

# Nepalese Linguistics

Volume 32

November 2017

Editor-in-Chief

Mr. Bhim Lal Gautam

Editor

Dr. Narayan Prasad Sharma

## Office bearers for 2016-2018

President	Mr. Kamal Poudel
Vice President	Mr. Bhim Narayan Regmi
General Secretary	Mr. Krishna Prasad Chalise
Secretary (Office)	Mr. Prem Prasad Poudel
Secretary (General)	Mr. Kedar Bilash Nagila
Treasurer	Dr. Ambika Regmi
Member	Dr. Omkareshwor Shrestha
Member	Mr. Amrit Yonjan-Tamang
Member	Mr. Indresh Thakur
Member	Dr. Tara Mani Rai
Member	Ms. Ekku Maya Pun

## Editorial Board

Editor-in-Chief	Mr. Bhim Lal Gautam
Editor	Dr. Narayan Prasad Sharma

*Nepalese Linguistics* is a journal published by Linguistic Society of Nepal (LSN). LSN publishes articles related to the scientific study of languages, especially from Nepal. The views expressed therein are not necessarily shared by the committee on publications.

Published by: Linguistic Society of Nepal  
Kirtipur, Kathmandu  
Nepal

Copies: 300

© Linguistic Society of Nepal

ISSN 0259-1006

Price: NC 400/- (Nepal)

IC 350/- (India)

US\$ 10/-

Life membership fee includes subscription for the journal.

**The publication of this issue was supported by Nepal Academy.**

## CONTENTS

Morphological analysis of scientific terms used in Nepali science books	Bal Ram Adhikari	1-5
Some aspects of the Baram vowels	Krishna Prasad Chalise	6-10
Rana Tharu case markers in areal-typological perspective	Dubi Nanda Dhakal	11-20
Language policy in Bangladeshi education: Bengali and English languages as a medium of instruction	Tania Hossain	21-27
Exploring phonological analysis in Tamang (Risiangku)	Jessie Johnson	28-32
Bold documentation of the Langtang language (Rasuwa)	Radka Kvicalova, Rebekah Slade, Lauren Gawne	33-39
It's time to understand and teach: Critical language awareness (CLA)	Shaty Kumar Mahato	40-44
The nature of language endangerment: A case study of Hajong	Albina Narzary	45-51
Mass noun classifiers in Nepali	Madhav P. Pokharel	52-56
Functions of language: a historical overview and the Nepalese context	Kamal Kumar Poudel	57-66
Inclusivity and exclusivity in Dumi	Netra Mani Dumi Rai	67-73
Agreement patterns in the Koyee verb	Tara Mani Rai	74-79
Role of MTBMLE in achieving some of the major SDGS in the ethno-linguistic communities in Nepal	Ambika Regmi	80-83
Orthography in Nepal: Issues and orientation	Bhim Narayan Regmi	84-93
Integrating ICT into MTBE in developing countries: Prospects, barriers and some strategies	Dan Raj Regmi	94-101
Thangmi surnames	Pratigya Regmi	102-109
Passive and antipassive in the typology of voice systems	Peter Sells	110-119
Nominalisation strategy in Puma	Narayan P. Sharma	120-129
Unification of fonts encoding system of Devanagari writing in Nepali	Trishna Singh and Santa B. Basnet	130-136
Social status of women in India: How Hindi accounts for it?	Sweta Sinha	137-141
Language for power and pedagogy: Redefining Nepal's linguistic architecture	Lava D. Awasthi	142-148
Presidential address	Kamal Poudel	149-151
List of Life Members		152-158



# MORPHOLOGICAL ANALYSIS OF SCIENTIFIC TERMS USED IN NEPALI SCIENCE BOOKS

BAL RAM ADHIKARI

*This article opens with a brief survey of some initiatives taken in order to expand the lexicon of science in Nepali. It mainly presents the analysis of the morphological structures of scientific terms. The terms included in the study are collected from the secondary level science books published in Nepali.*

Keywords: scientific terms, monomorphemic terms, polymorphemic terms, multiple affixation

## 1. INTRODUCTION

As promulgated by the Constitution of Nepal (2015), Nepali is the official language of the nation. The term 'official language' needs to be treated with a caution, for it is a loaded term. It implies that the language is internally rich enough to carry out the communication, both spoken and written, in diverse domains of life such as education, administration, law, and international relations. By implication, Nepali as a dominant medium of communication can meet the demands of different fields of knowledge. Apart from being a dominant language of the nation, Nepali, as identified by Pokharel, is also "a lingua franca of the Nepalis scattered all over the world" (2009: 334). It means, Nepali has outgrown its native land and has spread over the geo-political boundaries.

Diversity of domains of use and the size of lexicon in each domain are two of the defining criteria for a language to claim itself to be official as well as international. Regmi (2017) identifies six different domains of the Nepali language and science and research is one of the domains. The use of Nepali in the field of science, Regmi explains in the parenthesis, is limited. In order words, science is the least codified and hence least expressed domain of the Nepali language. In this article, I have used the term 'science' to refer to natural sciences such as physics, chemistry, biology and geology. The main reason for being these areas less expressed in Nepali is inadequate lexicalization of scientific concepts. There are mainly two reasons for *this* in adequacy. On the

one hand scientific concepts are absent from the language itself on the other hand those concepts which have entered the language are not sufficiently and systematically lexicalized. Pertaining to the former, scientific concepts do not have their origin in the Nepali language. Since such concepts are 'born' in the language like English, they are foreign by birth. Such concepts are to be borrowed and lexicalized in the Nepali language. As to the latter, those concepts which have entered the language are not sufficiently lexicalized yet.

Providing that scientific concepts are the 'content' to be communicated among the users of the field, terms are 'lexical containers'. In the absence of containers, content cannot be carried over. Such containers should be sufficient in quantity and solid, specific and precise in quality to hold the concepts and carry them to the target users.

As presented elsewhere, the lexicon of science in Nepali is not so rich and is in process of development. In this regard, various institutional initiatives have been taken to elaborate the scientific lexicon of the Nepali language. Of them Gorkhali (1978), Bandhu (1995), and Paudel and Gautam (2003) deserve a special mention. These are the commendable initiatives taken by the then Royal Nepal Academy. The common reality shared by these three projects is that Nepali as a developing language needs to elaborate its lexicon of science. In the absence of rich lexicon, it cannot be used as a medium of teaching and learning, and researching of science in Nepali.

Normally "scientific concepts, innovations and inventions are 'baptized' in the English language" (Adhikari 2004:16) and later they either transferred to or translated into the developing languages and Nepali is one of them. Such concepts in Nepali manifest themselves in a number of ways. Some are directly borrowed and transliterated in the Devanagari script (e.g. *aksijan*: oxygen), translated literally (e.g. *beg*: speed), coined based on the concepts in English (e.g. *gurutwākarsan*: gravity), or hybridized (e.g.

## 2 / Morphological...

*aseṭik amla*: acetic acid). There are some scientific terms in Nepali formed by extending the semantic range of common words (e.g. *pinḍa*: mass) to embrace the concepts expressed by the English terms. By implication, scientific terms are distinct on the grounds of their sources and formation process. What follows is the analysis of morphological structure of Nepali scientific terms.

### 2. METHODOLOGY

The secondary-level school science text books were used as a source of the data. A total of 200 terms were purposively collected, fifty terms each from physics, chemistry, biology, and geology and astronomy (Adhikari 2003). The terms which are directly borrowed and transliterated in Nepali such as *aksijan* and *hāidrojān* are not included in the study for their morphological analysis.

### 3. ANALYSIS AND DISCUSSION

To write with Nida (1949: 97), "morphological structure may be simple or complex. Simple structures consist of a single morpheme, free or bound. The complex structure consists of more than one morpheme". According to Nida, the words with simple structures are monomorphemic and those with complex structures polymorphemic.

Morphological analysis shows that there are two types of scientific terms used in the Nepali science textbook. They are the monomorphemic and the polymorphemic.

#### 3.1 MONOMORPHEMIC TERMS

A term with only one morpheme is taken as a monomorphemic term. It is a term with only one morpheme that can stand on its own. Some of them are as follows:

Table 1: Monomorphemic scientific terms

Nepali terms	English equivalents
lawan	salt
kaḥṣa	axis
pinḍa	mass
beg	speed
kaṣār	acid
snāyu	nerve

These are the terms with the simple morphological structure. The presence of

monomorphemic terms is not so conspicuous in the lexicon of science. Of the 200 collected words, only six terms (3%) are monomorphemic.

#### 3.2 POLYMORPHEMIC TERMS

A term with more than one morpheme is treated as a polymorphemic term. It is the term that involves the complex morphological structure (Nida 1949: 97). Polymorphemic terms are found to be of two types, namely the complex and the compound, each having its own types. A huge majority of the scientific terms in Nepali belong to the polymorphemic category.

##### 3.2.1 COMPLEX TERMS

A polymorphemic term has a root with one or more than derivational affix. Complex polymorphemic terms have the following structures:

prefix (±) root (±) suffix derived word  
 prefix root suffix derived word

The sign (±) indicates that the application of the prefix or suffix to the root is optional. However, the application of one of them is obligatory. That is to say, either prefix or suffix is applied to the given root, but not the both. It is the case of single affixation. The application of both the affixes to the same root results in multiple affixation.

##### 3.2.1.1 SINGLE AFFIXATION

Some of the terms comprise a root and one derivational affix. The affix can be a prefix or a suffix; the root can be free or bound. The sign (-) next to the root indicates that the root is bound. The structures of the complex terms formed through the process of single affixation are as follows:

Table 2: Words formed with single affixation

Prefix	Root	Suffix	Derived terms	English equivalents
pari-	path		paripath	circuit
par-	anu		parmānu	Atom
pra-	beg		prabeg	velocity
	nihār	-ika	nihārikā	nebula
	aṇḍa	-āsaya	aṇḍāsaya	testicle
	gam-	-ti	gati	Speed
	dol	-an	dolan	oscillation

Table 2 shows that both prefix and suffix are the potential affixes that can occur with the root, and

the root can be free or bound. The presence of complex terms with the single affixation seems more dominant than that of that of the monomorphemic while less dominant than that of the terms with multiple affixation. Of the total 200, only 10 (5%) terms are found to have this structure.

### 3.2.1.2 MULTIPLE AFFIXATION

Some of the polymorphemic terms comprise a root with more than one derivational affix. The sign (-) right to the root indicates that it is bound. The structures of the complex terms formed through the process of multiple affixation are as follows:

Table 3: Words formed with multiple affixation

Prefix	Root	Suffix	Derived terms	English equivalents
ā-	writ	-i	āwriti	frequency
pra-	amgār	-ik	prāngārik	organic
sam-	yuḥ-	-an	samyōjan	fusion
bi-	dhut-	-a	biddhut	electricity
a+pra-	amgār	-ik	aprāngārik	inorganic
a-	puspa	-ak	apuspak	cryptogamy
ut-	pre-	-ak	utprerak	catalyst

These terms have undergone a dual process of prefixation and suffixation resulting in a more complex structure. The survey shows that the number of the terms with multiple affixation is greater than the terms with the single affixation but lesser than the terms with compounding. Of the total 200, 16 (8%) terms are found to be with the complex affixation.

Both the monomorphemic and complex terms were also studied from the perspective of their origin. Etymologically these terms have their origin in the Sanskrit language. For example, *lawan* (salt), *pinḍa* (mass), and *upagraha* (satellite) are such Sanskrit-derived words. The use of Sanskrit as the source of scientific terms is institutionally motivated. Institutional inclination to Sanskrit is evinced in the procedures adopted by the then Royal Nepal Academy:

After collecting various scientific terms, we have adapted them in Nepali. In the process of adaptation we have used Sanskrit roots. (*my translation*) (Gorkhali 1978).

These are two of the main procedures articulated in *Introduction* to Bijñān Shabdāwali (Science Glossary 1978). These procedures have got continuity in another important publication Science Dictionary (Paudel and Gautam 2003) by the same Institution. One of the criteria, as stated in its *Preface*, is, "Sanskrit roots have been used while coining words".

The tendency of Nepali turning to its source language is in tandem with other languages like English. English has also profusely used the classical languages, namely Greek and Latin in the formation of terms in the field of science and technology (Adhikari 2004: 60). The reason for this is that classical roots are derivatively more productive than their contemporary counterparts. The example can be *jal* and *pāni*, both having the same meaning i.e. water, the former i.e. *jal* tends to be more productive than the latter.

### 3.2.2 COMPOUND TERMS

The second category of polymorphemic terms are compound in nature. The compound term has at least two bases which can be words, or root morphemes. The majority of the polymorphemic scientific terms (38%) are found to be compound. These compound terms are further categorized on the basis of two criteria: the headword and the source.

#### 3.2.2.1 ON THE BASIS OF HEADWORD

The headword is syntactically the dominant constituent of the entire compound words (Katamba 1993). On the basis of the headword, all compound terms have the noun as the dominant constituent. Compound terms headed by the noun can occur in different combinations. With regard to Nepali scientific compound terms, the following combinations are found to occur:

(1) N → NN	English equivalents
gurutwākarsan	gravity
candramās	synodic month
sumeruwrit	arctic circle
utswedan prakriyā	transpiration process
lambaduri	perpendicular distance

In this type of combination, the terms like 'gurutwākarsan' and 'chandramās' respectively consist of 'gurutwa' (gravity) and 'ākarsan'

(attraction), and 'chandra' (moon) and mās (month). Both the constituents of each compound are nouns. Sometimes a morphophonemic change is observable in the process of compounding. Here, 'gurutwākarsan' is a case in point.

(2)N → AN	English equivalents
biral chāyā	penumbra
yantrik phāidā	mechanical advantage
ānawik sutra	molecular formula
ajaiwik tatwa	abiotic factor
akāmya kriyā	reflex action

In this type of combination, the first constituents such as 'biral' (rare), 'yantrik' (mechanical) and 'ānawik' (molecular) are adjectives used as specifiers of 'chāyā', 'phāidā' and 'sutra' respectively. Like the combination of N + N, such combinations are common in Nepali scientific terms.

(3)N→NAN English equivalents

bidyut cumbakiya taranga	electro magnetic wave
bhumadhya kakṣaequator	
bhusthāi kakṣa	geo-stationary orbit

Some of the compound nouns are found to comprise three constituents, exhibiting the features of complex terms. In the terms given above, the medial constituents 'chumbakiya', madhya (middle) and sthāi (permanent) are the adjectives which are preceded as well as followed by nouns 'bidyut' (electricity), 'bhu' (earth), 'taranga' (wave) and 'kakṣa' (orbit).

The analysis indicates that compounding is recursively used in the formation of these terms. The process can be presented as:

[[prāṅgārik] A [[rasāyan]A[bijñan] N] N]N  
English: organic chemical science

[[bhu]N[[madhya]A [rekḥā] N] N] N  
English: equator

[[bhu]N[sthāi]A[kakṣya]N]N]N  
English: geo-stationary orbit

[[bhu]N [rasāyanik]A [cakrā] N] N] N  
English: geo-chemical cycle

Let's take the term 'prāṅgārik rasāyan bijñan', in which the first round of compound is 'rasāyan + bijñan'. With the addition of 'prāṅgārik' this compound term has undergone the second round

of compounding as 'prāṅgārik + rasāyan bijñan'. Similar is the case with rest of the terms.

In principle there is no limit in the gradual addition of words to the compound terms. In practice, however, the compound terms having more than three constituent words are rare. Moreover, these example terms show that there is a combination of affixation and compounding, resulting in a complex morphological structure.

### 3.2.2.2 ON THE BASIS OF SOURCE

On the basis of the source, two types of compound terms are found to occur in Nepali science lexicon, namely the homogeneous and the heterogeneous.

#### (a) Homogeneous compound terms

The majority of the compound terms are formed with the combination of the words from the same source. Seventy out of eighty-five compound terms are found to be homogeneous.

Nepali+Nepali

gurutwa +ākarsan→gurutwākarsan  
(gravity) (attraction) (gravity)

biral+chāyā → biralchāyā  
(shallow/less) (shadow) (penumbra)

lamba + duri → lambaduri (distance)  
(perpendicular) (distance)

ānawik+sutra→ ānawiksutra  
(molecular)(formula) (molecular formula)

Both of the constituent words of these compounds belong to the same language i.e. Nepali. However, from the perspective of origin, all these Nepali terms are rooted in Sanskrit.

#### (b) Heterogeneous compound terms

A few compound terms are found to constitute the words from different languages. These different sources are English and Nepali.

English + Nepali

aseṭic + amla →aseṭic amla  
(acetic) (acid) (acetic acid)

vekṭar + rāsi →vekṭarāsi (vector)  
(amount/quantity) (vector quantity)

moṭar + snāyu→moṭar snāyu  
(motor)(nerve)(motor nerve)



## Nepali + English

amla + reḍikal → amla reḍikal  
(acid) (radical) (acid radical)

niskriya + gyās → niskriya gyās  
(passive/inert) (gas) (passive/inert)

bhāle + gyāmeṭ → bhāle gyāmeṭ  
(male) (gamet) (male gamet)

Hybrid terms with Nepali and English words like these are common in Nepali science lexicon. These terms are the outcome of the partial translation of a term from the source language (here English). One constituent from the source language is translated while the other is directly borrowed and transliterated in the target language (here Nepali). It is the combination of literal translation and borrowing with transliteration. "Hybrid forms", Singh avers, "are normal and natural linguistic phenomena in technical terminology, and therefore such forms may be adopted keeping in the context and requirements" (1994: 281).

## 4. CONCLUSION

Based on the foregoing analysis, it can be concluded that lexicalization of scientific concepts is indispensable for modernization of the developing languages like Nepali. The lexicon of science in Nepali is in the process of expansion. To this end, the formation of scientific terms is inclined to the translativity model in which English serves the source language. Moreover, Nepali scientific terms are conceptually English oriented, etymologically Sanskritized, and structurally complex. Morphologically, Nepali scientific terms are inclined to complex structures. Furthermore, hybridity is common in the formation of Nepali compound scientific terms. Hence, hybridization should be accepted as a natural phenomenon.

## REFERENCES

- Adhikari, Bal Ram. 2003. The Translation of technical terms: A case of textbook for science (A Master's Thesis). Kirtipur: Faculty of Education, Tribhuvan University.
- Adhikari, Bal Ram. 2004. *Technical and cultural translation*. Kathmandu: Ksitiz Prashan.

Curriculum Development Center 1999. *Vijñan* (Vo.1 & 2). Bhaktapur: Janak Education Materials Center.

Curriculum Development Center. *Vijñan: Grade 9* (2016). Bhaktapur: Janak Education Materials Center.

Bhandu, Churamani. 1995. *Adharbhut pravadhik shabdawali* (Glossary of basic technical terms). Kamaladi: Royal Nepal Academy.

Gorkhali, Chandra Praksah. 1978. *Vigyan shabawali* (Glossary of science). Kamaladi: Royal Nepal Academy.

Kakamba, Francis. 1993. *Morphology*. London: Macmillan Press.

Nida, Eugene 1949. *Morphology: The descriptive analysis of words*. (2<sup>nd</sup> edn.). Ann Arbor: The University of Michigan Press.

Paudel, Harihar, and Laxman Prasad Gautam. 2003. *Vigyan shabdakosh* (Science dictionary). Kamaladi: Royal Nepal Academy.

Pokharel, Madhav. 2009. Origin and Development of the Nepali Language. In Subba, T. B., Sinha, A. C., and Nepal, D. R. *Indian Nepalis: Issues and Perspectives*. New Delhi: Concept Publishing Company. 225-238.

Regmi, Bhim Naryayan. 2017. Nepali bhāsāko ādhunikaranka pramukh āyām (Major dimensions of modernization of the Nepali language). A paper presented in Nepal Academy.

Singh, Udaya Narayan. 1994. Term planning and translation. In Bhattarai, Govinda Raj, Adhikari, Bal Ram and Phyak, Prem Bahadur. 2011. *Across languages and cultures*. Kathmandu: Vidhyarthi Prakashan Pvt. Ltd. 268-288.

*The Constitution of Nepal*. 2015. <http://www.oagnep.gov.np/uploads/Constitution-of-nepal-2072>.

CONTRIBUTOR'S EMAIL:

<balaramadhikari77@gmail.com>

# SOME ASPECTS OF THE BARAM VOWELS

KRISHNA PRASAD CHALISE

*Formant plot in F1XF2 plane shows that [i] and [u] are high, [e] and [o] are mid and [ə] and [a] are low; and [i] and [e] are front, [ə] and [a] are mid and [u] and [o] are low. Of them, [o] and [u] are rounded. But the position of [ə] is always fluctuating. Similarly, the high vowels have higher F0 than the low vowels. The second target of all the diphthongs found in the Baram native morphemes is [i]. The acoustic analysis has investigated that the speakers try to normalize the duration of the transition from the first target to the second target of the diphthongs.*

Keywords: formant, Baram, diphthong, normalize

## 1. INTRODUCTION

Baram is a Tibeto-Burman language spoken by a minority ethnic group of Nepal called Baram. The Baram people reside mainly (more than 90%) in the central southern part of the Gorkha district (CBS 2012) along Daraundi and Budhigandaki rivers and their tributaries in the central part of Nepal. It is a seriously endangered language because it is spoken only in two villages of the Gorkha district: Mailung and Dandagaun. There are 9 speakers in Mailung but they do not use the language in day-to-day conversation. In Dandagaun, it is spoken in day-to-day conversation in a very limited number of domains of language use. In 2007 there were 51 speakers and 44 terminal-speakers, and 34 rememberers. Most of the speakers were very senior in age and their number is decreasing. Six of the speakers passed away within the period of 3 years (Kansakar et al. 2011a).

The cognate comparison shows that the closest genetic affiliation of the Baram language is with Thami, second closest language is Chepang and Newar and Magar are close to it, too (Chalise 2015).

This paper investigates some phonetic and phonological aspects of the Baram vowel and consonant phonemes. The phonemic inventory and minimal pairs for contrast have been adopted as given in Kansakar et al. (2011c). The phonetics

and phonology of Baram shows great proximity with Nepali phonetics and phonology. Simply, we can guess that it is a result of heavy language contact and language shift but the outline of ancient Baram phonetics and phonology is still unknown, so without comparison we are not at the position of making any claim.

## 2. THE BARAM VOWELS

From the observation of the literature we understand that there are six contrastive vowels in Baram, viz. /i/, /e/, ə/, /a/, /o/ and /u/. There is no length, breathiness and nasalization contrast in Baram but, in perception, we realize allophonic length for emphatic purposes. Similarly, nasalization of the vowel (both prenasalization and postnasalization) is perceived in the environment of nasal consonants. In Kansakar et al. (2011b), there are a handful of nasal vowels in the native Baram words, but they have their counterparts with non-nasal vowels, for example, /aĩkok/ or /aŋkok/ for ‘a kind of tree’ which justifies that there is no phonemic status of nasal vowels.

### 2.1 THE BASIC VOWELS

Kansakar et al. (2011c) has classified the basic vowels in Baram in terms of height of the tongue: high /i/ and /u/, mid /e/ and /o/ and low /ə/ and /a/; part of the tongue active to produce the vowel: front /i/ and /e/, central /ə/ and /a/ and back /u/ and /o/. But there is not mentioned the parameter of shape of the lips, i.e. it is silent about whether there are rounded and unrounded vowels. In fact, the back vowels /u/ and /o/ are round vowels.

Formant plot of the vowels is an important aspect of vowel description in phonetics and phonology because it specifies where the vowels are produced from in the vowel space. For the purpose of formant plot, six words (one word containing one vowel in the similar environment) were selected from Kansakar et al. (2011a) and five tokens of each of them were recorded from one male and one female native speakers of Baram of age about 70 with normal speech ability.

