SORBUNG, AN UNDOCUMENTED LANGUAGE OF MANIPUR: ITS PHONOLOGY AND PLACE IN TIBETO-BURMAN

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Abstract
Sorbung is a Tibeto-Burman language of Manipur, India. This study outlines the phonology of the language based on data elicited from a speaker of residing temporarily in the United States, where he was studying theology. Sorbung shares characteristics with at least two branches of Tibeto-Burman—Tangkhulic and Kuki-Chin—without showing unambiguous evidence of belonging to either group. A word list based upon this collection of data is provided as an appendix.

Keywords: phonology, classification, Tibeto-Burnman

1. Introduction

Sorbung is a previously undocumented Tibeto-Burman language of Manipur, India. The current study outlines the major features of the phonology of the language, describing the segment inventories, prosodic structures, phonotactic constraints, and phonological alternations that characterize Sorbung. This sketch is based on lexical and other data elicited from a single native speaker of Sorbung (a male in his thirties) residing temporarily in the United States, where he was studying theology[23]. Elicitation was conducted

[22] The original field research on Sorbung was supported by a UC Berkeley Summer Research grant (2004) to the first author.

[23] Although we have no reason to doubt that our consultant's speech was typical of the speech of the broader language community, caution should be used in interpreting these results. Like most other speakers of Sorbung in his age group, our consultant was proficient to some degree in Standard Tangkhul, Meithei, Hindi, and English. Some instances of language interference are therefore likely. Since his spouse was not from Sorbung, he spoke to her and his children primarily in Standard Tangkhul. He had resided in the United States for approximately three years at the time the first author worked with him and his use of Sorbung was primarily confined to telephone conversations with family members during that time. However, he expressed considerable confidence in his Sorbung language competence, and was both prompt and consistent in his responses to elicitation prompts. Unfortunately, since the current political situation in Manipur makes fieldwork difficult and dangerous, it is unlikely that work on Sorbung based

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primarily in English but Standard Tangkhul and visual illustrations were used for difficult forms. Audio recordings were made of most of the lexical material elicited from the consultant, and these were used to verify and correct the transcriptions made while the first author was working with him. A word list based upon this collection of data is provided as an appendix.

Sorbung is phonologically interesting for a number of reasons. From a comparative standpoint, it shares characteristics with at least two branches of Tibeto-Burman—Tangkhulic (Mortensen & Miller 2009a; Mortensen & Miller 2009b) and Kuki-Chin (VanBik 2009)—without showing unambiguous evidence of belonging to either group. From a synchronic point of view, it displays a variety of productive alternations (both segmental and tonal) that may be of theoretical interest. It also shows interesting patterns of synchronic variation that may provide evidence regarding diachronic developments that have occurred elsewhere in Tibeto-Burman, specifically the development of manner distinctions from the "collapse" of lexical prefixes into the onsets of roots.

1.1. Geographic and Demographic Information

Sorbung is spoken in Sorbung village, a community of about 300 located in the southeast corner of Ukhrul District, Manipur State, India (about 40 km east of the border with Burma). Despite some significant linguistic and cultural differences, the inhabitants of Sorbung village consider themselves to be ethnic Tangkhuls, the majority ethnic group in Ukhrul District. The immediately neighboring villages are also ethnic Tangkhuls, though there is significant Kuki (Thadou) settlement that separates Sorbung from the larger group of Tangkhul villages to the north. According to our consultant, many of these villages are homes to dialects closely related to Sorbung. Others, like Tusom village, are inhabited by speakers of languages belonging unambiguously to the Tangkhulic group. To the south and southwest is a network of Maring and Old Kuki villages. The linguistic and ethnic affiliation of the villages to the east is not clear.

It is not well established whether Tangkhulic (or Kuki-Chin) are separate top-level branches of Tibeto-Burman or whether they form a subgroup with one another or other Tibeto-Burman languages. Traditionally, they have been grouped together as part of a Kuki-Chin-Naga group. However, as Burling (2003) notes, this subgroup has been based more on intuition than argument. Mortensen and Miller (2009b) present some evidence for innovations shared among Kuki-Chin, Tangkhulic, and an additional subset of "Naga" languages and suggest that they share a common ancestor more recent than Proto-Tibeto-Burman. Since there is no consensus on this subject, we will treat Tangkhulic and Kuki-Chin only as distinct taxonomic units, without specifying the relationship between them.

Like other ethnic Tangkhul, the inhabitants of Sorbung village are multilingual. Most aspects of family and village life are negotiated in the local language (here called Sorbung). Church sermons and some schooling are carried out in the ethnic lingua franca we call Standard Tangkhul (a Tangkhlic language originally based on the speech of Ukhrul village, now the district headquarters). Other schooling is done in Meithei—the dominant regional language, Hindi, and English. English is important not only because of its international stature, but because the overwhelming majority are Baptist Christians with a

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on the speech of a larger number of individuals will be available for some time unless it is carried out by local linguists.

persisting historical relationship to the American Baptist denomination. Loanwords from all of these languages appear in the Sorbung lexicon.

1.2. Previous Work

There is no previous work on Sorbung directly, but at least one published data set from a different dialect of the same language exists. Brown (1837) published word lists collected by Capt. George Gordon, a British political agent in Manipur, for a variety of languages in Manipur. These included "Luhuppa," which is largely identical to the Tangkhul language of Ukhrul town, "Champung," the language of another Tangkhul village, and three varieties explicitly labeled as Tangkhul: "Northern Tangkhul," "Central Tangkhul," and "Southern Tangkhul." Of these, Southern Tangkhul is the least like the others but very similar to Sorbung in its lexical, morphological, and phonological properties. Unfortunately, Brown's word lists were only 60 words long, and provide the only published information on this language up until the present.

Mortensen (2003) and Mortensen and Miller (2009a; 2009b) show that most of the languages spoken by members of the Tangkhul tribe belong to a single subgroup within Tibeto-Burman. They establish criteria for membership in this group, "Tangkhulic," on the basis of phonological, morphological, and lexical innovations. All of the Tangkhul languages enumerated by Brown (1837) appear to belong to this group, with the exception of "Southern Tangkhul." Our more complete corpus of data from Sorbung makes it clear that it does not descend from the Proto-Tangkhulic reconstructed by Mortensen and Miller. While Sorbung speakers belong to the same ethnic group as the speakers of Tangkhulic language, their language appears to come from a somewhat different branch of the Tibeto-Burman family.

1.3. The Place of Sorbung within Tibeto-Burman

It is well known that ethnic and linguistic boundaries do not align neatly. This is no less true in South and Southeast Asia than elsewhere. It appears likely that Tangkhuls, as an ethnicity, may be the result of the convergence of two or more populations already related in language and culture. One of these comprises, roughly, the forebears of Tangkhulic speakers; another comprises the ancestors of Sorbung and "Southern Tangkhul" speakers. We contend that this second group spoke a language closely related to the so-called "Old Kuki" languages that are spoken to the south and west of Sorbung. While the population around Sorbung came to identify ethnically with population of Tangkhulic speakers, and while their language was subject to some lexical and structural influence from Tangkhulic languages, they retain a linguistic tradition distinct from their northern neighbors. This was facilitated, no doubt, by the high degree of linguistic heterogeneity present even among Tangkhulic languages. It is apparent that Sorbung and "Southern Tangkhul" fall outside of Tangkhul as a group only when they are compared with Old Kuki languages like Kom (Kom Rem).

This is not to say that Sorbung does not resemble Tangkhul languages in some respects (only that its resemblance to Old Kuki languages is stronger). Like Tangkhul but unlike most Kuki-Chin languages, Sorbung shows no evidence of subject agreement in verbs. It also shows little or no evidence of verbal stem alternation, an important Kuki-

Chin feature[24]. Phonologically, too, Sorbung resembles Tangkhul in some respects. For example PTB *kr-, *kl- become c- in Sorbung, just as they did in Proto-Tangkhulic. Compare the following Sorbung forms with related reconstructions from Proto-Tangkhulic (PTk) and Proto-Tibeto-Burman (PTB):[25]

Table 1: *Palatal reflexes of velar clusters in Proto-Tangkhul and Sorbung.*

PTB	PTK	SORBUNG	
*krap	*cap	caap	'cry; weep'
*kri(y)	*ci	-cii	'fear'
*klaw	*cow	ciu	'dig'

However, in Tangkhulic, this appears to be a general process of palatalization before palatal vowels and glides, medial liquids having previously become palatal glides (Mortensen & Miller 2009b). In Sorbung, it is limited to PTB *kr- and *kl- specifically; *k- does not become c- before high front vowels, when has undergone secondary aspiration, does not become c- even before medial *-l-:[26]

Table 2: *Forms displaying palatization in Tangkhulic but not Proto-Kuki-Chin or Sorbung.*

PTB	PTK	PKC	SORBUNG	
*klum	*ʃim	*khlum	kʰuum	'sweet'
*g-ləy	*-ʃi	*khlii	kʰii	'wind (n.)'
*g-la	—	*khlaa	kʰaa	'moon/month'
—	—	*khluak	kʰuak	'brain'
—	*-ci	*kii	kìi	'horn'
*kəy		*sa-kii	səkíi	'deer'
*g(y)əy	*-ci	*kii (PNC)	bəkíi	'parrot'

Furthermore, when lexical items with palatal stops are compared with their cognates in the Old Kuki languages Kom and Moyon, and the lexically-similar language Puiron[27], it is apparent that these languages share the same pattern of palatalization as Sorbung:

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[24] Many Kuki-Chin languages have a morphological process that derives an inflected stem form (Form II) from the basic form (Form I). For a useful comparative study of this phenomenon, see Button (2009:182ff). Note, however, that there are Old Kuki languages which display evidence of neither subject agreement nor stem alternation (Grierson 1903:288-290).

[25] Except where otherwise indicated, Proto-Tibeto-Burman reconstructions are from Matisoff (2003) and Proto-Tangkhulic reconstructions are from Mortensen & Miller (2009b).

[26] Except where otherwise indicated Proto-Kuki-Chin (PKC) reconstructions are from VanBik (2009). Reconstructions labeled "DRM" are due to the first author.

[27] Ethnically, the speakers of Puiron are a subset of the Nruangmei tribe, most of whom speak languages belonging to the Zeme group (Burling 2003). Burling suggests that Puiron is a Zeme language with many Kuki loans. Below we suggest that Puiron is, like Sorbung, a "Nagafied" Old Kuki language.

Table 3: *Parallels in palatalization between Sorbung, Old Kuki (Kom and Moyon), and Puiron.*

PTB	PKC	SORBUNG	KOM	MOYON	PUIRON	
*krap	*krap	*càap*	*kə-čəp*	—	*cap*	'cry/weep'
*kri(y)	*kriʔ	*ʔəncíi*	—	—	*kaci*	'fear'
*klaŋ	*kroŋ (DRM)	*cóŋ*	*toŋ rih*	*lcoŋ*	—	'speech'
*tsywap	*tsuap	*ʔəcúap* 'spleen'	*əčip*	—	—	'lung'
*m-t(s)i	*tsii	*məcìi*	—	—	*maci*	'salt'
*dzyup	—	*cúup*	*čuču*	*cucuʔ*		'breast'

In other words, palatal reflexes of PTB *kr-, *kl-, etc. cannot be used to associate Sorbung with Tangkhulic in preference to Kuki-Chin.

Another area of similarity between Tangkhulic and Sorbung is their personal pronouns. In this respect, Sorbung actually is quite different from most Kuki-Chin languages but similar to Tangkhulic languages (when the family is taken as an aggregate). **Table 4** compares the Sorbung person pronouns (both the bound-root forms and the free forms) with their cognates in Proto-Tangkhul:

Table 4: *Comparison of Sorbung and Proto-Tangkhulic pronominal forms.*

	FREE PRONOUNS		BOUND PRONOMINAL PROCLITICS	
	SORBUNG	PTK	SORBUNG	PTK
FIRST	ʔoo (<*ej)	*ʔej, *ʔi	ʔi-, ʔəN- (< *ŋ- ?)	*ʔi-
SECOND	naŋ	*naŋ	na-	*na-
THIRD	maa	*mɐ, *ʔa	ma-	*ʔa-

Apart from the third person proclitic, each of the Sorbung pronouns has a clear cognate in Tangkhulic. This is unsurprising for the second person pronouns, which are widespread in Tibeto-Burman (Matisoff 2003) and are also found in Kuki-Chin languages. For first and third person pronouns, however, Kuki-Chin languages usually have both free forms and politics from *kai '1' and *ʔa '3' (La Polla 2006). However, this match does not tie Sorbung to Tangkhulic exclusively. Meithei pronouns match those in Sorbung even more exactly:

Table 5: *Comparison of Sorbung and Meithei personal pronouns.*

	FREE PRONOUNS		BOUND PRONOMINAL PROCLITICS	
	SORBUNG	MEITHEI	SORBUNG	MEITHEI
FIRST	ʔoo (<*ej)	əy	ʔi-, ʔəN-	i-
SECOND	naŋ	nəŋ	na-	nə-
THIRD	maa	má	ma-	mə-

The idea that the Sorbung pronouns (and possibly, those of Tangkhulic) have been borrowed from the politically and economically powerful Meithei-speaking community cannot be dismissed out of hand. It is also true that all of the Sorbung pronouns seem to have cognates among Kuki-Chin languages. Consider, for example, the pronouns of Kuki Thadou (Hyman 2007b):

Table 6: *Comparison of Sorbung and Kuki Thadou personal pronouns.*

	FREE PRONOUNS		BOUND PRONOMINAL PROCLITICS	
	SORBUNG	KUKI THADOU	SORBUNG	KUKI THADOU
FIRST EXCLUSIVE	ʔoo (<*ej)	kei	ʔi-, ʔəN-	ka-
FIRST INCLUSIVE		ei		i-
SECOND	naŋ	naŋ	na-	na-
THIRD	maa	ama	ma-	a-

The proclitic *i-* marks 'first person inclusive' in some Kuki-Chin languages. The free first person pronoun in Puiron is *ai*, probably cognate with Sorbung *ʔoo*. In many Old Kuki languages, the third-person pronoun consists of *a- '3' plus a formative like *ma*: Hallam *a-ma*, Aimol *ə-ma*, Kolren *ə-ma*. In Purum, this formative acts by itself as the marker of third person, as in *mo-ju* '3-NOM'. The same is true of Lamgang, where the 3sg prefix is *ma-* (Grierson 1903:282-284). In summary, the evidence supporting a special relationship between Sorbung and Tangkhulic breaks down under examination. It is unusual for Sorbung to share a characteristic with Tangkhulic unless the same characteristic is shared with Old Kuki languages.

