

# A SKETCH OF THE PHONOLOGY AND SENTENCE STRUCTURE OF NEWARI<sup>1</sup>

Marit Richardsen Westergaard

## 1.0 Introduction

This article is a summary of two papers on Newari written for a field methods course at the University of California, San Diego in 1983-84. It therefore covers two major topics; a sketch of the phonological system of Newari as well as an attempt at an analysis of the verbs and sentence structure of this language.

## 2.0 Phonology

### 2.1 Consonants

#### 2.1.1 Stops

The stops in Newari can be divided into four groups on the basis of place of articulation; there is a bilabial series, a dental series, a retroflex series and a velar one. Within each of these series there is a distinction between a voiceless unaspirated, a voiceless aspirated, a voiced and a murmured (also called "breathy") variant. Below follow examples of all the stops and a description of the major allophonic variation that they exhibit.

##### 2.1.1.1 Bilabials

(1)	/p/	/palu/	paalu	'ginger'
	/p <sup>h</sup> /	/p <sup>h</sup> aku/	phaaku	'a fruit'
	/b/	/bari/	baari	'garden'
	/p <sup>h</sup> /	/p <sup>h</sup> alu/	bhaalu	'bear'

Allophonic variation:

- a. The voiced bilabial stop /b/ becomes spirantized to [β] in intervocalic position:

(2) [ŋjiβa]                      niba                      'sun'

- b. By analogy with the above, the voiceless aspirated and sometimes also the voiceless unaspirated bilabial stops (/p<sup>h</sup>/ and /p/) become the bilabial fricative [ɸ] in intervocalic and final position:

(3)	[wa <sup>h</sup> ɕe:]	waaphe:	'storm'
	[k <sup>h</sup> atseiɕu]	ghaceipu	'ugly'
	[baraɕ]	baraph	'ice'

- c. The voiced bilabial stop /b/ and the voiceless unaspirated /p/ become affricated to [b<sup>h</sup>] and [p<sup>h</sup>] respectively in front of [w] and rounded vowels.

(4)	[b <sup>h</sup> wa]	bwaa	'father'
	[p <sup>h</sup> wa]	pwaa	'stomach'

The murmured sound, called "voiced aspirate" in Hindi, does not sound voiced at all in Newari and is hence transcribed [p<sup>h</sup>]. Rather, the difference between the voiceless aspirated and the murmured sounds seems to lie on the following vowel, which sounds "darker" when preceded by a murmured consonant. Spectrograms of these sounds confirm this acoustic effect;<sup>2</sup> there is no voicing bar present in the pronunciation of the murmured consonant, and the VOT ("voice onset time" relative to the moment of release of the stop) is approximately the same as that of the voiceless aspirated stop. The following vowel, however, is characterized by the presence of noise (irregular waveforms) and a substantial drop in pitch (approximately 15 Hz), and this effect can thus be said to function as the perceptual cue for the listener.

#### 2.1.1.2 Dentals

(5)	/t/	/tar/	taara	'star'
	/t <sup>h</sup> /	/t <sup>h</sup> aku/	thaaku	'difficult'
	/d/	/dakh/	daakh	'grapes'
	/t <sup>h</sup> /	/t <sup>h</sup> a:r/	dhaa:r	'back'

The dental series does not seem to undergo any allophonic variation.

#### 2.1.1.3 Retroflex sounds

(6)	/t/	/katmãdõ/	KaTmanDon	'Kathmandu'
	/t <sup>h</sup> /	/t <sup>h</sup> u:/	Thu:	'understand'
	/d/	/katmãdõ/	KaTmanDon	'Kathmandu'
	/t <sup>h</sup> /	/t <sup>h</sup> u/	Dhun	'tiger'

The retroflex stops are extremely rare and seem to occur mainly in words of Nepali origin. They do not occur in minimal pairs in our data, and their phonemic status is therefore uncertain. However, in our orthographic system they are kept distinct from the dentals, as they are needed for the pronunciation of fairly common words.

#### 2.1.1.4 Velars

(7)	/k/	/kaki/	kaaki	'aunt'
	/k <sup>h</sup> /	/k <sup>h</sup> ap /	khaapa	'door'
	/g/	/gat /	gaata	'enough'
	/k <sup>h</sup> α:/	/k <sup>h</sup> α:/	gha:	'water jar'

Allophonic variation:

- a. The voiceless aspirated velar stop /k<sup>h</sup>/ becomes the velar voiceless fricative [x] in intervocalic and final position:

(8)	[maxa]	maakhaa	'hen'
	[dax]	daakh	'grapes'

#### 2.1.2 Affricates

There is an affricate series in Newari, which exactly parallels that of the dental stops:

(9)	/ts/	/tsa/	caa	'clay'
	/ts <sup>h</sup> /	/ts <sup>h</sup> ati/	chaati	'chest'
	/dz/	/dza/	jaa	'rice'
	/ts <sup>h</sup> α/	/ts <sup>h</sup> α/	jhaa	'window'

Allophonic variation:

- a. The voiced affricate /dz/ is reduced to a fricative in intervocalic position:

(10)	[dzuzu]	juju	'king'
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- b. All the affricates become palatalized in front of the high front vowels:

(11)	[tʃi]	ci	'salt'
	[tʃ <sup>h</sup> e]	chen	'house'
	[dʃi]	ji	'I'
	[tʃ <sup>h</sup> ipi]	jhipin	'we'

This change is totally predictable in front of /i/ and /e/. It sometimes also occurs in front of the low front vowel /a/, but as this is not consistent, the palatalization has to be marked in the orthography.

(12)	[tʃau]	cyaa	'mushroom'
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#### 2.1.3 Nasals

Three places of articulation can be distinguished for the nasals in Newari; bilabial, dental and velar. The first two



have a murmured as well as a "regular" variant, and all four have phonemic status.