Later, the average of the five tokens of each of the vowels was calculated and the average values were used for the purpose of formant plotting.

The words were recorded using Sony ECM-MS908C Electret Condenser microphone and EDIROL, R09HR audio recorder maintaining a distance of 10-12 inches between the microphone and the mouth of the speaker in CD quality. Ten tokens containing one vowel were randomly selected from the collection of 885 words for the purpose (LEDBL 2007-11).

The measurements of the formant frequencies of the vowels and their plotting on the F1XF2 plane as presented in Figure 1 and Figure 2, support the findings of the Kanaskar et al. (2011 a and b) to a great extent and reveal some new facts about them.

Regarding the height of the tongue (location on the vertical dimension), the formant plot in F1XF2 plane supports the findings of Kansakar et al. (2011c) as /i/ and /u/ are high, /e/ and /o/ are mid and /a/ is low. But the height of the tongue of /ə/ is mid in this study (in Fig. 1&2) but previously it was classified as a low vowel. This vowel is very inconsistent in nature and location, and it is very difficult to determine whether it is to be represented with [ə] or [ʌ] because in the formant plot of male speaker it is very near to [ʌ] but in the formant plot of the female speaker it is very much near to [ə]. So in this study I have followed the trend used in the literature.

Similarly, in the case of frontness/backness (location on the horizontal dimension), this study has supported the findings of Kansakar et al. (2011c) regarding /i/ and /e/ as front vowels, /u/ and /o/ as back vowels but the finding is quite different concerning /ə/ and /a/. /a/ and /ə/ were supposed to be roughly central vowels but this study revealed /a/ as a purely central vowel. The case with /ə/ is again confusing as it is central in the tokens produced by the female speaker and back in that of the male speaker. So it can be said that /ə/ is an unstable vowel in Baram and it fluctuates in the mid-low and central-back region in the vowel space.

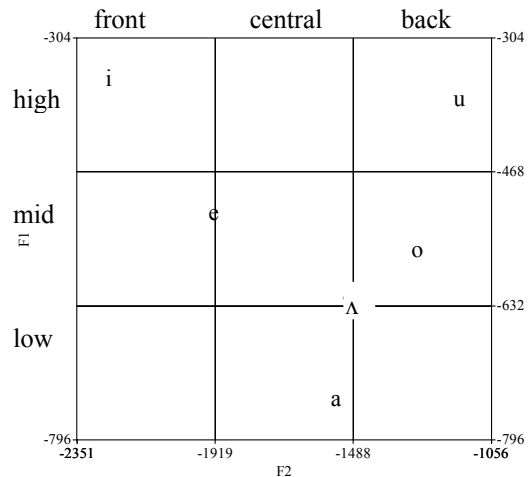


Figure 1: Average formant values in F1XF2 plane (produced by a male speaker)[Note: symbol ə=vowel ə in figures]

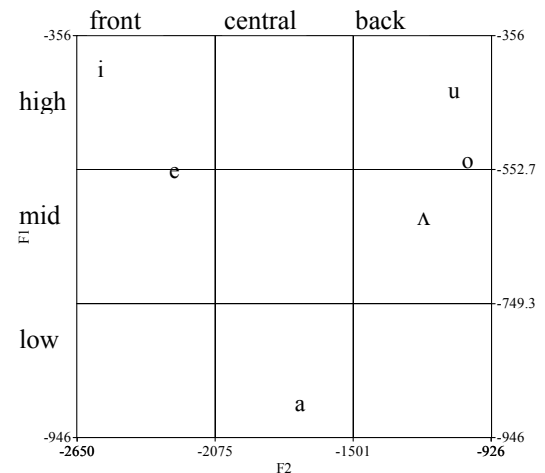


Figure 2: Average formant values in F1XF2 plane (produced by a female speaker)

The formant values of the vowels presented in Fig. 1 and 2 are the values calculated from the words produced in isolation in a controlled environment. A vowel while produced for the second time is not articulated exactly the way it was produced before, so we get different formant values measuring different tokens of the same vowel. Similarly, there is higher degree of quality variation of the vowels in the running text than in the production of individual vowels.

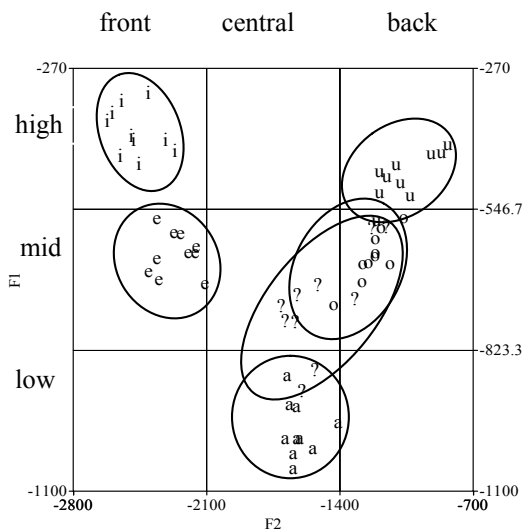


Figure 3: Scattered plot of F1 and F2 of the individual vowels

So, scattered plot of the formant values of the different vowels is an important means to observe the possible range of quality variations of the vowels. Fig. 3 presents the scattered plot of the first and second formant values of 60 tokens of Baram vowels (6 vowels  $\times$  10 tokens per vowel = 60 tokens) taken from a running text produced by a female speaker of age 72. It shows that all vowels are not equally stable in quality in different tokens. [i], [u] and [a] are the most stable vowels in Baram and it is a universal trend, too. Similarly following the general trend, [e] and [o] are relatively stable whereas [ə] is least stable in the scatter plot.

Quantal Theory of speech perception explains that there are quantal regions in the vowel space and the vowels produced from any point within its quantal region is perceived to be the same but if the production even slightly crosses the quantal region, it is perceived to be a different sound. The scatter plot presents the quantal regions of the vowels in the vowel space.

The front and high region in the vowel space is the quantal region for the production of [i]. The back and high region in the vowel space is the quantal region for the production of [u] but it is not as high as that of [i]. Similarly, the front and

mid part of the vowel space is the quantal region for [e], back and mid region for [o], and central and low region for [a]. The distribution of [ə] is diffusive. Its distribution is in the mid-central, mid-back and low-back regions.

The scatter plot also reveals the levels of stability of the Baram vowels. [i], [u] and [a] are the most stable vowels and show the nature of the quantal vowels. Relatively [e] and [o] are stable but not as stable as the previous three. In comparison, [e] is more stable than [o]. Of all, [ə] is the most unstable vowel and it fluctuates in the wide area of central-back and mid-low regions. Chalise (2015) reveals the status of the [ə] in Baram phonology as “It is a confusing rhyme in Baram because some of the native speakers replace it with -a- in most of the situations but it occurs in some instances. It is difficult to say whether it is a stable rhyme in the language or not but its distribution is relatively higher in the language. It is very difficult to get a true minimal pairs to show the contrastive distribution between /a/ and /ə/.”

## 2.2 THE INTRINSIC F0

It has been identified that the intrinsic fundamental frequency of a vowel is correlated to its height. In the identical environment phonetically higher vowels have a propensity to have higher F0 (Harrington, 2010: 87). It is obvious that when the vowel height increases the value of F1 decreases. F1 decreases when the size of the tube behind the point of constriction increases. To increase the size of the back tube we have to stretch the walls of the tube to expand it. While we stretch the walls of the tube, there increases tension in the vocal folds and the rate of vibration of the vocal folds gets slightly increased. So the F0 of the vowels correlates with the high of the vowels.

For measuring F0 of the vowels the words containing the vowels in the identical environment were recorded from one male and one female speaker of similar age. The measurements were taken for single tokens using spectrograms produced using PRAAT. The Baram vowels support the idea that the F0 of the higher

than that of the low vowels as in Figure: 4. But the F0 of [e] and [o] have slightly higher than that of their corresponding higher vowels and it needs further investigation.

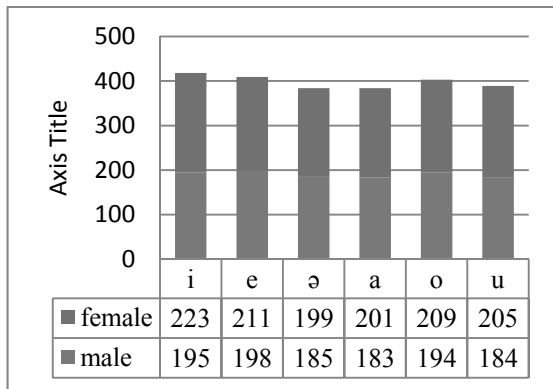


Figure 4: F0 of the different Baram vowels

### 2.3 THE DIPHTHONGS

However, Kansakar et al. (2011c) has given a sketch of 10 possible vowel sequences in Baram with examples and classified them in to initial, medial and final sequences. There is no claim about whether they are diphthong or not. The proposed possible vowel sequences are: [ei], [əi], [ai], [oi], [ui], [eo], [eu], [əu], [au] and [ou].

While analyzing 3676 dictionary entries, in Kansakar et al. (2011b), I could find only 5 diphthongs viz. [ei], [əi], [ai], [oi] and [ui] in the native Baram morphemes. In the Nepali loans the diphthongs of Nepali have been borrowed. It means that the target point of the Baram diphthongs is [i] so they all are closing diphthongs centered towards high-front of the vowel space.

Five tokens produced by a female speaker, one token containing one diphthong were taken for the analysis their formant structures. For formant structure of each diphthong, formant values were measured at four points on their trajectories (beginning and end, and two equidistant points between them).

Figure 5 presents the trajectories of the five different Baram vowels. The four points in the figure represent the four points of trajectory of

each of the diphthongs. The trajectories of the diphthongs are curves rather than straight line. It means that the movement of the tongue from the first target of the diphthong to the second target is not straight.

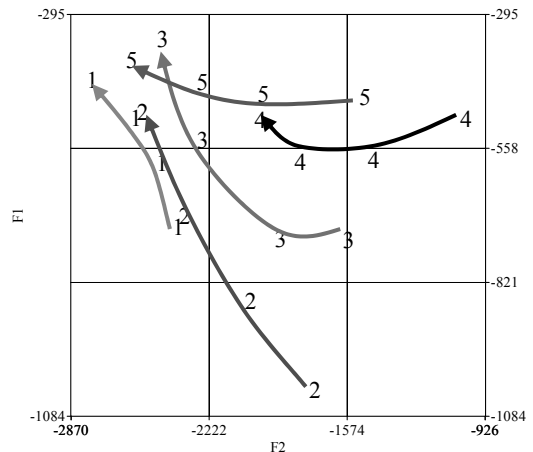


Figure 5: The Baram diphthongs

[Note: 1=ei, 2=ai, 3=əi, 4=oi and 5=ui]

Next remarkable point is that the speakers try to normalize the duration of the transition from the first target to the second target of the diphthongs as a result there is displacement of the target point(s) in diphthongs in comparison to the target points of the corresponding monophthongs. The distance between [e] and [i] is very short whereas the distance between [a] and [i] is relatively very long. While producing diphthong [ei] the distance is increased by lowering and centering the first target and raising and fronting the second target. Similarly while producing [ai], the first target is fronted and raised and the second target is lowered and centered as in Figure 5.

### 3. CONCLUSIONS

There are six basic vowels [i], [e], [ə], [a], [o] and [u]. The first two formants of the vowels are sufficient to acoustically characterize them. Plotting of the formant values of the vowels in F1/F2 plane shows that out of the Baram six basic vowels [i] and [u] are high, [e] and [o] are mid and [ə] and [a] are low; and [i] and [e] are front, [ə] and [a] are mid and [u] and [o] are low.

10 / Some aspects...

Of them, [o] and [u] are rounded. But the position of [ə] is always fluctuating from [a] to [o] and it is an unstable vowel and does not show the quantal nature in Baram.

Similarly, the intrinsic F0 of the vowels also is a cue to identify the height of the tongue of the vowels in Baram as high vowels have higher F0 than the low vowels.

There are found only five diphthongs in the native Baram morphemes. In all of them the second target is [i]. So the diphthongs in Baram are closing diphthongs heading towards the high-front of the vowel space. The acoustic analysis has investigated that the speakers try to normalize the duration of the transition from the first target to the second target of the diphthongs although the targets are very close in some diphthongs and far in some others. This is managed by dislocation of the targets from their locations in the corresponding monophthongs.

#### 4. REFERENCES

- CBS. 2012. *National population and housing census 2011: National report*. Kathmandu: CBS.
- Chalise, Krishna Prasad. 2015. *Acoustic Analysis of the Nepali Plosives*. Report submitted to the University Grants Commission, Bhaktapur, Nepal.
- Harrington, J. 2010. Acoustic phonetics. In Í W. J. Hardcastle, J. Laver, & F. E. Gibbon (ed.), *The handbook of phonetic sciences* (pp: 81-129). Chichester: Willey-Blackwell.
- Kansakar, T. R., Yadava, Y. P., Chalise, K. P., Prasain, B., Dhakal, D. N., & Paudel, K. (2011a). A Sociolinguistic Study of the Baram Language. *Himalayan Linguistics*. 10 (1).187-226.
- Kansakar, T. R., Yadava, Y. P., Chalise, K. P., Prasain, B., Dhakal, D. N., & Paudel, K. (2011b). *Baram Nepali English Dictionary*. Kathmandu: LEDBL, Central Department of Linguistics, TU.
- Kansakar, T. R., Yadava, Y. P., Chalise, K. P., Prasain, B., Dhakal, D. N., & Paudel, K. (2011c). *A Grammar of Baram*. Kathmandu: LEDBL, Central Department of Linguistics, TU.
- Linguistic and ethnographic documentation of the Baram language project (LEDBL). 2007-2011.

An ELDP, SOAS funded MDP (MDP0158).  
Central Department of Linguistics, Tribhuvan  
University, Nepal.

CONTRIBUTOR'S EMAIL:  
<krishna40e@yahoo.com>

# RANA THARU CASE MARKERS IN AREAL-TYPOLOGICAL PERSPECTIVE

DUBI NANDA DHAKAL

*Rana Tharu is a nominative-accusative language like all Tharu varieties, such as Chitwania Tharu, Dagauna Tharu, and Saptariya Tharu. There is a case syncretism between ablative, and instrumental in Rana Tharu. Additionally, the case markers in Rana Tharu are similar to other Indo-Aryan languages spoken in the neighboring areas.*

Keywords: case, nominative-accusative, case syncretism

## 1. RANA THARU LANGUAGE

The Rana Tharu language is spoken in the far-western districts of Nepal, and in the close geographical areas of India. Tharu is the fourth largest language group spoken in Nepal followed by Nepali, Maithili, and Bhojpuri (CBS 2012). Since the distinction is not made among Tharu varieties in census (cf. CBS 2012), it is difficult to say the exact number of speakers in different places. *Ethnologue* (Epele et al., 2012) notes this as an ‘unclassified language’ but Dhakal (2013) proposes that this is closely associated with western Hindi. Grierson (1916:311) notes that Tharu varieties resemble in different area.

The data for this paper were mainly gathered from the speakers from Pipladi and Dekhatbhuli VDCs of Kanchanpur district of far western Nepal. Both elicited and text examples were used for this purpose<sup>1</sup>.

This article is organized as follows. With a brief introduction to Rana Tharu in section 1, the case marking pattern in Rana Tharu is discussed in section 2. In the same way, section 3 deals with the case markers in Rana Tharu. In section 4, the case markers of Rana Tharu are discussed in the context of the Indo-Aryan languages spoken in the terai region of Nepal. And finally, this article is summarized in section 6.

## 2. CASE MARKING PATTERN

Case relations in Rana Tharu are shown by case markers and postpositions. Case is both a morphological and syntactic category in Indo-Aryan languages (Masica 1991:230). By case we mean ‘marking dependent nouns for the type of relationship they bear to their heads’ (Blake 2001:1). They are used to express syntactic and semantic functions of nouns. When some case suffixes are attached to the stems, the nouns are in oblique forms agreeing in number and person. Before moving to case markers, let’s look at the case marking pattern in Rana Tharu. We will first make a distinction of the grammatical relation of subject (S), agent (A), and Patient (P). These concepts are taken from Payne (2006).

- (1) *muḍka bhag gəo*  
muḍka bhag gəo  
frog run PST.3SG.M.NH  
‘The frog ran away.’ [Conversation1.15]
- (2) *muḍka səŋgike ḍhūḍən nəgəo*  
muḍka səŋgi-ke ḍhūḍ-ən  
frog friend-ACC look for-INF  
na-gəo  
NEG-go.PST.3SG.M.NH  
‘The frog did not go to look for his friend.’  
[Conversation1.14]

Let’s observe the examples in (1-2). Neither the subject of an intransitive clause nor the agent of the transitive clause encodes any case marker. Examples (1-2) demonstrate that the subject of the intransitive clause and the agent of the transitive clause are aligned in one way whereas the object of the transitive clause is marked distinctly. The case marking pattern like this suggests that Rana Tharu is a nominative-accusative language.

However, there are cases when the objects of the transitive clauses are not marked either. The agent and object of a transitive clause is sometimes marked with an accusative marker whereas others are not. Rana Tharu, thus, exhibits differential object marking as given in (3-4). For theoretical discussion on differential object marking, see Bossong (1985).

<sup>1</sup>The data for this study mainly came from Dhakal (2013). In addition to this, a phonological reconstruction of Tharu varieties are also available (Boehm 1998).

- (3) *sāp muḍḍake ghīts gəi*  
 sāp muḍḍa-ke ghīts gəi  
 snake frog-ACC eat PST.TR  
 'The snake swallowed (ate) the frog.'

- (4) *mæ lāuḍa piṭo*  
 mæ lāuḍa piṭ-o  
 I boy beat-PST.1SG  
 'I beat a boy.'

The case marking pattern is further perplexing when we compare examples (3-4). While the object in (3) is marked with the accusative case whereas the object in (4) is null marked. This exhibits that the object marking in Rana Tharu is not consistent.

### 3. CASE MARKERS

This section deals with the case markers in Rana Tharu. The case markers to be discussed in this section include dative-accusative, locative, genitive, ablative, and sociative.

#### 3.1 NOMINATIVE CASE:-Ø

Nominative case in Rana Tharu appears unmarked or has no inflection. I have used the symbol -Ø to indicate the nominative case in this section. Nominative nouns appear in subject position (5). As we see before, the subject of intransitive or the agent of the transitive clauses (1-4) do not code any case markers. As mentioned earlier, some (direct) objects take the case markers, whereas others do not. The object *rāssi* 'rope' in (6), for example, does not take any case marker at all. This can be contrasted with example (5) in which the object *rāssi* 'rope' has coded the accusative case.

- (5) *mæ rāssi bəṭo*  
 mæ-ø rāssi- ø bəṭ-o  
 I rope twist-PST.1SG  
 'I twisted the rope.'

See section (3.2) below for differential object marking in Rana Tharu.

Similarly, the subject of a copular clause or complement is also in nominative case (6).

- (6) *bo kutta hæ*  
 bo-ø kutta-ø hæ  
 that dog be.PRES.3SG.NH  
 'That is a dog.' [Conversation1.78]

The null marking on subject and inanimate and indefinite nouns is common in Indo-Aryan languages (Mohanan 1990: 79; Yadava 2004: 254; Verbeke 2013:39). Thus, the subject may be either in nominative or dative case. Similarly, the direct object is in nominative and indirect object may be either in nominative or accusative-dative case<sup>2</sup>. The discussion *prima facia* shows that Rana Tharu is a nominative-accusative language. It is also to be noted that null-marked nouns appear in different positions in Rana Tharu.

#### 3.2 DATIVE-ACCUSATIVE

The accusative-dative marker is identical in Rana Tharu, viz. *-ke*. The pronouns have oblique stems when they inflect for dative-accusative case (see Dhakal 2013)<sup>3</sup>. Since the dative and accusative have identical marker, this is called dative-accusative case. The animate object or patient is marked with the accusative case as shown in (7).

- (7) *muḍḍa səṅgike ḍhūḍən nəgəo*  
 muḍḍa səṅgi-ke ḍhūḍ-ən  
 frog friend-ACC search-INF  
 nə-gəo  
 NEG-go.PST.3SG.M.NH  
 'The frog did not go to look for his friend.'  
 [Conversation1.14]

The animate and human objects generally receive the accusative case. In addition, some inanimate nouns if specific also receive it. Consider the examples (8-9). However, the object marking is not very frequent in the discourse.

- (8) *bərdhake həm dzotət hæ*  
 bərdha-ke həm dzot-ət  
 ox-ACC we plough-HAB  
 hæ  
 be.PRES.3SG.NH  
 'We plough the oxen (We plough the field with oxen.)' [Cow.23]

<sup>2</sup> Mohanan (1990) and Yadava (2004) treat all instances of null marking as nominative case.

<sup>3</sup> Verbeke (2013: 253) in the context of Indo-Aryan languages states that animacy/definiteness display different kinds of case marking in subject and object. Similarly, Butt and Ahmad (2011:554) further note that in addition to animacy, definiteness/specificity, the other factors responsible for this includes the person hierarchy, tense/aspect.



- (9) *gəijāko bətsəsə bətsərə bətsəri kəhə həe*  
 gəijā-ko bətsə-se bətsərə  
 cow-GEN child-ACC calf  
 bətsəri kəhə həe  
 calf (female) say-HAB be.PRES.3SG.NH  
 'The young calves are called *bachara* and  
*bachari*.' [Cow.21]

Only the specific objects (animate or inanimate objects) code the dative-accusative marker. Examples (10-11) do not have any accusative case marking at all as the nouns appearing in the object position are not specific.

- (10) *bo phəl pəkəɖi*  
 bo phəl pəkəɖ-i  
 that fruit hold-PST.TR  
 'He caught (collected) the fruit.'  
 [Pear story.34]
- (11) *bənke səbəe dzəni dzənət homəŋge*  
 bən-ke səbəe dzəni dzən-ət  
 forest-ACC all CLF know-HAB  
 ho-məŋge  
 become-FUT.3PL  
 'All people know the forest.' [Forest.1]

When the accusative marker is attached to the inanimate nouns, this shows the definiteness (12).

- (12) *təo muɖkike ɖab dəi*  
 təo muɖki-ke ɖab de-i  
 then frog-ACC press give-PST.3TR  
 'Then (it) pressed the frog.'  
 [Sparrow and frog.12]

The discussion so far shows that the object marking in the transitive clause is not consistent in Rana Tharu.

The pronouns appearing in object position receive the accusative case. Consider the examples from discourse data in (13) where the nouns occurring in the object position with dative-accusative case.

- (13) *hindulog dzake ləktshmi kəhike pudzət həe*  
 hindu log dza-ke ləktshmi  
 Hindu people this-ACC goddess  
 kəh-ike pudz-ət həe  
 say-SEQ worship-HAB be.PRES.3SG.NH  
 'Hindu people worship it as god of wealth.'  
 [Cow.29]

The discussion so far has been concentrated on the direct object marking. It is obvious that some

objects are marked with the accusative case whereas others are not. The object is not simply distinguished from subject in case marking. This phenomenon is known as 'differential object marking' (Bossong 1985). The semantic features may be definiteness, specificity, or the semantic features of the verbs.

We've discussed so far the accusative case marking. Now let's discuss the dative-case marking in Rana Tharu. The indirect object (recipient) always takes the dative case (14).

- (14) *bəmən sorake kənu dəi*  
 bəmən sora-ke kənu də-i  
 Baman pig-ACC food give- PST.3.TR  
 'I wanted to drink milk.'
- (15) *ba moɖo admike tshəpərija dei*  
 ba moɖo admi-ke tshəpərija de-i  
 he fat man-DAT basket give-PST.3.TR  
 'He gave a basket to the fat man.'