The term "Old Kuki" is not without its complexities. As an ethnic term, it has been used to describe the Kuki-identified peoples who settled in Manipur at a relatively early time, prior to the arrival of the larger and more powerful Kuki groups like the Mizo (Lushai) and Thadou. These include the Anal, Aimol, Chothe, Purum, Koiren, Kom (Kom Rem), Lamkang, Moyon, Chiru, Tarao, and Vaiphei. Some of these groups, for political reasons, now identify as Naga (e.g. the Lamkang and the Tarao). We propose that certain other Naga groups, such as the Puiron (a ethnic subgroup of the Nruangmei) are the descendents of outlying Old Kuki groups that affiliated themselves ethnically with their Naga neighbors. It is not completely clear what groups should be characterized as Old Kuki and whether the languages of these people form a genetic subgroup (p.c., Kenneth VanBik). The internal coherence of Old Kuki was assumed in LSI, and this assumption has been carried on in part because of the lack of reliable data with which to test it.

VanBik, in his dissertation on Proto-Kuki-Chin, tentatively classified Old Kuki languages as part of his Northern (Zo) group, which is, in turn, part of his Peripheral group. This grouping is based on lexical resemblances between Northern Chin languages like Thadou and Paite and the Old Kuki language Purum. However, this speculation was removed from the published version of this work (VanBik 2009). We argue that the old Kuki languages cannot be part of VanBik's Northern subgroup. The criterial innovation definition the Peripheral group is the fortition of PKC *r- > *g-. However, there is no evidence of this change in Old Kuki languages (or in Sorbung). Etyma with PKC *r- retain *r-* in Anal, Kom, Moyon, Puiron, and Sorbung, as they do in Mizo (a Central Kuki-Chin language) but develop *g-* Tedim, a Northern Kuki-Chin languages, as show in **Table 7**.

Table 7: Reflexes of Proto-Kuki-Chin *r- and *hr- in Tedim, Old Kuki (Anal, Kom, and Moyon), Puiron, and Sorbung.

PKC	MIZO	TEDIM	ANAL	KOM	MOYON	PUIRON	SORBUNG	
*ruʔ	*ruʔ*	*guʔ*	*rú*	*ru*	*row*	*ru*	*ʔə-rúu*	‘bone’
*p-ruul	*rúul*	*gu:l²*	*pù-rùul*	—	—	*ma-run*	*bə-ríi*	‘snake’
*rik	*rit*	*gik¹*	—	—	—	*rit-nu*	*Rìit*	‘heavy’
*ril	*ríl*	*gil²*	—	*ə-ri*	*l-rə́r*	—	*ʔə-ríi*	‘intestines’
*raʔ	*ràʔ*	*gàʔ*	—	—	—	*tak-ra*	*Raa*	‘fruit’
*ruy ~ *hruy	*hrŭy*	*gui* (Paite)	—	*rui*	*rí*	*rui*	~~*ruu*~~	‘vine; tendon’
*hriŋ	*hríŋ*	—	—		*l-ríŋ*	*riŋ*	*Ríiŋ*	‘alive’

If all Northern Kuki-Chin languages are in the Peripheral group, and PKC *r- > g- in the common ancestor of all peripheral languages, the Old Kuki languages cannot be part of the Northern group. Given the morphological and lexical conservatism of Old Kuki languages, this introduces the possibility that they constitute a separate top-level branch of Kuki-Chin. However, they have been little-exploited in comparative reconstruction because relatively little data on them has been available. If it can be established that Sorbung belongs to this group, the body of data that we have assembled here could be of considerable value in reconstructing the history of Kuki-Chin as a family.

Aside from the evidence that has been presented thus far, there are three types of evidence that suggest Sorbung is a member of the Kuki-Chin family with specific affinities to the Old Kuki languages: shared lexical innovations, shared morphological innovations, and shared phonological innovations.

One striking aspect of the Sorbung lexicon is the presence of many lexical items that are widespread within Kuki-Chin but which are not widely found elsewhere in Tibeto-Burman:

Table 8: *Lexical resemblances between Sorbung and Kuki-Chin.*

SORBUNG	PKC		COMMENTS
som	**som*	‘ten’	
pan	**puan*	‘blanket; cloth’	
bùu	**buʔ*	‘rice (cooked)’	
kèe	**kee*	‘foot’	Cp. perhaps Karbi *keŋ*.
lu-kaaŋ	**luu*	‘head’	Cp. also Maring *lu*, Mru *lu*.
lu-sìip	**tship*	‘crown (of head)’	
ʔèk	**ʔeek*	‘feces; shit’	
mə-rái	**raay*	‘be pregnant’	
cèm	**tsem*	‘knife’	
ʔəták	**tak*	‘flesh’	
wàm	**wom*	‘black’	
dài	**daay*	‘cool; quiet’	
paasàa	**pa-sal*	‘husband; man’	

However, Old Kuki languages (and Puiron) have even more specific lexical resemblances to Sorbung:

Table 9: *Innovative lexical items shared between Sorbung, Old Kuki (Kom, Aimol, Moyon, Chiru) and Puiron.*

SORBUNG	KOM	AIMOL	MOYON	CHIRU	PUIRON	
ʔóo	*ei*	—	*ə*	—	*ai*	'bite; chew'
hóoŋ	*ka-hoŋ*	*ə-joŋ*	—	*a-hoŋ*	*hoŋ*	'come'
ʔíin	*in*	—	*lń*	—	*in*	'drink'
kʰòop	—	*Khop*	—	—	—	'be full'
*ʔən-**cáaŋ**-làm*	*čəŋ*	—	*ti-**cʌ́ŋ***	—	***caŋ**-lam*	'right (side)'
ʔən-ʃúŋ	*in-suŋ*	*ə-suŋ*	—	*a-su*	—	'sit'
ʔìin	—	—	—	—	*in*	'sleep'
lée	—	—	—	—	*lo*	'take'
Kaa	*kha-wa*	*Kha*	—	—	—	'that'
Wa	*hi-wa*	—	—	—	—	'this'
ham-bʉ́ʉ	*hum-pui*	—	—	—	—	'tiger'
kòoŋ	*koŋ*	—	*kuŋ*	—	*koŋ*	'waist; back'

The lexical similarities between Sorbung and Old Kuki languages are very strong and indicate, at the very least, a history of contact between southern Tangkhuls and Kuki-Chin speaking peoples. The morphological similarities (in both inflection and derivation) help to reinforce the idea that the relationship is a genetic one. Hartmann (2001) shows that there are a pair of valence-related prefixes in Daai Chin (a Southern Kuki-Chin language): *ng-*, occurring in low-valence verbs, and *m-*, occurring in transitive (especially causative) verbs:

(1) a. *thei* 'be clever' *ng-thei* 'learn' *m-thei* 'teach'
b. *püi* 'be together' *ng-püi* 'be included'
c. *kyüh* 'be afraid' *m-kyüh* 'make afraid'

Cognates of these two prefixes appear in Sorbung as *ʔəN-* and *mə-*, respectively:

(2) a. *ʔən-tʰèe* 'awake; be awake' *mə-tʰée* 'get somebody up'
b. *ʔən-cíi* 'fear; be afraid' *mə-cíp* 'frighten'

Various innovative inflectional markers found in Sorbung are also found in Old Kuki languages. The Sorbung progressive suffix *-om* (< ʔóm 'exist; be a place') has a cognate at least in Aimol. Compare Aimol *sekor a-chongaa-om* 'horse 3-ride-PROG (he is riding a horse)' with Sorbung *tʰiŋkooŋ-ua kiák-óm-òo* 'tree-DEM fall-PROG-DECL (the tree is falling)'. The Sorbung genitive suffix *-ta* also appears to have cognates in Langrong, Purum, and Kolren (all of which have a formally similar suffix in genitive pronouns).

Since comparative reconstruction of languages in the India-Burma borderlands area remains in its infancy, relatively speaking, it is difficult to speak of phonological innovations in terms as explicit as would be desirable. As noted above, Sorbung shares with Old Kuki languages a common development of PTB *kr-, *kl-, *ts(y)-, and *dzy-. It was also noted that a similar change has occurred in Tangkhulic and that it is not entirely

possible to establish the complete independence of these changes. The same may be said for another cluster of changes that are shared by Kuki-Chin, Sorbung, and Tangkhulic:

Table 10: *Reflexes of Proto-Tibeto-Burman coronal fricatives and affricates in Proto-Kuki-Chin, Proto-Tangkhulic, and Sorbung.*

PTB	PTK	PKC	SORBUNG
*s-, *sy$_1$-	*t^h-	*th-	t^h-
*sy$_2$-	*s-	*s^h-	s-
*ts-	*s-	*s-, *θ-	s-
*tsy-	*ts-, *c-	*ts-, s-	c-, s-
*dz-	*ts-	*ts-	c-
*dzy-	*c-, *ts-	*ts-	c-

One piece of evidence that at least the Kuki-Chin and Sorbung innovations are shared is the fact that irregular and variable etyma tend to pattern the same way in PKC and Sorbung (given that PKC *ts- regularly corresponds to Sorbung c-):

Table 11: *Comparison of regular and variable developments from PTB *ts-, *ts(y)-, and *dzy-. Note that Sorbung patterns like PKC rather than PTk.*

PTB	PTK	PKC	SORBUNG	
*tsam	*sam	*sam	*sàam*	'hair of head'
*ts(y)a-t	*tsa	*saa	*saa*	'hot; ill'
*ts(y)a	*tsa	*θaa	*saa*	'child'
*dzya-k/t/n	*tsa	*θaʔ	*saa* 'eat'; *sak* 'feed'	'eat; food; feed'
*tsywap	*tsup	*tsuap	*cúap* 'spleen'	'lung'

It is also the case that Sorbung and Proto-Kuki-Chin developed initial glottal stop from the same—reasonably diverse—set of onsets:

Table 12: *Sources of Proto-Kuki-Chin and Sorbung initial glottal stop.*

PTB	PTk	PKC	Sorbung	
*ʔa:r	*ar	*ʔaar	ʔaa	chicken; fowl
*k^{w}əy	*hwɨ	*ʔuy	ʔúu	dog (Canis familiaris)
*hyen	—	*ʔen	ʔen	look
*k-yim	*ʃim	*ʔim	ʔin	house

Perhaps the most striking evidence of a close relationship between Old Kuki and Sorbung is that fact that at least one Old Kuki language, Kom, shares with Sorbung a productive voicing alternation that seems to be active in the same environments. This alternation is discussed at length in Section 0 below.

Based on the evidence that we have presented here, we argue that Sorbung is best seen as a Kuki-Chin language (closely related to Old Kuki languages like Kom, Aimol, and Moyon) that has come under influence from Tangkhulic languages. We further suggest that it is not the only "Nagafied" Kuki language and that Puiron might be another case of this type, a matter that cannot be discussed at length here.

1.4. Important Characteristics

The significance of Sorbung partly lies in that it demonstrates of changes in progress that are important for accounting for historical developments elsewhere in Tibeto-Burman. These changes orbit around minor syllables ("presyllables" or "prefixes"), both their development from etymological major syllables and their collapse into following major syllables, yielding a new stop series.

Sorbung shows a pervasive pattern of reduction in pretonic syllables. Compounds consisting of two noun roots that would consist of heavy syllables in isolation are realized as a sequence of a light syllable and heavy syllable. This stress-conditioned pattern of reduction creates a kind of structure that is intermediate between full disyllables and sesquisyllables and provides a likely pathway for the development of new minor syllable prefixes from compounded roots.