(13)	/m/	/mutu/	mutu	'heart'
	/m <sup>h</sup> /	/m <sup>h</sup> utu/	mhutu	'mouth'
	/n/	/na: /	nae:	'butcher'
	/n <sup>h</sup> /	/n <sup>h</sup> æ: /	nhæ:	'nose'

The acoustic difference between the two variants of nasals can be easily distinguished, as the perceptual cue for the murmured sound seems to lie on the following vowel as well as on the nasal sound itself. On a spectrogram both sounds are characterized by the presence of aperiodic noise in addition to a drop in pitch in the vowel.<sup>3</sup>

The velar nasal in Newari is in most cases followed by a velar stop and may therefore be considered an allophone of /n/. In certain cases, however, the stop seems to have disappeared, and this suggests an ongoing phonological change in Newari, similar to what has happened in English. As the velar nasal never appears in initial position and also does not have a murmured variant, however, it seems strange to consider it phonemic, and it will therefore be represented ng in the orthography. In the cases where the following stop is to be pronounced, this will be marked by a hyphen. In front of the voiceless velar stop /k/ the phonological rule is totally predictable, and the nasal sound will in those cases simply be spelled n.

(14)	[ʃiŋa]/[ʃiŋga]	singa/sin-ga	'lion'
	[suruŋ]	surung	'tunnel'
	[tʃaŋk <sup>h</sup> ola]	cyankhola	'sweeper'

#### 2.1.4 Fricatives

There are only two fricatives in Newari; a dental and a glottal one.

(15)	/s/	/sa/	saa	'cow'
	/ʁ/	/ʁa/	haa	'bee'

By analogy with the affricates, the dental fricative also becomes palatalized in front of front vowels. This is consistent in front of the high front vowels /i/ and /e/, but must be marked in the orthography when it occurs in front of /a/.

(16)	[ʃi]	si	'louse'
	[ʃa]	syaa	'ache'

The glottal fricative is different from the English one in that it is voiced, or rather, murmured. On a spectrogram this shows up as more random noise affecting the following

vowel.

### 2.1.5 Liquids

There are two types of liquids in Newari, a lateral and a trill. Both of these have a murmured counterpart as well, so altogether there are four liquid phonemes.

(17)	/l/	/la/	laa	'drool'
	/l̥/	/l̥a/	lhaa	'arm'
	/r/	/bari/	baari	'garden'
	/r̥/	/bar̥i/	baarhi	'flood'

### 2.1.6 Approximants

The palatal glide /j/ and the bilabial /w/ both have phonemic status in Newari:

(18)	/j/	/ja/	ya	'love'
	/w/	/wa/	waa	'rain'

### 2.1.7 Palatalized and Labialized Consonants

In sections 2.1.2 and 2.1.4 it was mentioned that the affricates and the dental fricative become palatalized in front of non-low front vowels. However, all the consonants of Newari may undergo palatalization in this environment. Although the process seems to be the same, there is a phonetic difference between the two types of palatalized consonants; whereas the affricates and fricative are 'true palatals', the other consonants are merely followed by the off-glide /j/ and are 'palatalized'.

This latter type of palatalization is related to a similar process which occurs in front of back vowels, namely that of labialization. While palatalization seems to be consistent in front of /i/ and /e/, labialization occurs mostly in front of /u/ and /o/. These phenomena also occur sporadically in front of other vowels, in which cases it will be marked in the orthography.

(19)	[njipati]	nipatin	'two fingers'
	[gwoŋga]	gon-ga	'rooster'
	[pjæ:dz]	pyaej	'onion'
	[gwe]	gwe	'nut'

### 2.1.8 Chart of Consonant Phonemes in Newari

(20)	p	b	t	d	T	D	k	g
	ph	bh	th	dh	Th	Dh	kh	gh
			c	j				
			ch	jh				
	m	n					ng?	
	mh	nh						
		s					h	
		l						
		lh						
		r						
		rh						
	w						y	

### 2.2 Vowels

There are six, possibly seven, vowels in Newari. The status of the vowel [æ] is uncertain as it in most cases seems to be the result of a combination of two other vowels, usually a and e or aa and e. Both length and nasalization seem to be distinctive features of the vowels. Note that phonemic and orthographic notations for vowels are identical.

#### 2.2.1 Short vowels

(21)	i	[i, I]	mi	'fire'	u	[u]	aalu	'potato'
	e	[e, ɛ]	me	'tongue'	o	[o]	cokaa	'top'
	ae	[æ]	naegu	'eat'				
	aa	[a]	maa	'mother'	a	[a, ɔ, ʌ, ɐ, ɒ]	wa	'that'

The alternation in the vowels, mostly free variation, is included within the brackets. It is perhaps surprising that the low back vowel should have so many variants, but this could be explained by the fact that it seems to be the "basic" vowel in Newari.

As mentioned above, the status of the short mid front vowel [æ] is not clear. It is in our data attested in the above example only, naegu 'to eat', and in this case it is probably a contraction of nayaaqu. My reason for assuming this is that the form nayaa surfaces in the 1st person conjugation. This is often the case also for the long variant of this vowel; manutayaaqu 'the men's' tends to become manutaequ and manutayaata 'the men' (Dative case) tends to become manutaeta.<sup>4</sup> It does not seem to be possible to argue that all instances of ae have the underlying form ayaa, as the vowel



seems to surface as the result of various contractions; e.g. thaen 'in the beer' is the output of the combination of thon 'beer' and -e 'Locative case'. It is also possible that this distinction should be expressed in the spelling of this sound, so that the following two words in the Locative case should be spelled taae and mhae respectively, although the vowel sounds the same in both cases.

- (22) [tæ:] tae/taae? 'on the bridge' cp. taa 'bridge'  
[m<sup>h</sup>æ:] mhae 'on the body' cp. mha 'body'

Also, an underlying ayaa does not seem to consistently result in the realization of this vowel, but sometimes becomes ai; the word saila 'beef' is probably a contraction of sayaala 'cow's meat'.

### 2.2.2 Long vowels

Examples of the long vowels are:

- (23) [i:] wi: 'his' [u:] Thu: 'understand'  
[e:] phe: 'wind' [o:] ko: 'crow'  
[æ:] daekegu 'boil'  
[a:] mhaa:su 'yellow' [ɑ:] la: 'water'

### 2.2.3 Nasalized Vowels

All the vowels may be nasalized. In some cases this nasalization has grammatical function, as e.g. in the case which marks the subject of transitive verbs (simply glossed as A in this paper). Orthographically, this nasalization is marked by an -n after the vowel:

- (24) [t<sup>h</sup>ẽ] chen 'house'  
[t<sup>h</sup>ẽnta] chentaa 'houses'

As seen by the plural form of the noun in (24), this nasal may surface when followed by another consonant, and it therefore seems plausible that there really is an underlying -n present after the vowel. The following phonological rule can therefore be postulated, according to which the nasal is deleted in word-final position:

- (25) Vn → Ṽ/\_#

There are certain cases when this rule does not seem to apply, and this will have to be marked in the orthography by a hyphen.