We see that the indirect object object *sora* 'pig' is in the dative case. Similarly, the recipient in (15) is marked with the dative case.

Rana Tharu presents a number of instances where dative subject constructions are used. Some examples follow.

- (16) *serake bhūk lagi*  
 sera-ke bhūk lag-i  
 jackal-DAT hunger feel-PST.F.DAT  
 'The jackal was hungry.' [Clever jackal.21]
- (17) *bəghəɖake dikkə lag gəi*  
 bəghəɖa-ke dikkə lag gəi  
 tiger-DAT bored feel PST.F.DAT  
 'The tiger was irritated.' [Clever jackal.24]

When subjects are in dative case, they are experiencer subjects (Masica 1991:346; Subbarao 2012). The subjects in (18-19) are in dative case and they include psychological states (18-19).

- (18) *bake ghərki səmək ai*  
 ba-ke ghər-ki səmək  
 he-DAT house-GEN.F remembrance  
 a-i  
 come-PST.F.DAT  
 'He remembered his house.'

- (19) *bake gussa lægi*  
 ba-ke gussa læg-i  
 he-DAT angry begin-PST.3.F.DAT  
 ‘He was angry.’

As shown in these examples, Rana Tharu contains a number of dative-subject construction.

### 3.3 LOCATIVE

There are three distinct locative markers in Rana Tharu. Firstly, the locative marker is *-me*. The locative is used either to locate something in space or in time. Examples (20-21) shows that the locative marker locates the things in space.

- (20) *sera konime luko*  
 sera koni-me luk-o  
 jackal corner-LOC hide-PST3SG.M.NH  
 ‘The jackal hid in the corner.’
- (21) *bættsa khətjame hæ*  
 bættsa khətjja-me hæ  
 child cot-LOC be.PRES.3SG.NH  
 ‘The child is on the cot.’

Additionally, the things are located in time (22).

- (22) *horime agi lægat peti pədənake det hæ*  
 hori-me agi læg-at peti  
 child-LOC fire begin-HAB while  
 pədəna-ke de-t hæ  
 village.chief-ACC give-HAB be.PRES.3SG.NH  
 ‘The village leader (padana) is given the opportunity to burn theHori.’ [Hori.36]

In addition to the locative *-me*, the suffix *-e* also serves as the locative marker in Rana Tharu. For example, the word *kinar* ‘side’ hosts the locative suffix *-e* in example (23).

- (23) *panike kirare ka rəhæ*  
 pani-ke kirar-e ka rəhæ  
 water-GEN bank-LOC what be.PST.3SG.NH  
 ‘What was there on the side of the water?’  
 [Conversation1.89]

Locative is also used to express the characteristics related to a person. The thing may be inanimate or animate, human or non-human.

- (24) *gəijame bəhut gūḍ hæ*  
 gəija-me bəhut gūḍ hæ  
 cow-LOC many quality be.PRES.3SG.NH  
 ‘There are many qualities in cows.’  
 [Cow.30]

- (25) *bame kətshu khərabī nahæ*  
 ba-me kətshu khərabī na-hæ  
 that-LOC anything fault NEG-be.PRES.3SG.NH  
 ‘There is nothing wrong in him.’

Sometimes, the locative is also expressed with the locative marker *-ke*. Examples follow.

- (26) *bə hori khas kərike ratke khelət hē*  
 bə hori khas kər-ike that  
 Hori in particular do-SEQ rat-ke  
 khel-ət hē  
 night-LOC play-HAB be.PRES.3SG.NH  
 ‘The Hori is mainly celebrated in the night.’
- (27) *ratke səbse pəhile hori khelət hæ pədənake ghər*  
 rat-ke səb-se pəhile hori khel-ət  
 night-LOC all-ABL before Hori play-HAB  
 hæ pədəna-ke ghər  
 be.PRES.3SG.NH village chief-GEN house  
 ‘First of all, Hori is celebrated at the house of the village chief (Padana).’ [Hori.019]

The locative marker *-me* carries the meaning equivalent to ‘among, between’. This is slightly different from the actual location of things in place or time(28).

- (28) *əise kərike hori tsaḍ rana dzatme məna dzat hæ*  
 əise kər-ike hori tsaḍ rana  
 like this do-SEQ Holi festival Rana  
 dzat-me məna dza-t hæ  
 caste-LOC celebrate go-HAB be.PRES.3SG.NH  
 ‘Doing like this, Holi is celebrated within (community) of Rana Tharu people (castes).’  
 [Hori.62]

When we look at the corpus, we find that the locative marker *-me* is used more often compared to other case markers.

### 3.4 GENITIVE

The genitive marker is attached to the possessor. While the genitive marker *-r* is attached to the pronouns, the genitive suffix *-k* attached to nouns. The possessor precedes the possessed items when the possessor and possessed appear together in genitive phrases. Examples follow.

- (29) *mir ləḍḍija dhəngəḍḍime hæ*  
 mæ-r ləḍḍija dhəngəḍḍi-me hæ  
 I-GEN son Dhangadi-LOC be.PRES.3SG.NH  
 ‘My son is in Dhangadi.’

The genitive is also marked with the genitive marker *-ke*. There are also other cases where the genitive marker is *-ko*. First of consider these short elicited sentences.

- (30) *pādānake ghār dzat hāe*  
 pādāna-ke ghār dza-t hāe  
 village-GEN house go-HAB be.PRES.3PL  
 ‘(They) go to village chief’s house.’

The genitive case is also gender sensitive. It inflects as *-ki* to agree with the feminine subject (32).

- (32) *soneki kundḥl*  
 sono-ki kundḥl  
 gold-GEN.F ear ring  
 ‘The earring of gold’ [Jackal story.12]
- (33) *lādḥjaki phāija*  
 lādḥja-ki phāija  
 cart-GEN.F wheel  
 ‘wheel of a cart.’ [Conversation1.79]

Perhaps, because of an influence of Nepali, the genitive marker *-ko* is also used (34).

- (34) *kuttako bātsta panime girgāi*  
 kutta-ko bātsta pani-me gir gāi  
 dog-GEN child water-LOC fall PST.3SG.F  
 ‘The child of a dog fell into the water.’  
 [Conversation1.79]

The distribution of the suffix *-ko* is very limited in Rana Tharu.

### 3.5 ABLATIVE

There are two ways of expressing ablative in Rana Tharu. The ablative marker *-se* is attached to the noun to express source as it is illustrated in (35). Sometimes, the ablative is also suffixed to a temporal adverb or noun to show that action began from a specific time (35).

- (35) *sera bānse ao*  
 sera bān-se a-o  
 jackal forest-ABL come-PST.M.NH  
 ‘The jackal came out of the forest.’

The ablative also shows the point of time from which something begins. In example (36), people begin to play Hori from the second day.

- (36) *pādānake ghār bo dinse hori khelāt hāe*  
 pādāna-ke ghār bo din-se  
 village chief-GEN house thatday-ABL  
  
 hori khel-āt hāe  
 Holi play-HAB be.PRES.3PL  
 ‘Holi is celebrated at village chief (Padana’s)  
 house from that day.’ [Hori.46]

Sometimes, the ablative is expressed by *māise*. This is a postposition than a case marker. The postposition *māise* is made up of two words, *-māi* ‘LOC’-*se* ‘ABL’. There are examples where the sense of source is expressed with *māise*.

- (37) *murga lhohaḍāmāise nikro*  
 murga lhohaḍa māise  
 rooster pen ABL  
 nikr-o  
 come.out-PST.3SG.NH  
 ‘The rooster came out of the cage.’
- (38) *bo saikāl māise utār gāo*  
 bo saikāl māise utār gāo  
 he bicycle from get off PST.3SG  
 ‘He got off the bicycle.’ [Pear story.27]

The ablative is also used attached to *nam* ‘name’ with the meaning ‘in the name of’. An example follows.

- (39) *dza ek māhinaki hori hāmari mārī horike namse khelāt hāe*  
 dza ek māhina-ki hori hām-ri  
 that one month-GEN.F Hori we-GEN.F  
 mārī hori-ke nam-se khel-āt  
 Mari Hori-GEN name-ABL play-HAB  
 hāe  
 be.PRES.3SG.NH  
 ‘The Hori (festival) of one month is played by  
 the name of Mari Hori.’ [Hori2.10]

The ablative marker is used to indicate that an object is made from something, referring to the materials. In this case, *-se* ‘from’ indicates the material something is made up of. For example, in example (40), curd is made from milk.

- (40) *dudhse dāhi bānat hāe*  
 dudh-se dāhi bān-a-t  
 milk-ABL curd make-CAUS-HAB  
 hāe  
 be.PRES.3SG.NH  
 ‘Curd is made from milk.’ [Cow.15]

- (41) *q̄hōq̄ər bhitrəse khəsutər nikri*  
 q̄hōq̄ər bhitrə-se khəsutər nikri  
 hole inside-ABL own come out-PST.F  
 ‘The owl came out of the hole.’  
 [Conversation.35]

As we see in (49), the ablative marker *-se* is also attached to adverbs.

### 3.6 INSTRUMENTAL

The instrumental marker is *-se*. The instrumental marker is identical to ablative in Rana Tharu. For example, the instrumental marker is attached to *gədhalo* ‘spade’ in example (50) and *ithsha* ‘desire’ in (51). In example (52), the instrumental marker is attached to force.

- (42) *ba gədhalse s̄ap mari*  
 ba gədhalo-se s̄ap mar-i  
 he spade-INST snake kill-PST.TR  
 ‘He killed the snake with the spade.’
- (43) *diuta əur dzəq̄ibuṭise ikəllo admi bətsət rəhəe*  
 diuta əur dzəq̄ibuṭi-se ikəllo admi  
 god and herb-INST only man  
 bətsət-ət rəhəe  
 be safe-HAB be.PST.3.SG  
 ‘The god and the herbs used to save the people.’  
 [Industrious woman.25]

Secondly, the instrumental is also used with the materials which are used to cover, or wrap, or which are used as materials to make something. For example, *mudra* ‘mat’ or *bori* ‘sack’ are used as materials to cover the item indicated. The same is true in example (44) where *bhaṅ* ‘hemp’ is used as a material to wrap something.

- (44) *dzəri antahi bake topən pəq̄ət həe mudrase əthəwa borise*  
 dzəri a-n-tahi ba-ke top-ən  
 sprout come-INF-PURP that-ACC cover-INF  
 pəq̄-ət həe mudra-se  
 should-HAB be.PRES.3SG.NH mat-INST  
 əthəwa bori-se  
 or sack-INST  
 ‘(The seeds) should be covered with sacks or mats to let the sprouts appear.’ [Sowing paddy seed.5]
- (45) *bhaṅse topən pəq̄ət həe*  
 bhaṅ-se top-ən pəq̄ət həe  
 hemp-INST cover-INF should be.PRES.3SG.NH  
 ‘It should be covered with hemp leaves.’  
 [Sowing paddy seed.6]

### 3.7 COMITATIVE

The comitative marker in Rana Tharu is *-səṅ* ‘with’. Comitative case shows accompaniment. Similarly, the dog fell along with the child in (46).

- (46) *təihu mirsəṅ bhadz pətshtshuse*  
 təi-hu mæ-səṅ bhadz pətshtshu-se  
 you-EMPH I-COM run away behind-ABL  
 ‘You run with me behind me.’  
 [Clever jackal.6]

In addition to the case marker *-səṅ* ‘with’, the case marker *-se* also functions as a comitative case marker.

- (47) *bo ləuḍa bəq̄o mudkase ek mudka magi*  
 bo ləuḍa bəq̄o mudka-se  
 that boy big frog-COM  
 ek mudka mag-i  
 one frog beg-PST3.  
 ‘That boy asked for a small frog with the small boy.’ [Conversation1.100]

Accompaniment is also indicated by *ṭhine* ‘with’. This postposition is preceded by the case marker *-ke*.

- (48) *bake ṭhine sirəph ek rupəija rəhəe*  
 ba-ke ṭhine sirəph ek  
 that-GEN with only one  
 rupəija rəhəe  
 money be.PST.3SG  
 ‘He had only one rupee with him.’

The discussion shows that the ablative may be morphologically marked, or it may also be shown by making use of a postposition.

## 4. AREAL-TYPOLOGICAL CONTEXT

Now we discuss the case marking in Rana Tharu in areal-typological perspective. We compare the case markers with a total of 11 languages. This is relevant as the Tharu varieties are spoken from the east to the west of Nepal, and there are a number of Indo-Aryan languages spoken in this region along with the Tharu varieties.

This discussion will show whether the case marking pattern including the case markers are typical of Rana Tharu, or they share a number of features of other Indo-Aryan languages spoken in the region. Since the synchronic description of all languages is not equally treated in the available

sources, the typological comparison will be based on limited data<sup>4</sup>. All of these languages make use of the suffixes for marking the grammatical relation. The case markers of different IA languages are summarized in appendix 1.

An overwhelming languages given in appendix have nominative-accusative case marking pattern. In other words, many IA languages lack the ergative marker and characteristically follow this feature. Some languages spoken in the terai region, such as Tharu varieties of Nepal have nominative-accusative case marking pattern. In addition, Maithili (Yadav 1997), Bhojpuri (Shukla 1981), Bajjika (Mahato et al. 1999, and Roy 2010) and Rajbanshi (Wilde 2008) also share this feature. This can be contrasted with the languages with ergative-absolutive languages spoken in the region. A cluster of languages, such as Nepali, Bote, and Darai included in the appendix have ergative-absolutive case alignment. Unlike in Hindi (cf. Kachru 2006:212), Rana Tharu does not an ergative case.

The ergative-absolutive languages mentioned above also differ in the way the cases are aligned. To begin with, Bote is a consistently ergative language. By contrast the languages with ergative-absolutive alignment have split ergativity. The split ergativity in Nepali is mainly based on tense, and aspect whereas the split ergativity in Darai, and Majhi is based on nominal hierarchy<sup>5</sup>. As noted in Verbeke (2003:109) the ergativity in Hindi is semantically determined. Overall, the split ergativity is common among Indo-Aryan languages (Masica 1991). The optional ergativity is not only a feature of Indo-Aryan languages, but

also a case alignment found in Tibeto-Burman languages as well (DeLancey 1979).

The dative-accusative case begins with *k* is attested in a number of languages. The languages which do not have the dative-accusative marker *k* is limited in number. The dative-accusative marker is *lai* in Nepali, and *hənə* in Dangaura Tharu among the languages taken here for typological comparison. Grierson (1904:4) notes that the dative marker in eastern languages is *-ke*. All other languages have the dative-case marker mostly *-ke* and some others begin with *k*. The dative *-ka* is also found in old Bengali (Chatterji 1926:760). Rana Tharu shares this feature with other Indo-Aryan languages spoken in the terai region of Nepal. Thus, this suffix spreads geographically in the languages spoken in this region.

There are a couple of interesting points to be mentioned in this context. Firstly, many of these languages show the kinds of marking known as 'differential' object marking. Like in Rana Tharu, some languages, such as Nepali, Darai, and Bote, and perhaps others as well characterize this feature.

Additionally, the dative-marked subject behave differently at the syntactic level. For example, the dative-marked subjects trigger verb agreement in a couple of languages, such as Darai, and Majhi (although Majhi is not included here for typological comparison). How do the dative-marked subjects behave in terms of verb agreement in the languages of Nepal? This is a typologically interesting question to explore. Although semantics of the dative subjects are discussed to some extent (Masica 1991: 346-356), the verb agreement triggered by the dative subjects are yet to be discussed among the languages spoken in Nepal. The dative-marked subjects are often described as subjects that occur in sentence-initial position which do not trigger verb agreement. Some of the languages, such as Darai, Majhi, and Rajbanshi, on the other hand, causes the agreement with the dative subjects.

The locative begins with *-m* in all languages mentioned above. Although Rajbanshi is also distinct in this regard because this makes use of the

<sup>4</sup>Data for this typological comparison come from a number of sources: Dhakal (2012) for Darai; Wilde (2008) for Rajbanshi; Yadav (1997 [1996]) for Maithili; Chaudhari (2005) for Saptaria Tharu; Mahato et al. (2009) and Roy (2010) for Bajjika; Poudel (1999) and Bandhu et al (1999) for Bote; Paudyal (2014) for Chitwania Tharu, Boehm (2008) for Dangaura Tharu, Giri (2012) and (Shukla 1981) for Bhojpuri and ideas about Nepali from Pokharel (2056vs), and Li (2008).

<sup>5</sup>DeLancey (1979) provides a detailed study of split ergativity in typological context.

locative *mikhi* including other forms, the postposition seems to be cognate with the locative case *-me*. This postposition also contains the nasal sound as the first sound of the word. Darai has the locative marker *-jã* containing the nasalized element.

While some of these languages have two genitive markers that begin with *-k* and *-r*, some other languages have only one of them. Those having only one genitive suffix *-r* is Maithili. By contrast, Dangaura Tharu contains only the genitive suffix *-k*. The rest of the languages make use of the genitive suffixes *-k* and *-r* although the precise form may differ from one language to other languages. Citing the sources Masica (1991:243) notes that the genitive *-k* might have been developed via *kēra* although Chatterjee favours that it was developed through adjectival suffix *-kka* as its source. Grierson (1903: 8) notes, “The typical letter of genitive case is *r* in eastern language” adding that the typical letter of *k* is more common with western IA languages. Rana Tharu genitive suffixes resemble to a number of IA languages. The case markers mentioned above are areal morphemes.

The genitive-marked noun phrases are very interesting to explore. There are cases that when the genitive-marked subjects occur in sentences, the verbs agree with the genitive modifiers rather than the head nouns in some languages, such as Maithili (Yadav 1997 [1998]), Darai (Dhakal 2012), and Majhi (Dhakal 2014). The genitive modifiers of genitive phrases triggering the verb agreement is somehow explained in Darai, Majhi, and Maithili. However, a comparative and typological features of the genitive modifiers are yet to explain. Furthermore, as we find in Nichols (1986) patterns, Darai, Bote and Majhi are both dependent-marking and head-marking whereas other languages mentioned here are only dependent marking. The pronominal possessive suffixes found in the genitive phrases in these languages are typologically interesting.

Furthermore, the ablative in these languages is mainly formed two ways either with *-se* or *batə*. Although the precise form differs in some languages, most of them share these markers. Masica (1991:247) notes that the suffix *-se* is

found in various forms in Hindi areas from Bihar to Rajasthan. Maithili ablative marker is *-sə* which is shared by a number of languages. Similar is the case with those languages which possess the ablative marker *batə*. Rana Tharu shares this with some other languages, such as Bhojpuri, Bajjika, Maithili, and Saptariya Tharu. Like in Rana Tharu, there is a case syncretism between instrumental and ablative in Chitwania Tharu, and Bhojpuri.

Lastly, almost all languages share a sociative postposition (or marker) except Bhojpuri. The sociative marker *səŋ* is evidenced in a number of IA languages. Added to this, there are some languages possessing *-se* as a sociative marker.

The case inventories in these languages are of medium-sized in typological context follow. Iggesen (2013) categorizes the case inventories into three types. The languages with less than three cases into small-sized case inventory. The languages containing four or five are considered the mid-sized case inventory, and languages with more than that is considered as languages with large case inventory. The case syncretism is counted as a single category for this purpose. Based on their phonological features, monosyllabic suffixes are considered as case markers whereas the bisyllabic words (or larger than them) (cf. Liljegren 2008:161; Genetti (2007:103) are considered as postposition for this purpose. Based on this, majority of these languages contain medium-sized case markers (aside from postpositions mentioned earlier). While Nepali, Saptaria Tharu, and Rajbanshi contain 5 case markers, Dangaura Tharu contains 6 case markers. The languages which contain large case inventory are the languages such as Rana Tharu (9), Darai and Bhojpuri (8)<sup>6</sup>. The vocative case has not been included for this purpose. This further confirms that South Asia is characterized by mid-sized or large inventories as noted in Iggensen (2013).

## 5. CONCLUSION

This article has discussed the case markers in Rana Tharu and then compared the case forms of Rana

<sup>6</sup>It is to be noted that since the the data taken for this typological comparison are not equally informed, the actual number may slightly vary.

Tharu with other IA languages spoken in the terai, Nepal. The discussion shows that majority of the languages spoken in the terai region of Nepal are nominative-accusative. The comparison of the number of case markers of Rana Tharu with other languages show that Rana Tharu is a language with a large case inventory in broader typological context, and this contains the largest number of case forms compared to other languages of the area mentioned before.

## REFERENCES

- Bandhu, C. M., Chalise, K. P., Khatiwada, K., Lohani, R. R., Prasain, B. R., Paudel, K., Regmi, B. N. & Yonjan, A. 1999. Bote Language. *Gipan* 1 (1): 101-141.
- Blake, Barry J. 2001. *Case*. Cambridge: Cambridge University Press (2nd edition).
- Boehm, Edward Daniel. 1998. A phonological reconstruction of proto-Tharu. The University of Texas at Arlington, Unpublished Thesis.
- Boehm, Edward Daniel. 2008. Compound case marking in Dagaura Tharu. *Nepalese Linguistics* 23: 40-57.
- Bossong, Georg. 1985. *Empirische Universalienforschung: Differentielle Objektmarkierung in Neuiranischen Sprachen*. Tübingen: Narr.
- Butt, Miriam, and Tafseer Ahmed. 2011. The redevelopment of Indo-Aryan case system from a lexical semantic perspective. *Morphology* 21: 545-572.
- Central Bureau of Statistics. 2012. *National Population and Housing Census 2011 (National Report)*. Kathmandu: HMG.
- Chatterji, Suniti Kumar. 1926. *The Origin and the Development of the Bengali Language*. Part II. Calcutta: Calcutta University Press.
- Chaudhari, Mahesh Kumar. 2005. *A Sketch Grammar of Saptaria Tharu*. Unp. Thesis. Tribhuvan University.
- DeLancey, Scott. 1979. An interpretation of split ergativity and related patterns. *Language* 57: 626-657.
- DeLancey, Scott. 2011. "Optional Ergativity" in Tibeto-Burman languages." *Linguistics of the Tibeto-Burman Areas* 34.2: 9-20.
- Dhakal, Dubi Nanda. 2012. *Darai Grammar*. Muenchen: Lincom Europa.
- Dhakal, Dubi Nanda. 2013. *The Documentation of Rana Tharu*. A Research Report submitted to Nepal Academy, Kamaladi Kathmandu, ms.
- Dhakal, Dubi Nanda. 2014. *A Grammar of Majhi*. Muenchen: Lincom Europa.
- Eppele, John W., M. Paul Lewis, Dan Raj Regmi, Yogendra P. Yadava. 2012. *Ethnologue: Languages of Nepal*. Kathmandu: Linguistic Survey of Nepal and SIL International.
- Genetti, Carol. 2007. *A Grammar of Dolakha Newar*. Berlin and New York: Mouton deGruyter.
- Giri, Maya 2012. Verbal Morphology of Bhojpur. Unp. Thesis. Tribhuvan University.
- Grierson, GA. 1903. *Linguistic Survey of India*, Vol.V. Part I. New Delhi: Motilal Banarsidass.
- Grierson, GA. 1904. *Linguistic Survey of India*, Vol.VI. New Delhi: Motilal Banarsidass.
- Grierson, G. A. 1916. *Linguistic Survey of India*. V.II. New Delhi: Motilal Banarsidass.
- Iggesen, Oliver A. 2013. "Number of Cases". In: Dryer, Matthew S. & Haspelmath, Martin (eds.) *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology.
- Kachru, Yamuna. 2006. *Hindi*. Amsterdam/Philadelphia. John Benjamins Publishing Company.
- Li, Chao. 2007. Split ergativity and split intransitivity in Nepali. *Lingua* (117).1462-1482.
- Liljegren, Henrik. 2008. *Towards a Grammatical Description of Palula*. PhD Dissertation, University of Stockholm.
- Mahato, H.R., Roy, Koushal Kishor., Shah, B., Thakur S., Adhikari, Binod, Yadav, Binod, & Yadav, Mahi Narayan. *Field Report of the Bajjika Language*, ms.
- Masica, Colin P. 1991. *The Indo-Aryan languages*. Cambridge: Cambridge University Press.
- Mohanan, Tara. 1990. *Argument Structure in Hindi*. Stanford, California: Stanford University.
- Nichols, Johanna. 1986. Head-marking and Dependent-marking grammar. *Language* 62. 65-119.