In true minor syllables, though, another process is in progress. The vocalism in such syllables is now completely predictable; thus, the /ə/ vowels in minor syllables are analyzed here as epenthetic. However, in certain environments, epenthesis variably fails to occur. Thus, instead of [ʔəkái] 'hips', our consultant often produced [ʔkái]. Such preglottalized productions could easily develop into fortis [kˀái] or geminate stops [k:ái], which could be reanalyzed by learners as aspirates [kʰái]. Since the prefix [ʔə- ~ ʔ-] has an unpredictable distribution, such a change would lead to what would appear to be, retrospectively, an unconditioned change in manner. Matisoff (2003:87ff) has suggested that many of the apparently sporadic manner correspondences among Tibeto-Burman onsets should be attributed to the effects of lexical prefixes that have collapsed into the following major syllable onset. Because the distribution of Tibeto-Burman lexical prefixes seems to be heavily determined by analogical processes, but seldom shows deterministic grammatical conditioning, the presence of a prefix often has to be inferred from the effect its existence is meant to explain. While this presents a methodological problem (invoking a hidden cause), cases like Sorbung give additional empirical support to the idea that semi-productive lexical prefixes can give rise to new laryngeal distinctions in onsets.

2. Syllable Structure and Prosody

Sorbung, like many other Tibeto-Burman languages (indeed, many Southeast Asian languages generally), tends to have sesquisyllabic word stems. That is, word stems often consist of a minor-syllable "prefix" (which is sometimes a morphological prefix) and a major syllable "root". This pattern is consistent with a general tendency towards right-headed (iambic) prosodic constituents. It is also essential to understanding the distribution to tone (which is only contrastive on major syllables) and the general syllable-structure constraints in the language.

2.1. Stress

Stress in Sorbung has the following correlates:

1. **Duration**: Unstressed vowels are never long; underlying long vowels are shorted in unstressed syllables.
2. **Amplitude**: Stressed syllables are louder than unstressed syllables.
3. **Pitch**: Pitch excursions are more pronounced in stressed syllables.

All of these correlates point to a general iambic pattern of stress. This is not to say, however, that Sorbung stress is predictable without reference to morphological structure. The following general principles seem to hold:

1. Minor syllables are never stressed. This may be due to the fact that the vowels in these syllables are epenthetic.
2. The last root syllable in a compound stem, not counting derivational suffixes, is stressed.
3. Two consecutive unstressed syllables are not tolerated.
4. Stress assignment is cyclic. 'Underarm hair,' from the compound *cubˈlaa* (*cuup* 'breast' plus *laa* 'crotch') plus *míi* 'hair' is *cubˌlaaˈmíi* rather than *ˌ*cuublaˈmíi*.
5. Suffixes do not affect the stress of the base to which they are attached: ˈ*look* 'big', ˈ*loog-ˌoo* 'big-DECL', *ʔˈ~~uu~~* 'dog', *ʔˈ~~uu~~-e* 'dog-NOM'.
6. The members of one set of suffixes are always stressed (including the obligatory final suffixes marking mood). Another set of suffixes are always unstressed (including case suffixes).
7. Some non-lexicalized compounds, particularly verbs compounded with nominal objects, may not display stress subordination. Thus, while *móo* 'fire' is unstressed and reduced in *mò-sèm* 'fire-blow; blow on fire', *cúup* 'breast' is fully stressed and not reduced in *cúup-ʔìin-èe* 'breast-drink-IMP; suckle!'

The following data illustrate these principles more fully. It can be seen in (3) that /ŋaa/ 'fish' is stressed when final or when preceded by a minor syllable, but is unstressed when it is initial:

(3)	a.	ˈŋaa	'fish'	'fish'
	b.	ʔə-ˈŋaa	'0' + 'fish'	'fish'
	c.	ʔə-ˌŋaa-ˈmíi	'0' + 'fish' + 'hair/feather'	'scale; fin'
	d.	ŋa-ˈmíi	'fish' + 'hair/feather'	'flying fish'

The examples in (4-6) show that /kee/ 'foot' is unstressed when in it occurs penultimately (5) but is stressed before a minor syllable (6):

(4)		ˈkèe	'foot'	'foot'
(5)	a.	kè-ˈlúuŋ	'foot' + 'print'	'footprint'
	b.	kè-ˈkíuk	'foot' + 'crippled'	'lame'
	c.	kè-ˈbú~~u~~	'foot' + 'great one'	'big toe'
	d.	kè-ˈsáa	'foot' + 'child'	'little toe'
(6)	a.	ˌkèe-məˈtóo	'foot' + 'thigh'	'crotch'
	b.	ˌkèe-məˈrái	'foot' + 'calf'	'calf'
	c.	ˌkèe-məˈjáa	'foot' + 'palm/sole'	'sole'
	d.	ˌkeè-məˌjúum-ˈràa	'foot' + 'digit' + 'fruit'	'toe'

In each word, one stress is more prominent than the others (specifically, it has a greater amplitude and longer duration). This is indicated here as primary stress [ˈ]. Other stressed syllables are marked as bearing secondary stress [ˌ]. By way of illustration, duration of 'foot' in (5a-d) is much shorter than the duration of 'foot' in (6a-d). This, in turn, is somewhat shorter than the duration of 'foot' in (4). We have not identified any

cases where the distinction between primary and secondary stress is contrastive. However, its patterning does suggest that both Sorbung feet and prosodic words are right-headed.

2.2. Word Structure

Barring loanwords, non-compound stems in Sorbung are always monosyllabic or sesquisyllabic. Monosyllabic stems consist of a single major syllable. Sesquisyllabic stems consist of a minor syllable followed by a major syllable. Underlyingly, we believe that all Sorbung roots have a single vowel and that the predictable schwa-vocalism in minor syllables is the result of epenthesis. However, the system is easier to describe if it is approached from the surface.

2.3. Minor syllables

With one exception, the minor syllables in Sorbung have the shape Cə, where C can be any of the onsets allowed in major syllables except for /p/, /t/, /w/, /j/, and /ʃ/. The exception to this pattern is /ʔəN/, where N is a nasal that shares the same place of articulation as the following consonant. In all instances of minor syllables, [ə] is the only vowel to appear (though it is possible that the quality of these vowel is affected by coarticulation with following vowels). The complete inventory is given in the following table:

Table 13: *Minor syllables in Sorbung.*

bə				
bəríi ‘snake’				
bəkíi ‘parrot’				
pə	**tə**	**cə**	**kə**	**ʔə**
pəláai ‘navel’	*tətir* ‘crossbar’	*cəháa*	*kə̀ʃuə̀* ‘rain’	*ʔəwám* ‘bear’
	tərà̀t ‘tie’	‘langur’	*kəléeŋ* ‘loose’	*ʔətʰár* ‘new’
		cəkòo ‘river’		
pʰə	**tʰə**		**kʰə**	
pʰənaat ‘grind’	*tʰəwáaj* ‘fly (n.)’		*kʰərà̀an*	
pʰəláa ‘wing’	*tʰərì̀i* ‘boundary’		‘shoulder’	
mə	**nə**		**ŋə**	
mətír ‘shrew’	*nəmoomə̀kʰúu*		*ŋənáar* ‘snore’	
məmì̀t	‘widow’			
‘extinguish’				
	sə			
	səloo ‘buffalo’			
	səkúu ‘porcupine’			
	rə			
	rəŋáa ‘five’			
	lə			
	ləkʰà̀a ‘shoulder’			
	ləʃù̀a ‘put’			
	təN			**ʔəN**
	taŋguáp ‘headdress’			*ʔəntʰée* ‘awake’
	təmbuelà̀m ‘river			*ʔəŋkʰaaw* ‘fish
	vally’			sp.’

In actual production, each of the Cə minor syllables has a variant without a schwa. Thus, /s-mùk/ 'cattle' can be realized either as [səmùk] or [smùk] and /ʔ-kʰaaw/ 'grasshopper' can be realized either as [ʔəkʰaaw] or [ʔkʰaaw]. The variants with initial consonant clusters occur more frequently when there is a sharp increase in sonority between the two consonants.

Problematically, our database contains minor syllables with /b/ but not with any other voiced stop (in spite of the fact that /d/ appears as the onset of major syllables). We believe this to be an accidental gap. Also, aspirated-stop minor syllables have a restricted distribution, occurring only before sonorant onsets. However, in this environment they contrast with their unaspirated counterparts, at least on the surface:

(7)	a.	*kʰəràan*	'spider'	*kəraak*	'voice'
	b.	*pʰəláa*	'wash'	*pəlái*	'snake'
	b.	*tʰərìi*	'boundary'	*təràt*	'tie'

We propose that this pattern actually results from a morphological cause: the aspirated stop minor syllables occur only in monomorphemic stems and are the result of epenthesis into underlying stop-sonorant clusters. The minor syllables with unaspirated stops occur in both monomorphemic stems, as in (7) and bimorphemic stems where the minor syllable is a lexical prefix. Underlying, we posit that monomorphemic stems like those in (7) have forms as in (8) while bimorphic stems have forms like those in (9):

(8)	a.	/kʰràan/	'spider'	/kraak/	'voice'
	b.	/pʰláa/	'wash'	/plái/	'snake'
	b.	/tʰrìi/	'boundary'	/tràt/	'tie'
(9)	a.	/m-mìt/	'extinguish'	/t-tír/	'bar'
	b.	/r-ŋáa/	'five'	/l-ʃùa/	'put'
	b.	/s-loo/	'buffalo'	/ŋ-náar/	'tie'

This accounts for the freer distribution of unaspirated-stop minor syllables versus aspirated-stop minor syllables and for the greater frequencies of schwa-less variants stems in the aspirated-stop minor syllable group.

In some cases, there is compelling evidence that minor syllables are distinct morphological units; in other cases, the data suggest that minor syllables are simply part of a root. Evidence for morphological independence includes the following:

1. A root may occur with or without a minor syllable, depending on morphological or syntactic context.
2. The same root may occur with different minor syllables in related lexical items.
3. A cluster of stems containing the same minor syllable share a component or meaning or belong to the same semantic field.
4. The minor syllable is transparently related to an independent lexical item.

According to these criteria, at least the following minor syllables should be considered to be prefixes, rather than parts of the root:

(10) **bə-** **fossilized animal prefix**
- a. *bəríi* ‘snake’
- b. *bəkíi* ‘parrot’

(11) **cə-** **‘water’ prefix** (*cúu* ‘water’)
- a. *cəkáaŋ* ‘drought’
- b. *cəlòk* ‘flood’
- c. *cəluáŋ* ‘flow’

(12) **kə-** **lexical prefix**
- a. *kəniiŋ* ‘two’ (*semníi* ‘twenty’)
- b. *kərúuk* ‘six’

(13) **ʔə-** **lexical prefix**
- a. *ʔərúu* ‘bone’
- b. *ʔacúu* ‘egg’ (*ʔacúu-məcúu* ‘lay egg’)
- c. *ʔəŋaa* ‘fish’ (*ŋàmíi* ‘flying fish’)
- d. *ʔəmíi* ‘hair; fur’ (*mòrmíi* ‘facial hair’)

(14) **mə-** **body-part prefix** (< PTB **mi* ‘human’?)
- a. *məsàa* ‘body’
- b. *mətóo* ‘lap; thigh’
- c. *mətín* ‘nail; claw’

(15) **mə-** **‘mouth’ prefix** (< *mor* ‘mouth’?)
- a. *məlit* ‘vomit’
- b. *məjúup* ‘kiss’
- c. *məcámcùu* ‘saliva’
- d. *mək^{h}áa* ‘jaw; chin’

(16) **mə-** **fossilized stative prefix**
- a. *mənée* ‘be soft’
- b. *mək^{h}ái* ‘be crooked’
- c. *məsáaŋ* ‘be high’
- d. *mənèm* ‘be low’

(17) **mə-** **productive causative prefix** (< *mii ‘give’?)
- a. *mət^{h}ée* ‘wake up (v.t.)’ (*ʔənthée* ‘wake up (v.i.)’)
- b. *məcàap* ‘make cry’ (*càap* ‘hurt’)
- c. *məʔóo* ‘make bite’ (*ʔóo* ‘bite’)

(18) **ʔəN-** **valence-decreasing prefix**
- a. *ʔənt^{h}èe* ‘wake up (v.i.)’
- b. *ʔəncíi* ‘fear (v.i.)’
- c. *ʔəndía* ‘fall (v.i.)’

(19) **lə-** **'hand/arm' prefix** (< PTB *l(y)ak 'hand/arm'?)
- a. *ləkʰàa* 'shoulder'
- b. *ləʃùa* 'put'
- c. *ləkium* 'bar'

(20) ***sə-*** **'animal' prefix** (< *saa* 'animal')
- a. *səloo* 'buffalo'
- b. *sərіám* 'mithun'
- c. *səkíi* 'deer'
- d. *səkúu* 'porcupine'

None of the aspirated stop-minor syllables belong in this set, consistent with the hypothesis that the aspirated stops are morphologically part of the root.