- (26) [p<sup>h</sup>as n] bhaasa-n 'speech'

### 3.0 Sentence Structure

#### 3.1 Verbs in Newari

There are various verb forms in Newari, both finite and non-finite, and they may all be linked together in a sentence, usually with only one finite form. Newari is a fairly consistent SOV language, and since there do not seem to be any restrictions on the number of verbs that can occur at the end of a sentence (other than memory, of course), the word order of Newari can be considered to be SOV<sub>n</sub>. As an example, consider the following sentence:

- (26) Gitaa-n Raam-yaata me-ha-e-k-e bi:-ta ko:sis ya-e  
maasi-wa  
Gita-A Raam-D song-shout-e-CAUS-FP give-FOR try do-FP  
want-come/ST  
'Gita wants to try to let Ram sing.'

As in (26), the last verb in a string is usually the finite one. The various non-finite forms of the preceding verbs are dependent on the verb immediately following them, e.g. in (26), the verb bi:qu 'to give' usually requires the preceding verb in the Future Participle form (see section 4.2.2.2), the verb ko:sis yaegu 'to try' requires it in the FOR-form (see section 4.2.4.2), and the verb maasiwe:qu 'to want' again requires the Future Participle form.

#### 3.1.1 Identification of the Various Verb Forms in Newari

##### 3.1.1.1 Finite Verb Forms

##### 3.1.1.1.1 Tense

There are two tenses in Newari, Past and Future (or perhaps more correctly, Non-past). They do not seem to correspond exactly to the English tenses, and especially when eliciting Simple Present forms in English, the Newari counterpart would sometimes be given in the Past and other times in the Future tense, depending on the type of verb and the context.

In the conjugation of the two tenses there is person agreement; the first person singular and the first person plural inclusive and exclusive forms differ from the rest. According to Malla (1981), there are several verb classes in Newari. This seems to be correct, but it has been difficult in our data to distinguish all of them. One common conjugation, however, is the following:



(27) naegu 'to eat'

			PAST	FUTURE
sg.	1.	jin	nayaa	nae
	2.	chan	nala	nai
	3.	wan	nala	nai
pl.	1. incl	jhisán	nayaa	nae
	1. excl	jimsán	nayaa	nae
	2.	chimsán	nala	nai
	3.	imsán	nala	nai

### 3.1.2 Disjunct and Conjunct

The person agreement system illustrated in (27) exemplifies what Malla calls Disjunct and Conjunct forms. For lack of better terms, I will also adopt this terminology, as these notions seem to be needed to explain the following system:

	PAST TENSE	FUTURE TENSE
Conjunct:	-aa	-e
Disjunct:	-a	-i

The first and non-first person verb forms differ according to the sentence type in which they occur. A first person pronoun requires the Conjunct form in statements, but the Disjunct form in questions, while for non-first person subjects the situation is the opposite. Consider the following examples:

(29) Ji-n Gitaa-yaata mhiga khan-aa  
I-A Gitaa-ANO yesterday see-PC  
'I saw Gita yesterday.'

(30) Ji-n mhiga Gitaa-yaata khan-a laa  
I-A yesterday Gita-ANO see-PD-Q  
'Did I see Gita yesterday?'

Sentence (29) is a statement, and the first person pronoun therefore requires the Conjunct form of the verb. The corresponding question, on the other hand, has the verb in the Disjunct form. The opposite situation holds with non-first person subjects, as in (31) and (32) below, where the pronoun cha 'you' takes the Disjunct form in the statement, but the Conjunct form in the corresponding question.

(31) Cha-n Gitaa-yaata mhiga khan-a  
You-A Gita-ANO yesterday see-PD  
'You saw Gita yesterday.'

(32) Cha-n mhiga Gitaa-yaata khan-aa laa  
You-A yesterday Gita-ANO see-PD Q  
'Did you see Gita yesterday?'

The same kind of examples can be given for the Future tense forms:

(33) Ji-n me-haal-e  
I-A song-shout-FC  
'I will sing.'

(34) Ji-n me-haal-i laa  
I-A song-shout-FD Q  
'Will I sing?'

(35) Cha-n me-haal-i  
You-A song-shout-FD  
'You will sing.'

(36) Cha-n me-haal-e laa  
You-A song-shout-FC Q  
'Will you sing?'

A similar, but probably much more complex phenomenon occurs in indirect speech. In sentence (38), for example, the non-first person pronoun chan 'you' requires the Conjunct form, although this is clearly a statement. I suppose that the reason for this is the close relationship with the direct speech version of this sentence, represented in (37), where the subject is in the first person and naturally requires the Conjunct form. The verb form can thus be said to be "carried over" from the more basic version of the sentence to the transformed version.<sup>5</sup>

(37) Cha-n dhaal-a ji-n mhiga Gitaa-yaata khan-aa  
You-A say-PD I-A yesterday Gita-ANO see-PC  
'You said, "I saw Gita yesterday".'

(38) Cha-n mhiga Gitaa-yaata khan-aa (dhakaa) dhaal-a  
You-A yesterday Gita-ANO see-PC (QUOT) say-PD  
'You said that you saw Gita yesterday.'

### 3.1.3 Auxiliaries

Newari has several auxiliaries, the most important being con- 'to be', dhun- 'to finish(?)', tyan- 'will(?)' and yaequ 'to do'. The first three auxiliaries, which incidentally never seem to be given in the citation form (see section 3.2.1), are used to express temporal and aspectual meanings.

#### 3.1.3.1 Temporal/Aspectual Auxiliaries

##### 3.1.3.1.1 Progressive

The auxiliary con- is used to express Progressive aspect, and sentences with this auxiliary seem to correspond fairly closely to the English translation. When con- is used, the

main verb will have the Past Participle form (see section 3.2.2.1) and con- itself will be marked for tense, usually Past, as in the examples below:

- (39) Ji phetun-aa con-aa  
I/S sit-PP be-PC  
'I am sitting.'

- (40) Wa phetun-aa con-a  
She/S sit-PP be-PD  
'She is sitting.'