Paudyal, Krishna. 2014. *A Grammar of Chitwanita Tharu*. Muenchen: Lincom Europa.

Payne, Thomas E. 2006. *Exploring Language Structure: A Student's Guide*. Cambridge: Cambridge University Press.

Pokharel, Madhav Prasad. 2056 vs. *Nepali Sentence Grammar (nepali vakja vyakaran)*. Kathmandu: Ekta Books.

Poudel, Kamal. 1999. *Bote Verb Morphology*. Unp. Thesis. Tribhuvan University.

Roy, R. R. 2010. *Verbal Morphology of Bajjika*. Unp. MA Thesis. Tribhuvan University.

Shukla, Shaligram. 1981. *Bhojpuri Grammar*. Washington: Georgetown University Press.

Subbarao, K.V.S. 2012. *South Asian languages: A syntactic typology*. Oxford: Oxford University Press.

Verbeke, Saartja. 2013. *Alignment and Ergativity in New Indo-Aryan Languages*. Berlin/Boston: Mouton DeGruyter.

Wilde, Christopher P. 2008. *A Sketch of the Phonology and Grammar of Rajbanshi*. Helsinki: University of Helsinki.

Yadav, Ramawatar. 1997 (1996). *A Reference Grammar of Maithili*. New Delhi: Mumshiram Mahoharlal Publishers Pvt. Ltd.

Yadava, Yogendra P. 2004. Non-nominative subjects in Maithili. In P. Bhaskarrao and K.V. Subbarao (eds.), *Non-nominative subjects*, Vol 2. Amsterdam: John Benjamins Publishing Company, 253-264.

CONTRIBUTOR'S EMAIL:

<dubidhakar@yahoo.com>

#### Appendix 1: Case markers in IA languages in Terai, Nepal

Languages →	Rana Tharu	Dag aara Tharu	Nepali	Chitwanita Tharu	Bote	Darai	Bhojpuri	Bajjika	Maithili	Saptaria Tharu	Rajbanshi
Case markers ↓											
Ergative	-	-	-le	-	-ī	-ī	-	-	-	-	-
Instrumental	-se	-səŋ	-le	-se, mah ē	-ī	-ī	-se	-se	-sə -sə	-se	-de
Dative-accusative	-ke	hən ə	-lai	-ke, -k	-ke	-ke	-ke	-ke	-ke	-ke	-k
Genitive	-ko, -ro	-ək	-ko, -ro	-rə -kə	-ko	-kə, -rə	-ke -r	-ke -ər	-ək -ər	-ke, -ra	-er
Locative	-me	-mə, -the, -ke	-ma	-ma -me	-me	-jə	-e -me -pər	-pər -me	-me	-me	-pər, mikhi, biti, tina
Ablative	-se	-se	baṭə dekhi	-se	bhə i	-se	-se	?	-sə -sə	?	-se
Sociative	-səŋ	-səŋ	səŋ ə	səŋe	sin	-se, -sə ŋ	-ke/k a jore	sath e	səŋ e	səŋ e	səŋe

Note: absence of marker is indicated by (-) and the gaps by (?).



# LANGUAGE POLICY IN BANGLADESHI EDUCATION: BENGALI AND ENGLISH LANGUAGES AS A MEDIUM OF INSTRUCTION

TANIA HOSSAIN

*The paper reviews different policies implemented during the colonial period. It also describes the different language policies and educational reforms after independence in 1971. The status and functions of Bengali and English are considered in the context of language practices in school. The second aim of this paper is to describe and examine the present status of Bengali and English in the educational system of Bangladesh.*

Keywords: language policy, language planning, medium of instruction, Bengali medium school and English medium school

## 1. INTRODUCTION

In a country like Bangladesh where much of the population is illiterate and unexposed to media, ease of access is undoubtedly a crucial factor in determining the nature of communication networks. The facility with which people can travel from urban centers to the rural areas will depend partly on the extent and the nature of access which rural dwellers have to urban areas. Conversely, the extent to which particular groups of rural speakers are able to come to town and interact with others there determines, at least in part, the effect they may have on the formation of the urban variety, and their participation in the changes that take place in it.

According to Bangladesh 2020, in the higher secondary level of public education, the rate of inefficiency is very high. Bangladesh has an adult literacy rate of only 38 percent, which is much lower than Sri Lanka, for example (90 percent). Fifty percent of the students who enter in the primary schools of Bangladesh do not complete their five-year education and many of them achieve only a second-grade level of attainment. It takes an average of more than 12 years to complete the 5 years cycle (Bangladesh 2020, 1998). In 1996 only 200,000 students (three percent of the 11-15 year age group) graduated from secondary schools in Bangladesh. This number is for a country of 144,319,628 million

people, too few to supply the talents for the development of Bangladesh. Although Bangladesh spent 2 percent of its GDP on education to elevate learning achievement, the task facing Bangladesh seems to be challenging (Bangladesh 2020, 1998). The major fieldwork for this project took place in urban and rural locations. It mainly focuses on Dhaka, the capital, and Gazipur, a rural area in districts.

Gazipur is one of the districts which is near Dhaka city with good internal and external road links. For this reason I choose this district as my field work. Access to schools is also a crucial factor for me. Comprehensive data on access to schools are not yet available for the whole country. There is a great disparity between rural and urban schools. While educational policy is dictated largely by the central government, in practice a wide variety of practices operate under differing local conditions. This applies to such things as staffing, dates of terms, language used in the classroom, and age at which children enter school.

This paper demonstrates that both Bengali and English are introduced in all levels of education in Bangladesh. Bangladeshi students have favorable attitudes towards English. Despite the absence of consistent language policy, the people of Bangladesh accept the fact that English is necessary in education. But this English education creates inequalities among the students of rural and urban areas. It seems that equity in access to schooling is an important challenge for Bangladesh. The inequitable educational system in Bangladesh offers less opportunity for rural students to compete in any given educational cycle than the students who are from the wealthy class. This case study is by no means exhaustive and cannot provide all the answers to the problems regarding use of English in rural and urban contexts. But this study may be a step in the right direction in the search for adequate and functional alternatives to resolving problems relating to language and social inequality. A more dynamic language policy would undoubtedly

yield better results than those achieved until now.

The paper will give a historical overview on the position of the national language (Bengali) and English education from the time when the British ruled the country up to the present day after the Bangladesh gained her independence. A special attention will be paid to the present use of English as a bridge language of instruction at secondary schools.

## 2. LANGUAGE OF INSTRUCTION IN HISTORICAL PERSPECTIVE

It is important to mention that the educational profile of India, Pakistan and Bangladesh is essentially the same on account of British colonialism and the countries' geographical location. Before 1947, these three countries were under the British colonial rule and the region was known as the Indian subcontinent (at present known as India, Bangladesh and Pakistan). The history of education in the Indian sub-continent starts from the Vedic times and this education was improved later by the period of Brahmans and the period of Dharmasastras (about 1500 B.C. to 600 B.C.). Education was Hindu education and the main principles were borrowed from the Vedic system. Vedic education is actually spiritual education. Education at that time was free from external control or politics. As P.N. Probhu (cited in Sharma, 2003, p. 2) mentioned "Education in ancient India was free from any external control like that of State or Government or any politics...also education did not suffer from any communal interest or prejudices in India". Vedic education, Brahman as education and Buddhist education were the religious and spiritual education. The teaching method was verbal and explanatory and there was no debate about the medium of instruction.

After Muslim rulers conquered the subcontinent, the religious education (Madrassa and Madrasa Education) started in the subcontinent. The goal of this type of education was to provide religious education based on the Holy Koran. Students memorized the "Ayats" (important phrases of the Holy Koran). After children learned the Arabic script, they studied Persian language and script. The religious education included the study of Holy Koran, Islamic history, Arabic literature,

grammar, philosophy, mathematics, and geography. Arabic and Persian were adopted as a media of instruction and the vernacular languages were neglected (Sharma 2003).

Colonial Indian education started with the advent of the East India Company (1600-1854). The British came to Bengal in 1757 and were present until 1935. British at the beginning wanted to improve the Indian educational system on the basis of the indigenous system of education. It is assumed that there was no specific language and education policy at that time. It is also not evident the British wanted to teach English to the people of the Indian subcontinent. At first, the British placed importance on local languages, but it was the Indians who at first wanted to learn the English language. In 1800, the Marques Wellesley, the Governor General, established the college of Fort William in Calcutta. Its aim was to teach East India Company officials local Indian language and cultures. However, the educated Indian middle class opposed these policies and they felt themselves excluded from social, political and economic advancement. In 1816, the Bengali middle class established The Hindu College in Kolkata. The aim of the college was to teach English language and literature. Thus, it was not only the British but also the local elites who demanded English on account of its social and economic prestige (Pennycook 1994:80). In 1820, the people of the town of Panswell expressed their desire to learn English when they wrote to the Governor of Bombay that they wanted "to learn English that we may be employed in your service and maintain ourselves" (Parulekar 1955:133, cited in Rahman 1995:30). In 1823, the Governor of Bombay wrote that: "A man with such knowledge of English as we require, would easily get 150 or 200 rupees as a clerk to a merchant" (Basu 1952: 203, cited in Rahman1995).

Thus, access to jobs in the colonial administration was strictly tied to mastery of English. Viswanathan (1989) argued that English language teaching in India was a form of social, cultural and political control. It produced a class of people who were alienated from their own languages and cultures and discontented with the colonial rule (Pennycook 1994:103). Similar circumstances can be found in other colonial settings. In the U.S, for

example, Commissioner of Indian Affairs J. D. C. Atkins, in his annual report of 1887 mentioned,

No unity or community of feeling can be established among different peoples unless they are brought to speak the same language, and thus to become imbued with like ideas of duty. Deeming it for the very best interest of the Indian, both as an individual and as an embryo citizen... no school will be permitted on the reservations in which the English language is not exclusively taught cited in McCarthy (2002:285).

Data concerning British language policy can be found beginning in the year 1835. Lord William Bentinck who was appointed as Governor-General India in 1835 accepted the Minute, which was formulated on 2<sup>nd</sup> February 1835 by Thomas Macaulay. Bentinck's Minute asserts the supremacy of English and Western culture. Bentinck was a vigorous promoter of English education in the Indian subcontinent. His main interest was to create Anglicized Indian elite. He also recommended that vernacular languages should be used among the masses. Macaulay was a supporter of English education and held that local people would welcome the Minute if it led to increased employment.

This change can be observed in 1835 in the Governor-General-in-Council's resolution which declared: "The great object of the British government ought to be the promotion of European literature and science among the natives of India; and that all the funds appropriated for the purpose of education would be best employed in English education alone" (Sharp 130, cited in Rahman, 1995:37). Macaulay also suggested that Madrasah (one kind of boarding school where Islamic religious education was taught, usually to poor students) and the Sanskrit college of the Muslims should be abolished, no scholarship should be given for oriental studies, and all Arabic and Sanskrit books should be destroyed. It created great agitation among the Indians, especially those who would lose their income and social status because of this change (Rahman 1995). Their action of the Muslims was extreme, because they

thought that they would suffer if Madrasah from Calcutta were abolished. As Madrasah was a source of income for many Muslims, some Muslims held the view that the Government wanted to convert people to Christianity. The agitation continued but the policy remained unchanged. On the other hand, the reaction of the Hindu Bengalis was divided into two groups. One approved of westernization and the other supported traditionalism. The traditionalists organized themselves and established Dharma Sabha (a kind of religious meeting).

The Indian reaction to the Macaulay Minute was ambivalent and divided throughout the British period. Those who were working for the British were supporters of this policy, but most others were not. This language policy increased the use of English in all domains of India, especially in the higher level of the Judiciary. Actually the British desired that English should eventually be the language of business throughout the country. Of course the use of coercive measures did not turn all Indian people into European people, nor did it promote mass literacy and education. In addition, the use of English contributed to the low rate of literacy and of course most people were not bilingual. Thus, English created class division.

However, Lord William Bentinck realized that the imposition of the English language for all local languages would be impossible and then in one Resolution, the Governor-General-in-Council declared that Indian people could conduct judicial and fiscal proceedings in any language that they understood. This sort of controversy went on throughout the time of the British. However, the Indian elites were the supporters of an overall British language (Rahman 1995). A very few people had access to colonial education, and the colonial language was acquired by only a tiny minority of the Indian people.

### 3. LANGUAGE OF INSTRUCTION AFTER INDEPENDENCE

In 1947, India gained its independence from the United Kingdom and then Pakistan separated from India. Language played an important play in

Muslim separatism in South Asia. Hindi was a part of the Hindi separatism and also the identity marker of Hindu. The Hindi-Urdu conflict constantly divides India and Pakistan. In 1952, East Pakistan emerged with the language movement known as “The Bhasha Andolon. In 1971, East and West Pakistan fought for their separate identity. Bengali was the linguistic marker of identity for East Pakistan and Urdu for the identity of the leadership West Pakistan (Rahman 1995: 37).

The new Constitution of Bangladesh, adopted on November 4, 1972, placed the Bengali language at the center of Bangladeshi nationalism. In particular, the Constitution’s official narrative of the independence struggle highlights the fundamental role of the Bengali language: “The unity and solidarity of the Bengali nation, which deriving its identity from its language and culture, attained a sovereign and independent Bangladesh through a united and determined struggle in the war of independence, shall be the basis of Bengali nationalism” (Constitution of Bangladesh, 1972: 1-4). The Constitution also declared Bengali the “state language” (Constitution of Bangladesh, 1972:3), and it established a state educational system with Bengali as the medium of instruction. No provision addressed the many minority languages. Indeed, the nationalist ideology was promulgated in part by a discourse that linked Bengali to the state of Bangladesh, without regard to language variation in Bengali or the minority languages of the region (Hossain & Tollefson 2006).

Despite the central role for Bengali in the nationalist movement for independence, and the constitutional provision for Bengali as the medium of instruction, the educational system did not immediately adopt Bengali as a universal medium of instruction. In practice, three educational systems evolved. In Bengali-medium schools, English was taught as a compulsory subject, while most classes and informal interaction took place in Bengali. In English-medium schools, Bengali was also used for much of the informal social interaction, but English was used for subject-matter instruction. In addition, the Madrasah religious educational system used Bengali and Arabic as media of instruction (ibid).

In its efforts to overcome its overwhelming economic problems, the new state of Bangladesh placed a high priority on education. One of the primary mechanisms for debating the appropriate roles for English and Bengali has been a series of educational commissions established by the government. The first National Educational Commission issued its influential report, known as the Qudrat-e-khuda Education Report, in 1974, three years after independence (Ministry of Education 1974). Like the Constitution, the Commission’s report presented an ideology of Bangladeshi nationalism in which the Bengali was the embodiment of national aspirations and culture. Yet the Commission also provided a pedagogical rationale for Bengali-medium instruction. The Report claimed that Bengali has many advantages as medium of instruction, particularly its value in developing students’ “natural intelligence,” original thinking, and imagination (Ministry of Education, 1974:14). However, despite its support for Bengali and its recommendation that Bengali should be the medium of instruction, the Commission argued that English should remain the language of higher education until the colonial educational system could be reformed. The Commission recommended that second-language instruction should begin in grade 6, with English compulsory (and that offerings should also include Arabic, Russian, Persian, and Chinese). The Commission also recommended that English-language instruction emphasize language (including reading skills) rather than literature (Hossain & Tollefson 2006).

Despite its ideological and pedagogical support for Bengali-medium education, the Commission recognized numerous problems in implementing its recommendation. Among these, the most important were lack of textbooks and other materials and inadequate preparation among teachers. To make possible greater Bengali-medium instruction, the Commission called for increased textbook production and a new teacher-training center. In addition, the Commission recognized that English-language education was undermined by inadequate preparation among teachers outside the capital. Although all teachers were required to teach English, in practice few

teachers outside the capital were qualified to do so (Hossain & Tollefson 2006).

In higher education, the Commission recommended in 1974 that university departments should be permitted to choose between Bengali and English, but that all students should become competent in English. To further this goal, the Commission recommended a new Modern Language Institute to spearhead efforts to improve English-language instruction throughout the educational system (Hossain & Tollefson 2006).

In the Commission's report, the Madrasah educational system was organized differently from the rest of education in Bangladesh. Its curriculum included religious instruction and Arabic language and literature, as well as math, history, science and other subjects; but its main emphasis was on Islamic education. The Commission recommended that English be a compulsory subject from grade 7 in the Madrasah system, and that the medium of instruction should be Bengali. In practice, English received relatively little attention in the Madrasah system (Hossain & Tollefson 2006).

Thus the 1974 Education Commission was faced with serious practical problems limiting its ability to ensure Bengali-medium education and English-language instruction. The Commission supported Bengali, recognized the importance of English, and recommended steps to ensure that students in the schools would improve their English proficiency. In its report, the Commission linked Bengali and English with different values. Bengali was the embodiment of Bengali identity and the foundation of the movement for an independent Bangladesh; English was the language providing access to international business, science, and technology. In addition, English was the language of the international aid agencies that provided the country with much of its income, particularly after the devastating civil war and floods of the early 1970s (*ibid*).

Later educational commissions (which issued reports in 1987, 1997, and 2000) continued this dual-language focus, with Bengali and English

continuing to express different, non-contradictory values. Over the years, the commissions tended to extend the teaching of English. The 2000 report, for example, made English an optional subject in grades one and two, and compulsory from grade three (in comparison to grade six in the 1974 report). More recently, English was made compulsory from grade one, though this policy has yet to be fully implemented. The 2000 Commission also recommended that Bengali should eventually become the sole medium of instruction, but availability of textbooks continued to limit this option. In particular, in engineering, science, medicine, and law, English would have to continue as the medium of instruction, since Bengali-medium textbooks were not available (Hossain & Tollefson 2006).

#### 4. MEDIUM OF INSTRUCTION IN THE CLASSROOM

Although there are many debates concerning the aim of education and its contribution to social and economic development, it is universally accepted that illiteracy is one of the main hindrances to social and economic development. Because the Government of Bangladesh regards illiteracy is one of the country's main problems, it has taken many steps to increase literacy. The World Conference on Education for All (EFA), held in Jomtien Thailand in 1990, set the year 2000 to ensure education for all children. The Bangladesh Government has been at the forefront of promoting Education for All in Bangladesh. In 1992, a separate ministry level division, the Primary Mass Education Division (PMED), was set up in order to help accelerate activities that would attain the government goals of achieving both Universal Primary Education (UPE) and Education for All (EFA). In 1993, the government established many programs such as compulsory primary education and a stipend program for girls. In order to relieve the country of illiteracy, the government began a program called "Food for Education" in 1995. Total enrollment in the primary level has increased because of the adoption of these steps, but the quality of the education is not yet satisfactory (Khan 2000).

Fieldworks were done in three different schools: an urban Bengali-medium school (The Shobujbagh Government Girls' High School), a rural Bengali-medium school (Shinabahr High School), and an urban English-medium school (The Bangladesh Academy School). In-depth classroom observations were carried out in these three schools. My study followed a non-participant classroom observation strategy to collect information with the use of a checklist.

From my observation, I found that there is a big gap between the teaching systems of the three schools. Rural people lack fluency in the national language. For example when I was explaining to the students the theme of my research, I found that the students had difficulty understanding my language; the classroom teacher later explained everything in the local language.

In Bengali medium schools some teachers used standard Bengali and some teachers use regional Bengali especially in the grammar classes. Students also felt comfortable in that language. But in the English-medium school students have no problem of understanding the instruction in English. In rural Bengali schools students have also difficulty to understand the standard Bengali. They spoke in regional Bengali.

Teacher-student relationships also varied in rural and urban areas. Urban students were friendlier to the teachers than rural students. Rural students were shy and not very friendly to the teachers.

My classroom observations reveal that the physical facilities are very poor in the rural school compared to urban schools (Bengali and English-medium). The teaching materials in both Bengali schools are insufficient. In the rural school teachers do not have a dictionary in classes. In the urban Bengali-medium school, teachers complained that parents do not want to buy recommended books for the students. But in the English medium school, we find that students have sufficient books with an enriched library. They were using encyclopedia in the classrooms.

In the rural school, teaching is actually memory based. For example in the English grammar class, students memorized the definition of noun and pronoun. On the other hand, in English-medium

schools students did not memorize anything. They did creative writing and also they played roles in the classroom from Shakespeare's play. There are no remedial classes for those students having difficulty in specific subjects.

In rural Bengali schools and also in urban Bengali-medium schools, classroom practices are not favorable to attain competence. Very poor classroom environment is found in the rural Bengali school, compared to the urban Bengali-medium school.

The aim of the Bengali-medium school is to prepare the students to appear in the national examination of the country as well as to teach them the culture of Bangladesh. On the contrary, the aim of the English-medium school is to prepare the students to appear in the O'level examination and to learn about western culture in preparation to study abroad. Though the English-medium school enjoys some Bangladeshi festivals like Bengali New Year and Milad (Muslim religion festival), the textbook and curricula are western. Because the principal and other teachers are from foreign countries, they naturally teach their own culture.

In the Bengali-medium school, the number of teachers is not sufficient. Teachers have to teach many classes in a day. The number of English teachers seems to be sufficient in the English-medium school. The English-medium school has a problem with teachers. As the English-medium school is mostly private, teachers also tend to change their jobs. The principal told me that teachers quit their job with no prior notice and thus the school may need to find a new teacher within a very short period of time. The Principal stated that most of the time teachers left because they received better job offers from other English-medium schools. Teachers' salary also varied in English as well as in Bengali-medium schools.

There is a large difference in the teaching systems of these three schools. Indeed, it seems that Bangladesh is one country with three systems for teaching students. Yet, after graduation from the schools, all these students will sit for the same entrance examinations for university education at the same time. It is predictable that it would be hard for the rural students to get into a college or

university, as their basic knowledge of English is much weaker than urban students.

## 5. CONCLUSION

English has been a part of the official colonial heritage of Bangladesh (Alam, Zaman & Ahmed 2001) since it was introduced with the Macaulay's "Minute" in 1835. Since then, English has occupied a special position in the curriculum of schools, colleges and universities in the Indian sub-continent. In 1947 after the partition of India and Pakistan, English also gained the status of official language in both newly independent nations. After Bangladesh emerged, English first lost its status and then regained its position. English is now used in many schools as a second language, academic language, and compulsory subject for primary, secondary and higher education (Dutta 2001). Economic and social opportunities also depend on the knowledge of English. But a complex education system exists in Bangladesh which sustains class distinctions among learners. Language always plays an important role in Bangladesh. The birth of Bangladesh lies in the language movement. It is still playing an important role in the society. After 36 years of independence, it is time to promote a language policy which would benefit the whole nation, not some individuals.