Minor syllables are subject to an alternation that does not appear in major syllables. In compounds, nasal codas do not assimilate in place to following obstruents:

(21)
- a. [i**np**ù] 'host (house owner)'
- b. [pua**nk**ʰóoŋnaa] 'loom'
- c. [so**mt**ʰúum] 'thirty'
- d. [cíi**ŋt**òoŋ] 'hill'

The nasal of the minor syllables [ʔəN] and [təN] assimilates in place to the following segment. The following examples show this for [ʔəN], which appears as a possessive prefix on kinship terms and as a stative/valency-reducing prefix on verbs:

(22)
- a. [ʔəmbíi] 'paternal grandfather (of ego)'
- b. [ʔəmbúu] 'maternal grandfather (of ego)'
- c. [ʔəntʰée] 'awake'
- d. [ʔəntiàk] 'green'
- e. [ʔəndía] 'fall'
- f. [ʔənnuu] 'mother (of ego)'
- g. [ʔəŋguu] 'child'
- h. [ʔəŋkʰau] 'fish species'

Similarly, the nasal in [təN], for which no general function is discernable, shares the place of articulation with the subsequent onset.

(23)
- a. [təmbuelàm] 'left hand'
- b. [təmbàak] 'valley'[28]
- c. [tənʃuk] 'pestle'
- d. [təŋguáp] 'headdress'
- e. [təŋgooŋ] 'ant-eater'
- f. [təŋkʰai] 'half'

[28] This form is probably borrowed from Meithei (see Chelliah 1997).

Before palatals, as in (23c) 'pestle', the nasal becomes coronal. This may be due to a general restriction against palatal nasals in Sorbung. Another interpretation of the evidence is that nasal is underlyingly /n/. However, we suggest that the nasal is underlyingly unspecified for place, for the following reasons:

1. Throughout the corpus, nasal codas generally do not assimilate in place to following obstruents; the different, assimilating behavior of [ʔəN] and [təN] can be explained by the "need" for the final nasals to acquire place features.
2. No where in the data does one of these formatives not occur before an obstruent from which it could acquire place features.

This position is subject to verification, pending the availability of further data.

2.4. Major syllable types

Major syllables in Sorbung may be either open or closed and may have either long or short nuclei. Length is only contrastive in closed syllables and only when syllables are stressed. Unstressed syllables always surface with short nuclei and underlying long vowels are shortened when they occur in weak positions. Stressed syllables, on the other hand, are always closed, have long nuclei, or both.

Table 14: *Sorbung major syllable types.*

	Stressed Syllables	Unstressed Syllables
Open Syllables	CVV	CV
Closed Syllables	CVC, CVVC	CVC

Long nuclei may be either long monophthongs or diphthongs. There appears to be no quantitative (length) contrast among diphthongs. As discussed in section 0 below, monophthongs and rising-sonority diphthongs occur in closed syllables relatively freely. However, (phonological) falling sonority diphthongs do not occur in closed syllables. Interactions between constraints on stress assignment and quantity produce length alternations, which will be discussed at greater length in section 0 below.

2.5. Tone

Tone is contrastive in Sorbung, but the lexical load born by tonal contrasts is relatively low and the phonetic distance between tonal categories is relatively small. Tone interacts with intonation to such an extent that it was sometimes impossible, working from recordings, to determine the tones of a lexical item with complete certainty. Furthermore, all statements about the tonal inventory of Sorbung remain tentative until the tone sandhi system of Sorbung is worked out in greater detail.

2.5.1. Inventory

Sorbung has three contrasting tones, which we will refer to as H, L, and M. These are indicated in our transcriptions by diacritics on the first vowel of a rhyme: acute (x́), grave (x̀), or no diacritic (x), for H, L, and M, respectively. Minimal and near-minimal sets illustrating these contrasts are given in **Table 15** below:

Table 15: *Example of the three contrastive tones of Sorbung.*

	H		**L**		**M**
sáa	'hot'	*sàa*	'animal'	*saa*	'eat', 'child'
móo	'fire'	*mòo*	'QUEST'	*moo*	'brother'
tʰóo	'hear'	*kʰòo*	'split, break'	*kʰoo*	'bee'
ʃî	'rain cover'	*ʃì*	'sand'	*ʃi*	'crab', 'star'
wáŋ	'fly (v.)'	*wàm*	'black'	*wan*	'belly'
rée	'war'	*nèe*	'small'	*ree*	'roast'
náap	'stick (v.)'	*nàap*	'liquid mucous'		
nàkʰúak	'deaf person'	*nàkʰùak*	'be deaf'		

The labels given here should not be taken as literal phonetic realities: H is not simply a high-pitched tone and L is not simply a low-pitched tone. The tones have characteristic pitch contours and also differ from one another in voice quality. The H tone rises to a peak about two-thirds through its duration before dropping slightly. It often has a tense voice quality. The L tone falls through its duration and sometimes starts higher in pitch than the terminus of a preceding L or M tone. L tone syllables are usually produced with lax or breathy voice quality. The pitch of M tone syllables falls gently before rising again. The voice quality is usually modal.

The contrastive load of tone in Sorbung is relatively low. This may be responsible for some of the difficulty we encountered in producing a complete analysis of the tone system. Our consultant was aware that there were tonal contrasts in Sorbung, and produced a number of minimal sets with little prompting (e.g. 'rain cover', 'sand', 'crab', 'star'), but found it difficult to say whether two items were similar or different in tone.

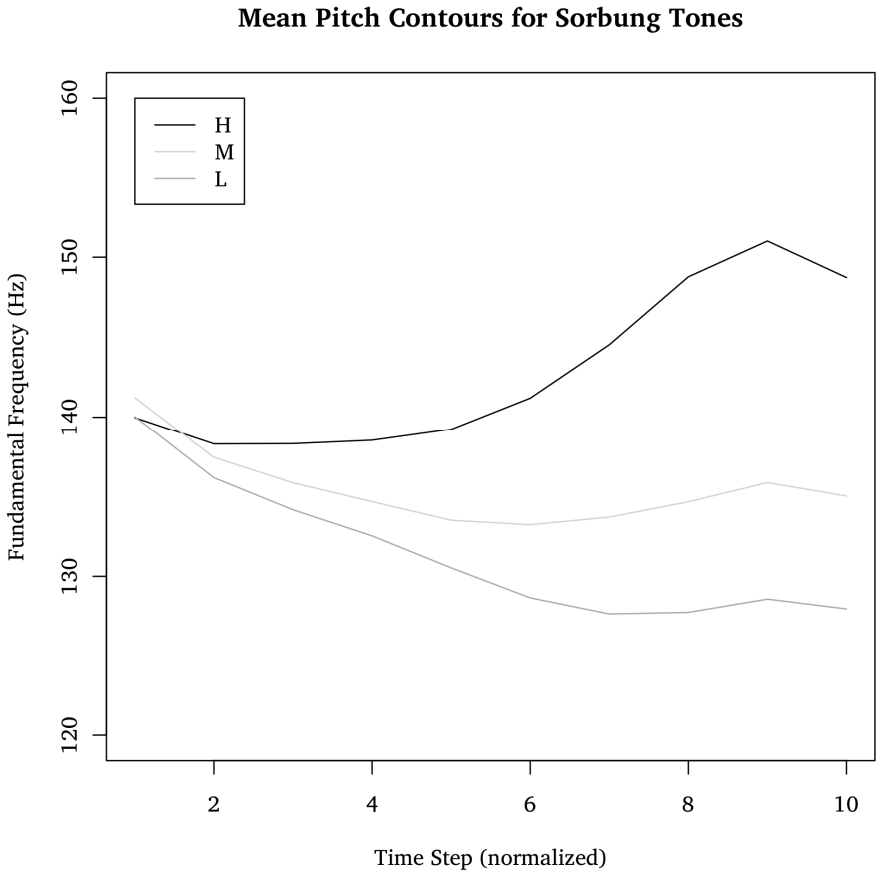

Figure 1: ***Averaged pitch plots for the three Sorbung tones.***

2.5.2. Distribution

Tonal contrasts in Sorbung are subject to two major restrictions. First, tonal contrasts only occur on major syllables. The pitch of minor syllables is predictable from the pitch of surrounding major syllables. Second, there is only a two-way tonal contrast in stopped syllables (syllables with a stop coda) but a three-way contrast in major syllables of other types. Neither of these restrictions is unusual in the area.

2.5.3. Alternations

Given the current state of knowledge about Sorbung, it is clear that the language has a robust system of tonal alternations. However, the data are not sufficient to paint a clear and complete picture of these alternations. What follows, then, is only an introduction to some of the most obvious alternations.

Sorbung displays dissimilation of high tones. In smooth syllables, underlying H become M after H:

(24)	a.	*cúu*	'liquid'	'water; liquid'
	b.	*kʰò-cúu*	'bee' + 'liquid'	'honey'
	c.	*məcam-cúu*	'saliva' + 'liquid'	'saliva'
	d.	*məkʰáan-cuu*	'sweat' + 'liquid'	'sweat'
	e.	*məkʰá-cuu*	'tear' + 'liquid'	'tear'
(25)	a.	*ʔə-rúu*	PREFIX + 'bone'	'bone'
	b.	*mai-rúu*	'face' + 'bone'	'cheekbone'
	c.	*kòoŋ-rúu*	'back' + 'bone'	'spine; backbone'
	d.	*ʔəkái-ruu*	'buttocks' + 'bone'	'tailbone; coccyx'
	e.	*mətóo-ruu*	'thigh' + 'bone'	'thighbone; femur'
	f.	*məkʰáa-ruu*	'jaw' + 'bone'	'jawbone'

As can be seen from (24a-c) and (25a-c), the morphemes meaning 'water; liquid' and 'bone' are realized with a H tone word-initially and when preceded by M or L. However, as shown by (24d-e) and (25d-f), they are realized with a M tone when preceded by a H tone.

This process interacts with another alternation. Stopped syllables with an underlying H tone are realized as L except word-finally. Thus, /kút/ 'hand; arm' is realized as [-kút] when it occurs finally but as [-kùt-] when it appears elsewhere:

(26)	a.	*kút*	'hand'	'hand, arm'
	b.	*kùt-sáa*	'hand' + 'child'	'finger'
	c.	*kùd-búu*	'hand' + AUG	'thumb'
	d.	*kùd-məjáa*	'hand' + 'palm/sole'	'palm'
(27)	a.	*cúup*	'breast'	'breast'
	b.	*cùb-ráa*	'breast' + 'fruit'	'nipple'
	c.	*cùb-cuu*	'breast' + 'liquid'	'milk'

In isolation, the morphemes meaning 'hand; arm' and 'breast' are realized with H tones. However, when followed by other syllables, within a word, the tone changes to L. As shown by example (27c), this process counter-bleeds the H → M / H___ process described above. Were this not the case, we would expect *[cùb-cúu], with a H tone on the second syllable.

Our Sorbung database is not currently large enough, and does that have enough morphologically complex forms, to allow us to confidently characterize all of the tonal alternations that we have observed. These two patterns are described here because they were exemplified in a relatively large number of data. Based upon these relatively limited findings, though, we believe it is safe to characterize the tone sandhi system of Sorbung. On the one hand, Sorbung clearly has more tonal alternations than Tangkhulic languages like Ukhrul, where tone is morphophonologically very stable. On the other hand, Sorbung cannot claim as pervasive a system of tone rules as many Kuki-Chin languages (Hyman & VanBik 2002; Hyman & VanBik 2004; Hyman 2007a; Hyman 2007b; Yip 2004).

3. Onsets

3.1. Inventory

The onset inventory of Sorbung includes plosives, fricatives, nasals, trills, and approximates. Sorbung has five contrasting places of articulation: labial, coronal, palatal, velar, and glottal. Plosives appear at all of these places and display a three-way distinction among voiceless, aspirated, and voiced. In word-initial position, the /b/-/p/ and /d/-/t/ contrasts are retained but the /g/-/k/ contrasts is neutralized. Neither voicing nor aspiration is contrastive at the palatal place. There is no voiced-voiceless contrast among fricatives and the only voiced fricative is [v], which is a conditioned variant of /w/. There are labial, coronal, and velar nasals but no palatal nasal. The inventory also includes the trill /r/ ([r] ~ [ɾ]) and the approximates /l/, /w/, and /y/. The inventory is summarized in **Table 16** below.

Table 16: *Sorbung onsets. Onsets in parenthesis only occur as predictable variants of other underlying sounds.*

	LABIAL	CORONAL	PALATAL	VELAR	GLOTTAL
NASAL	m	n		ŋ	
PLOSIVE	p	t	c	k	ʔ
	pʰ	tʰ		kʰ	
	b	d		g	
FRICATIVE	(v)	s	ʃ		h
TRILL		r			
APPROXIMATES		l	j	w	

The language variably allows a few consonant clusters, comprising of /pl/ /pʰl/ /tr/ /kʰr/ and /kl/, (see section 0 above).

3.1.1. Examples

Table 17 provides examples of each of the onsets.