It should be noted that the Progressive aspect in (39) and (40) always translates as Present in English (which is another example of the difficulty of finding appropriate terminology for the grammatical categories in Newari). If one wants to express Past Progressive or Future Progressive, this has to be done with other means, e.g. a time adverbial as in (41) and (42) below. Note, however, that the auxiliary in (42) is in the Future tense.

- (41) Ji-n nay-aa con-aa bale...  
I-A eat-PP be-PC when  
'When I was eating...'

- (42) Ji-n nay-aa con-e bale...  
I-A eat-PP be-FC when  
'When I will be eating...'

### 3.1.3.1.2 Perfective

To express Perfective aspect the Newari language uses the auxiliary dhun-, which probably means something like 'to finish, end'. It has slightly irregular forms in that the Past Conjunct ends in -a and the Past Disjunct in -kala. There seems to be a whole class of verbs that are conjugated in a similar fashion.<sup>6</sup> Surprisingly enough, the main verb in this case always occurs in the Future Participle form (see section 3.2.2).

- (43) Ji nyaasi wan-e dhun-a  
I/S walk go-FP finish-PC  
'I have walked.'

- (44) Wa nyaasi wan-e dhun-kala  
She/S walk go-FP finish-PD  
'She has walked.'

### 3.1.3.1.3 Immediate Future

The auxiliary tyan- 'will(?)' is used to express Immediate Future. It is conjugated regularly in the Past Tense, which seems to be the only form this verb occurs in. The main verb



is, as should be expected in this case, in the Future Participle form.

- (45) Ji mhit-e tyan-aa  
I/S play-FP will-PC  
'I am about to play.'
- (46) Ipin mhit-e tyan-a  
They/S play-FP will-PD  
'They are about to play.'

### 3.1.3.2 The Auxiliary "yaegu"

The auxiliary yaegu 'to do' is different from the others in that it does not affect temporal or aspectual meanings. It seems most often to occur with a nominal, i.e. it "verbalizes" a noun which has no corresponding verb. The expression ko:sis yaegu 'to try' in (47), then, is probably best understood as something like 'make a try'.

- (47) Gitaa-n wan-i-gu ko:sis yaat-a  
Gita-A go-i-INF? try do-PD  
'Gita tried to go.'

The main verb in this case may occur in the Infinitive or -gu-form, but also in the FOR-form (see section 3.2.4.2). In the latter case the meaning is something like 'make a try in order to go.'

- (48) Gitaa-n wan-e-ta ko:sis yaat-a  
Gitaa-A go-e-FOR try do-PD  
'Gitaa tried to go.'

Other expressions where yaegu is used are for example:

- (49) suru yaegu - 'start, make a start'  
bicaar yaegu - 'think, do a thought(?)'  
biswaas yaegu - 'believe, do a belief(?)'

Finally, it should be noted that yaegu may be used as a main verb by itself:

- (50) Ji-n yaan-aa  
I-A do-PC  
'I did it.'

### 3.1.4 The Stative

There is a third finite verb form which can be called the Stative (Malla's term). It is very similar to the Stem (see section 3.2.4.3). The Stative form is used, appropriately enough, with verbs denoting states, such as si:kigu 'to know', lumankigu 'to remember', maasiwe:gu 'to want' and Thuigu 'to understand'.

- (51) Ji-n chan-gu naa syu  
I-A you-G name know/ST  
'I know your name.'
- (52) Ji-ta chan-gu naa luman  
I-D you-G name remember/ST  
'I remember your name.'
- (53) Ji-ta wan-e maasi-ma-wa  
I-D go-FP want-NEG-come/ST  
'I don't want to go.'

- (54) Ji-n Thu  
I-A understand/ST  
'I understand.'

The Stative form usually translates as Simple Present in English, and there does not seem to be a separate form to express a state in the past, as for example in (55). If it is obvious, however, that there has been a change in the state, as in (56), the Stative and Past Tense forms are interchangeable.

- (55) Gitaa-n Raam ma-wa dhakaa syu  
Gita-A Ram NEG-come/ST QUOT know/ST  
'Gita knew that Ram didn't come.'
- (56) Ji-n mhiga syu-gu, tara thaun ma-sil-aa / ma-syu  
I-A yesterday know/ST-NOM, but today NEG-know-PC / NEG know/ST  
'I knew it yesterday, but I don't know it today.'

The modals also occur in the Stative form when the meaning is present, as in (57) and (59) below. With past meaning, on the other hand, these verbs take regular Past Tense endings as exemplified by the sentences in (58) and (60).

- (57) Wa (\*mhiga/thaun/nhyablen) wan-e-ye maa  
She/S (\*yesterday/today/always) go-e-ye- must/ST  
'She must go.'
- (58) We-yaa (mhiga/thaun/\*nhyablen) wan-e maal-a  
She-G (yesterday/today/always) go-FP must-PD  
'She had to go.'
- (59) Wa-n me-haal-e ma-phu  
She-A song-shout-FP NEG-can/ST  
'She can't sing.'
- (60) Wa-n me-haal-e ma-phut-a  
She-A song-shout-FP NEG can-PD  
'She couldn't sing.'

The Stative can also be used with event verbs like siliqu 'to wash' and sare juiqu 'to move'. In these cases the verb form expresses habitual meaning.

- (61) Wa-n nhyablen motar syu  
She-A always car wash/ST  
'She always washes/washed the car.'
- (62) Ipin oppoyaanaa sare ju  
They/S often move/ST  
'They often move.'

### 3.1.5 The Imperative

Not very many Imperatives have been attested in our data, but there definitely seems to be a separate finite form with imperative function. Phonologically this is similar to the Stative. There has also been found one instance of suppletion, as the Imperative form of waniqu 'to go' is hun.

- (63) Dyan hun  
Sleep/STM go/IMP  
'Go to sleep.'

Other examples of Imperatives are:

- (64) Raam-yaata day-aa phetu  
Ram-D hit-PP sit/IMP  
'Hit Ram and sit down.'
- (65) Ji-ta jaa ti  
I-D rice put/IMP  
'Give me rice.'
- (66) Wa-n na-i-gu jaa thi-u  
She-A eat-FD-NOM rice touch-IMP  
'Touch the rice that she eats.'
- (67) Cha-n Raam-yaata me-ha-e-k-e byu  
You-A Ram-D song-shout-e-CAUS-FP give/IMP  
'Let Ram sing.'