## REFERENCES

- Alam, F. Zaman, N. & Ahmed, T. 2001. *Revisioning English in Bangladesh*. Dhaka, Bangladesh :The University Press Limited.
- Chowdhury, A. M. & Alam, F. 2002. *Bangladesh on the threshold of the twenty-first century*. Dhaka, Bangladesh: Asiatic Society of Bangladesh.
- Dutta, S. K. 2001. English language and literature in Bangladesh: Towards a methodology. In F. Alam, N. Zaman & T. Ahmed (eds). *Revisioning English in Bangladesh*. Dhaka, Bangladesh: University Press Limited.
- Government of the People's Republic of Bangladesh, Ministry of Law and Parliamentary-Affairs. 1979. *The Constitution of the People's Republic Of Bangladesh*, Dhaka: Government Printing Press.
- Khan. R. M. A. 2000. Amadershikkhabebostha: Ektiporjalochona (An analysis of our educational system). *Sakkorota Bulletin* (pp. 23-25,71-72). Dhaka, Bangladesh: Gonosakkorotaobhijan.
- Hossain, T. & Tollefson, J. W. 2006. Language policy in education in Bangladesh, In J. W. Tollefson, & A. B. M. Tsui (eds). *Language policy, culture and identity in Asian contexts*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Pennycook, A. 1994. *The cultural politics of English as an international language*. London: Pearson Education Limited.
- Rahman, T. 1995. *Language and politics in Pakistan*. Islamabad, Pakistan: Oxford University Press.
- Sharma, R. N. 2003. *History and problems of education in India*, Delhi, India: Surjeet Publications.
- The World Fact Book. 2005. Economy – overview. Retrieved November 11, 2005, from <http://www.cia.gov/cia/publications/factbook/ge/os/bg.html>.

CONTRIBUTOR'S EMAIL:  
<kstania2@hotmail.com>

# EXPLORING PHONOLOGICAL ANALYSIS IN TAMANG (RISIANGKU)

JESSIE JOHNSON

*This work builds on Martine Mazaudon's phonetic analysis of the Risiangku variety of Tamang spanning over four decades by discussing the representation of the phonological contrasts that Mazaudon has described phonetically. These results show that with the wealth of data available on Himalayan languages, advanced phonological descriptions are indeed possible.*

Keywords: phonology, tone, register, Tibeto-Burman, Tamang

## 1. INTRODUCTION

Tamang, a tonal language spoken in the Nepalese Himalayas, has benefitted from a rich and extensive history of phonetic research that Martine Mazaudon spearheaded and has carefully maintained over the past forty years, established by her (1973) work done on the Risiangku variety, and continuing into the current day. Despite the abundance of research done on this language, virtually no phonological analysis has been made for Tamang tones. Maddieson (1984) reinterprets Mazaudon's description of Risiangku Tamang's four contrastive tones and their respective accompanying phonetic properties as two independent features, edging on an implied register analysis. Yip (1995) makes a note of register, applying to the tones of a variety of neighboring Risiangku Tamang as well, associating the register distinction with phonation. This two-tone split with correlating phonetic features is not only present in varieties of Tamang, but it is also prevalent in other related languages and has been analyzed as a register distinction; and though Mazaudon acknowledges this (Mazaudon 2012), she finds both Maddieson's reanalysis and Yip's observations suggestive of register distinction 'unconvincing' regarding Risiangku Tamang (Mazaudon & Michaud 2008: 254). The analysis introduced in this paper will re-examine Maddieson's (1984) reanalysis along with Yip's (1995) account as a modern-day phonological analysis of tone on monosyllables in Tamang, while suggesting an analysis more in line with the attested phonetics. Given

Mazaudon's detailed and thorough phonetic work, both auditory and acoustic, and descriptions spanning over four decades, enough material exists to allow for such a phonological analysis to proceed.

'Tamang' is a term that encompasses the varieties of a Sino-Tibetan language spoken by the ethnic Tamang people, who reside in central Nepal. Taking the speakers of each variety into account, Tamang is the fifth-most spoken language in Nepal, comprised of over a million speakers. There is about 72-97% reported lexical similarity across the varieties of Tamang, meaning there is some variability regarding cross-variety mutual intelligibility (Varekamp 1996). Tamang belongs to the Tibeto-Burman language family, under the branch of Tamangic languages, which also includes the Thakali, Gurung, and Manange (TGTM) languages. Nestled amongst non-tonal Indo-Aryan languages, and tonally-abundant Asia, the behavior of tone in Tamang is both unpredictable, yet unsurprising.

## 2. PHONETICS OF TAMANG TONE

Mazaudon (1973) described Risiangku Tamang tones phonetically which were reproduced in (1) below; Tone 1 is described as a High/mid-high tone falling pitch, Tone 2 a mid-high level pitch, Tone 3 a mid-/mid-low level pitch, and Tone 4 a mid-low/low falling pitch. Chao (1930) tone numbers, in addition to the IPA pitch staff, are used to represent these language-specific tone levels and contours phonetically. Chao tone numbers are a system of describing relative pitch height values within a language, with a range of 1 to 5, where 1 is the lowest pitch in the language and 5 is the highest. Chao tone numbers can be combined to create a sequence of numbers to describe pitch contours.

(1) Risiangku Tamang Tones (Mazaudon 2005: 82)

Tone	Ris.	Tone	Ris.
1	54	3	33/22
2	44	4	211



In her various publications over the past four decades (e.g., Mazaudon 1978, 2003, 2005, 2012), Mazaudon describes other phonetic cues, such as breathiness, that occur along with Tones 3 and 4, represented by the grey highlight in (1). Mazaudon also identifies an aspiration contrast that only occurs on Tones 1 and 2, and some voicing that occurs only on Tones 3 and 4, in her (2005) publication. Furthermore, the parallelism of tone and phonetic cues is common among languages of the Himalayas and also evidenced in work on languages within the Tamangic (TGTM) language group (Hildebrandt 2004; Hildebrandt 2007; Mazaudon 2012; Noonan 2003; Sprigg 1997). Reproduced in (2) below is Mazaudon's (2005) summary of phonemic initial contrasts along with voice quality across two varieties of Tamang, two varieties of Thakali, and a variety of Gurung:

(2) Phonemic Initial Contrasts (Mazaudon 2005: 83)

<i>Tone</i>	<i>Voice quality</i>	<i>Phonemic contrast</i>
tone-1	modal voice	ph vs p ...
tone-2	modal voice	ph vs p ...
tone-3	breathy voice	no contrast [b?~b~p]
tone-4	breathy voice	no contrast [b?~b~p]

*Relationship of tones and initials in Risiangku, Sahu, Tukche, Syang, Ghachok*

As these phonetic cues are not orthogonal to tone and are rather operating concurrently, they must be accounted for to provide a full description of Tamang tones.

### 3. PHONOLOGICAL MODELING OF TAMANG TONES

Tones are phonologically underlying; using conventions established in Hyman (1993) when looking at the Mandarin words 那 *nà* 'that' and 马 *mǎ* 'horse,' for example, the respective the falling (HL) and low (L) tones that are present in these words cannot be phonetically derived from the segments comprising them. In other words, none of the segments have any phonetic motivation that would otherwise inform these tones. Tonemes are equivalent to phonemic consonants and vowels in that tones are also used

to form a basis of lexical contrasts. Therefore, these tones form a suprasegmental tier existing on these lexical items, independent of their phonemic segments, and consequently, must be analyzed independently. An optimal phonological model is one that, in its simplicity, is maximally generalizable and economic (Hyman 1975). When it comes to phonological modeling the underlying forms of tones, the binary units, High (H) and Low (L), are used to represent the height of tones and can be combined to represent rises and falls, as well, and Mid (M) can oftentimes be used to describe a relatively 'middle' tone. These economic underlying representations inform the surface forms, accounting for the minutiae perceived, offering an explanation why certain pitch levels surface in certain environments and not others. For example, tones may surface differently from their underlying forms. Utilizing only a few units however, modeling through combining binary units can only fully encapsulate the phonology of languages with two or three levels of tone and falls apart when trying to account for four or more levels of tonal contrasts, as is demonstrated below, in (3). How does one model the underlying contrasts of Risiangku Tamang tones with maximally three units?

(3) Possible Representation of Tamang Tones with Three Units

	Phonetic Description	Phonological Representation
Tone 1	54	H (L?)
Tone 2	44	M?
Tone 3	33/22	M?
Tone 4	211	L

#### 3.1 EDGING ON PHONOLOGICAL MODELING OF TAMANG TONES

Yip, in her (1980) phonological analysis of Mandarin Chinese tones, presented the notion of pitch register with tone. Bundles of features often co-exist with tones, and these features very much depend on the tones with which they co-occur. Reconciling that four or more tones and their co-occurring phonetic cues cannot be fully described simply through combination of binary units H and L, she introduced the new concept of register, in which [ $\pm$  upper] are features that specify these correlating cues. This entails that the phonetic

cues associated with [-upper] register serve as independent motivation separate from [+upper] register. These “cues” either manifest as other phonetic “cues” such as phonation, glottal stops, voicing, or syllable structure, i.e., phonological constraints or restrictions on tonal correlates. Usually the register is linked to various phonetic add-ons, and though it can be associated with pitch, it is not necessarily so. This phonological register system should not be confused with the sociolinguistic pragmatic phenomenon; phonological register is more related to the musical concept of register, which denotes a relative height or range of pitch.

Maddieson (1984) attempted to describe Tamang tones with a matrix reminiscent of register features. Below in (4), is the model. Maddieson explains: the feature [±breathy] is combined with two tone types (level versus contour) for a simple model.

(4) Tamang Tone Reanalysis (Maddieson 1984)

	Level	Fall
-breathy	44 (Tone 2)	54 (Tone 1)
+breathy	33/22 (Tone 3)	211 (Tone 4)

Yip’s (1995) account is based off Weidert’s (1987:262) description of a variety of Eastern Tamang about 70 kilometers south of the Risiangku variety. Weidert’s description is nearly identical to Maddieson’s (1984) analysis. Below in (5) is a reproduction of Yip’s (1995) analysis. Although she does not directly label her chart with register, she refers to the voicing distinction between the two different types of tones that Mazaudon has regularly reported over the decades as being conditioned leftwards by the register. Yip’s analysis, along with Maddieson’s account, both encompass the ‘two tones plus two registers’ analysis Mazaudon (2005; 2008) disagrees with, preferring a scalar model.

(5) An Account of a Variety of Eastern Tamang (Yip 1995)

Voiceless obstruent onsets	Clear phonation	H (or HL) M
Voiced obstruent onsets	Breathy phonation	LM L

3.2 PHONOLOGICAL MODELING OF TAMANG TONES WITH REGISTER

Recognizing that not only varieties of Tamang, but also dialects of the related Gurung and Thakali languages, have the features [+breathy], [-aspiration] [+voice] correlative of low tones (Mazaudon 1978, 2003, 2005, 2012), we could make the claim that register, specifically [-upper] register, informs this so-called ‘bundle of features’. Contrastively, then, [+upper] register would inform the opposing features, [-breathy], [+aspiration], and [-voice]. Combining the analyses of both Maddieson (1984) and Yip (1995), and then updating it, we could see something like in (6), where, when the register serves as a divide between the two higher tones and the two lower tones, we could then set them in opposition, with high and low defining the respective tones within each register. This means that we could introduce the binary units H and L once more, with each contrastive tone being individually specified for its respective underlying phonological form. That is, we could see H and L in [+upper] register, and H and L in [-upper] register; this is modeled in (6).

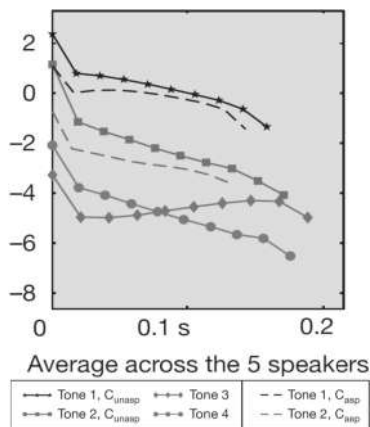
(6) Phonological Analysis I

[+Upper] Register	+aspiration -voice	Tone 1	54	H
	-breathy	Tone 2	44	L
[-Upper] Register	-aspiration +voice	Tone 3	33/22	H
	+breathy	Tone 4	211	L

A neat two-tone, two-register system is created by this analysis, and fulfills the requirements of simplicity of the model; however, after observing the Tamang pitch traces (taken from tokens within a frame) Mazaudon measures and reports in her (2008) work which is reproduced below in (7), we see that this model does not fully encapsulate the attested phonetics. The proposed tone for Tone 2 fares reasonably well with comparison, though Tones 1, 3, and 4 require further revision. Undeniably, Tones 1 and 4 appear to fall, which is not only apparent in the tone numbers in 1), but also in the pitch traces in (7); also following the

pitch traces in (7), Tone 3 rises, though this is not reflected in the tone numbers reported for it; all of these details must be accounted for.

(7) Risiangku Pitch Traces (Mazaudon 2008: 239)



Tone 3 as illustrated in the pitch traces above seems to be more of a 23 contour instead of a 33 or a 22 level tone, and so should be revised. Thus, instead of a H tone to represent the underlying tone, an LH would reflect the rise observed. Both Tamang Tones 1 and 4 must be phonologically represented by a level H tone. To account for the fact that both Tone 1 and Tone 4 fall, we conclude that all tones seem to require a L tone. Tone 1 and Tone 4 are 55 and 22 underlying level tones, respectively. Due to the observed phrase-final boundary L% tone, Tone 1 (55) and Tone 4 (22) become the surface forms we perceive, 54 and 21. Phrase-final boundary L% tone is not uncommon, existing in English, as well (e.g., I bought bread, cheese, and milk). This revised phonological analysis of Tamang tones is summarized in (8).

(8) Phonological Analysis II

[+Upper] Register	+aspiration	Tone 1	55/ L% → 54	H
	-voice -breathy	Tone 2	44	L
[-Upper] Register	-aspiration	Tone 3	23	LH
	+voice +breathy	Tone 4	22/ L% → 21	H

4. CONCLUSION

Both analyses posited in this paper come with respective benefits and drawbacks. The revised

analysis, Phonological Analysis II, is more faithful to the phonetic details, while offering a relatively simple phonological model of the underlying tonal forms that leave some margin of freedom for surface forms. However, there is a trade-off for a more snugly-fitting analysis: the tendency to keep striving for a more phonetically-faithful phonological model. At what point is an analysis adequately capturing what has been attested, sufficiently productive and appropriately underspecified in predicting could be attested, and yet sufficiently constrained to restrict what could *never* be attested? While the revised analysis may not be the best option, it is at current, the most optimal. For if we look to the first analysis, we see that it offers simplicity while proposing a simple matrix composed of the features [ $\pm$  upper] and [H] and [L] set in opposition. The benefits of this sort of model is that it allows for wide variance in forms while still providing some sketch of the underlying form; nevertheless, this level of underspecification entails sacrifice of precision in depicting the phonetic reality, and more importantly, allows for all kinds of unattested forms to surface, which may or may not be permitted by Tamang. For this reason, the revised analysis is the preferred phonological analysis of Risiangku Tamang monosyllable tones. Disyllables may offer more support for this analysis as well. These results are preliminary, and demonstrate that with the wealth of data available on languages in the Himalayas, advanced phonological descriptions are indeed possible, to achieve a similar level of description to the better-described languages in Asia and Africa.

REFERENCES

- Chao, Yuen-Ren. 1930. A system of tone-letters, *Le Maître Phonétique*, 45: 24–27.
- Hildebrandt, Kristine A. 2004. A grammar and glossary of the Manange language. *Tibeto-Burman Languages of Nepal: Manange and Sherpa*, (ed.) by C. Genetti, 2-189. Canberra: Pacific Linguistics.
- Hildebrandt, Kristine A. 2007. Tone in Bodish languages: Typological and sociolinguistic contributions. *New Challenges in Typology*, (ed.) by P. Epps and A. Arkhipov, 77-100. Berlin: Mouton De Gruyter.

- Hyman, Larry M. 1975. Phonological Simplicity. *Phonology: Theory and Analysis*, 99-137: Holt McDougal.
- Maddieson, Ian. 1984. *Patterns of Sounds*, 126: Cambridge University Press.
- Mazaudon, Martine. 1973. Phonologie Tamang (Nepal). Collection Tradition Orale. Société d'Études Linguistiques et Anthropologiques de France, Paris. 4.
- Mazaudon, Martine. 1978. Consonantal mutation and tonal split in the Tamang subfamily. *Kailash*. 6: 157-79.
- Mazaudon, Martine. 2003. Tamang. *The Sino-Tibetan Languages*, (ed.) by G. Thurgood & R. J. LaPolla, 291-314. London: Routledge.
- Mazaudon, Martine. 2005. On tone in Tamang and neighbouring languages: synchrony and diachrony. *Proceedings of the Symposium Cross-linguistic Studies of Tonal Phenomena*, ed. by S. Kaji, 79-96. Tokyo University of Foreign studies: Research Institute for Language and Cultures of Asia and Africa. Amsterdam/Philadelphia: John Benjamins.
- Mazaudon, Martine. 2012. Path to tone in the Tamang branch of Tibeto-Burman (Nepal). *The dialect laboratory, Dialects as a testing ground for theories of language change*, 139-77.
- Mazaudon, Martine & Alexis Michaud. 2008. Tonal Contrasts and Initial Consonants: A Case Study of Tamang, A 'Missing Link' in Tonogenesis. *Phonetica* 65: 231-56.
- Noonan, Michael. 2003. Nar-Phu. *The Sino-Tibetan Languages*, (ed.) by G. Thurgood & R. J. LaPolla, 336-52. London: Routledge.
- Sprigg, R. K. 1997. A Tonal Analysis of Gurung, with Separate Systems for Register and Contour Pitch Features. *Bulletin of the School of Oriental and African Studies*, University of London, 60: 448-54.
- Varenkamp, B. K. 1996. Tamang tam: a sociolinguistic study of eastern Tamang dialects (in Nepal) Kirtipur, Nepal: Centre for Nepal and Asian Studies, Tribhuvan University.
- Weidert, Alfons. 1987. Phonation and tone in the Tamang/Gurung/Thalaki nucleus. *Tibeto-Burman Tonology: A Comparative Analysis*, John Benjamins Publishing. 54:262.
- Yip, Moira. 1980. The tonal phonology of Mandarin. *Cahiers de linguistique-Asie orientale* 7(1): 47-57.
- Yip, Moira. 1995. Tone in east Asian languages. *The handbook of phonological theory*, 476-494.

CONTRIBUTOR'S EMAIL:  
<jessicamichelejohnson@gmail.com>

# BOLD DOCUMENTATION OF THE LANGTANG LANGUAGE (RASUWA)

RADKA KVICALOVA, REBEKAH SLADE, LAUREN GAWNE

*This paper provides an overview of documentation work on the language spoken in Langtang region, Rasuwa, Nepal. This understudied Tibeto-Burman variety has been the focus of a documentation project using Basic Oral Language Documentation (BOLD) methods. We provide an overview of the project, the materials documented and the archiving process.*

Keywords: documentation, Tibeto-Burman, BOLD, archiving, data management, Langtang

## 1. INTRODUCTION

The Langtangpa dialect of Tibetan is spoken in five villages of the Langtang Valley in Nepal. Very little linguistic research has been carried out in this region. This project had addressed the lack of documentation of Langtang, through the creation of an open access corpus of audio recordings in the language that have been translated using the BOLD method (Reiman 2010). In this paper we provide an overview of Langtang history (§2), a brief introduction to the Langtang language and its speakers (§3) and a description of the documentation work we have done (§4). The first two authors are responsible for the documentation work, and the third author has been assisting with technical support and has archived the documentation with Paradisec.

## 2. HISTORY OF LANGTANG

The Langtang community is situated in a ‘beyul’ (hidden valley) recognized in the Tibetan literature. The beyul were concealed by Padmasambhava (also known as Guru Rinpoche) so that they could be used as sanctuaries during times of need (Ehrhard 1997, Childs 2012).

Domar Mingyur Dorje (born 1675) is traditionally credited with opening the hidden land Dagam Namgo, or ‘Heavenly Gate of Half-Moon Form’, which lies in today’s Langtang Valley. This discovery is described in the bibliography of Renzen Nyida Longse (1680). Ehrhard (1997) notes that Renzen Nyida Longse met a Domari clansman and his son, as he was starting his journey to search for the beyul. The son, Mingyur

Dorje, later became a prolific writer, authoring several important texts concerning Dagam Namgo. Based on comparison with the geographical evidence presented in various texts, Mingyur Dorje concludes Dagam Namgo must be located in the valley of Langtang. To strengthen this argument, he recounts a legend relating to the discovery of Langtang, which was interpreted as the ‘opening of the gate to the sacred place’:

“Now for the origin of what is called *gLang-phrang* [Langtang] a bull is said to have been killed once in ‘*Bri-bstim* [...Briddim] ... In the evening the bull fled to that secret land by reason of his supernatural knowledge. The valley was discovered by virtue of the fact that the owner followed its trail; for this reason [the valley] is known under the name Bull Passage—so it is said in the tales of the people of old.” (Quoted in Ehrhard 1997: 345)

Until this day, people present the bull’s story when asked about the meaning of the name Langtang. In the rocks of the upper valley, foot and handprints can be seen that are said to be connected to the legend of Mingyur Dorje of the Domar clan reaching the hidden valley, and overcoming the Drukpa lama called Chorangri (originally from Bhutan), as there were already people in Langtang upon his arrival. After getting rid of his rival, Mingyur Dorje embarked on a number of tasks to stamp his authority over Langtang, the first being to build a temple following Padmasambhava’s instructions. This temple was built next to the Langtang village, however, it was destroyed by fire, and a new one was built on top of a hill that looks like an elephant trunk (today’s temple in Gumba village). For more on the Domar clan in Langtang see Lim (2004). Not much is known about Domaris in Langtang after Mingyur Dorje and his sons.

The inhabitants of Langtang village usually place the founding of the village about four hundred years ago. This coincides with the period of turmoil in southern Tibet in the 17<sup>th</sup> to 18<sup>th</sup> centuries. Members of four clans are believed to have arrived from Kyirong after hearing the news

of the discovery of a beyul in Langtang Valley. The earliest settlers subsequently devised a system of rotating the village headmen-ship amongst the four founding clans every four years.

The ancestors of the Domaris currently residing in Langtang are said to have arrived only around the closing quarter of the 19<sup>th</sup> century. As there was no Domari lama in the village at that time, some members of the founding clans went across the border to Kyirong to search for a suitable lama to take over the Langtang temple. In the literature, there is a consensus that the legitimate ruler of a 'hidden valley' must be a member of the royal lineage associated with King Trisong Detsen. Eventually they found a Domari who agreed to move to Langtang under a condition of exercising both religious and temporal power, and thus becoming the King of Langtang. The modern Domari estate, called Labrang, was still situated next to the temple in Gumba village prior to the 2015 earthquake and consequent avalanche, and his grandson is the informal King of Langtang today. The Domari clan stayed the wealthiest and only ruling power in Langtang until tourism arrived in the late 1970's and the restoration of multiparty democracy in Nepal in 1990.

According to the Langtang Management and Reconstruction Committee chairman Temba Lama, the Langtang Village Development Committee contains five villages; Gumba, Langtang, Mundu, Shindum and Kyanjin Gompa. There are at least sixteen patrilineal exogamous clans.

During a survey trip through 23 villages of northern Rasuwa in the spring of 2013 we identified 5 additional villages to those in Langtang, whose mother tongue is similar: Thuman; Timure; Bridhim; Khanjim and Thulo Syabru.

The community that inhabits the Langtang Valley has been subjected to Langtang National Park regulations since 1976. The valley is located in the north-eastern part of Rasuwa District, Bagmati Zone, Nepal, and is at the border with Tibet. The valley stretches out in an east-west orientation for about 35 km, carved out by the westward flow of the Langtang Khola that originates from the glaciers of Langshisa and flows through Shyapru

Besi village into the Bhote Kosi River coming from Tibet. The valley is encircled by the monumental Langtang Lirung (7245 m) on the north, the Yala Peak and Kang Chenpo in the East and the Gosainkund holy lakes in the South. The Langtang region encompasses an area of about 520 square kilometers, and is permanently inhabited in the central area at the elevation of about 3500 m.

