

# The Origin of Implosive Stops in Wambule Rai

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The Kiranti languages are members of the Tibeto-Burman language family. The name 'Kiranti' is an ethnolinguistic term which applies to the Limbu and Rai groups of eastern Nepal. The Limbu are the easternmost ethnic group. The name 'Rai' is an ethnonym which is used to denote different groups speaking closely related languages, e.g. Bahing, Bantawa, Chamling, Dumi, Hayu, Jero, Khaling, Kulung, Lohorong, Nachiring, Puma, Sampang, Sunwar, Thulung, Wambule and Yamphu.<sup>1</sup>

## Implosive stops in Western Kiranti

Among the Kiranti languages, the Western languages Bahing, Sunwar and Wambule are characterised by the presence of implosive or preglottalised stops in their modern phoneme inventories. Since implosive or preglottalised stops are not found in other Kiranti languages, these peculiar sounds therefore seem to represent a Western Kiranti innovation.

It is possible to reconstruct a preglottalised bilabial phoneme at some stage in the development of Western Kiranti languages because of the correspondences between implosive or preglottalised bilabial stops in Bahing, Sunwar and Wambule. Michailovsky (1988, 1994) mentions the presence of preglottalised /ʔb-/ or /ʔw-/ in Sunwar and implosive /b-/ or preglottalised /ʔb-/ in Bahing. Bieri and Schulze (1969, 1970, 1971a, 1971b, 1973a, 1973b) transcribe the Sunwar preglottalised bilabial phoneme as /bw-/ followed by /a/. The Bahing implosive or pre-glottalised bilabial consonant appears before other vowels as well.

Wambule occupies a special place among the Western Kiranti languages which have implosive stops because Wambule has two implosive stop phonemes instead of just one, viz. /b/ and /d/ (Toba VS 2052; Oppenort 2002, 2004). In Wambule, implosive stops are generally found in word-initial position, and they occur before each of the Wambule vowels and before the phonemic sequences /wa/ and /ya/.

## The origin of implosive stops

Michailovsky (1988) suggests that the initial implosive or preglottalised Proto-Western Kiranti phoneme /\*ʔb-/ represents a preglottalised manner-series or, another possibility, developed from labiovelar /kw-/. Wambule supports the idea of a labiovelar origin for Western Kiranti implosive or preglottalised bilabial stops and proposes a new source, i.e. modified nasal consonants. The correspondences of the modern Wambule (W) implosives and nasals in Proto-Kiranti (PK), Proto-Western Kiranti (PWK) and Proto-Wambule (PW) are presented here:

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<sup>1</sup> Abbreviations: - morpheme boundary; \* reconstructed form; / / phonological transcription; ˈ high tone; AD Anno Domini; -H Hodgson; -M Michailovsky; -S Starostin; VS Vikram Saṃvat era.

PK	PWK	PW	W
/*kw-/	/*ʔw-/	/*ʔb-/	/b-/
/*m-/	/*m-/	/*ʔm-/	
		/*m-/	/m-/
/*n-/	/*n-/	/*ʔn-/	/d-/
		/*n-/	/n-/

Since no obvious conditioning factors can be given, it is still rather unclear why the Proto-Wambule clusters /\*ʔm-/ and /\*ʔn-/ have split from Proto-Kiranti /\*m-/ and /\*n-/. Verbal morphology and internal reconstruction suggest that the Wambule implosive phonemes are partly innovations that can be traced back to clusters of stops, in particular post-final <ɓ> of transitive verb stems, and nasals (Opgenort 2002, 2004).

#### A labiovelar origin of /b-/

The first series of words with bilabial implosive stops might be traced back to Proto-Western Kiranti /\*ʔb-/ or /\*ʔw-/ corresponding to prior labiovelars /\*kw-/ because the preglottalised Western Kiranti segments correspond to /kw-/ in closely related and more distantly related Tibeto-Burman languages.