## 3.2 Non-finite Verb Forms

### 3.2.1 The Infinitive

As there are several non-finite verb forms in Newari it is difficult to single out one as the Infinitive, and there probably is no form which corresponds exactly to the function of the English counterpart. The citation form that has consistently been given by our consultant, however, is a verb form which always ends in -i/e-gu.



- (68) mehaal-i-gu 'to sing'  
 bon-i-gu 'to read'  
 ju-i-gu 'to be (around)'  
 bi:-gu (bi-i-gu) 'to give'  
 dha-e-gu 'to say'  
 cho-e-gu 'to send'

The -iqu/egu alternation can be explained phonetically. The -i- seems to be consistent after stems ending in consonants. After all non-high vowels, this -i- is lowered to -e-, while it is retained after the high vowels u and i.

There is also another verb form in Newari which ends in -gu (see section 3.2.4.1), but this -gu morpheme seems to be attached to a different stem, and I would like to claim that it is not quite the same as the citation form. The -gu morpheme is used as a nominalizer, and since the Infinitive is one of the most noun-like forms of the verb, the two -gu forms are probably related historically.

The Infinitive is rarely attested in sentences, and in our data there is only one instance of a -gu form that could possibly be interpreted as such. This example is represented in (47) and repeated below for convenience.

- (47) Gitaa-n wan-i-gu ko:sis yaat-a  
 Gita-A go-i-INF? try do-PP  
 'Gita tried to go.'

### 3.2.2 Participles

There are two participles in Newari, which in form are exactly identical to the Past Conjunct and the Future Conjunct forms; i.e. they end in -aa and -e respectively. I have therefore simply chosen to call them the Past Participle and the Future Participle. As has been pointed out above, however, these terms are not always appropriate since the temporal meanings conveyed by these participles frequently contradict the meanings expressed by the terms.

#### 3.2.2.1 The Past Participle

In addition to being used together with the auxiliary con-, the Past Participle can occur with several other verbs. The meaning may be that of actions or processes happening in sequence, as in (69), but the actions/processes may also be simultaneous, as in (70).

- (69) Ji-n dhay-aa wan-aa  
 I-A say-PP go-PC  
 'I said it and left.'

- (70) Ji-n phetun-aa coy-aa con-aa  
I-A sit-PP write-PP con-aa  
'I am sitting and writing.'

The difference between simultaneity or sequence of events can sometimes be disambiguated by word order, as in the following two sentences. In (71) the two actions occur simultaneously, and the sentence has the normal SOV<sub>n</sub> order, while the sequence of events in (72) is expressed by a SVOV order.

- (71) Wa-n Gitaa-yaata phetun-aa daal-a  
He-A Gita-D sit-PP hit-PD  
'Sitting down, he hit Gita.'

- (72) Wa-n phetun-aa Gitaa-yaata daal-a  
He-A sit-PP Gita D hit-PD  
'He sat down and hit Gita.'

The Past Participle has essentially the same temporal meaning as the finite verb in the same sentence; in (69) it is past and in (70) present progressive. The participle may also refer to an action in the future, as in sentence (73).

- (73) Ji-n ghari kay-aa ji-mi kalaa-yaata bi:  
I-A watch take-PP I-G wife-D give/F  
'I will take the watch and give it to my wife.'

The Past Participle form may also be the one that sometimes occurs with adjectives. Consider the following examples:

- (74) Wa macaa lhon-aa con-a  
That child/S heavy-PP(?) be-PD  
'That child is heavier now.'

- (75) Puy-aa wal-a  
Hot-PP(?) come-PD  
'It is getting hot.'

### 3.2.2.2 The Future Participle

As mentioned above, the Future Participle occurs with the auxiliary dhun- and the Immediate Future auxiliary tyan-. Otherwise it seems to be required only by certain verbs like maasiwe:gu 'to want', maa 'must, should' and bi:qu 'to give'. The temporal meaning is often future, as in (76) and (77), but (78) is one of the many examples illustrating that this is not necessarily the case.

- (76) Ji-ta wan-e maasi-ma-wa  
I-D go-FP want-NEG-come/ST  
'I don't want to go.'



(77) Wa-n me-haal-e maa  
She-A song-shout-FP should/ST  
'She should sing.'

(78) Gitaa-n Raam-yaata nyaasi-k-e bil-a  
Gita-A Ram-D walk-CAUS-FP give-PD  
'Gita let Ram walk around.'

### 3.2.3 The Reduplicated Form

The Newari verb also has a reduplicated form which seems to have a function similar to that of the participles. It occurs only, but not necessarily, when two actions occur simultaneously. The difference between the Reduplicated form and the Past Participle, according to our consultant, has to do with the speed of the actions. Reduplication seems to give connotations of something happening fast, whereas the Participle seems to be more neutral in this respect.

(79) Wa phetun-aa coy-aa con-a  
He/S sit-PP write-PP be-PD  
'He is sitting and writing.'

(80) Wa phetu-tun coy-aa con-a  
He/S sit-REDUPL write-PP be-PD  
'He is sitting and writing (in a hurry).'

(81) Wa bwaen-wan-aa nay-aa wan-a  
She/S run-go-PP eat-PP go-PD  
'She was eating while running (slowly).'

(82) Wa bwaen-wan-wan nay-aa wan-a  
She/S run-go-REDUPL eat-PP go-PD  
'She was eating while running (fast).'

### 3.2.4 Other Non-finite Verb Forms

In addition to the Stem (see section 3.2.4.3), there are two remaining non-finite verb forms, the -gu-form and the -ta-form. Although Malla (1981) claims that these are both infinitives (in addition to the form I have called Future Participle), I analyze these endings merely as particles that can be added to a finite or non-finite stem for specific purposes.

#### 3.2.4.1 The Nominalizer -"gu"

A verb stem can be nominalized by adding to it the morpheme -gu. This may happen to the main verb in a sentence, e.g. in the answer to a question. Our consultant continuously emphasized that the following examples were not complete



sentences, but were appropriate answers to a question like "Who will eat it?"

- (83) Ji-n na-e-gu  
I-A eat-FC-NOM  
'I'll eat it.'

- (84) Wa-n na-i-gu  
I-A eat-FD-NOM  
'He'll eat it.'

It should be noted here that these forms are not totally non-finite (perhaps one should call them semi-finite?), since a finite form may precede this -gu morpheme, like the Future Conjunct and the Future Disjunct in (83) and (84) above. This -gu form, then, is different from the Infinitive in that the -e/i- alternation has grammatical function, whereas in the Infinitive form this is a purely phonological process.

