?p-*, \**?t-*, \**?c-* and \**?k-* and a possible spirantization of Proto-Kiranti \**ch-*. Secondly, like Bahing and Sunwar, Wambule has a bilabial implosive stop that can be traced back to a prior labiovelar \**kw-*. Then, like Jero, but unlike all the other Kiranti languages, Wambule has a preglottalized lateral *?l-*, which may be a retention of Proto-Kiranti \**?l-* or represent an innovation. Finally, unlike all the other Kiranti languages, Wambule has implosive stops *b-* and *d-*, which may be a reflect of Proto-Kiranti \**?m-* and \**?n-* or represent a language-specific innovation. The sum of these phonological developments, especially the intricate changes in the glottalic range, characterizes Wambule as a unique member of the Kiranti language family.

### References

- Allen, Nicholas J. 1975. *A Sketch of Thulung Grammar*. Ithaca: Cornell University [Cornell University East Asia Papers no. 6].
- Benedict, Paul K. 1972. *Sino-Tibetan: A Conspectus*. Cambridge: Cambridge University Press.
- Bieri, Dora; and Schulze, Marlene. 1971. *A Vocabulary of the Sunwar Language*. Kathmandu: Summer Institute of Linguistics.
- Bieri, Dora; and Schulze, Marlene. 1973a. "Chaining and spotlighting: Two types of paragraph boundaries in Sunwar". In: Hale, Austin (ed.), *Collected papers on Khaling, Kulunge, Darai, Newari, Chitwan Tharu* 389-400. Kirtipur: Summer Institute of Linguistics and the Institute of Nepal and Asian Studies.
- Bieri, Dora; and Schulze, Marlene. 1973b. "An approach to discourse in Sunwar". In: Hale, Austin (ed.), *Clause, Sentence, and Discourse Patterns in Selected Languages of Nepal* Vol. 1, 401-462. Norman, Oklahoma: Summer Institute of Linguistics.
- Borchers, Dörte. 2007. *A Grammar of Sunwar. Descriptive Grammar, Paradigms, Texts and Glossary*. Ph.D. diss, Leiden University.
- Caughley, Ross Charles. 2000. *Dictionary of Chepang, a Tibeto-Burman language of Nepal*. Canberra: Research School of Pacific and Asian Studies, Australian National University [Pacific Linguistics, No. 502].
- Doornenbal, Marius. 2009. *A grammar of Bantawa: Grammar, paradigm tables, glossary and texts of a Rai language of Eastern Nepal*. Ph.D. diss, Leiden University.
- van Driem, George. 1987. *A Grammar of Limbu*. West Berlin: Mouton de Gruyter.
- van Driem, George. 1990. "The fall and rise of the phoneme /r/ in Eastern Kiranti: sound change in Tibeto-Burman". *Bulletin of the School of Oriental and African Studies* LIII (1): 83-86.
- van Driem, George. 1993. *A Grammar of Dumi*. Berlin: Mouton de Gruyter.
- van Driem, George. 2001. *Languages of the Himalayas*. Volumes 1 and 2. Handbook of Oriental Studies. Section Two: India. Leiden/Boston/Köln: Brill.
- Ebert, Karen. 1997. *Camling (Chamling)*. München: Lincom Europa.
- Ebert, Karen. 2003. "Camling". In: Thurgood, Graham; and LaPolla, Randy J. (eds.), *The Sino-Tibetan Languages* 533-545. London & New York: Routledge.
- Hodgson, Brian Houghton. 1857. "Comparative Vocabulary of the Languages of the broken Tribes of Népal", *Journal of the Asiatic Society of Bengal* XXVI, 333-371.
- Michailovsky, Boyd. 1981. *Grammaire de la langue hayu*. Ph.D. dissertation, University of California at Berkeley.

- Michailovsky, Boyd. 1994. "Manner vs. place of articulation in the Kiranti initial stops". In: Kitamura, Hajime; Nishida, Tatsuo; and Nagano, Yasuhiko (eds.), *Current issues in Sino-Tibetan linguistics* 766-772. Osaka.
- Opgenort, Jean Robert. 2004a. "Implosive and preglottalized stops in Kiranti", in *Linguistics of the Tibeto-Burman Area*, Vol. 27.1, 1-27.
- Opgenort, Jean Robert. 2004b. *A Grammar of Wambule. Grammar, Lexicon, Texts and Cultural Survey of a Kiranti Tribe of Eastern Nepal*. Brill's Tibetan Studies Library. Languages of the Greater Himalayan Region, 2. Leiden: Koninklijke Brill.
- Opgenort, Jean Robert. 2005. *A Grammar of Jero. With a Historical Comparative Study of the Kiranti Languages*. Brill's Tibetan Studies Library. Languages of the Greater Himalayan Region, 3. Leiden: Koninklijke Brill.
- Opgenort, Jean Robert. Forthcoming. "A note on Tilung and its position within Kiranti", in *Himalayan Linguistics* (June 2011).
- Rāpacā, Lāl. VS 2065. "Kirāṭi-Tilung". In: Rāpacā, Lāl (ed.), *Indo-Nepāl Kirāṭi Bhāṣāharū* 384-389. Kathmandu: Research Institute for Kirātology.
- Rutgers, Roland. 1998. *Yamphu. Grammar, Texts & Lexicon*. Research School CNWS. Leiden: The Netherlands.
- Toba, Sueyoshi; and Toba, Ingrid. 1975. *A Khaling-English English-Khaling Glossary*. Kirtipur: Summer Institute of Linguistics and the Institute of Nepal and Asian Studies of Tribhuvan University.
- Toba, Sueyoshi. 1979. *Khaling*. Tokyo: Asia Africa Gengo Bunka Kenkyūzyo [Asian & African Grammatical Manual 13d].
- Toba, Sueyoshi. 2004. "Tilung: an endangered Kiranti language. Preliminary observations". *Nepalese Linguistics. Journal of the Linguistic Society of Nepal* 20. Kirtipur/Kathmandu: Linguistic Society of Nepal, Tribhuvan University.
- Tolsma, Gerard Jacobus. 1999. *A Grammar of Kulung*. Ph.D. diss, Leiden University.
- Watters, David Eugene; and Watters, Nancy Jean. 1973. *An English-Kham Kham-English Glossary*. Kirtipur: Summer Institute of Linguistics and Institute of Nepal and Asian Studies of Tribhuvan University.
- Winter, Werner. 2003. *A Bantawa Dictionary*. Berlin/New York: Mouton de Gruyter [Trends in Linguistics. Documentation 20].