- Wambule *bari* ‘wound’, Bahing *bar* ‘wound’, (Sunwar-S *gār* ‘wound’); Thulung-M *par* ‘wound’; Khaling *'kwaar* ‘wound’, Dumi *kar* ‘wound’<sup>2</sup>; Kham *'khxtera* ‘wound’, Chepang *khay* ‘to wound’.
- Wambule *bala* ‘shadow’, Bahing *bala* ‘shadow’; Thulung-M *pel* ‘shadow’, Chepang *kwa.laŋʔ* ‘shadow’.
- Wambule *ballu* ‘fish-net’, Bahing *ba:luŋ* ‘fish-net’; Chepang *kwəlh* ‘fish trap’.
- Wambule *bacam* ‘eat’; Bahing *ʔba-*, *ʔbat-* ‘eat’, Sunwar *'bwa-*, *bwaw-* ‘eat’; Thulung-M *pet-* ‘eat’, Khaling-M *bət-* ‘eat’; Kham *kxya-* ‘eat’.
- Wambule *bo* ‘chicken’, Bahing *ba* ‘chicken’, Sunwar-M *bwa:* ‘chicken’; Thulung-M *po* ‘chicken’, Khaling *phö* ‘chicken’, Dumi *pawæm* ‘chicken’<sup>3</sup>; Magar-M *gwā* ‘chicken’, Kham *baza* ‘chicken’, Chepang *waʔ* ‘bird’.

#### Another possible labial origin of /b-/

Implosive /b/ in the following Wambule words corresponds to various bilabial plosive phonemes in other Kiranti languages.<sup>4</sup> The implosive might also be traced back to Proto-West-ern Kiranti /\*ʔb-/ or /\*ʔw-/ , but there is no evidence for the development from Proto-Kiranti-Magaric /\*kw-/.

<sup>2</sup> Cognates with initial velar plosives are also found in Bantawa, Kulung and Limbu

<sup>3</sup> Cognates with initial bilabial /w/ are also found in Bantawa, Chamling, Kulung and Limbu.

<sup>4</sup> Cognates with initial bilabial plosives are also found in Bantawa, Chamling, Kulung, Yamphu and Limbu.

- Wambule *barcam* ‘throw out’, (Bahing *ward-* ‘throw’), Sunwar *bwar-* ‘sow’; Thulung-S *par-* ‘throw’, Khaling *waan-nä* ‘throw’, Dumi *wərnɪ* ‘throw’.
- Wambule *bambu* ‘cheek’; Thulung-S *phosü* ‘cheek’, Khaling *phosu* ‘cheek’, Dumi *busu* ‘cheek’.
- Wambule *bwalcam* ‘mix’; Thulung *phol-* ‘stir’, Khaling *phwaal-nä* ‘mix’.
- Wambule *bapcam* ‘scratch’, (Sunwar-S *bamsica* ‘scratch’); Thulung-S *bram-* ‘scratch’, Khaling *präm-nä* ‘scratch’.
- Wambule *basyam* ‘shoulder’, (Sunwar-S *balā* ‘shoulder’); Thulung-S *balam* ‘shoulder blade’, Khaling *bhaataa* ‘shoulder’, Dumi *bokto* ‘shoulder’.

#### A nasal origin of /b-/

In the following series of words, there is a systematic correspondence between Wambule /b-/ and the bilabial nasal /m-/ in related Kiranti languages.<sup>5</sup> This suggests that the bilabial implosive /b-/ developed from the Proto-Wambule cluster /\*ʔm-/. The Wambule words with initial /b-/ corresponding to /m-/ in related languages can be contrasted with Wambule words with initial /m-/ corresponding to /m-/ in related languages, e.g. Wambule *mama* ‘mother’ (Thulung-S *mam* ‘mother’, Khaling *mām* ‘mother’ and Dumi *mama* ‘mother’), Wambule *mi* ‘fire’ (Bahing-H *mi* ‘fire’, Sunwar-S *mī* ‘fire’, Thulung-S *mu* ‘fire’, Khaling *mi* ‘fire’ and Dumi *mi* ‘fire’) and Wambule *muyo* ‘person’ (Bahing-H *múri* ‘man-kind’, Sunwar *mur*, *mur* ‘person’ and Dumi *min* ‘man, mankind’).