The nominalizing morpheme is also attached to the main verb in an embedded sentence functioning as the subject or the direct object of the matrix sentence, as in (85) and (86) respectively.

- (85) Chan-ta syaau ne:-gu jyu  
You-D apple eat/ST-NOM ok  
'Eating apples is good for you.'

- (86) Ji-n cha-n na-i-gu na-e  
I-A you-A eat-FD-NOM eat-FC  
'I'll eat what you'll eat.'

#### 3.2.4.2 The FOR-form

The -ta morpheme carries the meaning 'in order to' when attached to a verb stem. This is illustrated by examples (87) and (88) below. In some cases, this meaning is not explicitly stated in the English version of the sentence, but it can usually be inferred, as in (89).

- (87) Wa me-haal-e-ta phetul-a  
She/S song-shout-e-FOR sit-PD  
'She sat down in order to sing.'

- (88) Wa Gitaa-yaata da-e-ta phetul-a  
She/S Gita-D hit-e-FOR sit-PD  
'She sat down in order to hit Gita.'

- (89) Gitaa-n wan-e-ta ko:sis yaat-a  
Gita-A go-e-FOR try do-PD  
'Gita tried to go (i.e. made a try in order to go).'

The -e- which always seems to occur in front of the -ta morpheme may simply be a part of it, so that the form of the

morpheme is actually -eta. A perhaps more likely explanation is that this -e- is that of the Future Participle.

### 3.2.4.3 The Stem

The Stem of the verb occurs in front of the Reduplicated form (see examples (80) and (82) above). It also seems to behave as a separate non-finite verb form in certain cases, for example in the following sentence where the first verb dyan is interpreted as a stem.<sup>7</sup>

- (90) Gitaa-n Raam dyan wan-e dhunk-aa mata syaat-a  
Gita-A Ram/S sleep/STM go-FP finish-PP light kill-PD  
'Gita turned off the light after Ram had gone to bed.'

## 4.0 Some Notes on Newari Sentence Structure

### 4.1 General Remarks

As mentioned above, a Newari sentence allows a whole string of verbs, one after the other. The language seems to prefer not to break up this structure into several finite clauses, and thus, a sentence like (91), although it has to be expressed as two clauses in English, can be expressed as a single clause in Newari.

- (91) Gitaa-n Raam-yaata day-aa phetul-a  
Gita-A Ram-D hit-PP sit-PD  
'Gita hit Ram and sat down.'

Temporal and aspectual meanings can also be incorporated into this structure, as is shown by the following sentences:

- (92) Gitaa-n jaa nay-aa me-haal-aa con-a  
Gita-A rice eat-PP song-shout-PP be-PD  
'Gita was eating rice and singing.'

- (93) Gitaa-n Raam-yaata da-e dhunk-aa phetul-a  
Gita-A Ram-D hit-FP finish-PP sit-PD  
'Gita sat down after hitting Ram.'

There is, however, one important restriction on this verbal string construction, and that is that the logical subject of all the verbs must be the same. When this is not the case in the English version of a sentence, the Newari language will try to keep the single-clause structure by using various devices, e.g. the Causative construction, as in sentence (94), or simply rephrasing, as in (95).

- (94) Gitaa-n Raam-yaata jaa na-k-e maasi-wa  
Gita-A Raam-ANO rice eat-CAUS-FP want-come/ST  
'Gita wants Ram to eat rice.'  
(lit. 'She wants to feed rice to Ram.')



- (95) Gitaa-yaata Raam cho-e maasi-wa  
 Gita-D Ram/O send-FP want-come/ST  
 'Gita wants Ram to go.'  
 (lit. 'She wants to send Ram away.')

In case no such device is available in Newari, the language must resort to a coordinate structure, as in (96).

- (96) Gitaa-n Raam wa-gu khan-a, tara wa phetul-a  
 Gita-A Ram/S come-NOM see-PD, but he/S sit-PD  
 'Gita saw Ram coming, but he sat down.'

The language does not seem to particularly "like" this kind of coordinate construction and will try to avoid it by using various other grammatical structures. There seems to exist a hierarchy of sentence structures in Newari depending on the complexity of the sentence, ranging from simple clauses at one end of the scale to true coordinate structures on the other.

- (97) Simple clauses  
 The Causative construction  
 Embedded clauses  
 Relative clauses  
 Temporal clauses  
 Complementation of certain verbs (verbs of saying)  
 Coordinate structures

#### 4.2 The Simple Clause Structure

The single clause structure is by far the most preferred sentence type in Newari. It may contain from one up to several verbs, and only the last one in the string will be finite. The preceding verbs will occur in all combinations of the non-finite forms discussed in section 3, only with certain restrictions on the order of the elements. There have already been given several examples of the single clause structure in this paper so far, e.g. (91), (92) and (93).

#### 4.3 The Causative Construction

The Causative morpheme is usually -k-; related, I would guess, to the word ka 'because'. The Causative seems to be a fairly common construction in Newari, probably because, as mentioned above, it can be used without breaking up the simple clause structure. As in the case of the -ta morpheme, an -e- very often occurs in front of the Causative. This could simply be a linking device (though I doubt it since such a device does not seem to be necessary elsewhere), it could be part of the Causative morpheme, or it could be the -e- of the Future Participle. Below are some typical examples of the Causative construction:



- (98) Raam-an Baaburaaajaa-yaata Gitaa ye-k-e bil-a  
 Ram-A Baburaja-D Gita/O like-CAUS-FP give-PD  
 'Ram made Baburaja like Gita.'
- (99) Gita-n Raam-yaata me-ha-e-k-e-ta ko:sis yaat-a  
 Gita-A Ram-D/ANO song-shout-e-CAUS-e-FOR try do-PD  
 'Gita tried to make Ram sing.'

A Causative may also be expressed by a slightly more complex construction, using the verb yaegu 'to do'. In this case the Causative morpheme -k- seems to be optional; it is not present at all in (100), but may actually occur twice in (101).