Table 17: *Examples of each onset.*

/m/	*mai*	'face'	*mìit*	'eye'	*mùu*	'see'
/n/	*náa*	'hurt'	*níiŋ*	'mind'	*nèe*	'small'
/ŋ/	*ŋaa*	'fish'	*ŋia*	'stand'	*ŋée*	'white'
/p/	*paasàa*	'man'	*pii*	'aunt'	*pée*	'give'
/t/	*taa*	'old'	*tətir*	'crossbar'	*tee*	'sister'
/c/	*càap*	'cry'	*məcìi*	'salt'	*cèm*	'knife'
/k/	*kaa*	'that'	*ʔəkíi*	'corner'	*kèe*	'leg'
/g/	*ʔəŋgúu*	'child'	*cəgòo*	'river'	*təgók*	'pot'
/ʔ/	*ʔaa*	'fowl'	*ʔìin*	'sleep'	*ʔèk*	'feces'
/pʰ/	*pʰáaglàaŋ*	'wall'	*pʰíit*	'hit'	*ʔəpʰùt*	'breath'
/tʰ/	*tʰaaŋ*	'dry'	*tʰìi*	'blood'	*tʰèe*	'bow'
/kʰ/	*kʰaa*	'bitter'	*kʰii*	'wind'	*kʰoo*	'bee'
/b/	*ʔəbák*	'bat'	*buum*	'sit on eggs'	*ʔəbúu*	'mole'
/d/	*dài*	'cold'	*dùu*	'sew'	*mədée*	'be born'
/s/	*sàa*	'animal'	*lusìip*	'crown'	*ʔəsóo*	'spear'

/ʃ/	*ʃúuk*	‘exit’	*ʃìr*	‘vagina’	*ʃóo*	‘long’
/h/	*haa*	‘tooth’	*maihìŋ*	‘freckle’	*məhée*	‘charcoal’
/r/	*ʔəraa*	‘fruit’	*ríiŋ*	‘alive’	*rée*	‘war’
/l/	*laa*	‘song’	*məlíi*	‘four’	*lee*	‘medicine’
/j/	*jàa*	‘accept’	*ʔəjíi*	‘drive, chase’	*ʔəjòok*	‘friend’
/w/	*ʔəwaa*	‘bird’	*tʰəwái*	‘mosquito’	*wór*	‘swell’
	laavá	‘this song’	*iiŋkʰaavá*	‘this boundary’	*bélcàavá*	‘this spade’

Two of the onsets have visibly limited distributions.

- /ʃ/- never occurs before /ee/, /e/, or /aa/.
- /w/- only occurs before /a/ and /aa/.

While it would seem desirable to collapse these onsets with other phonemes, they are both in contrastive distribution with all of the possible candidates.

A more interesting case is the relationship between /g/ and /k/. Both of these occur in the onsets of major syllables following vowel-final minor syllables, establishing them as distinct phonemes:

(28) a. *təgók* ‘pot’
b. *cəgòo* ‘river’

(29) a. *səkíi* ‘deer’
b. *məkee* ‘kidney’
c. *kap kʰàt* ‘length from thumb to finger’
d. *cəkáap* ‘tongs’
e. *səkúan* ‘horse’
f. *ʔəkór* ‘peel’

However, while /k/ can occur word-initially (30), and word-internally after another major syllable (31), /g/ does not:

(30) a. *kút* ‘arm’
b. *kèe* ‘foot’
c. *kuum* ‘year’
d. *koo* ‘do’

(31) a. *pakùu* ‘younger paternal uncle’
b. *kèkíuk* ‘crippled, lame, handicapped’

In this respect, /g/ is unlike the other voiced stops, /b/ and /d/. However, like then (and unlike the voiceless stops) /g/ can occur after nasal-final minor syllables:

(32) a. *ʔəŋguu* ‘baby, child’
b. *təŋguáp* ‘hat’
c. *təŋgooŋ* ‘anteater’

A reviewer suggests that this might be a case of free [g ~ k] variation, as is found Jingpho. This is possible. However, within our corpus there are no clear instances of [g] varying with [k] in the same lexical item without a clear conditioning environment (see 0 below).

3.2. Alternations

As discussed above, CəC sequences vary with CC sequences in the same lexical item. That is to say, the epenthetic process that breaks up underlying initial consonant clusters to produce minor syllables is variable. The [ə] appears to be the only vowel permitted in the minor syllables. We note three types of cases where epenthesis sometimes fails to occur, depending crucially on the nature of the two initial consonants. First, in /s/-sonorant clusters, epenthesis variably fails yielding, e.g. [sə.m…] varying with [sm…], as in 'cattle':

(33) [səmùk] ~ [smùk] 'cattle'

In this example, as in other cases with /s/+sonorant clusters, the /sm/ cluster is tautomorphemic (/s+muk/ 'animal prefix' + 'cattle'). This variation is apparently sensitive to word length and speech rate. For example, /smùk/ 'cattle' was usually realized *with* epenthesis, but /smukpaasaa/ 'bull' was usually realized *without* epenthesis.

Most of the obstruent-sonorant onset clusters in Sorbung contain stops. These clusters consist of voiceless labial or velar stops followed by /l/ or /r/:

(34) b. [pəlaaj] ~ [plaaj] 'umbilical cord'
c. [pʰeláa] ~ [pʰláa] 'wing (of a bird)'
d. [kʰəràan] ~ [kʰràan] 'spider'

In none of these cases is there convincing evidence that the minor syllable is an independent morphological unit. It is notable that while we have recorded instances of clusters with /p/ and /pʰ/, we have noted no clusters with /b/ even though the prefix /b-/ occurs before the root /ríi/. This leads us to believe that epenthesis between morphemes is more favored that epenthesis into morphemes.

The final, and probably most theoretically interesting, cluster of environments in which epenthesis sometimes fails to occur is between a glottal stop and a following consonant:

(35) a. [ʔəkʰau] ~ [ʔkʰau] 'grasshopper'
b. [ʔəkʰúan] ~ [ʔkʰúan] 'voice'
c. [ʔəkái] ~ [ʔkái] 'hips'
d. [ʔəkʰúk] ~ [ʔkʰúk] 'knee'
e. [ʔərík] ~ [ʔrík] 'louse'
f. [ʔəpáat] ~ [ʔpáat] 'soft, mushy'
g. [ʔəŋaa] ~ [ʔŋaa] 'fish'

As with the /s/+sonorant clusters, the /ʔ/+consonant clusters are all tautomorphemic. There are a number of different prefixes in Sorbung which are underlyingly /ʔ-/, usually with a following epenthetic schwa. However, all of them seem to pattern similarly with regard to

epenthesis. When there is no epenthetic schwa, the glottal stop is realized as a faint glottal release (before stops), increased duration, or preglottalization (on a following sonorant). The variation does not seem to be constrained by the manner of the second consonant and seems to be a function mostly of speech rate and higher-level prosodic influences.

There are also cases, in Sorbung, where the first mora of a diphthong is devocalized and syllabified as an onset. The best examples of this involve the proximal demonstrative enclitic, /ùá/. When the syllable to which /ùá/ cliticizes ends in a consonant, the clitic is realized as [ùá]:

(36) a. [cèmùá] 'this knife'
b. [ʔəʃĭmùá] 'this needle'
c. [təgógùá́] 'this pot'
d. [təŋguábuá] 'this headdress'
e. [téŋguàdùá] 'this bowl'

If the syllable to which it cliticizes ends in a vowel other than /a/, /ùá/ is usually realized as [wá]:

(37) a. [tʰèewá] 'this bow'
b. [lèewá] 'this medicine'
c. [réewá] 'this war'
d. [ròowá] 'this axe'
e. [ʔəsóowá] 'this spear'

After high vowels, though, /ùá/ varies between [wá] and [vá]:

(38) a. [məʃĭiwá ~ məʃĭivá] 'this necklace'
b. [r~~uu~~wá ~ r~~uu~~vá] 'this rope'
c. [meciiwá ~ meciivá] 'this necklace'

Finally, and most curiously, after /a/, /ùá/ varies between [vá] and [βá]:

(39) a. [bélcàavá] 'this spade'
b. [iinkʰaavá ~ iinkʰaaβá] 'this door'
c. [laavá] 'this song'

It is not clear to us what the phonetic basis for this latter pattern is.[29]

[29] A reviewer inquires about the fate of the initial low tone in /ùá/. When the /u/ is realized as a vowel, rather than a glide, it is produced with a distinct low tone and the following /a/ is produced with a high tone. When the /u/ is devocalized to [w], [v], etc., the low tone disappears so that in [məʃĭiwá], the last two syllables are realized as high tones with no interveneing low. This suggests that the low tone may be a default inserted on toneless TBUs.

4. Rhymes

4.1. Inventory

We analyze Sorbung as having five short-long pairs of vowel phonemes in major syllables:

/ii/	/i/	/~~ɯɯ~~/	/~~ɯ~~/	/uu/	/u/
/ee/	/e/			/oo/	/o/
		/aa/	/a/		

Phonetically, the short-long distinction is realized through a number of different cues other than duration, including quality and dynamic quality. In general, long vowels have a more peripheral quality and short vowels a more centralized quality. For the high vowels, duration is the primary cue to length. The long mid-vowels /ee/ and /oo/ are phonetically the diphthongs [ej] and [ow] while their short counterparts are realized as the lower monophthongs [ɛ] and [ɔ]. The low vowels /aa/ and /a/ are phonetically [aː] and [ɐ]. A summary of the phonetic values of the vowel phonemes is given below:

/ii/ [iː]	/i/ [ɪ]	/~~ɯɯ~~/ [ɯː]	/~~ɯ~~/ [ɯ]	/uu/ [uː]	/u/ [ʊ]
/ee/ [ej]	/e/ [ɛ]			/oo/ [ow]	/o/ [ɔ]
		/aa/ [aː]	/a/ [ɐ]		

We readily acknowledge that it would be possible to reanalyze this system in terms other than quantity (vowel length). The similar vowel systems of Northern Chin languages, for example, were analyzed by Button (2009) in purely qualitative terms. Our analysis provides a number of advantages. It allows us to easily characterize the stress-conditioned vowel alternations as alternations in a single phonological parameter (length), even though different phonetic parameters are involved depending on the vowel. By treating /ee/ and /oo/ as long vowels rather than phonemic diphthongs, we save the generalization that codas do not appear after phonemic falling-sonority diphthongs (diphthongs with a phonemic off-glide occupying the coda position). It is not simply the case, though, that analyzing the Sorbung vowel system into short-long pairs allows us to better capture the phonological patterns in the language than a quality-based analysis. It is also conceptually simpler and requires us to invoke fewer phonological parameters in order to characterize all of the contrasts in the system.

Aside from vowel length, one other aspect of our analysis of the vowels calls for comment. Although they are contrastive on the surface, it is possible to elimintate /~~ɯɯ~~/ and /~~ɯ~~/ from the underlying vowel inventory if some abstractness in underlying representation is allowed. In stressed syllables, short [~~ɯ~~] only occurs before coronal codas (/n/ and /t/) and thus occurs in complementary distributions with [u], which never occurs in these environments. In isolation from other facts, [~~ɯ~~] could be reduced to an allophone of /u/. We treat it as distinct because [~~ɯ~~] can also surface as a result of stress-conditioned length alternations with [~~ɯɯ~~]. Compare, for example, *cú~~ɯɯ~~* ‘water’ and *cɯ-rée* ‘thirsty (water-thirst)’**.** Thus, the phonemic status of /~~ɯ~~/ is dependent on the phonemic status of /~~ɯɯ~~/. As noted in Section 0 (above), Sorbung -~~ɯɯ~~ corresponds to PKC *-uy and probably reflects earlier *-ui. As will be seen below, it also behaves like the falling-sonority diphthongs /ai/ and /au/ in that it never occurs with a coda. For this reason, it is tempting to consider [~~ɯɯ~~]

to be the realization of underlying /ui/. This would not be problematic, apart from the degree of abstraction involved, if there were not a number of lexical items in Sorbung with surface [ui]. All of these appear to be loanwords from Meithei or Ukhrul Tangkhul:

(40) LOANS FROM UKHRUL TANGKHUL

a.	*ʃúi*	'tempt'
b.	*lúi*	'finish'
c.	*ókətʰui*	'world'

(41) LOAN FROM MEITHEI

	cəkúi	'dance'

In principle, there is nothing to stop us from saying that there is a phonological process mapping /ui/ to [ɯɯ] that only affects the lexical stratum containing native vocabulary. Claims of the same type have been made for other languages (Itô & Mester 1995; Itô, Mester, & Padgett 1999). However, in the interest of descriptive neutrality, we have retained the more concrete analysis while highlighting some of its shortcomings.

Excluding a few loanwords which have final /l/, Sorbung allows major syllables to have one of seven coda consonants:

/p/	/t/	/k/
/m/	/n/	/ŋ/
	/r/	

With a few exceptions, these can occur after the long and short vowels and after the rising-sonority diphthongs /ia/, /ua/, and /iu/. They do not occur after the falling-sonority diphthongs, /ai/ and /au/, and after /ɯɯ/. **Table 18** shows which of the combinatorial possibilities between nuclei and rhymes are attested in our corpus. Examples are given in the subsequent tables.