Geologically, this region falls within the Inner Himalayas, while climatically it is in the transitional zone between the southern monsoon region and the arid deserts of the Tibetan plateau. The bottom of the valley intersects with an important trade route that has, for centuries, linked southern Tibet with central Nepal and the Indian subcontinent. Recently, a road connecting Kathmandu with the border town of Rasuwagadi has been built.

The first western 'tourist' to visit Langtang Valley is believed to be explorer H. W. Tilman in 1949. Since the 1980s, trekking lodges and teashops have mushroomed in the area, with approximately 100 operating in 2015. Lim (2008) provides an overview of Langtang history and the trekking industry that grew in the valley.

The 2015 earthquakes in Nepal were devastating for the Langtang community. Prior to the quakes, the Langtangpa population was 673 people in 156 households. Tragically, the population of Langtang was reduced to 486 people and 116 households, after the earthquake on April 25 triggered a major avalanche that killed 187 Langtangpa. All of Langtang, Gumba and Shindum villages were wiped out by the avalanche. Most houses and hotels in Mundu and Kyanjin Gompa were also damaged.

### 3. LANGTANG LANGUAGE AND PEOPLE

The people of the Langtang community refer to themselves as *Langtangpa* or *Langtangnga*. Their closest neighbors, by geography, culture and family, are the Kyirong (1-2 days walk north-west), Western Tamang (2 days walk, west of Bhote Kosi) and Yolmo (2 days walk south-east via mountain pass). They occasionally gather for seasonal and religious festivals and to arrange marriages. Most of the Langtang population is

fluent in Nepali for communication with people from outside the region.

While the Langtang region is well-known as a trekking destination in Nepal, very little is known about the language spoken there, and its relationship to other Tibeto-Burman languages. Ethnologue (Simons & Fennig 2017) lists ‘Lang Dang’ as a variety of Yolmo (ISO 639-3: scp),<sup>1</sup> however provides no motivation for this analysis. Tournadre (2014) includes Langtang in the Southwestern group of Tibetic languages, along with Yolmo and Kyirong, but also gives no evidence for this. Hari (2010) notes that Langtang (which she refers to as *Tärkeghyāng*) is closely related to the varieties of Yolmo she studied, suggesting they are mutually intelligible, however she also concedes that the variety is ‘quite different’ based on brief interaction with a number of speakers (see also Hari & Lama 2004: 703).

Geographically, Langtang is situated between Yolmo and the related, but distinct, Kyirong variety. Hedlin’s (2011) analysis of Kyirong and Yolmo indicates that there are key differences, including the structure of the lexical tone system, pronoun system and evidential system.

On one of our later trips to Langtang, we took with us some stories recorded in the Yolmo language and played these to see how compatible the dialects were. We were surprised to discover that the adults we played them to said that they could understand all the words used. They said the only difference is that if the words had been pronounced in their own language they would be pronounced ‘slower’ with ‘longer sounds’. However, the same recordings were not understood by the younger generation, who has less traditional contact with Yolmo speakers due to study in Kathmandu.

Initial observations indicate that Langtang has some features that make it distinct from Yolmo. Most notable are the phonetic features, including front rounded vowels in words *tü* ‘see’. This feature is found in Kyirong, but not Yolmo (Huber 2005, Hedlin 2011). Langtang has at least two tones. More will need to be done to figure out

the relationship between Langtang, Kyirong and Yolmo.

The Langtang dialect is no longer being used by all children as their language at home. During our time spent within the community we found that most children still speak the basic everyday language when around other speakers, however, for most of the year they reside at various English boarding schools in Kathmandu, using Nepali and English for everyday interactions. As a result of this intergenerational change in language use, and the effect of the earthquakes, the language, cultural heritage, and intergenerational knowledge of the Langtang language are increasingly at risk. While there are still over 300 speakers today, this language is on a trajectory towards being highly endangered within a generation.

In our documentation work, we aimed to help educate Langtangpa to see that their language is endangered, to show its value and to encourage the youth to keep it alive. Some of the fathers and grandfathers in the community told us that they purposefully only speak to their children and grandchildren in the Langtang dialect, even though many of the children speak more Nepali and English amongst themselves and at school. They explained that the reason they do this is because of their concern that their children may not continue communicating in their mother tongue.

#### 4. DOCUMENTATION OF LANGTANG LANGUAGE

The Langtang area is undergoing massive developmental change in many areas (economic, educational, medical, social). This has led to a massive shift towards use of Nepali and English. This language change motivated us to document the Langtangpa variety. Our aim was to make a positive contribution to the development efforts in the Langtang area while also documenting the language and culture. Neither of the first two authors on this paper are trained in linguistics, but we have extensive experience managing community projects in Nepal and other places. This project demonstrates that it is possible to successfully undertake a language documentation project without extensive training in linguistics.

---

<sup>1</sup>also known as Helambu Sherpa.

Our prior work with this community made us confident that this project could serve the Langtangpa by promoting the value of preserving the language and rich oral traditions. Documentation of the language could also provide more recognition for the community, making the language accessible to a broader audience. We also wanted to document the language to help provide basic, quality information for further linguistic analysis.

The aims of the documentation were:

1. Learn the Langtang language spoken to ensure that we could communicate with people who do not speak English or Nepali.
2. Collect audio records covering diverse genres of oral traditions, including cultural narratives, dialogues and songs.
3. Incorporate oral annotations including careful speech, phrasal translation and analytical comments.
4. Elicit and record wordlist including oral translation.
5. Digitally archive the materials so that they can be used by current and future generations of speakers, scholars, and teachers.

Both authors who performed the documentation speak Nepali, and the first author had some familiarity with Standard Tibetan, but the first aim of the project was for each author to be able to speak the language to engage all members of the community, even those who didn't speak English or Nepali. This was done through structured lessons with a Langtangpa in Kathmandu, and ongoing observation and interaction in the villages.

In the spring of 2013 we conducted a survey trek through the northern parts of Rasuwa district in order to get a geographical understanding of the places where the Langtang language is spoken. We were looking to identify any surrounding villages whose mother tongue was the same or similar to the language spoken in Langtang. In three weeks, we visited 23 villages asking about their mother tongue, and the languages that are used in daily life in the area.

The first year of our project was devoted to the historical and linguistic survey and language learning. After this we launched primary data collection of oral traditions covering a variety of genres. Recordings were made in people's everyday environment using a Zoom H4n audio recorder.

Between March 2014 and December 2016 we made 127 original recordings, totaling 10 hours. These included old folk stories about the Langtang area, personal stories and memories, descriptions about families, instructions on how to make a variety of local produce, songs, and religious teachings and descriptions about the area.

Recordings include the following genres. The total is more than 127 as some recordings include multiple genres:

- Report, 29 sessions
- Singing, 26 sessions
- Interactive Discourse, 24 sessions
- Narrative, 19 sessions
- Oratory, 7 sessions
- Formulaic Discourse, 6 sessions
- Procedural Discourse, 6 sessions
- Language Play, 3 sessions
- Elicitation, 3 sessions

There are also 29 recordings of oral consent. An oral consent model was used because not everyone in the area is literate, and because it fits better with interactional styles in the area that are more conversational than bureaucratic.

During recording sessions it was apparent that the people love to sing and they have many songs in their language. They were always keen to share these songs with us, much more readily than to talk about something. In other recordings participants took the opportunity to talk about things of importance to them. These recordings reveal the values and worldview of this culture.

There are 61 speakers represented in these recordings. Each person's consent and photo file are archived as part of the collection. Information was also collected about each participant's age, place of residence, educational background and



other metadata. These files are on restricted access as they contain personal information.

Each recording was named consistently using the date and recording sequence number. For example, 141115-000 is a recording of Phurpa Pasang discussing the opening of the Langtang beyul (see §2). It was the first recording on the 15<sup>th</sup> of November 2014. 141115-003 is a recording made later the same day of Norchnung leaving a message for her children. For each recording metadata was collected including the participants information, recording title, genre and other information.

We used SayMore (Hatton 2013) to manage our recordings. SayMore allows participant metadata to be linked to each recording. For the transcription and translation of the recordings we decided to use the Basic Oral Language Documentation (BOLD) method (Reiman 2010). This involved creating records of the speech repeated slowly, as well as spoken Nepali translations that are aligned to the time codes in the original recordings. This means the recordings can be more useful for community members and researchers in the future. We were thus able to create translations for more recordings in a shorter time than if we had chosen a written method. We also chose an oral transcription method because there is no established orthography for the Langtang language. SayMore includes an easy to use BOLD workflow that can be completed using an ordinary computer.

The BOLD translation and transcription were performed by Langtang-speaking language helpers. We used the Zoom H4n audio recorder as a microphone, directly recording and compiling audio files onto the SayMore database on the computer. Texts to be annotated were prioritized based on cultural and linguistic value, diversity of participants, and the quality of the audio recordings. We also had to take into consideration the ability of our language helpers to understand the original recordings, especially with regards to the traditional songs and folk stories told by older-generation speakers. Two Langtangpa contributed the most to these transcriptions. The first was Karchung Garca, a 36-year-old mother of two sons who lives as a yak herder with her husband.

She did most of the careful speech transcription. The second was Nima Lopchen, a 20-year-old student, finishing her bachelor degree in hotel management in Kathmandu, who did most of the oral translations into Nepali. Karchung assisted Nima with some of the translations when Nima was unsure of the more traditional vocabulary.

All recordings were segmented using SayMore. At the time of this article, 107 recordings have been orally transcribed through careful speech and 64 have been orally translated into Nepali.

In the spring 2016 we produced a DVD, consisting of historical and traditional stories, poetry and songs, jokes and riddles, proverbs and sayings, religious and ritual discourses, as well as descriptions and explanations of local culture and customs. This was our token of appreciation to the community, on the occasion of a memorial day, conducted in Langtang on April 25 2016, one year after the earthquake and avalanche. This DVD was also made available to those individuals and organizations who have been involved in the Langtang Valley reestablishment process. Nima Lopchen also helped us with this DVD project, creating recordings that were the basis for subtitles.

The source recordings along with metadata have been archived in the Pacific and Regional Archive for Digital Sources in Endangered Cultures (PARADISEC).<sup>2</sup>The third author of this paper has been responsible for archiving the documentation. Paradisec has a secure storage structure, as well as an interface that is accessible on the internet. Anyone interested in accessing the data can do so by registering for an account and agreeing to fair use of the materials.

It is not possible to archive the whole SayMore project in an archive like Paradisec. The original WAV files are archive quality, and the segmentation in SayMore creates ELAN<sup>3</sup> (Sloetjes & Wittenburg 2008) transcription files, which are XML structured and suitable for archiving. The greatest challenge in archiving SayMore projects is that each segment of time-

<sup>2</sup><http://catalog.paradisec.org.au/collections/LAN1>

<sup>3</sup><http://tla.mpi.nl/tools/tla-tools/elan/>

aligned respeaking or translation is saved as an individual WAV file, generating thousands of files that need to be archived. The original recordings were archived in 2016. Subsequent recordings and annotations were archived in 2017. Any future oral or written transcription will be archived as part of the collection.

In the future some of the data will also become part of the larger Langtang Memory Project.<sup>4</sup> This project aims to create an archive for the Langtang people that is also publicly accessible, drawing on historical materials and creating new records. The project is built on a community-focused model that seeks to help younger Langtangpa connect with their linguistic identity and cultural heritage.

## 5. CONCLUSION

Our project has created the first documentation of the Langtang language. This documentation has been archived as an Open Access collection, and returned to community members. The genres we have recorded have created a record of the language and associated culture for community members. We hope that it has helped the Langtangpa value their linguistic heritage. The recordings also prove linguists and other researchers with a basis to better understand the relationship between the Langtang language and related Tibetan varieties.

There is still more work to be done completing oral annotation of the collection. Future work may also include written transcriptions and translations of the recordings. We have encouraged our language helpers to continue working on the language documentation on their own.

Most importantly this project is being very well received by the speech community as it captures many of the folk stories and songs that would otherwise disappear with the older generation. The language and cultural heritage has become even more endangered after the devastating earthquakes in April 2015. Some of the speakers we had recorded who died in the consequent avalanche were the only ones who knew a certain story or song.

This is part of a greater cultural loss in the Langtang valley. Because of the devastating aftermath of the earthquakes, the Langtang valley and its life will never be the same. The traditional architecture has been lost, one third of the community perished in one single day, the traditional ways of life such as yak herding, farming and weaving—already in decline—have now very little chance of being passed on to the generations to come.

The disaster may have also speed up the loss of transmission of the language to younger speakers. As a result of the earthquake, all of the Langtang children have been allocated to boarding schools in Kathmandu where they will have less contact with their mother tongue.

This project was challenging in many ways, but it was particularly emotionally difficult after the earthquakes. Out of our 20 contributors up until April 2015, 8 participants died in the earthquake and avalanche. This required us to reconsider what materials would be suitable for archiving, and to work closely with community members to ensure they were willing for the project to continue.

All this being said, we feel extremely privileged to be able to contribute our time, energy and love for the Langtang people, and provide a considerable volume of language documentation in Langtang.

## REFERENCES

- Childs, Geoff. 2012. Trans-Himalayan migrations as processes, not events: Towards a theoretical framework. In T. Huber & S. Blackburn (eds), *Origins and Migrations in the Extended Eastern Himalaya*, 11-32. Leiden: Brill.
- Ehrhard, Franz-Karl. 1997. A "Hidden Land" in the Tibetan-Nepalese borderlands. In A. W. Macdonald (ed.), *Mandala and Landscape*, 335-364. New Delhi: D. K. Printworld.
- Hari, Anna Maria. 2010. *Yohlmo Sketch Grammar*. Kathmandu: Ekta books.
- Hari, Anna Maria & Chhegu Lama. 2004. *Yohlmo–Nepali–English Dictionary*. Kathmandu: Tribhuvan University.
- Hatton, John. 2013. SayMore: Language documentation productivity. Paper presented at

---

<sup>4</sup>[www.langtangmemoryproject.com](http://www.langtangmemoryproject.com)

- the 3rd International Conference on Language Documentation and Conservation (ICLDC). Mānoa, Hawai‘i. 28 February. <http://scholarspace.manoa.hawaii.edu/handle/10125/26153>
- Hedlin, Matthew. 2011. *An Investigation of the relationship between the Kyirong, Yølmo, and Standard Spoken Tibetan speech varieties*. Chiang Mai: Payap University, Master’s thesis.
- Huber, Brigitte. 2005. *The Tibetan dialect of Lende (Kyirong)*. Bonn: VGH Wissenschaftsverlag.
- Lim, Francis K. G. 2004. Zombie Slayers in a “Hidden Valley” (sbas-yul): Sacred Geography and Political Organisation in the Nepal-Tibet Borderland. *European Bulletin of Himalayan Research* 27:37-66.
- Lim, Francis K. G. 2008. *Imagining the good life: Negotiating culture and development in Nepal Himalaya*. Leiden: Brill.
- Reiman, D. Will. 2010. Basic oral language documentation. *Language Documentation & Conservation* 4:254-268.
- Simons, Gary F. & Charles D. Fennig (eds). 2017. *Ethnologue: Languages of the World, Twentieth edition*. Dallas: SIL International. Online version: <http://www.ethnologue.com>.
- Sloetjes, Han & Peter Wittenburg. 2008. Annotation by category – ELAN and ISO DCR. In: *Proceedings of the 6th International Conference on Language Resources and Evaluation (LREC 2008)*.
- Tournadre, Nicolas. 2014. The Tibetic languages and their classification. In T. Owen-Smith & N.W. Hill (eds.), *Trans-Himalayan Linguistics*, 105-130. Berlin: Mouton de Gruyter.

## CONTRIBUTORS’ EMAIL:

<rakvi@swissmail.org>;  
 <Becky.Slade@om.org>;  
 <L.Gawne@latrobe.edu.au>

# IT'S TIME TO UNDERSTAND AND TEACH: CRITICAL LANGUAGE AWARENESS (CLA)

SHATY KUMAR MAHATO

*The study is qualitative research on critical paradigm, so the use of language has variation in discourse. Teacher can foster the learners' curiosity to differentiate the language according to the learners' needs and interest in language. Language is the transformation of knowledge, culture and identity in a society.*

Keywords: CLA, discourse, identity, power, inequality.

## 1. INTRODUCTION

Language is a means of communication. Language is a powerful tool for expressing emotions and feelings. It shows one's culture, identity and hold status in a society. Language is the transformation of knowledge, culture and identity in a society. Ali (2011:29). States, "Language awareness is a mental and internal capacity which the learner gradually develops by giving motivated and conscious attention to language in use to use patterns. Critical language awareness springs out of it". It is necessary to teach and make students understand that why certain language should be learnt. Learners may choose and take their own interest in language learning. It is the learners who can differentiate language role in a society.

Therefore, at first teacher should focus on language awareness and explore critically why language should be learnt. Language must have some functions in society to work with livelihoods. It is the mental desire of the learners to choose the language which can serve them for their functional livelihoods. Society is the platform where learners or people can exercise their role through the medium of language. Critical Language Awareness (CLA) refers to the understanding of social, political and ideological aspects of language, linguistics variation and discourse.

It generally includes consideration of how a person may be marginalized by speaking a particular way, especially if that way of speaking

serves as an index of their race, ethnicity, religion and social status.

CLA brings the consciousness to the person, which is the first step of emancipation. Hawikins, NCLE (1985) states, "The term Language Awareness has been used since 1980s to refer specifically to the advocacy by a group of language teachers, educationalists and applied linguists of a new language awareness element in the school curriculum at the top end of primary school or in the early years of secondary school". It is an integral part of any education system.

It promotes the mutual understanding of the language varieties and plays a critical role in a society. Similarly, CLA also refers to the issues of language and society. It makes people aware that language is determined by society and its discourse. Language is socially and politically determined. It occurs with the linguistics variation and discourse of society.

Fairclough (1992) states, "It is insufficient to teach students to use "appropriate" language without considering why that language is preferred and who make that decision (as well as the implications for the speakers who do not use "appropriate linguistics". It means the language is a discourse of society which functions in a society. It helps to transform the knowledge and preserves own culture and identity. In other words, CLA is based on the power, social class and gender of the society. Alfouaim (2012) says, "CLA is an integral part of any successful language education system". It makes people aware to choose the language on the behalf of their culture and identity. It also gives the conscious attention of properties of language and its use. We are living in a period of intense and social change where language and power is exercised. Language varies according to social situation and its discourse rather than language use. We can say it is an orientation towards language through which the possibilities of language is changing to its development of the world. Therefore the discourse of language can

play prominent role in a society. According to Fairclough (1995) another feature of CLA is Technologisation which is the striking features of contemporary society. The time we are living is totally dependent on technology which is also called social transformation by its meaning and it demands change through the existing time.

The nature of contemporary society makes critical language awareness more necessary than ever in order to create citizens more democratic and effective.

## 2. TEACHING CLA IN NEPALESE CONTEXT

In context of Nepal English language teaching is an opportunity for broadening and widening the future career. Mostly, it opens the door for higher studies and plays a very crucial role for job opportunities in nations and abroad. Now, through my own teaching and learning English language I felt that language has power to express their cultural and professional identity. I come to know that how language is holding power and killing one's identities, emotions and culture. As I come to know language has a power to save and show one's identity for the future generation. Language has a value to preserve the culture and identity too.

I come to know through my own experience that language is a vehicle for development and social transformation. It preserves our thoughts and expresses belongings to others human associated feeling attachment. Therefore we should focus on our native language to develop our culture and societies. We can take English language as a vehicle to interact and see the worlds eyes view. It can help to achieve the goal but it is not our destination.

According to Fairclough (1992), language awareness is the need of the people for personal success and to bring change in the society, for it the language education can play a vital role to promote such awareness. CLA clearly investigates how a person may marginalize by speaking a particular way in certain context. It falls under the ethnicity, religion and social status. Language may differentiate the culture and identity through

their distinctive role and also make aware to behave accordingly. Similarly, CLA opens the door for the people in society to understand the linguistic variation and discourse.

Language determines a lot to see social transformation and educational development in our society. Language can give us power to socialize and manifests in our society. Language can be seen as a power functions in educational change. As a teacher and novice researcher I can say that national language should be focused on to preserve our identities, social values and norms to establish the nation hood, belongingness and sincere attachment. It makes us to live unity in diversity. We can make people aware and motivated towards our mother tongue too by creating useful environment for creative learning too.

Moreover, I can say language is a vehicle for success and achievement in a professional career. And of course English is an international language, lingua-franca and a vehicle for higher education, however to preserve our culture, identity we must be aware to our values and identity in our own society. The feelings and emotional attachment what one's share in their one language is always lacking in foreign language. English language serves us to understand foreign culture and society but it may not help to preserve our own culture and society. Nepal is never colonized by any country (Poudel 2016) and therefore it is a widening language in Nepal. Nepal is a small country but we can find the unity in diversity. Geographically, Nepal is divided into three regions Terai, Hill and Mountain. It is a multilingual, multicultural country; they have their own mother languages though they are much interested in English language because it provides them resources and opportunities to enhance their career.

English education has entered in Nepal at the establishment of Durbar High School in 1854 by Prime Minister Junga Bahadur Rana. He opened this school for making their children aware and conscious to make the good relationship with the British people. It was only for the elite people and

family to take English education during the time. English education was broadening only after the establishment of Tri-Chandra College in 1918 and college of education in 1959 (Tribhuvan University) the first university in Nepal. English education was introduced for all in Nepal only after the first Nepal Education System Plan (1971-1976). Since then English education is a compulsory subject in our education. This education system plan was implemented in Nepalese curriculum and brought a drastic change in the system of curriculum, textbook, examination and so on. It was made compulsory from primary to university levels of education. The plan also made English no longer compulsory subject but made provision to opt for any United Nations language. But from the learners perspective English became major for most of them.

### 3. FIVE THEORETICAL PROPOSITIONS OF CLS

The major concern of critical language study is to see the development of critical language awareness of the world and possibilities of changing discourse. Critical language study plays the vital role to orient the people towards language.

1. Language Use- it is a discourse in a society and it is shaped by society. Use of language is socially determined and captured. Use of language varies according to social situation in society. For example it's the power and social status of the people in a society where discourse is different.

2. Discourse helps to constitute (and change) knowledge and its objects, social relations, and social identity. Social identity and relations in society constitutes the change of knowledge so it functions likely to change the discourse of knowledge, social relations and social identities which are simultaneously being constituted or reconstituted.

3. Discourse is shaped by relations of power, and invested with ideologies.

Power affects discourse conventions by investing them ideologically in particular ways. It determines to set the discourse in a society, e.g. medical interview genre, relations between doctors and patients and their social identities.

4. The shaping of discourse is a stake in power struggles.

Powerful social forces and groups dominate a society or a particular institution, e.g. doctor patient's relations. It is less tightly controlled.

5. CLS sets out to show how society and discourse shape each other.

Social sciences are not neutral or innocent; they stand in particular relationships to dominant or dominated groups and forces and therefore contribute correspondingly to social struggles.

CLS sees itself as a resource for developing the consciousness of particularly those people who are dominated in a linguistic way in a society.

According to Fairclough (1989), the shaping of discourse by society and of society, by discourse are on the one hand long-term practices which progressively restructure the sociolinguistics order which affects every instance of discourse. It has three dimensions: it is a spoken or written language text; it is an interaction between people, involving processes of producing and interpreting the text; and it's a part of a piece of social action and in some cases virtually whole of it. Hawkins (1984) mentions that 'Awareness' affects 'competence'. Similarly, Fairclough (1989) says, "Awareness affects language capabilities". Both of them are in favor of change in a competence level through the awareness. Language awareness should be fully integrated with the development of practice and capabilities. CLA can make us aware of how our writing may subject others, or how we may dominate conversation, but it is up to us to act upon that awareness.