- (100) Gitaa-n yaan-aa Raam-yaata me-haal-e maasi-wal-a  
 Gitaa-A do-PP Ram-D/ANO song-shout-FP want-come-PD  
 'Gita made Ram want to sing.'
- (101) Gitaa-n yaan-aa Raam-yaata me-ha-e(-k-e) maasi-we-k-  
 ala  
 Gita-A do-PP Ram-D/ANO song-shout-e(-CAUS-FP) want-  
 come-CAUS-PD  
 'Gita made Ram want to sing.'

#### 4.4 Embedded Clauses

Clauses functioning as the direct object (or, more rarely, the subject) of the matrix clause are usually nominalized, and thus made non-finite, by attaching the -gu morpheme to the verb. Because of the consistent SOV structure in Newari sentences, the object clause will always occupy second position. There are numerous examples of this embedded clause structure in the data, a few of which are given below:

- (102) Wa-n ji-n na:-gu khan-a  
 He-A I-A eat-NOM see-PD  
 'He saw me eat.'
- (103) Wa-n Gitaa-n me-haal-aa con-gu then con-k-ala  
 He-A Gita-A song-shout-PP be-NOM seemingly be-CAUS-PD  
 'He made it seem that Gita was singing.'

#### 4.5 Relative Clauses

Relative clauses in Newari have a form similar to the embedded clauses above. The whole relative clause actually behaves like a modifier preceding the head, and the final verb receives the Adjective/Classifier morphemes -gu or -ma depending on the animacy of the head.

- (104) Ji-ta cha phetun-aa con-gu kitaab maal-a  
 I-D you/S sit-PP be-REL book want-P  
 'I want the book you are sitting on.'

- (105) Wa gwaartu-ma manu ji-mi sasa-daaaju kha  
He/S fall-REL man I-G in law-brother be true/ST  
'The man who fell down is my brother-in law.'

#### 4.6 Temporal Clauses

Temporal clauses usually have the temporal particle -bale 'when'/'while' attached to the last verb, thus creating a non-finite (or rather semi-finite) structure. There may be other both finite and non-finite verbal morphemes preceding -bale, e.g. the Past tense in (106), the Future tense in (107) and the Stative in (108). The main clause is of course a regular finite sentence.

- (106) Ji-n San Diego-le: con con-aa-bale motar cha-ga  
nyaan-aa

I-A San Diego-L be/STM be-PC-TEMP car one-CL buy-PC  
'While I was in San Diego, I bought a car.'

- (107) Ji-n San Diego-le: we-bale motar cha-ga nya-e  
I-A San Diego-L some/F-TEMP car one-CL buy-FC  
'When I come to San Diego, I will buy a car.'

- (108) Ji-n swe:-bale wa-n me-haal-e ye-k-e maa:  
I-A look/ST-TEMP she-A song-shout-FP like-CAUS-FP  
should/ST  
'I think that she should like to sing.'

Another type of temporal clause contains the particle nhya 'before'. In this case the verb of the temporal clause always seems to occur in the Future Participle form.

- (109) Gitaa-n Raam dyan wan-e nhya duru ton-a  
Gita-A Ram/S sleep/STM go-FP TEMP milk drink-PD  
'Gita drank milk before Ram went to bed.'

#### 4.7 Complements of Certain Verbs

There is a class of verbs in Newari that behave differently with respect to their complementation as compared to the sentences in 4.4. Instead of a main clause with an embedded nominalized object clause, we seem to have a structure with two finite clauses when the matrix verb is dhaigu 'to say', nyaegu 'to ask', sikiqu 'to know' etc. These verbs also typically require the complementizer dhakaa (from dhaigu 'to say'). Consider the following examples:

- (110) Raam-an Gitaa wan-a dhakaa dhaal-a  
Raam-A Gita/S go-PD QUOT say-PD  
'Ram said that Gita left.'



- (111) Ji-n Gitaa sit-a dhakaa khabar nyan-aa  
I-A Gita/S die-PD QUOT news ask-PC  
'I heard the news that Gita was killed.'
- (112) Raam-an wa-n Gitaa-yaata ya dhakaa syu  
Ram-A he-A Gita-D like/ST QUOT know/ST  
'Ram knows that he likes Gita.'

In some cases, however, these verbs seem to conform to the embedded clause structure of section 4.4, nominalizing the verb of the embedded clause by -qu.

- (113) Ji-n Gitaa-n kitaab pasa:-le cho-i-gu dhakaa syu  
I-A Gita-A book shop-L send-FD-NOM QUOT know/ST  
'I knew that Gita was going to send the book to the shop.'

#### 4.8 Coordinate Structures

Two clauses may be conjoined by the conjunctions tara 'but', ale 'and' or ki 'or', in which cases both clauses must be finite. As mentioned above, this construction is needed when the subjects of the two clauses are different. Consider for example the following pair of sentences, which differ in exactly this respect; in (114) the subject of the two verbs is the same, while in (115) the coordinate construction is needed as the subjects of the two verbs are different.

- (114) Raam-an Gitaa-yaata day-aa phetul-a  
Ram-A Gita-D hit-PP sit-PD  
'Ram hit Gita and sat down.'
- (115) Raam-an Gitaa wa-gu khan-a, tara wa phetul-a  
Ram-A Gita/S come-NOM see-PD but she sit-PD  
'Ram saw that Gita was coming, but she sat down.'

In some cases this coordinate construction can optionally be used also when the subjects are the same, as in (117) below:

- (116) Wa-n phetun-aa Gitaa-yaata daal-a  
He-A sit-PP Gita-D hit-PD  
'He sat down and hit Gita.'
- (117) Wa phetul-a ale Gitaa-yaata daal-a  
He/S sit-PD and Gitaa-D hit-PD  
'He sat down and hit Gita.'

It is interesting to note that although two subjects can have the same verb in a simple clause structure, this is not allowed for two objects, in which case a coordinate structure is needed. This is illustrated by the two final examples of this paper, sentences (118) and (119).



- (118) Kane Raam ki Gitaa-n me-haal-i laa  
Tomorrow Ram or Gita-A song-shout-FD Q  
'Will Ram or Gita sing tomorrow?'
- (119) Wa-n kane syaau na-i ki santraasi na-i  
He-A tomorrow apple eat-FD or orange eat-FD  
'Will he eat apples or oranges tomorrow?'

## 5.0 Conclusion

This paper makes an attempt to sort out some aspects of the phonological system of Newari. The major part of the paper is, however, devoted to the discussion of the various verb forms of this language as well as an analysis of their function and the structures governing their combinations. At least some insight into the verbal system of the Newari language has been gained through our research at UCSD. It should be noted, however, that this analysis/description is based on limited data, and that it should by no means be considered complete or necessarily correct.