- Wambule *bico* ‘wife’, Bahing-H *ming* ‘wife’, Sunwar *miish* ‘wife’; Thulung-S *mo-cü* ‘woman’, Khaling *mey* ‘wife’ (archaic), Dumi *me:ʔe* ‘wife’.
- Wambule *bimcam* ‘remember’, Sunwar-S *mim-ca* ‘remember’; Thulung-S *mim-* ‘remember’, Khaling *mam-nä* ‘remember’, Dumi *minni* ‘remembrance’.
- Wambule *bisi* ‘eye’, Bahing-H *míchi* ‘eye’, Sunwar-S *mīkci* ‘eye’; Thulung-S *miksi* ‘eye’, Khaling *mas* ‘eye’, Dumi *miksi* ‘eye’.
- Wambule *bulum* ‘tail’, Sunwar-S *mīlu* ‘tail’; Thulung-S *mer* ‘tail’, Khaling *mer* ‘tail’, Dumi *miri* ‘tail’.

#### A nasal origin of /d-/

In the following series of words, Wambule initial post-alveolar /d-/ corresponds to the alveolar nasal /n-/ in related Kiranti languages.<sup>6</sup> This suggests that the post-alveolar implosive /d-/ developed from the Proto-Wambule cluster /\*ʔn-/. The Wambule words with initial /d-/ corresponding to /n-/ in related Kiranti languages can be contrasted with Wambule words with initial /n-/ corresponding to /n-/ in related Kiranti languages, e.g. Wambule *nakso* ‘family priest’ (Thulung-S *nokcho* ‘ritual officiant’, Khaling *nokco* ‘priest, shaman’ and Dumi *naksæ* in *naksæ-kibi* ‘kind of shaman’) and Wambule *nyam* ‘brain’ (Sunwar-S *nipsi* ‘brain’, Thulung-S *nepci*, *näpci* ‘brain’ and Khaling *nes* ‘brain’).

Wambule *dí* ‘name’, Bahing-H *ning* ‘name’, Sunwar-S *ne* ‘name’; Thulung-S *nəŋ* ‘name’, Khaling *nang* ‘name’, Dumi *nɪ* ‘name’.

- Wambule *díwa* ‘knowledge’; Khaling *nu* ‘mind’, Dumi *nɪ* ‘mind’.
- Wambule *ducam* ‘be well’, Bahing-H *nyú-ba* ‘good’; Thulung-S *nü-* ‘be well’, Khaling *nü* ‘all right’, Dumi *nini* ‘be good, be alright’.

<sup>5</sup> Cognates with initial /m/ are also found in Bantawa, Chamling, Kulung, Yamphu and Limbu.

<sup>6</sup> Cognates with initial /n/ are also found in Bantawa, Chamling, Kulung, Yamphu and Limbu.

- Wambule *dusum* 'nose', Sunwar-S *nē* 'nose'; Thulung-S *nō* 'nose', Khaling *nō* 'nose', Dumi *nu* 'nose'.
- Wambule *dwam* 'sun', Sunwar *naan* 'sun'; Thulung-S *hem* 'day', Khaling *nwaam* 'sun', Dumi *na:m* 'daylight, sun, sunshine'.
- Wambule *dwabu* 'ear', Bahing-H *-nyéú* in *sámá-nyéú* 'ear', Sunwar-S *nophā*; Thulung-S *nokphla*, *nephla*, *nophla* 'ear', Khaling *ngeco* 'ear', Dumi *ñitso* 'ear'.

### Conclusion

Wambule, Sunwar and Bahing are characterised by the presence of implosive or preglottalised stops in their modern phoneme inventories. These phonemes have not been attested in other Kiranti languages and seem to represent a Western Kiranti innovation. Comparative evidence shows that Wambule occupies a special place among its closest relatives because the bilabial implosive stop /b-/ can be traced back not only to Proto-Western Kiranti /\*ʔb-/ or /\*ʔw-/, but also to Proto-Wambule /\*ʔm-/, and because the main source of the post-alveolar implosive stop /d-/ is Proto-Wambule /\*ʔn-/.

### Bibliographic references

Primary sources. Bahing by Michailovsky (1988, 1994), based on his own field notes; Bahing-H by Hodgson (1857); Chepang by Caughley (2000); Dumi by van Driem (1993); Hayu-H by Hodgson (1857); Khaling by Toba and Toba (1975); Kham by Watters and Watters (1973), who represent the phoneme /ə/ as orthographic x; Sunwar by Bieri and Schulze (1973a, 1973b); Wambule by Opgenort (2004). Bahing and Hayu words culled from Hodgson (1857) are preceded by ( -H ).