### 4. THE APPROPRIACY OF 'APPROPRIATENESS IN CLA

Language differs in being appropriate for different purpose and different situations. Fairclough argues that, social communication and is particularly likely to be required in public, formal settings. Teaching should cover discussions of the situations in which the purposes for which people might choose to use non-standard varieties rather than standard English, e.g. in speech with friends, in a local team or group in television advertising, folk songs, poetry, dialogue in novels or plays.

Everywhere we find different discourse because they have their own context.

Appropriateness is the cornerstone of the Report's Policy on the teaching of Standard English. The report argues that children have an 'entitlement' to Standard English, and that many important opportunities are closed for them' if they do not have access to Standard English.

They recommend therefore that the schools should aim to develop pupils' ability to understand and produce both written and spoken Standard English. Hymes (1972) as cited in Fairclough (1995:218) notes 'Appropriateness' belongs to domain of language attitudes: it is one sort of judgments that is made by members of speech communities. Learning to read the language is learning about the cultural properties of the language. It is the study of Idioms and metaphors, in particular context to reveal a lot about the culture. Learning to read about the cultural properties of language makes people aware to perform in a society.

##### 5. LANGUAGE AND POWER

Language use and unequal relations of power, power exercised through depriving people of their jobs, their homes and their lives. Social relations and the social status in a society exercised accordingly in the life style of people living in society. Language functions also exercised in social life but there is a particular agenda in mind. It clears that the Professional usages of language enables us to understand issues of social concern. In other words, our communication is constrained by the structures and forces of those social institutions within which we live and function. Fairclough (1989) clears on it that language, Social theory and Particular professional context, which explore critical linguistic exploration in a society to understand and use. So he defines language is a system of sentences but language as discourse. It means Language is shaped by social relationships and realized through such particular discourses. Fairclough, (1989:17) states, "The relationship between language and power and relation between language and ideology together

presents the main element of the position and that language is centrally involved in power, and struggles for power, and that it is so involved through its ideological properties". He also mentions that language as a social practice determined by social structures.

##### 6. CONTRIBUTION OF CLA

Frerire (1989) states, CLA can contribute different ways in a society it brings: notions of social justice, social identity and clears the notions of power and inequality. If we look these things which are commonly exercised in our society after the notions CLA comes to the society then people realized and felt the change due to these notions. Similarly, other contribution in the field of CLA by Fairclough (1992) who clearly defines the CLA is a conscious attention to properties of language and language use as an element of language education. The notions developed by Fairclough on CLA which contribute a lot by making the people aware and conscious about the language and its use in a society.

Clark and Ivanic (1997) as cited in Fairclough (1995:217) states that, "CLA empowers learners by providing them with a critical analytical framework to help them reflect on their own language experiences and practices, the language practices of others in the institutions of which they are a part and in the wider society within which they live". In the same what way we can say that language is not only meant for communication it is associated with other factors of people who are not usually aware of power, class gender, race and sexuality.

##### REFERENCES

- Alfouaim, Ahlam. 2012. *The Critical Language Awareness Impact on Language Variation*. California State University ([http://works.bepress.com/ahlam\\_alfouaim/3/](http://works.bepress.com/ahlam_alfouaim/3/))
- Ali, Shamim. 2011. Critical Language Awareness in Pedagogic Context: *English language teaching*, (4). 4. 28-35
- Andrews, Stephen. 2007. *Teacher Language Awareness*. New York: Cambridge University Press.

44 / It's time to...

Fairclough, Norman. 1989. *Language and Power*.  
London: Longman.

Fairclough, Norman. 1992. *Critical Language  
Awareness*. London: Longman.

Fairclough, Norman. 1995. *Critical discourse  
analysis*. London: Longman.

Freire, Paulo. 1989. *Pedagogy of the oppressed*.  
New York: Continuum.

Hawkins, Eric W. 1984. *Awareness of Language:  
An introduction* (revised edition). New York:  
Cambridge University Press.

CONTRIBUTOR'S EMAIL:

<satyanews.org@gmail.com>



# THE NATURE OF LANGUAGE ENDANGERMENT: A CASE STUDY OF HAJONG

ALBINA NARZARY

*The results of the study show that Hajong language is unsafe, yet to be codified and lack written materials from the linguistic aspect. The other reasons behind the degree of language endangerment are the negative attitude of the people towards their language, dwindling domains, less population, lack of governmental support, lack of materials for language education and literacy etc.*

Keywords: Language Documentation, Language Endangerment, Language Vitality, Language Attitude, Hajong

## 1. INTRODUCTION

Language is an important tool to safeguard our cultural values and identity; therefore, before it gets extinct language should be documented as early as possible. A language is endangered when its speakers cease to use it, use it in fewer domains, and use fewer of its registers and speaking styles, and or stop passing it on to next generation (UNESCO). Language can only exist when there is community to speak and transmit them. A community of people can exist only where there is a reliable environment for them to live in and a means of making a living. Where communities cannot thrive, their languages are in danger. When language loses their speakers, they die (Romaine 2007:127) Language death or loss of the world's languages is very common today especially among the indigenous people in the world. UNESCO Atlas of the *World's Languages in Danger* (2003) says that out of 6,000 existing languages in the world approximately 2,500 are endangered languages in five levels of endangerment: unsafe, definitely endangered, severely endangered, critically endangered and extinct. UNESCO estimates that 190 Indian languages are in danger and out of it 86 languages are from Northeastern India.

The crisis of endangerment was first brought into light by Krauss (1992). He divides the world languages into three categories: moribund, endangered and safe (1992:6). Moribund languages are those which are no longer spoken

by the children. He defines endangered as "those languages which, though now still being learned by children, will- if the present condition continue- cease to be learned by children during the coming century" (1992:6-7). And languages which have the official support of the state and have larger numbers of speakers are in the category of safer languages. In this situation, Hajong falls in the category of endangered language which has less population and lacks official support to save their language. Besides if the present condition continues it might stop passing it to the next generation.

It has been noted that there are 86 endangered languages from Northeastern State of India which is yet to be explored and documented. Most of these languages are in a stage of extinction in near future. Unfortunately, languages like Ahom, Moran, Sonowal are already extinct. Therefore an initiative should be done to preserve these endangered languages before it gets extinct. Language documentation is not new in the history even though, it has been come into noticed in the field of linguistics recently. 'Language documentation' or 'Documentary linguistics' (Himmelman 1998; 2002; 2006; Lehmann 2001; Austin 2010a; Grenoble 2010; Woodbury 2003; 2011) is new subfield of linguistics whose purpose is to preserve language, as it is naturally used in speech community, for both linguistic and cultural value (Unseth 2012:10). Language documentation (also known by the term 'documentary linguistics') is defined by Nikolaus Himmelmann as the subfield of linguistics that is 'concerned with the methods, tools, and theoretical underpinnings for compiling a representative and lasting multipurpose record of a natural language or one of its varieties' (Himmelman 2006). "The aim of language documentation is to provide a comprehensive record of the linguistic practices characteristic of a given speech community. This differs fundamentally from language description [which] aims at the record of a language as a system of abstract elements, constructions, and rules"

(Himmelmann 1998). The goal of documentation is not only to record a language for linguistic purposes, but also to meet the needs of the speakers of the language and to support them in their desire to maintain the language (Austin 2010:13). Keeping in Mind the consequences of language endangerment, the present paper is an attempt to study the nature and degree of language endangerment of Hajong, an undocumented language of Assam.

## 2. OVERVIEW OF THE ENDANGERED LANGUAGES IN NORTHEAST INDIA

According to the *UNESCO's Atlas of the World's Languages in Danger* 2009 more than 190 Indian languages are in danger of becoming extinct, while five have already been lost. The 2001 census says that 96% of Indian population speaks only 4% of Indian languages. The other 4% of the population speaks the remaining 96% languages which now need to be preserved" (Kulkarni Joshi, 2013). With regards to the languages of the Northeast India *UNESCO's Atlas of the World's Languages in Danger* 2009 Edition states that majority of Northeast Indian languages are endangered with different degrees/ Level of language and these are Adi, Ahom, Aimol, Aiton, Aka, Anal, Angami, Ao, Apatani, Bawm, Biete, Bishnupriya Manipur, Bodo, Bokar, Chang, Chokri, Deori, Dimasa, Galo, Gangte, Hill Miri, Hmar, Hrangkhoh, Idu, Kabui, Khachari, Karbi, Khamba, Khampti, Khasi, Kheza, Khiamngan, Khoirao, Howa, Koch, Koirang, Kokborok, Kom, Konyak, Lamgang, Lepcha, Lotha, Liangmai, Limbu, Lishpa, Mao, Mara, Maram, Maring, Mech, Meitei, Miji, Milang, Minyong, Mising, Mizo, Moyon, Mzieme, Na, Nocte, Nyishi, Padam, Paite, Pasi, Phom, Pochuri, Purum, Rabha, Rengma, Ruga, Sangtam, Sherdukpen, Sherpa, Singpho, Sulung, Tagin, Tai Phake, Tamang, Tangam, Tangkhul, Tangsa, Tarao, Thado, Tiwa, Tshangla, Wancho, Yimchungru, Zeme, and Butun. Fortunately Hajong is not included in the UNESCO's lists of endangered languages despite it's being in a state of the critically endangered language.

## 3. AIM OF THE PAPER

This paper is an attempt to study the nature and degree of language endangerment of Hajong,

inhabitants of Assam in the light of UNESCO's Language Vitality and Endangerment Framework. The UNESCO Ad Hoc Expert Group identifies a total of nine factors that evaluate a language vitality and state of endangerment, Language attitude and Urgency for documentation. The nine factors are divided into three areas: firstly, six factors for assessing language vitality; secondly, two factors for assessing Language Attitude and the third is assessment of the urgency for documentation.

## 4. METHODOLOGY

The present data is collected from two main sources primary and secondary. The primary data is collected through questionnaire, interview methods and personal observations with a different aged group ranging from 14 to 29, 30 to 45, 46 to 59, and 60 and above from a field visits to Goalpara district of Assam. A total number of informants was 50. The secondary sources are collected from books, journals and internet.

### 4.1 SURVEY LOCATION

The present data is collected from the Goalpara district of Assam from the dominated Hajong villages from Dhaigaon, Tilapara, and Khardang. Although Hajongs are scattered in many districts of Assam it is found that majority of Hajong community lived in the Goalpara district of Assam.

#### 4.1.1 SELECTION OF THE RESPONDENTS

The present paper is based on the data collected from 50 respondents all from Hajong individuals living in the villages of Goalpara district.

Table 1: Distribution of the sample by age

Age	No. of respondents
14-29	20
30- 45	12
46- 59	8
60-	10
Total	50

Tables 1-4 report the socio-biographical characteristics of the informants, i.e., age, gender, occupation and educational background. Following the model of Dweik (2000), Al- Khatib (2001), Al-Khatib & Al- Ali (2005), and Abd-el-

Jawad (2006), the selected sample is divided into four age groups.

Table 2. Distribution of the sample by gender

Gender	No. of respondent
Male	26
Female	24
Total	50

Table 3: Distribution of the sample by occupation

Occupation	No. of respondents
Farmers	11
Housewives	8
Students	20
Teachers	3
Drivers	2
Nurses	1
Traders	1
Retired	1
Shop Assistants	3
Total	50

Table 4: Distribution of the sample by educational background.

Illiterate	12
Preparatory	12
Secondary	20
Undergraduate	5
Postgraduate	1
Total	50

#### 4.1.2 METHODS OF GATHERING INFORMATION

The data used in this analysis was collected through questionnaires, informal conversation and personal observations. The questionnaire was fashioned after those employed by Linguistic Survey of Nepal and Al-Khatib (2011) in his study of Armenians of Jordan. This entire questionnaire helps to investigate the data on language endangerment, language use, attitude and proficiency. These questionnaires were modified in order to meet the necessity requirement of the data.

The data was collected through personal contacts and informal conversation with the subjects on a field visit of six months from January to June 2017. During a field visit, I approached Hajong people with the help of the interpreter who knows the Assamese language very well and has a good

relation with leaders of Hajong community. As most of the Hajong people are bilinguals with Assamese and Hajong I personally could have direct informal conversation with the people about the different aspects of the language. During my field visit I haven't experienced any outsider's feelings from the side of interviewees and they were cooperative most of the time.

In the field visit beside informal conversation I also observed different language situation like the attitude of the people towards the language, domains of language use, language proficiency etc., and collected much information regarding language endangerment issues.

#### 5. HAJONG: A BRIEF LINGUISTIC PROFILE

Hajong is a term used both for language and community. Hajong language is recognized as one of the tribal languages of Assam. Hajong is an undocumented language which is mainly spoken in the Mymensingh District of Bangladesh and in Assam and Meghalaya in India. In Assam Hajong is spoken in the Karbi Anglong and North Cachar Hills. And in the plains districts of Assam Hajong is scattered in Lakhimpur, Chirang, Bongaigaon, Barpeta and Goalpara. The total number of Hajong speakers according to chronological population list of Tribes in Assam as per as 2011 census is 34,253 in plains and in hills 436.

There is a controversy regarding the origin of Hajong. Hajong is classified in the Ethnologue as Indo-European, Indo-Iranian, Indo-Aryan, Eastern zone, Bengali-Assamese (Gordon 2005). But other say it has its Tibeto-Burman roots but slowly shifted to Indo-Aryan due to long contact with Indo-Aryan languages. Colonel Dalton observes, "The Rahha and Hajongs of Gawalparah district are branches of the Kachari race and connected with the Garos."! According to Grierson, Hajong tribe is a Tibeto-Burman clan settled in the districts of Mymensingh and Sylhet, principally in the country at the foot of the Garo hills.

#### 6. RESULTS AND DISCUSSION ON ESTIMATED DEGREE OF ENDANGERMENT IN HAJONG

In the UNESCO's Language Vitality and Endangerment Framework, there are six major evaluative factors of language vitality and these

factors helps to find out the nature and degree of language endangerment. Let us discuss the nature and degree of language endangerment in Hajong.

### 6.1 INTERGENERATIONAL LANGUAGE TRANSMISSION

The most common factor to evaluate language endangerment is to see whether or not it is being transmitted from one generation to the next (Fishman, 1991). In order to determine the level of endangerment, UNESCO establishes six degrees of endangerment: a. safe b. unsafe c. definite endangered d. severely endangered e. critically endangered f. extinct. Following UNESCO (2003), the degree of Hajong endangerment may be classified as belonging to the second level i.e., *unsafe*. Most children speak their parental language, but it is restricted only to the limited domain i.e., in the home domain where children interact with their parents and grandparents. Even though most children speak their parental language in their home domain but it is reported that “pure” form of Hajong is gradually losing its ground, as Hajong children are educating in Assamese generation after generation. Unfortunately, that in younger generation, the pure form of Hajong is being replaced by a mixed Hajong. However in some areas the older generation still speaks the pure Hajong. Being multilingual and oral in tradition to retain a pure language for long is not possible.

Table 5: Response percentages: Language proficiency in Hajong and Assamese

No.	Language Skills	Yes %	No %	Total
1	Can you understand a conversation in Hajong?	45	5	50
2	Can you engage in a conversation in Hajong?	45	5	50
3	Can you read Hajong?	30	20	50
4	Can you write Hajong?	30	20	50
5	Can you understand Assamese?	50	0	50
6	Can you read Assamese?	38	12	50
7	Can you write Assamese?	38	12	50

To have the clear picture of language proficiency Table 5 represents the ‘Can’ questions that give the respondents language proficiency in both languages: Hajong and Assamese.

The outcome of the findings shows that the language proficiency in Hajong gradually is decreasing with each generation while 50% of the respondents can understand and speak in Assamese but only 45% of the respondents can understand Hajong.

### 6.2 ABSOLUTE NUMBER OF SPEAKERS

UNESCO defined that a small speech community is always at risk and it is easy to merge to the dominant community leaving their own language and culture and it is true in most of the cases. In the case of Hajong the total number of speakers according to chronological population list of Tribes in Assam as per as 2011 census is 34,253 in plains and in hills 436. Hajong is not free from endangerment as per as the population they have at present and it can be predicted that in near future the language will shift to some dominant languages due to heavily influenced by from dominant language like Assamese, as a result pure form of Hajong is being replaced by mixed Hajong.

### 6.3 PROPORTION OF SPEAKERS WITHIN THE TOTAL POPULATION

A significant indicator of language vitality is the number of speakers of the ancestral language in relation to the total population of an ethnolinguistic group. In Assam, Hajong total population is very less 34,253 in plains and 436 in hills as compared to the Assamese and other Tribal’s population. Even though they have less population most of the speakers especially living in the village area are conscious about the value of their language and try to preserve the language with much effort. Language loss is associated with reducing proportions of the population using the language. But in case of Hajong proportion of the community continue to use it. Based on the following scale the degree of endangerment for Hajong is *Unsafe i.e., nearly all speak the language*.

#### 6.4 SHIFTS IN DOMAINS OF LANGUAGE USE

Children speak Hajong at home and with friends of same community but with neighbors and at schools in Assamese. Table 6 demonstrates that 40% to 50% of Hajong people used Assamese most frequently while counting, bargaining, discussion. 40% of Hajong people used Hajong while singing, storytelling, praying, abusing and dreaming. Therefore, we can say that Hajong language finds its usage in *dwindling domains*.

Table 6: Response percentage in language used most frequently (in %)

What language do you used most frequently in	Hajong	Assamese	Total %
Counting	0	50	50
Singing	10	40	50
Joking	30	20	50
Bargaining/shopping /marketing	0	50	50
Story telling	40	10	50
Discussion	10	40	50
Praying	30	20	50
Talking to household helpers	40	10	50
Abusing	40	10	50
Dreaming	40	10	50

#### 6.5 RESPONSE TO NEW DOMAINS AND MEDIA

In order to expand the scope and the power of language it is necessary to access to new domains and media. To remain adamant without facing the challenges of modernity is a sign of moving towards endangerment. Hajong language is not used in any new domains and media. It is restricted only to a private and social conversation within the same community members. It is neither the official language nor a language of administration and power. Taking this factor into consideration, Hajong degree of endangerment can be categorized as *inactive*.

#### 6.6 MATERIALS FOR LANGUAGE EDUCATION AND LITERACY

*Education in the language is essential for language vitality... literacy is directly linked with social and economic development. Needed are books and materials on all topics for various ages and language abilities* (UNESCO 2003). Hajong language has a strong oral tradition but lacks

healthy written materials. They do not have indigenous script, therefore, have adopted Assamese script for writing their language. Some scattered written literature exist but not sufficient enough to save language. The language is not used as a medium of instruction nor a part of school curriculum. In school children are learning either in Assamese or in English medium. Therefore, “pure” form of Hajong is getting replaced by “mixed” Hajong due to different medium of instruction children are learning generation after generation. To retain “pure” Hajong for long in near future is not possible. Therefore the grade for accessibility of written materials in Hajong is 2 i.e., *written materials exist, but they may only be useful for some members of the community; and for others, they may have a symbolic significance. Literacy education in the language is not a part of the school curriculum.*

#### 6.7 GOVERNMENTAL AND INSTITUTIONAL LANGUAGE ATTITUDES AND POLICIES

With regards to the governmental and institutional language attitude and policies the degree of support Hajong received is not satisfactory. It is being protected as a private domain and gets Differentiated support (4): *Non-dominant languages are explicitly protected by the government, but there are clear differences in the contexts in which the dominant/official language(s) and non-dominant (protected) language(s) are used. The government encourages ethno linguistic groups to maintain and use their languages, most often in private domains (as the home language), rather than in public domains (e.g. in schools). Some of the domains of non-dominant language use enjoy high prestige (e.g. at ceremonial occasions).*

#### 6.8 COMMUNITY MEMBERS’ ATTITUDES TOWARDS THEIR OWN LANGUAGE.

30% of the Hajong speakers have a positive attitude towards their language. They feel it is rich, precise, prestigious, pure and powerful against other tongues irrespective of being less prestigious language in the eyes of the dominant languages. But majority of Hajong people doesn’t consider their language is useful in jobs, business, social mobility, medium of instruction and in science and technology. Even though community

members attitude towards their language is positive and has great support for language maintenance still 20% of the Hajong informants expressed that they feel embarrassed to speak in their mother tongue in the presence of the speakers of the dominant language. The reason behind is the feeling of inferiority complex in front of the dominant languages and lack of exposure, value and opportunities that their language is carrying. They feel their language is not used in education, administration, trade and commerce etc., therefore they are bound to learn dominant languages for day- to-day activities. Due to the lack of institutional support children are educating either in Assamese or English medium schools for the sake of better opportunities in jobs therefore “pure” Hajong is at risk of being replaced by “mixed” Hajong. It is noticed that the community members have mixed feeling towards their language due to the lack of reliable environment to use their mother tongue. Being concerned about their language maintenance they want to preserve and promote their language by encouraging people to write literature in mother tongue.

#### 6.9 TYPE AND QUALITY OF DOCUMENTATION

If we assess properly the type and quality of Hajong documentation it is found that Hajong is still in the stage of undocumented language. Unlike many other documented languages Hajong does not have healthy written literature, grammar, texts, dictionaries, and everyday media but with only phonological description and few papers here and there. Unfortunately, no scholar or linguist come up till date to document the language properly. However, they have a rich oral literature in the form of folk songs, folk- dances, folk tales, craft etc. And this unwritten literature has been transmitted orally from one generation to another which is not a good sign to last longer for a few more decades. Therefore Hajong needs a serious attention in the preservation and revitalization of the language with proper documentation before it aggravates more in the level of critically endangerment.

#### 7. CONCLUSION

In this paper, we attempted to examine the nature of language endangerment in Hajong in the light

of UNESCO’s Language Vitality and Endangerment framework which establishes six degrees of vitality based on nine factors. Based on the above observation it is found that Hajong is an unexplored and undocumented language which falls under the category of *Unsafe Language*. As a result Hajong language is not safe from extinction in near future. If low transmission occur due to influenced of the dominant language it will definitely lead to language shift towards dominant language. The results of the study show that Hajong is not free from endangerment. It is seen that language is unsafe, yet to be codified and lack written materials from the linguistic aspect. Due to lack of proper codification and literature and some other socio-economic and political reasons this language is in a state of endangerment. The other reasons behind the degree of language endangerment are the some negative attitude of the people towards their language, dwindling domains, less population, lack of governmental support, lack of materials for language education and literacy etc. Due to long term contact with the mainstream language group most of the lexical items and relating to indigenous word list of number, colour, flora and fauna, games, cultural artifacts etc is unknown to the present generation. Therefore it is in need of extensive research in the area of documentation for Hajong language. Based on the observation given above, the degree of language endangerment in Hajong may be summed up in the following chart:

Table 7: Language Vitality Assessment in Hajong

Factor	Hajong
Intergenerational Language Transmission	4 unsafe
Absolute Number of Speaker	34,689
Proportion of the Speakers within the Total Population	4 unsafe
Shifts in the Domains of Language Use	3 dwindling domains
Response to New Domains and Media	0 inactive
Materials for Language Education and Literacy	2 written materials exist but they may be useful only for

	some members of the community; for others, they may have a symbolic significance. Literacy education in the language is not a part of the school curriculum.
--	--------------------------------------------------------------------------------------------------------------------------------------------------------------

Table 8: Language Attitude Assessment in Hajong

Factor	Hajong
Governmental and Institutional Language Attitudes and Policies including Official Status and Use	4 Differentiated Support

Table 9: Documentation Urgency Assessment in Hajong

Factor	Hajong
Community Members' Attitudes toward Their Own Languages	4 Most members support language maintenance
Amount and Quality of Language Documentation	0 No material exists.