## FOOTNOTES

1. I am grateful to Ken Cook, Tony Hung and Steve Poteet for their comments on earlier versions of this paper. These comments have been especially valuable to me as I was not able to be present in San Diego during the process of revising/rewriting it.
2. Spectrograms of these sounds were made by Edmund Mardon and myself - with the help of our consultant Narendra Suwal - as a project in phonetics. Below are wide-band spectrograms of the four bilabial sounds /p/, /p<sup>h</sup>/, /b/ and /p<sup>h</sup>/ followed by the vowel /a/:

(i) See next page

The murmured sound is clearly voiceless (no voicing bar is present, cp. /b/), and it can be distinguished from /p<sup>h</sup>/ by the presence of aperiodic noise as well as a drop in pitch on the following vowel (more space between the vertical bars).

3. The wide-band spectrograms below illustrate the dental nasals /n/ and /n<sup>h</sup>/ followed by the vowel(s) ae. The murmured feature of the consonant clearly affects both the vowel and the nasal sound itself.

(ii) See next page

(i)

1. It is necessary to note the fact that the phonetic transcription of the above examples, given in the long version, is as follows:

2. It is also possible that the ending -as on the verb 'was' in (195) is not a true ending but a true ending, as in (196).

3. The -s of the last consonant ending may not be a true ending, but could be a true ending, as in (197). One could imagine that the ending -s is a true ending, as in (198). The ending -s is a true ending, as in (199). The ending -s is a true ending, as in (200).

4. The ending -s is a true ending, as in (201). The ending -s is a true ending, as in (202). The ending -s is a true ending, as in (203).

5. The ending -s is a true ending, as in (204). The ending -s is a true ending, as in (205). The ending -s is a true ending, as in (206).

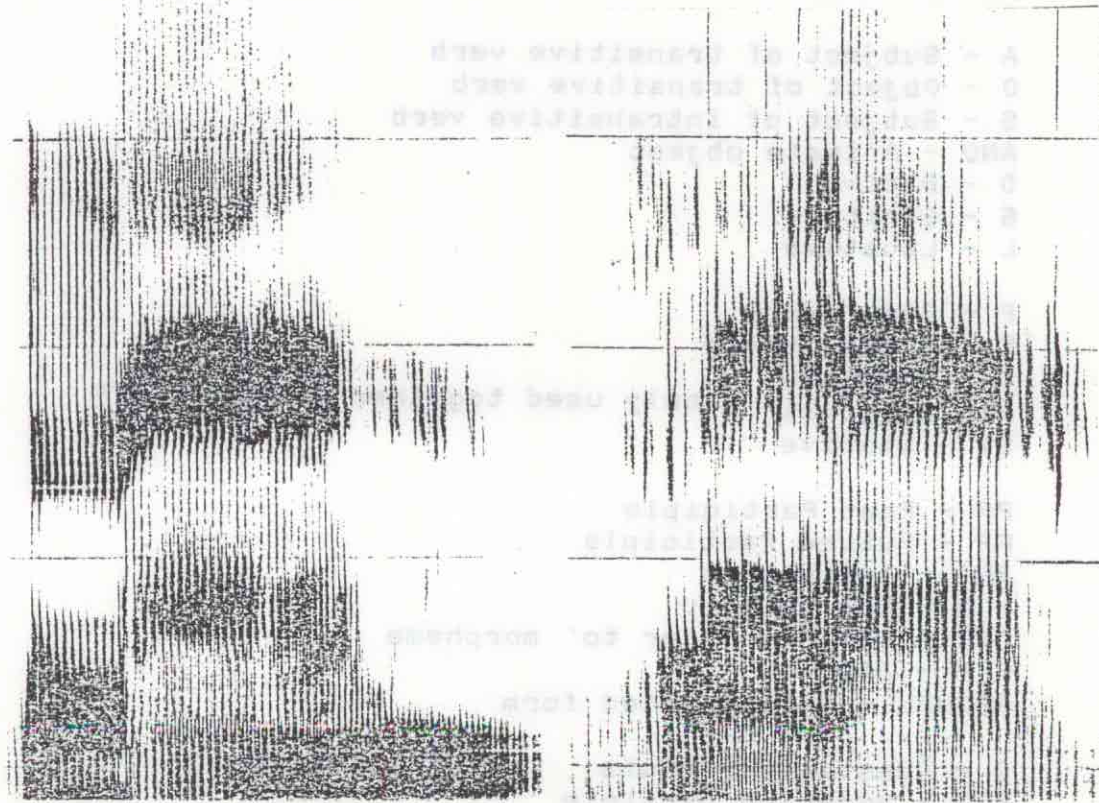
[pa]

[p<sup>h</sup>a]

[ba]

[p<sup>h</sup>a]

(ii)



[na:]

[n<sup>h</sup>a:]



4. It is unnecessary to mark the length of the vowel in the orthography here, as it always, with the exception of the above example, occurs in its long version.
5. It is also possible that the ending -aa on the verb 'see' in (38) is the non-finite form of the Past Participle (see section 3.2.2.1) rather than the Past Conjunct.
6. The -k- of the Past Conjunct ending may not be simply an irregularity, but could in fact be the Causative morpheme. One could imagine (as has been suggested to me by Tony Hung) that in Newari one says something like "cause something to be done". The question still remains, however, why this Causative never occurs in the Disjunct (1st person) form.
7. The word dyan could in fact also function as a noun in this example, similar to the structure in the English translation.

#### REFERENCES

Malla, Kamal P. (1981), Contemporary Newari, A Working Outline, manuscript, University of California, Berkeley.

#### ABBREVIATIONS

A - Subject of transitive verb  
O - Object of transitive verb  
S - Subject of intransitive verb  
ANO - Animate object  
D - Dative  
G - Genitive  
L - Locative  
  
P - Past tense  
F - Future tense  
C - Conjunct  
D - Disjunct } only used together with P and F  
ST - Stative  
  
PP - Past Participle  
FP - Future Participle  
INF - Infinitive  
NOM - Nominalizer  
FOR - the 'in order to' morpheme  
STM - Stem  
REDUPL - Reduplicated form  
  
Q - Question particle  
NEG - Negation particle