Table 18: *Sorbung rhymes.*

–0	**–r**	**–m**	**–n**	**–ŋ**	**–p**	**–t**	**–k**
[a]	ar	am	an	aŋ	ap	at	ak
aa	aar	aam	aan	aaŋ	aap	aat	aak
[e]		em	en	eŋ		et	ek
ee				eeŋ			eek
[o]	or	om	on	oŋ	[op]		ok
oo		oom	oon	ooŋ	oop		ook
[i]	ir	im	in	iŋ	ip	it	ik
ii			iin	iiŋ	iip	iit	
[u]	ur	um	[~~u~~n]	uŋ	[up]	[~~u~~t]	
uu	uur	uum		uuŋ	uup		uuk
~~uu~~							
au							
ai							
ia	iar	iam		iaŋ			iak
ua	uar	uam	uan	uaŋ	uap	uat	uak
iu		ium					iuk

Table 19: *Examples of Sorbung open and r-final rhymes.*

	–0		**–r**	
a	*ciŋʃiipá*	‘ant’	*ʔətʰár*	‘new’
aa	*ʔaa*	‘fowl’	*ŋənáar*	‘snore’
e	*kèmíit*	‘ankle’	*cèm*	‘knife’
ee	*məlée*	‘tongue’		
o	*tətrò*	‘comb’	*mor*	‘mouth’
oo	*móo*	‘fire’	*caŋkʰoom*	‘milk’
i	*tʰìʃúuk*	‘bleed’	*mətír*	‘shrew’
ii	*tʰìi*	‘die’		
u	*lukaaŋ*	‘head’	*ʔəhúr*	‘frost’
uu	*məjúu*	‘mouse’	*júur*	‘nation’
~~uu~~	*hab~~uu~~*	‘molar’		
au	*jau*	‘sheep’		
ai	*mai*	‘face’		
ia	*ʔènʃià*	‘enemy’	*tʰiár*	‘iron’
ua	*kàʃuà*	‘rain’	*húar*	‘bright’
iu	*ciu*	‘dig’		

Table 20: *Examples of Sorbung nasal-final rhymes.*

	–m		**–n**		**–ŋ**	
a	*hambú~~u~~*	‘tiger’	*wàn*	‘stomach’	*wáŋ*	‘fly (v.)’
aa	*səráam*	‘otter’	*laan*	‘err’	*lukaaŋ*	‘head’
e			*lèn*	‘close’	*seŋ*	‘clear’
ee					*kəléeŋ*	‘loose’
o	*som*	‘ten’	*ʔítà kʰón*	‘my village’	*cóŋ*	‘speak’
oo			*məhu~~u~~tʰoon*	‘window’	*jooŋ*	‘monkey’
i	*ʔənim*	‘shadow’	*mətín*	‘nail’	*maihìŋ*	‘freckle’
ii			*ʔiin*	‘drink’	*jíiŋ*	‘dark’
u	*kùmpʰék*	‘duck’	*ku~~u~~n*	‘straight’	*məlúŋ*	‘heart’
uu	*kʰuum*	‘sweet’			*ʃúuŋ*	‘cook’
ia	*səriám*	‘mithun’			*mətu~~u~~nliaŋ*	‘eighth’
ua	*mùam*	‘hold’	*puan*	‘blanket’	*cəluáŋ*	‘to flow’
iu	*ləkium*	‘bar’				

Table 21: *Examples of Sorbung stop-final rhymes.*

	–p		**–t**		**–k**	
a	*nàpkáaŋ*	‘dry mucus’	*tʰàt*	‘kill’	*ʔəbák*	‘bat’
aa	*naap*	‘stick (v.)’	*kʰáat*	‘one’	*ŋàak*	‘wait’
e			*ʔərét*	‘eight’	*mooʔék*	‘hot coal’
ee					*ʔəméek*	‘meat’
o					*ʔəcok*	‘frog’
oo	*kʰòop*	‘be satisfied’			*òok*	‘pig’
i	*məcíp*	‘frighten’	*mit*	‘squeeze’	*ʔərík*	‘louse’
ii	*lusìip*	‘top of head’	*mìit*	‘eye’		
u	*məjúp*	‘suck (v.)’	*ku~~u~~t*	‘arm’		
uu	*məjúup*	‘kiss (v.)’			*ʃúuk*	‘exit’
ia					*ʔəntiàk*	‘green’
ua	*ʔəcúap*	‘spleen’	*kʰuat*	‘scratch’	*ʔəkʰúak*	‘brain’
iu					*kèkíuk*	‘crippled’

4.1.2 Gaps

Two major nucleus-coda co-occurrence restrictions are found in Sorbung. The first applies to the falling-sonority diphthongs. As mentioned above, phonemic falling sonority diphthongs are never followed by coda consonants. Unlike /ia/, /ua/, and /iu/ that act as nuclei with codas, /ai/ and /au/ do not permit codas because the off-glide fills the coda position. In general, complex codas are not permitted in Sorbung. /ui/ follows the same pattern even though it is found only in loanwords from Ukhrul (Standard) Tangkhul and Meithei. Similarly, no codas appear after long [u~~u~~], which, as discussed above, is the modern reflex of historical **-ui.

(42)	a.	*ʔə-sái*	'elephant'	*sài-róoŋ*	'slingshot'
	b.	*jau*	'sheep'	*ʔəkʰaurúaŋ*	'grasshopper'
(43)	a.	*ʔa-cùu*	'chicken egg'	*mə-nuu*	'laugh'
(44)	a.	*ŋia*	'stand'	*ʔən-tiàk*	'green'
	b.	*ʃĭu*	'hit'	*kè-kíuk*	'crippled'
	c.	*kà-ʃuà*	'rain'	*ʃuan*	'weak'
(45)	a.	*ŋée*	'white'	*kə-léeŋ*	'loose'
	b.	*sóo*	'run'	*òok*	'pig'

As mentioned above, the coda restriction does not apply to the long vowels /oo/ and /ee/, though phonetically they are falling-sonority [ow] and [ej]. Our analysis of [ow] and [ej] as underlying long vowels, /oo/ and /ee/, explains why they function as monophthongal nuclei instead of falling-sonority diphthongs with regard to syllable structure.

4.2. Alternations

The phonological alternations affecting Sorbung rhymes include voicing alternations in stop codas and vowel shortening in unstressed syllables.

The voicing of stop codas is predictable from the phonological environment. When the following segment in a word is a vowel or voiced consonant, the coda is voiced. Elsewhere, when word-finally and before voiceless consonants, stops are then voiceless. (46a) demonstrates the changing voicing of the coronal stop in /miit/ 'eye'. When this stem is compounded with /mii/ to form 'eyebrow' (literally 'eye hair'), the final stop is voiced as it precedes a voiced segment. However, when followed by the voiceless consonant-initial /kor/, the stop remains voiceless. Other examples in (46) further demonstrate the same pattern:

(46)	a.	miit	'eye'	mìd-mii	'eyebrow'
		mit-kor	'eyelid'	mìd-ék	'eye sand'
	b.	kút	'hand'	kùd-mətín	'finger nail'
		kùt-kʰóom	'handspan'		
	c.	kʰòop	'full'	kʰóob-maa	'full-question'
	d.	káap	'shoot'	káab-òo	'shoot-ind'
	e	ʔèk	'feces'	ʔèg-len	'defecate'

This alternation cannot be attributed to a general process of voicing assimilation. Intervocalic voiceless stops occur frequently:

(47)	a.	lukaaŋ	'head'
	b.	kèkíuk	'crippled'
	c.	pátáabàa	'elder paternal uncle'
	d.	jáapee	'many'
	e.	kʰupú kʰuncaaŋ	'storm'

The examples in (47) show that voiceless stop onsets are not subject to intervocalic voicing and therefore dismiss a general voicing assimilation rule. However, it is not clear whether the voicing alternation in Sorbung stop codas should be treated as the voicing of underlying voiceless stops before voiced segments, the devoicing of underlying voiced segments word-finally and before voiceless segments, or the "filling" of laryngeal specifications into segments underlyingly unspecified for voice. As both voiced and voiceless stops appear as onsets, intervocalically or otherwise, we cannot assume all stops are either voiced or voiceless. In Kom, an Old Kuki language also spoken in Manipur which shares many traits with Sorbung, we find a similar pattern of voicing (Grierson 1903:244). Word final voiceless stops become voiced when a vocalic suffix is added (48):

(48) a. *kut* 'hand' *a-kud-a* 'his hand on'
b. *kaap* 'shoot' *a-kaab-a* 'his shooting'

Like Sorbung, Kom also has examples of voiceless stops between vowels. While the available corpus of Kom data is not large enough to determine whether the alternations are identical, the similarity is suggestive.

In simple compounds consisting of two monosyllabic roots, the first syllable is consistently unstressed. If the first syllable's vowel is short underlyingly, it will not be modified; if it is long, it will be shortened.

(49) a. *kʉt* 'hand' ***kʉ̀d****bʉ́ʉ* 'thumb'
b. *cóŋ* 'words' ***cóŋ****ʔàak* 'stutter'

(50) c. *kʰoo* 'bee' ***kʰo****cʉ́ʉ* 'honey'
d. *miit* 'eye' ***mit****kor* 'eyelid'
e. *haa* 'tooth' ***ha****bʉʉ* 'molar'
f. *cuup* 'breast' ***cup****cʉʉ* 'milk'
g. *tʰii* 'blood' ***tʰi****ʃuuk* 'bleed'
h. *jaaŋ* 'penis' ***jaŋ****hun* 'foreskin'
i. *kèe* 'leg, 'foot' ***ke****míit* 'ankle'

However, the constituent structure of compound formation alters stress and thus reduction. As expected, the vowel reduces in the unstressed position in (51b), but remains a long vowel in the stressed position in (51c). The reduction appears to only apply to instances of endocentric compounds of two simple, one-syllable roots.

(51) a. *ˈkèe* 'leg, foot'
b. *ˌkè-ˈmíi* 'leg hair'
c. *ˌkèe-məˈjáa* 'footprint'

(52) a. *məˈkʰáa* 'jaw'
b. *məˌkʰáa-ˈruu* 'jawbone'

In other complex compounds, especially those containing sesquisyllables, reduction does not apply in the same manner. (52b) displays a complex compound where the

nucleus of the head does not reduce. The length alternation follows almost entirely from the alternations in stress discussed in Section 0 above.

5. Conclusion

Leaving aside Brown's (1837) brief word list, this study is the first introduction of Sorbung/Southern Tangkhul to the scholarly community. We have introduced some of the significant properties of this language that are likely to be of interest to synchronic theorists, typologists, and comparativists. At the same time, a great deal of work remains to be done. Because our goals in this paper were descriptive, we have not ventured to provide a theoretical rationale for the patterns and alternations that we have reported. We have only ventured far enough into matters diachronic to promote our position that Sorbung is closer to Kuki-Chin than to Tangkhulic and that its phonology should be seen in this perspective. A detailed working-out of both the theoretical implications of the synchronic alternations in Sorbung phonology—cyclic stress assignment, opaque tone sandhi, morphologically conditioned place-assimilation, variable epenthesis, and problematic voicing alternations—will have to be left for further work. So, too, will detailed study of the historical development of Sorbung phonology. Likewise, we have scarcely touched upon the implications that this work has for understanding Tangkhul ethnogenesis and for plotting the historical relationship between the Tangkhuls of the Sorbung area and the rest of the Tangkhul ethnicity. What we do hope to have established is that Sorbung presents interesting data and problems to both the historical and synchronic linguist.

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Appendix: Sorbung Word List

1dl	ʔərúkəniŋ
1pl	ʔənəkʰuo
1sg	ʔoo
1sg-gen	ʔità
1sg-refl	ʔóoməsaa
2dl	nàrúkəniŋ
2pl	naaŋnəkʰuo
2sg	naaŋ
2sg-gen	nanta
2sg-refl	naaŋməsaa
3dl	mərúkəniŋ
3pl	maanəkʰuo
3sg	maa
3sg-gen	mata
3sg-refl	maaməsaa
Gloss	NewTrans
abdomen (external bulge); belly	wan
able	kòomán
accept	jàa
accustomed	məʃúhaa
adam's apple; larynx (throat)	kəráak
add together	mətùuk
adult	santáarià
afterbirth; placenta	ʔəlaam
alive; living, be	ríiŋ
animal	saajúur
animal	sàa
ankle	kèmíit
ant	ciŋʃiipá
anteater (pangolin); crocodile	təŋgooŋ
antler (of deer)	ʔəkìi
anus; rectum	ʔəkái
arm, upper	paambúm
arm; hand	kʉ́t
armpit; underarm	cùbláa
arrive	hàŋguŋ
arrow	tʰèe
artery; blood vessel; vein	məŋeetʰáarʉʉ
ascend; climb	háaŋ
ashamed; shy	jáak
asleep, be; sleep	ʔìin
aunt, elder paternal	ʔənnìi
aunt, maternal	nugənuu
aunt, wife of elder paternal uncle	nútáanù