Secondary sources. Magar-M by Michailovsky (1988, 1994) based on Shepherd and Shepherd (1971); Sunwar-S by Starostin (1994) based on Hale (1973), and Sunwar-M by Michailovsky (1988, 1994) based on Bieri and Schulze (1969, 1970, 1971a, 1971b) and Genetti (1988, personal communication); Thulung-S by Starostin (1994) and Thulung-M by Michailovsky (1988, 1994) based on Allen (1975). Forms culled by Michailovsky (1988, 1994) are preceded by ( -M ). Data used by Starostin (2000) are preceded by ( -S ) and rendered in Starostin's Starling format.

Allen, Nicholas K. 1975. *Sketch of Thulung Grammar with Tree texts and a Glossary*. East Asian Papers, No. 6. Ithaca: Cornell University.

Bieri, Dora, and Marlene Schulze. 1969. 'Sunwar Phonemic Summary', 31-page typescript in Vol. II of *Bodic Languages* by the Summer Institute of Linguistics.

Bieri, Dora, and Marlene Schulze. 1970. 'Sunwar segmental synopsis', in Austin Hale and Kenneth L. Pike, eds., *Tone Systems of Tibeto-Burman Languages of Nepal. Occasional Papers of the Wolfenden Society*, Vol. 3. Urbana: Department of Linguistics, University of Illinois.

Bieri, Dora, and Marlene Schulze. 1971a. *Sunwar Phonemic Summary: Revised Version*. Kathmandu: Summer Institute of Linguistics [38-page typescript].

Bieri, Dora, and Marlene Schulze. 1971b. *A Vocabulary of the Sunwar Language*. Kathmandu: Summer Institute of Linguistics [38-page typescript].

Bieri, Dora, and Marlene Schulze. 1973a. 'Chaining and spotlighting: Two types of paragraph boundaries in Sunwar', pp. 389-400, Vol. I in Hale (1973).

Bieri, Dora, and Marlene Schulze. 1973b. 'An approach to discourse in Sunwar', pp. 401-462, Vol. I in Hale (1973).

Driem, George van. 1993. *A Grammar of Dumi*. Berlin: Mouton de Gruyter.

Genetti, Carol Elaine. 1988. 'Notes on the structure of the Sunwari transitive verb', pp. 62-92 in *Linguistics of the Tibeto-Burman Area*, 11 (2).

Hale, Austin, ed. 1973. *Clause, Sentence, and Discourse Patterns in Selected Languages of Nepal* (Vols. I-IV). Norman, Oklahoma: Summer Institute of Linguistics.

Hodgson, Brian Houghton. 1857. 'Comparative Vocabulary of the Languages of the broken Tribes of Népal', pp. 333-371 in *Journal of the Asiatic Society of Bengal* XXVI.

- Michailovsky, Boyd. 1988. 'Phonological typology of Nepal languages', pp. 25-50 in *Linguistics of the Tibeto-Burman Area*, 11 (2).
- Michailovsky, Boyd. 1994. 'Manner vs. place of articulation in the Kiranti initial stops', pp. 59-78 in *Current Issues in Sino-Tibetan Linguistics*. Hajime Kitamura, Tatsuo Nishida and Yasuhiko Nagono, eds. Osaka: Organizing Committee of the 26th International Conference on Sino-Tibetan Languages and Linguistics.
- Opgenort, Jean Robert. 2002. *The Wāmbule Language*. Amsterdam: Jean Robert Opgenort [doctoral dissertation, 6 June 2002].
- Opgenort, Jean Robert. 2004. *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.
- Shepherd, Gary, and Barbary Shepherd. 1971. *Magar Phonemic Summary*. Kathmandu: Summer Institute of Linguistics [34-page typescript].
- Starostin, Sergei. 1994. Electronic publication on the internet site <[www.iasnt.leidenuniv.nl/starling.html](http://www.iasnt.leidenuniv.nl/starling.html)>. Also presented at the Sino-Tibetan conference in Paris, 1994.
- Toba, Sueyoshi, and Ingrid Toba. 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. VS 2052. 'Implosive Stops in Umbule Rai', pp. 7-9 in *Libju-Bhumju* 3.
- Watters, David Eugene, and Nancy Jean Watters. 1973. *An English-Kham Kham-English Glossary*. Kirtipur: Summer Institute of Linguistics and Institute of Nepal and Asian Studies of Tribhuvan University.