aunt, wife of maternal uncle	pii
aunt, wife of younger paternal uncle	núgənùu
aunt, younger paternal	ʔənnìi
awake, be; wake up (v.i.)	ʔəntʰèe
axe	ròo
back	kòoŋ
back (of something)	ʔənúuŋlàm
back basket	məkóoŋ
back, lower	kòoŋcat
backbone; spine	kòoŋrúu
bad (morally)	saaleè
bamboo spoon for curry	məkʰée
bar	ləkium
bat	ʔəbák
bathe	cɥʃíi
beak; bill (of bird)	mòr
bear (Selenarctos thibetanus)	ʔəwám
bear; birth, give	mədée
beard	mòrmíi
beautiful	ʔəloo
become old	taalen
bee	kʰoo
behind	ʔənúuŋlàm
belly; abdomen (external bulge)	wan
big	lòok
bile	məʃîŋkʰaa
bill (of bird); beak	mòr
bird	ʔəwaa
birth, give; bear	mədée
bite (v.)	ʔóo
bitter	kʰaa
black	wàm
blanket; cloth	púan
bleed (v.)	tʰìʃúuk
blemish on skin	maihìŋ
blemish; mole	sèmàamíi
blind	mìtcòo
blink (v.)	mìtkʰəjùp
blood	tʰìi
blood vessel; vein; artery	məŋeetʰáarɯɯ
blow (mouth)	sèm
blow fire	mò-sèm
body	məsàa
body, dead; corpse	tʰìilenta məsàa
boil	bùt
bone	ʔərúu

bone, jaw; jawbone; mandible	məkʰáaruu
bone, malar; cheekbone	mairúu
born, be	mədée
borrow	màmbúk
bosom	məlúuŋ
boundary	tʰərìi
bow	tʰèe
bowels; intestines	ʔəríi
bowl	téŋguàt
brain	ʔəkʰúak
break	məkʰóo
break (glass, egg); split (a watermelon, other round object)	kʰòo
breast	cúup
breath	ʔəpʰu̬t
breathe (v.)	ʔəpʰu̬t-lée
bright	húar
brother of female, elder	moo
brother of female, younger	ʔináupa
brother of male, elder	moo
brother of male, younger	ʔináupa
brother-in-law (of ego)	ʔinèeŋ
brow; forehead	məcèe
brush	ʔətáat
buffalo	səloo
bull; cattle, male	səmùk paasaa
burn off fields; slash and burn	lèe-hèe
burn; on fire, be	moo-còk
burnt	kaaŋlen
burst	məkʰóo
butterfly	ʔəpàak
buttocks	ʔəkái
buy	ʔəlóo
calf; shin	kèeməráai
call	kèe
carry	pʰùa
carry on the head	tooŋ
carry with hand; lift up	kʰaaŋ
cat (Felis domesticus)	kʰaan
catch	ʔəráak
catch; drive; chase	ʔəjíi
cattle	səmuk
cattle, female; cow	səmùk mòosa
cattle, male; bull	səmùk paasaa
cave; hole (in rock)	luŋkʰua
charcoal	məhée

chase; catch; drive	ʔəjíi
cheap	pai
cheek	mai
cheekbone; bone, malar	mairúu
chest (=liver)	mətʰín
chew (v.)	ʔóo
chicken egg	ʔacùu
chicken, jungle	ʔarip
chicken; fowl	ʔaa
chief	ʔəhuáŋbáa
child	ʔəŋgúu
chin; jaw	məkʰáa
choose	kəplăaŋ
chop (at tree)	dùu
clan; surname	səkái
claw (of animal)	mətín
clay	lámpʰu
clean	tʰàar
clear	seŋ
clever; smart; wise	tʰàaŋmee
climb; ascend	háaŋ
close; shut	lèn
cloth; blanket	púan
cloud	kʰàmbúu
coccyx; tailbone	ʔəkáiruu
cock (intact male)	ʔakʰóoŋ
cold, very; quiet, very	dàirìʃì
cold; quiet	dài
comb (of rooster)	tətrò
come	hóoŋ
come back (imperative)	hoóŋledee
conceive	mərái
cook	ʃúuŋ
copulate (v.); have intercourse	ʔətéŋná
cord, one; fathom, one	laam kʰàt
corner	ʔəkíi
corpse; body, dead	tʰìilenta məsàa
correct	kún
cosmos; world	ókətʰui
cough	məkʰáa
cow; cattle, female	səmùk mòosa
crab	ʔəʃìi
crawl	ʔəwák
crayfish	tukòŋ(g)lá
creator of the universe	semnùu sempáa
crippled; lame; handicapped	kèkíuk

(whether or not legs are involved)	
crocodile; anteater (pangolin)	təŋgooŋ
crooked	məkʰái
cross	ʔəkaan
crossbar	tətir
crotch; fork of legs	kèemətóo, kèemədóo
crow (v.); sound (v.i., as a musical intrument)	ʔəkʰuàn
crown; pate; head, top of	lusìip
cry; weep	càap
cut (wood, vegetables)	táan
dance	cəkúi
dark	jíiŋ
darkness	ʔəjíiŋ
daughter	saa
daughter-in-law (of ego)	ʔihàa
day	ʔəʃʉn
dead, be; die	tʰìi
deaf	nàkʰuák
decay	məmăaŋ
deceive	mináam
deep	tʰùuk
deer	səkíi
defecate (v.)	ʔèklen, ʔèglen
descend	júuŋ
desire; want	pam
devil, ghost, demon, evil spirit	rambúu
dew	ʔədáicʉʉ
dhole	ràmʔúʉ
die; dead, be	tʰìi
difficult	lùu
dig	ciu
digit	-məjúumràa
dirty	múàt
dish out; scoop out	ʃuaglee
divide; split	mətáan
do	koo
dog (Canis familiaris)	ʔúʉ
door	iinkʰaa
dove; pigeon	ʔəʃʉ́u
dream	máaŋ
drink (v.)	ʔíin
drive; chase; catch	ʔəjíi
drought	cəkáaŋ
dry	tʰaaŋ
dry land (vs. water); earth; ground	ʔəloo

duck	kùmpʰék
dull (not sharp)	ŋáimai
dumb; mute	coŋʃúuk
dust; powder	ʔəhút
eagle	bùumlík
ear	ʔənáa
ear canal	nákʰùur
eardrum	nájàaŋ
early; fast	tʰàk
earring	ʔənáatʰíiŋ
earth; ground; dry land (vs. water)	ʔəloo
earthquake	ràmbuu háaŋ
earwax	ʔənáaʔék
easy	pai
eat	saa
egg	ʔəwaacúu
eggs, fish; roe	ʔəŋaacúu, ʔŋaacúu
eight	ʔərét
eighteen	som ʔərét
eighth	mətunliaŋ
elephant	ʔəsái
eleven	som kʰáat
ember; hot coal	moʔék
enemy	ʔènʃìà
erase a chalkboard; extinguish	məmìt
err	laan
evening	kʰəleelám
exist	ʔóm
exist, to	ʔòmná
exit	ʃúuk
exit, to	ʃùgná
expect	ʔədúuk
expensive	táaŋ
extinguish; erase a chalkboard	məmìt
extinguish; put out fire	məmìt
eye	mìit
eye sand	mìdék; mìtʔék
eye, white of	mìdèk, mìtʔèk
eyeball	mìit
eyebrow	mìdmíi
eyelash	mìdmii
eyelid	mìtkor
face	mai
fall	ʔəndía
family	ʔinʃúŋkʰuar
far	ʃóo

fart məcipát
fast; early tʰàk
fat ʔətʰáu
fat tʰáu
father (of ego) ʔəmbaa
father-in-law (of ego) ʔəmbúu
fathom, half laam təŋkʰai
fathom, one; cord, one laam kʰàt
fear ʔəncíi
feather (of bird) ʔəmíi
feces; shit ʔèk
femur; thigh bone mətóoruu
few kaajàŋ
field lèe
fifteen som rəŋáa
fifth born tʰoombáa
fifty sòŋŋáa
fin; scale of fish ʔəŋàmíi
finger kʉdməjúumràa, kʉtməjúumràa
finger width, one kʉdməjumráa kʰàt
finger, little kʉ̀sáa
fingernail kʉ̀dmətín
finish lúi
fire móo
first born moopaa
fish (general) ʔəŋaa,ʔŋaa
fish species, light in color ʔəŋkʰau
fish, catfish ʔəŋoŋ(g)lá
fish, flying ŋàmíi
fishing cat səráam
fit càa
five rəŋáa
flea ʔʉrík
flesh ʔətáak
flood cəlòk
flow (v.) cəluáŋ
fly tʰəwái
fly (v.) wáŋ
follow ʔənúuŋ-aajíi
foot kèe
footprint kèlúuŋ
forehead; brow məcèe
foreskin jaŋhʉ́n
forget mənìi-lèn
fork of legs; crotch kèemətóo, kèemədóo
four məlíi

fourteen	som məlíi
fourth born	miipáa
fowl, male; rooster	ʔakʰóoŋ
fowl; chicken	ʔaa
fox	ràmʔúu
freckle	maihìŋ
friend	ʔəjòok
frighten	məcíp
frog	ʔəcok
front (of something)	məŋaalam
front of, in	məŋaalam
frost	ʔəhúr
fruit	tʰìŋraa
fry	tʰàu-jáu
fry	jáu
full; satiated, be	kʰòop
fur (of animal)	ʔəmíi
gape; open mouth (v.)	ʔàaŋ
get somebody up	mətʰée
get up; rise	ʔəntʰée
give	pée
go	jáu
goat	màŋgəlée
goatee	mòrmíi
gold	sənáa
good	ʔəloo
grandchild (of ego); son's son	ʔisàata ʔisàa
grandfather, maternal (of ego)	ʔəmbúu
grandfather, paternal	ʔəpùu
grandfather, paternal (of ego)	ʔəmbúu
grandmother, maternal (of ego)	ʔəmbíi
grandmother, paternal (of ego)	ʔembíi
grasshopper	ʔəkʰaurúaŋ
grasshopper	ʔəkʰau, ʔkʰau
grease (for cooking); oil	tʰàu
green	ʔəntiàk
grind with pestle	pʰənaat
grope (in the dark)	mətʰáp
ground; dry land (vs. water); earth	ʔəloo
guest	məlóoŋ
gums	hákʰii
hail; sleet	ʔəriáràa
hair (general)	ʔəmíi
hair of head	sàam
hair, body	ʔəmíi
hair, facial	mòrmíi

hair, female pubic	ʃĭrmìi
hair, leg	kèmíi
hair, male pubic	jàŋmìi
hair, underarm	cùbláamíi
hand	kʉ́t
hand span	kʉ̀tkʰóom
hand; arm	kʉ́t
handicapped (whether or not legs are involved); crippled; lame	kèkíuk
hard; tough	lùu
hat; headdress	təŋguáp
have intercourse; copulate (v.)	ʔətéŋná
head	lukaaŋ
head, top of; crown; pate	lusìip
headdress; hat	təŋguáp
hear (v.)	tʰóo
heart	məlúŋ
heart; locus of anger	məlúuŋ
heart; locus of emotions	níiŋ
heartbeat (=breath)	ʔəpʰʉ̀t
heavy	rìit
help	páaŋ
hen	ʔalàa
hen, mother	ʔabʉ́ʉ
hiccup	səkái
hide	mətʰúup
hide; leather (dried animal skin)	ʔəmèkhʉ́n
high	məsáaŋ
hill	cíiŋtòoŋ
hips	ʔəkái, ʔkái
hit (with stick)	pʰíit
hit (with the fist)	ʃĭu
hold in mouth (v.)	mùam
hole	ʔəkʰuá
hole (in rock); cave	luŋkʰua
honey	kʰòcʉ́ʉ
horn (of animal)	ʔəkìi
horse	səkúan
host (house owner)	ʔinpù
hot	sáa
hot coal; ember	moʔék
house	ʔin
humble	tʰòonáa
hunchback	kòoŋkʰùu
hundred	ʔəjaa kʰáat
hungry, be	bùcám

hunt	ʔəjíi
hurt	mətʰái
hurt; sick, be; ill, be	náa
husband	bəsée
ice	ʔəhúr
ill, be; hurt; sick, be	náa
insects	ʔəkuu ʔəkái
intestines; bowels	ʔəríi
iron	tʰiár
itch (v.); itchy, be	mətʰàk
itchy, be; itch (v.)	mətʰàk
jaw; chin	məkʰáa
jawbone; mandible; bone, jaw	məkʰáaruu
joint	mətètnà
kick	məʃùuk
kick; knead with the feet	kau
kidney	məkee
kill	tʰàt
kiss (v.)	məjúup
knead with the feet; kick	kau
knee	ʔəkʰúk, ʔkʰúk
knee cap; patella	kʰúk
knife	cèm
lac insect	ʔəríp
ladder	ʔəláak
lame; handicapped (whether or not legs are involved); crippled	kèkíuk
langur; leaf-monkey	cəháa
lap	mətóo
large intestine	ʔəríilookpaa
larynx (throat); adam's apple	kəráak
late; slow	ʃùum
laugh	mənúu
lay egg	ʔəcúu-məcúu
lead; start	ʔəntʰée
leaf-monkey; langur	cəháa
leather (dried animal skin); hide	ʔəmèkhún
leech (land)	məhít
left hand	təmbuelàm
leg	kèe
lend	wàaj
length from thumb to forfinger	kap kʰàt
leprous	ʔəhún-náa
lick (v.)	məléek
lift up; carry with hand	kʰaaŋ
ligament (bone to bone)	ʔəlíglák

light (weight) jaaŋ
lightning kʰumléeláap
like pam
like, be; resemble máan
lion hambúu
lip mòr
liver mətʰín
living, be; alive ríiŋ
locus of anger; heart məlúuŋ
locus of emotions; heart níiŋ
locus of thought; mind níiŋ
long ʃóo
look ʔen
look (imperative) ʔenee
loom puankʰóoŋnaa
loose kəléeŋ
loose; untie təràt-kəlen
lost máaŋ
louse ʔərík, ʔrík
low mənèm
man paasàa
man, blind mìtcòbàa
mandible; bone, jaw; jawbone məkʰáaruu
mantis ʔəsóm
many; very jáapee
marrow ʔəlíglák
meat ʔəméek
medicine lèe
milk cùpcuu
milk caŋkʰoom
mind; locus of thought níiŋ
mithun səriám
mock mənuuʃá
molar habuu
mole ʔəbúu
mole; blemish sèmàamíi
monkey jooŋ
month ʔəkʰáa
moon ʔəkʰáa
morning ʔəkʰuanlám
mosquito tʰəwái
moth ʔəpàa
mother (of ego) ʔənnúu
mother-in-law (of ego) ʔənnìi
mountain cíiŋtòoŋ
mouse məjúu

moustache	mòrmíi
mouth	mor
mucus, dry	nàpkáaŋ
mucus, liquid	nàap
muscle (=flesh)	ʔəták
mushy (of rice, crushed banana); soft	ʔəpáat, ʔpáat
mute; dumb	coŋʃúuk
my village	ʔítà kʰón
nail	mətín
name	ʔəmín
narrow	nèe
nation	júur
nationality	júur
navel	p(ə)lái
near	ʔənái
neck	riiŋ
necklace	məʃîi
needle	ʔəʃîm
nephew (of ego)	ʔitùsáa
nest	ʔəwaabúu
new	ʔətʰár
niece (of ego)	ʔitùsáa
night	ʔəján
nine	ʔəkúa
nineteen	som ʔəkúa
ninth	moolét
nipple	cùbráa
noon	ʔəʃʉn
nose	nàráa
nose bridge	nàráa
nostril	nàkʰúur
nurse; suckle (v.) (=drink)	ʔíin
oil; grease (for cooking)	tʰàu
old	ʔəlúu
old (age)	séndaa
old folks	ʔətaaria
on fire, be; burn	moo-còk
one	kʰáat
open	məhóoŋ
open mouth (v.); gape	ʔàaŋ
orphan	səràasa
otter	səráam
owl	ʔəwaahambúu
palm	kùdməjáa
parrot	bəkíi
pate; head, top of; crown	lusìip

patella; knee cap	kʰúk
paternal grandmother	ʔəpii
path; road	lambù~~u~~
path; this road	lambù~~u~~wá
peel	ʔəkór
penis	jaaŋ
person, blind	mìtcòpà, mìtconu
person, deaf	nàakʰuàk
person, old	santáarià
perspiration; sweat	məkʰáncu~~u~~
pestle	tənʃuk
pig	òok
pigeon; dove	ʔəʃúu
placenta; afterbirth	ʔəlaam
pond; pool	pukʰrìi
pool; pond	pukʰrìi
porcupine	səkúu
pot	təgók
pot, clay	lampʰù təkòo, dəgòo
pound rice	ʔənpʰee-néŋ
powder; dust	ʔəhút
practicioner of witchcraft	léváaʃuán
pregnant, be	mərái
price	ʔəmáan
pus	ʔənái
put	ləʃùa
put out fire; extinguish	məmìt
python	bəríilòokpáa
queen (no such office)	ʔəhuáŋnúu
quiet, very; cold, very	dàirìʃî
quiet; cold	dài
rain	kəʃuà
rat	məjúu
rectum; anus	ʔəkái
red	ʔaaŋ
release	məkʰáan-lèn
resemble; like, be	máan
respect	kʰəjáaʃá
rib cage	wándà ʔərúu
right hand	ʔəncáaŋlàm
rise; get up	ʔəntʰée
river	cəkòo, cəgòo
road; path	lambù~~u~~
roast	ree
roe; eggs, fish	ʔəŋaacú~~u~~, ʔŋaacú~~u~~
roll (v.i.)	laam

roll (v.t.)	màŋk(ə)liŋ
rooster; fowl, male	ʔakʰóoŋ
rope	rɯ̀ɯ
round	ʔəlúum
rub	tai
run	sóo
rust	ʔədáahàaŋ
saliva	məcámcɯ̀ɯ
salt	məcìi
sambar; sambhur	səjáa
sambhur; sambar	səjáa
sand	ʔəʃìi
satiated, be; full	kʰòop
scab (hardened rice at bottom of pot)	ʔəkaaŋ
scale of fish; fin	ʔəŋàmíi
scar	tàak
scoop out; dish out	ʃuaglee
scrape; scratch	ʔəhuát
scratch	kʰuat
scratch; scrape	ʔəhuát
search; seek	jóoŋ
second born	kʰoopaa
see (v.)	mùu
seek; search	jóoŋ
sell	júa
semen; sperm	jaŋcɯ̀ɯ
seven	səríi
seventeen	som səríi
seventh	loopáa
sew	dùu
shadow	ʔənim
shadow	ʔəním
shallow	tàar-leŋleŋ
sharp	ŋai
sharpen knife	cèm-ʔətát
sheep	jau
shin; calf	kèemərái
shit; feces	ʔèk
shiver; shudder; tremble	sái
shoot (v.)	káap
short (height)	tòo
short (length)	tòo
shoulder	ləkʰàa
shout	wàaw
shrew	mətír
shudder; tremble; shiver	sái

shut; close	lèn
shy; ashamed	jáak
sick, be; ill, be; hurt	náa
side (left)	tənpùelàm
side (right)	ʔəncáaŋlàm
sinew; tendon (muscle to bone)	ʔəlíglák
sing	laasáa
sister of female, elder	tee
sister of female, younger	ʔinàunù
sister of male, elder	tee
sister of male, younger	ʔisaanù
sister-in-law (of ego)	ʔimèe
sit	ʔənʃʉ̃ŋ
sit on eggs	buum
six	kərúuk
sixteen	som kərúuk
sixth born	joombáa
skeleton	ʔəruráaŋ
skin	ʔəhʉ́n
skinny	kòoŋ
skull	lukáaŋruu
skull	mairúu
sky	ʔəwaarám
slash and burn; burn off fields	lèe-hèe
sleep; asleep, be	ʔìin
sleet; hail	ʔəriáràa
slingshot	sàiróoŋ
slow; late	ʃùum
small	nèe
small intestine	ʔəríinèepaa
smart; wise; clever	tʰàaŋmee
smell; sniff (v.)	mənáam
smile (v.)	mənʉ́ʉ
smoke	mokʰʉ́t
snail	càbrùulá, càbrùurá
snake	bəríi
snake species, large	bəríis(ə)mùuk
sneeze	hátʰìi
sniff (v.); smell	mənáam
snore	ŋənáar
snow	ʔəhúr
soft	mənée
soft; mushy (of rice, crushed banana)	ʔəpáat, ʔpáat
sole	kèeməjáa
son	saa
son's son; grandchild (of ego)	ʔisàata ʔisàa

son-in-law (of ego)	ʔihàa
song	laa
soul, spirit (Meithei)	tʰəwái
sound (v.i., as a musical intrument); crow (v.)	ʔəkʰuàn
sour	tʰuur
spade	bélcàa
speak (v.)	cóŋ
spear	ʔəsóo
speech; words	cóŋ
sperm; semen	jaŋcʊ̀ʊ
spider	kʰəràan, kʰràan
spin	məlàm
spinal cord (=marrow)	ʔəlíglák
spine; backbone	kòoŋrúu
spit (v.)	məcamcúʊ mətʰúur
spit (v.)	məcamcúʊ məsàk
spleen	ʔəcúap
split (a watermelon, other round object); break (glass, egg)	kʰòo
split (as with a candy bar)	ʔətáanjèe
split; divide	mətáan
spring	cəlàm
squeeze	mit
squeeze; twist	mit
squirrel	ʔəlóo
squirrel, giant	ʔəlóo
stammer; stutter	cóŋʔàak
stand	ŋia
stand up (imperative)	ŋiaèe
star	ʔəʃìi
start; lead	ʔəntʰée
stature	ʔəráan
steal	mərúu
stick (v.)	náap
stink	mənámʃoo
stomach	wan
stone	lùuŋ
storm	kʰʊpʊ́ kʰʊncaaŋ
straight	kʊ́n
strong	məkàt
stupid	pàaŋ, ʔəpàaŋ
stutter; stammer	cóŋʔàak
suck (v.)	məjúp
suckle (v.) (=drink); nurse	ʔíin
sun	ʔəníi

sunrise ʔəníi-ʃuuk
sunset ʔəníi-lút
surname; clan səkái
swallow (v.) məjúu
sweat məkʰáan-cuu
sweat; perspiration məkʰáncuu
sweet kʰuum
swell; swollen, be wór
swollen, be; swell wór
tail (of animal) ʔəmóo
tailbone; coccyx ʔəkáiruu
take lée
tall ʃóo
talon (of bird) mətín
tear (n.) məkʰácuu
tempt ʃúi
ten som
ten thousand lèeʃìŋ som
tendon (muscle to bone); sinew ʔəlíglák
termite; white ant lùuksáa
testicle jàŋráa
that kaa
the muscle comes out ʔəták ʃùugòo
the tail is long ʔəmóo sóoòo
the tail is short ʔəmóo tòoòo
thick lòok
thigh mətóo
thigh bone; femur mətóoruu
thin məmpáar
think ʔədúuk
third born teepáa
thirsty, be curée
thirteen som ʔəntʰúum
thirty somtʰúum
this wa
this axe ròowá
this blanket; this cloth puanùá
this boundary tʰərìiwá, tʰərìivá
this bow tʰèewá
this cloth; this blanket puanùá
this corner ʔəkíiwá
this crossbar tətirùá
this door iiŋkʰaavá
this earring ʔənáatʰíiŋùá
this knife cèmùá
this ladder ʔəláagùá

this loom	puankʰóoŋnaavá
this medicine	lèewá
this necklace	məʃîiwá
this needle	ʔəʃîmùá
this pestle	tənʃugùá
this pot	təgógùá
this price	ʔəmáanùá
this road; path	lambùɯwá
this rope	rɯɯwá
this slingshot	sàiròoŋùá
this song	laavá
this spade	bélcàavá
this spear	ʔəsóowá
this wall	pʰáaglàaŋùá
this war	réewá
this window	məhɯtʰoonùá
thousand	lèeʃîŋ kʰáat
three	ʔəntʰúum
throat; uvula	kəráak
thumb	kùdbúɯ
thunder	məcék kàa
tie	təràt
tiger	hambúɯ
tight	cin
to dry	məkaaŋ
toad	ʔəcok
toast	məhai
toe	kèeməjúumràa
toe, big	kèbúɯ
toe, little	kèsáa
toenail	kèemətín
tongs	cəkáap
tongue	məlée
tooth	haa
torso; trunk	məsàa
touch	còo
tough; hard	lùu
trachea; windpipe	kəráak
tremble; shiver; shudder	sái
trunk; torso	məsàa
twelve	som kəníiŋ
twenty	semníi
twist; squeeze	mit
two	kəniiŋ
udder (of cow, goat)	cúup
ugly	càakʃa

umbilical cord	p(ə)lái
uncle, elder paternal	pátáabàa
uncle, husband of elder paternal aunt	pùu
uncle, husband of maternal aunt	pakùu
uncle, husband of younger paternal aunt	pùu
uncle, maternal	pùu
uncle, younger paternal	pakùu
underarm; armpit	cùbláa
untie; loose	təràt-kəlen
urinate (v.)	məcée-len
urine	məcéecùu, məcéecuu
uvula; throat	kəráak
vagina	ʃir
valley (river valley)	təmbàak
vein; artery; blood vessel	məŋeetʰáaruu
vertebrae (of spine)	kòoŋrúu
very; many	jáapee
village	ʔəkʰuan
voice	ʔəkʰúan, ʔkʰúan
vomit (v.)	məlit
wait	ŋàak
wait (imperative)	ŋàagèe
wake up (v.i.); awake, be	ʔəntʰèe
walk	jáu
wall	pʰáaglàaŋ
want; desire	pam
war	rée
wart (= skin disease)	ʔəhúnnáa
wash (clothes)	ʔəʃúu
wash (hands, vegetables, cars)	pʰərii
water	cúu
weak	ʃuan
weep; cry	càap
well, be	ʔəloo
wet	juu
whiskers (of animal)	màrmíi
whistle	məhúu
white	ŋée
white ant; termite	lùuksáa
whole	kəlúktaee
widow	nəmoomàkʰúu
wife	mənamóo
wind	kʰii
window	məhutʰoon
windpipe; trachea	kəráak

wing (of bird)	pʰəláa, pʰláa
wise; clever; smart	tʰàaŋmee
wolf	ràmʔúu
woman	moosáa
woman, blind	mìtcònuu
woodpecker	ʔəwaatʰìŋhútpá
words; speech	cóŋ
world; cosmos	ókətʰui
yawn (v.)	məhàm
year	kuum
yellow (color of curry)	jaiŋàaŋməcuu
young (age)	mənée