## REFERENCES

- Al-Khatib, Mahmoud. A. & Al-Ali, Mahammed. N. 2005. Language and cultural maintenance among the Gypsies of Jordan. *Journal of Multilingual and Multicultural Development* 26 (3): 187–215.
- Austin, Peter K. (ed.). 2002 & 2004. *Language Documentation and Description*. The Hans Rausing Endangered Languages Project, SOAS, London. (Vols. 1 and 2).
- Dweik, Bader S. 2000. Linguistic and cultural maintenance among the Chechens of Jordan. *Language, Culture and Curriculum* 13 (2): 184–195.
- Fishman, Joshua A. 1964. Language maintenance and language shift as fields of inquiry. *Linguistics*, 9, 32 – 70.
- Grierson, George. A. 1903-28. Linguistic survey of India. Repr. Delhi 1967. Calcutta, Motilal Banarsidass.
- Grenoble, Lenore A. and Lindsay Whaley (eds.). 1998. *Endangered Languages: Language Loss*

- and Community Response*. Cambridge: Cambridge University Press.
- Grenoble, Lenore A. and Lindsay J. Whaley. 2006. *Saving Languages. An Introduction to Language Revitalization*. Cambridge: Cambridge University Press.
- Hajong, Biren. 2002. *The Hajongs and their struggle*. Assam: Janata Press.
- Hale, Ken. 1992. Language endangerment and the human value of linguistic diversity. *Language* 68.35-42.
- Hale, Ken, et al. 1992. Endangered Languages. *Language* 68. 1-42. 63
- Krauss, Michael. 1992. The world's languages in crisis. *Language* 68.4-10.
- Himmelman, Nikolaus P. 1998. *Documentary and descriptive linguistics*. Berlin: de Gruyter.
- UNESCO. 2003. *Language Vitality and Endangerment*. UNESCO. Access method <http://unesco.unesco.org/images/0018/001836/183699E.pdf>

CONTRIBUTOR'S EMAIL:

&lt;narzary.albi@gmail.com&gt;

# MASS NOUN CLASSIFIERS IN NEPALI

MADHAV P. POKHAREL

*Nepali stands out among the classifier languages of the world, because it is the only language to our knowledge, which uses extensive number of mass noun classifiers. Numeral classifiers of other classifier languages typically supply classifiers only for the count nouns which have a definite boundary, but Nepali has conceptually bounded units as mass noun classifiers, abstract noun classifiers, verbal (action and state) classifiers, classifiers for pieces, and classifiers for counting naturally bounded units.*

Keywords: classifier, Nepali, mass noun

## 1. INTRODUCTION

Among the classifier languages of the world, Nepali stands out for using mass noun classifiers in addition to count noun classifiers which are commonly found in all the classifier languages. In a typical classifier language like Burmese (Latter 1845; Bur 1965; Pe 1965; Becker 1975) Thai (Haas 1942), Chinese (Schafer 1948) (T'sou 1965), Vietnamese (Nguyen 1957), Khmer (Jacob 1965), Sino-Tibetan (Hashimoto 1977) and Japanese (Matsumoto 1985), there are classifiers to count bounded objects, but in Nepali although there are classifiers to count bounded round and unround objects like man, mammal, insect, similar to other noted classifier languages, there are many mass noun classifiers in addition to these count noun classifiers and the number of those mass noun classifiers exceed the number of count noun classifiers.

## 2. CLASSIFIER

According to Pe (1965), the word 'classifier' was coined by Latter (1845). 'Classifier' is an extra free or bound (typically obligatory) morpheme that co-occurs with a noun in a noun phrase and it states the semantic features of the noun it co-occurs with. Malinowski (1929) supplies six criteria for defining 'classificatory particles' [classifiers]:

- a. Is the numerical classification comprehensive or not?
- b. Must the numerals be used obligatorily with classifiers?
- c. What are the rules of sporadic use?
- d. Does the classification embrace all nouns or only a few isolated groups?
- e. How many classifying formatives do there exist?
- f. Are the examples exhaustive or nearly so, or only a small fraction of the full list?

There are more than 500 classifiers in the data. Almost all the count nouns in the noun phrase obligatorily take a classifier while counting it. Mass nouns typically fall outside this counting (Greenberg 1972). However, mass noun classifier is a device in Nepali to supply units to count culturally functional natural sections of mass nouns.

In addition to making a classificatory device for counting culturally relevant sections of mass nouns, there are classifiers for the conceptually bounded units of abstract nouns and verbal nouns denoting actions and states in the data. However, abstract noun classifiers, and action and state verbal noun classifiers (including the most typical count noun classifiers) fall outside the focus of this paper.

According to Greenberg (1974), the classifier morpheme disappears when someone tries to translate a text from a classifier language like Nepali or Japanese to a non-classifier language like English.

- |                         |                      |
|-------------------------|----------------------|
| (1) a. Nepali:          | b. Japanese:         |
| <i>ek koso kera</i>     | <i>banana ip-pon</i> |
| one-CL.long.object-kera | banana-one-          |
| 'a banana'              | CL.long.object       |
|                         | 'a banana'           |

The examples show that the classifiers for long object <koso> in Nepali and <hon> in Japanese are lost when the noun phrase is translated into English from each of the languages.



This stance presumes that classifiers do not supply any meaning to the noun it qualifies, but T'sou (1965) and Becker (1975) differ from Greenberg (1974). Our data also support T'sou and Becker (Kay 1971).

### 3. NUMERAL CLASSIFIER AS A SUBTYPE OF CLASSIFIERS

There are six types of classifiers found in the languages of the world (Aikhenvald 2000; Grinevald 2000). They are: gender or noun class, numeral classifier, noun classifiers, verb classifiers, genitive or possessive classifiers, and locative or deictic classifiers.

### 4. TYPES OF CLASSIFIER IN NEPALI

Nepali has three types of classifier, viz. gender or noun class, verb classifiers and numeral classifiers. Mass noun classifier is a subtype of numeral classifiers in Nepali.

### 5. QUANTIFIERS VS. MASS NOUN CLASSIFIERS

Every language has a set of words called quantifiers. They are also called measure words. A numeral classifier typically occupies the syntactic slot chosen by a quantifier like kilo, meter, liter, etc; therefore a quantifier may be confused to be a classifier. Care must be taken that a quantifier may not be counted in the list of classifiers.

A measure word or a quantifier does not qualify the inherent property of the noun with which a quantifier collocates, e.g.

- (2) a. *ek kilo pani* 'a kilo of water'  
 b. *ek kilo phalam* 'a kilo of iron'  
 c. *ek kilo kera* 'a kilo of banana'

But a classifier (in our case a typical mass noun classifier) classifies the inherent semantic properties of the noun it qualifies and collocates with:

- (3) a. *ek thopo pani*  
 'a drop of water'  
 (while the drop is hanging at the source)  
 b. *ek thoplo pani*  
 'a drop of water'  
 (after the drop drops on a plane surface)

- c. *ek t<sup>sh</sup>ito pani*  
 'a drop of water' (when the drop is slanted upwards or downwards)  
 d. *ek t<sup>sh</sup>irko pani*  
 'a drop of water' (when the drop falls on a surface being split up and sprinkled into a cluster of droplets)  
 e. *ek t<sup>ap</sup>kjanipani*  
 'a drop of water' (when one of the several drops of water periodically falls inside the house leaking through the roof)  
 f. *ek bat<sup>sh</sup>ito pani*  
 'a drop of water' (slanted and strayed raindrop)

Each of the classifiers in the examples means 'a drop', however, each of the drops define different orientations of the drop. The classifier <t<sup>h</sup>opo> is used when the drop is hanging; <t<sup>h</sup>oplo> is used when the drop falls on the surface; <t<sup>sh</sup>ito> is used when the projectile of the drop of is slanted (both upwards and downwards); <t<sup>sh</sup>irko> is a sprinkled cluster of drops; <t<sup>ap</sup>kjani> is every drop of water periodically leaking through the roof or ceiling and <bat<sup>sh</sup>ito> is the raindrop slanted downwards. Each of them occupies a typical classifier slot. We claim that each of the drops in the examples is a classifier not a quantifier.

T'sou (1965, 1973, 1976) has supplied two semantic features [ENTITY] and [EXACTNESS] to define classifiers. According to him, quantifiers are [-ENTITY, +EXACT]; abstract nouns are [-ENTITY, -EXACT]; classifiers like Chinese <zhi> 'chicken' are [+ENTITY, +EXACT] and group classifiers like '(a) school (of fish)' are [+ENTITY, -EXACT]. Following T'sou, Nepali mass noun classifiers fall under the fourth group.

### 6. MODEL OF ANALYSIS

We have followed here the model and methodology of analyzing classifier semantics adopted by Berlin (1964, 1968) and Berlin & Breedlove(1973), but the method of classificatory

device is somewhat influenced by Simpson (1945) and (Kay 1971).

#### 7. DESCRIPTION OF MASS NOUN CLASSIFIERS

Following is the classified list of mass noun classifiers in Nepali. Each of the classifiers occupies the syntactic slot typically occupied by a classifier/quantifier. Besides, each of such mass noun classifiers classifies the fine grained properties of the noun it qualifies.

##### (4) Granules/ powder/ flour

- a. mʌsko [Ashes or sand etc. for rubbing the pots clean]
- b. d̥jikko [a big crystal of salt]
- c. tʌmɪt-i [A pinch of salt ‘(literally) forceps’ (metaphorical)]

##### (5) Semisolid

- a. tʌoili [Characteristic test against both solid & liquid: (prototype <ɓat> ‘rice’/ <nʌuni> ‘butter’/ <matɔ> ‘mud’)]
- b. tʌoilo-tʌoilo-i [Edge prominent slice or chop]
- c. tʌʌpɪɪ [Small thickness, bigger chop of unmarked thickness]
- d. d̥ʌllo [unmarked for edge small lump]
- e. ɓʌkkano [Bigger lump]
- f. d̥jisko [still bigger and harder mass of clay]
- g. mʌd̥keno [Particular place where people go to dig typically red color mud to paint their house wall, mud floor and inside and outside of the door]
- h. tʰas [Stool of buffalo]
- i. tʰapro [Stool of cow]
- j. lidi/ liɖ [Stool of pig, cat, tiger, mouse (semi cylindrical shape)]
- k. ɓʌd̥kaũlo [Stool of goat]

- (6) Emulsion, suspension and paste [Characteristic test against semisolid and liquid: <ɪtko>] <pitko> (vs.<turko> for

liquid) ‘smallest natural drop/ mass/ quantity’

- a. Edge prominent <d̥jikko> (feels solid)(e.g. <dʌhi> ‘yoghurt’; <kʰʌkar> ‘phlegm’)
  - b. Dispersed and without edge <ɪtko> (does not feel like solid) (<siɳan> ‘nasal mucous’, <dʌhi> ‘yoghurt’, <ʌtsar> ‘pickle’)
  - c. Length prominent and smaller than referred to by <ɪtko> (e.g. toothpaste) <litko>
  - d. Quantity of ghee that can be scooped up with an index finger hook <ʌũlo> ‘finger’
  - e. Not dispersed smallest natural mass (without edge) (usually collocates with food items) <pitko>
  - f. Solidified chunks of blood <pʰalso>
  - g. Chunks of solid particles separated/ not separated from liquid (related to food or drink) <tsʰokro> (maybe etymologically related with <tsoktɔ> ‘piece of meat or forcibly torn piece of cloth)
- (7) Liquid [Characteristic test against emulsion: <turko>] <pani>, <duɖ>, <tel>: <turk-o>/ <turk-i> vs. <pitko>
- a. Static (source & container classifiers) <kʰolo> ‘stream’, <kulo> ‘canal’, <ɓʌŋgalo> ‘estuary’, <dʌhʌ> ‘lake’, <d̥ɔbilko>/ <kʰobilɔ> ‘pit’, <mul> ‘source’
  - b. Quantity of water occupied in two palms joining together <ʌdzuli>
  - c. Dynamic (direction: upward, downward, horizontal, slanted)  
Direction:  
Upward <ɓulko> ‘boil’  
Downward  
Drop  
Divergent single <tsʰit-o> ‘sprinkle’(?)

Sprinkled drops (multiple) drops or spots made by them <ts<sup>h</sup>irko> (etymology \*<ts<sup>h</sup>iṭ-k-o>→<ts<sup>h</sup>ir-k-o>) (<k> ‘bounded instantiation of an action or event)

Convergent

Hanging on the source <t<sup>h</sup>opo>

Fallen on some object <t<sup>h</sup>oplo>

Rain shower

Big shower <dʌrko>

One shower (normal) <ɖʌr>

Tap/ line of liquid while pouring <ɖaro>

With force

Sudden surge

Usually dirty water/ smoke <muslo> ‘(literally) pole of flour mill for crushing grains’ (metaphorical)

Usually clean water <mulko>

Linear single spray of liquid <sirko>

d. Number of times a cow or a buffalo gives milk <sāɖz> ‘evening’

e. Quantity of oil needed for one time curry <ɖuɖun>

(8) Gas

a. Eye sensitive

Pungent smoke around felt in the eyes <ɖatyol>

Smoke <kūɖullo> ‘(literally) coil’

Smoke/ dust/ muddy water (with force) <muslo> ‘(literally) pole of flour mill for crushing grains’ (metaphorical)

b. Nose sensitive (smell) <hʌrʌk>

c. Ear sensitive

Whistling in the wind <susel-o> vs. <susel-i> ‘whistling’ (metaphorical)

Sound of wind/ hurricane <huīko>

d. Skin sensitive

Cold <sireto>,

Heat <āts>

(9) Fire

a. Spark <ɖzilko>

b. Glow <pilko>,

c. Burning fire particle <p<sup>h</sup>ilungo>

d. Flame <dzwalo>

e. Biggest flame <dʌnko>

f. Burning coal <koilo>

g. Torch made of braided cloth <pult<sup>h</sup>o>,

h. Tongs <tsimṭa>

i. Torch made on the stick <rāko>,

j. Collection of burning coals <ɖuɖro>,

k. Burning fire stick on one side <ʌgullto>,

l. Hearth <ʌgeno>,

m. Bonfire <ɖuni>

(10) Light

a. (i) Sunlight and (ii) dress measured in terms of human body <aŋ> ‘body’

b. Glow from a smallest light source <pilko>,

c. Sunrise/ moonrise <ɖzulko>,

d. Spark <ɖzilko> [cf. <ɖzʌlko> (for seeing) & <ɖzʌɖzʌlko> (for memory)]

## 8. CONCLUSIONS

These examples are sufficient to claim that there are mass noun classifiers and that the mass noun classifier is a separate class and category to be explored in other languages and Universal Grammar.

## ACKNOWLEDGMENTS

This paper is a part of the research entitled ‘Cognitive similarities in the conceptualization of classifiers in Nepali and Japanese’ (2009-10) that was conducted in Kobe University Japan under the Japan Foundation fellowship.

## REFERENCES

- Aikhenvald, A. Y. 2000. *Classifiers: A typology of noun categorization devices*. New York: Oxford University Press.
- Becker, A. L. 1975. A linguistic image of nature: The Burmese numerative classifier system. *Linguistics*, 165, pp. 109–121.
- Berlin, B. 1964. Descriptive semantics of Tzeltal numeral classifiers. *American anthropologist, new series*, 66.3 (2), 79-98.

- Berlin, B. 1968. Tzeltal numeral classifiers. A study in ethnographic semantics. *Janua linguarum, Series 70*.
- Berlin, B., & Breedlove, D. E. 1973. General principles of classification and nomenclature in folk biology. *American anthropologist*, 214-242.
- Burling, R. 1965. How to choose a Burmese numeral classifiers. In M. E. Spiro (ed.), *Context and meaning in cultural anthropology* (pp. 243-264). New York: The Free Press.
- Greenberg, J. A. 1972. Numeral classifiers and substantival number: problems in the genesis of a linguistic type. *Working papers on language universals*, 9, 1-39.
- Greenberg, J. A. 1974. Studies in numeral systems I: Double numeral systems. *Working papers on language universals*, 14, 75-89.
- Grinevald, C. 2000. A morphosyntactic typology of classifiers. In G. Senft (ed.). New York: Cambridge University Press.
- Haas, M. R. 1942. The use of numeral classifiers in Thai. *Language*, 18 (3), 201-205.
- Hashimoto, M. J. 1977. The genealogy and the role of the classifier in Sino-Tibetan. *Computational analysis of Asian and African languages*, 7, pp. 69-78.
- Jacob, J. M. 1965. Notes on the numerical and numeral coefficients in Old, Middle and Modern Khmer. *Lingua*, 15, pp. 143-162.
- Kay, P. 1971. Taxonomy and semantic contrast. *Language*, 47 (1), 866-887.
- Latter, T. 1845. *A grammar of the language of Burmah*. Calcutta: Thacker.
- Malinowski, B. 1929. Classificatory particles in the language of Kiriwina. *Bulletin of the School of Oriental Studies*, 1 (4), 33-78.
- Matsumoto, Y. 1985. *Japanese numeral classifiers: their structures and acquisition*. MA dissertation, Sophia University, Tokyo.
- Nguyen, D. H. 1957. Classifiers in Vietnamese. *Word*, 13, 124-152.
- Pe, H. 1965. A re-examination of Burmese 'classifiers'. *Lingua*, 15, 163-185.
- Schafer, E. J. 1948. Noun classifiers in Classical Chinese. *Language*, 24 (3), 408-413.
- Simpson, G. G. 1945. The principles of classification and a classification of mammals. *Bulletin of the American Museum of Natural History*, 85, i-xvi, 1-350.
- T'sou, B. K. 1965. The place of classifiers in a generative grammar of Chinese. *Quarterly progress report, MIT: Research laboratory of electronics*, 78, pp. 221-226.
- T'sou, B. K. 1973. The structure of nominal classifier systems.
- T'sou, B. K. 1976. The structure of numeral classifier systems. L. P. Jenner (eds.) *Oceanic linguistics, Special publications 13* (2), 1215-47.

CONTRIBUTOR'S EMAIL:

<madappokhrel@gmail.com>

# FUNCTIONS OF LANGUAGE: A HISTORICAL OVERVIEW AND THE NEPALESE CONTEXT

KAMAL KUMAR POUDEL

*Instigated by Malinowski in 1923, the theoretical study of language functions reached its culmination in the 1970s, and has been a significant component of sociolinguistic studies and language pedagogy. This paper is an attempt to review the major models of language functions and their pedagogic implications in the Nepalese context.*

**Keywords:** language function, linguistic functionalism, appropriacy, communicative language teaching (CLT), implication

## 1. THEORETICAL BACKGROUND

This section conceptualizes linguistic functionalism as a theory on which this article builds and then defines language functions.

### 1.1 LINGUISTIC FUNCTIONALISM LANGUAGE FUNCTIONS

Linguistic functionalism can best be understood in a contrastive relationship to linguistic structuralism (also called 'formalism'), "the view that the formal structures of language are independent of the way language is used" (Thompson 1992, as mentioned in Hudson, 1996: 123). Following the structuralists' view, language is a complex, structured system organized in a hierarchical order in which a smaller unit constitutes a larger unit, so meaning is inherited in such forms of language as the morpheme, the phrase, the clause and the sentence. This school of linguistic thought emphasizes the study of formal (grammatical) accuracy of language.

In contrast, linguistic functionalism, views that the meaningful use of language rests on the context in which language is used. Following linguistic functionalism, being able to use a language not only is a matter of gaining mastery over grammatical competence, that is, the knowledge of the grammatical system of the language but also to simultaneously acquire communicative competence—"our ability to use language appropriately in different situations" (Finch 2003: 230). According to this view, what is formally correct may not necessarily be

appropriate in the immediate situation. Using language effectively includes a number of aspects other than simply accuracy or the correct use of grammar and pronunciation. Another important aspect, namely appropriacy, focuses on the use of language as it is used in the actual communicative setting in which the speaker/writer is expressing him/herself. Thus, Jones (2010: 1) states that "it [the language being used] must be appropriate to the situation you are in"

Almost every activity we carry out has a purpose. At its very macro level, the purpose of using language is for communication. However, at its micro level, language utterances manifest themselves as categories of verbal acts such as a request, permission, an offer, an order and so on. Such purposes for which language is used are termed as language functions. This often repeated definition, however, has a serious problem, particularly in employing the term 'utterances' because it tends to limit language functions to speech, exclusive of the written mode of language, which itself is a 'recording function'. To the researcher's conviction, a more inclusive definition would be, "what we use language for" (Finch 2003: 21).

## 2. VIEWS AND PRACTICES: A BRIEF REVIEW

A thorough search of the literature of linguistic functionalism made the researcher realize that, for clarity, it is best to organize the review under these three specific headings: theoretical inception and the development of the models, pedagogic orientation and revival/expansion of the theory.

### 2.1 THEORETICAL INCEPTION AND DEVELOPMENT OF THE MODELS

Linguistic functionalism has a long historical-theoretical tradition heavily influenced by socio-anthropological studies which regarded language as a tool for social interaction and cultural transmission. In 1923 anthropologist Malinowski for the first time coined the term 'phatic communion' to refer to a function of language which is used for maintaining rapport between people. Thus, after this function, language is a

device to signal friendship, or at least, lack of enmity.

As Firth (1973: 16) stated, Malinowski (1923) also coined the phrase 'context of situation' to refer to these categories: (i) the relevant features of participants (verbal and non-verbal actions of the participants) (ii) the relevant objects, and (iii) the effect of the verbal action. In the same year, Ogden and Richards (as cited in Smith, 1984: 288) recognized an "instinctive attitude to words as natural containers of power" for human beings—both children and adults.

The concept of language functions seems to have extended when Vygotsky (1896-1934) argued for a concept of 'inner speech', a mental use of words to evoke a sequence of thoughts.

Firth (1973) considered language as a force of individuals' social personality development. His view was that speech or language connects a person as a member of his/her society and his/her family, neighbourhood, class, occupation, country and religion.

Austin's series of lectures on "speech acts" (published by Oxford University Press in 1962) indeed created a strong theoretical basis for linguistic functionalism and a useful model for the works in the field thereafter. Austin's (1973: 47) theory of speech acts views a language utterance as an act, or "a course of action".

Austin (1973), recognized five 'more general classes' of speech acts which may overlap with each other: verdictives ('an exercise of judgment'), exercitives ('an assertion of influence or exercising of power'), commissives ('an assuming of an obligation or declaring of an intention'), behavitives ('the adopting of an attitude'), and expositives ('the clarifying of reasons, arguments, and communications'). Importantly, Austin provided some future directions for further studies in functionalism, particularly the multiplicity of form-function relations through three clues ('overlapping', or 'their relationships' and 'inter-connections'). Thus, he indicated towards the possibility of exploring novel and fresh functions through research.

It was also in the late 1960s that Abercrombie emphasized the role of 'paralinguistic

communication' (non-verbal communication) as he claimed, "We speak with our vocal organs, but we converse with our entire bodies" (1973: 31), thus, suggested that conversation integrates verbal linguistic symbols with non-linguistic features (both visible and audible) such as body moments or postures and gestures, eye contacts, proximity, 'tones of voice' or 'voice dynamics' such as loudness, tempo, register, tessitura, and also 'talking through' sobs, yawning, laughter etc. These features are very significant contextual influences in the study of the functional use of oral language.

Perhaps, for the first time, Jakobson (1973:53) provided a very clear taxonomy of six basic language functions, each linked with "the constitutive factors in any speech event, in any act of verbal communication". His taxonomy is schematized in a slightly modified form in Figure 1.

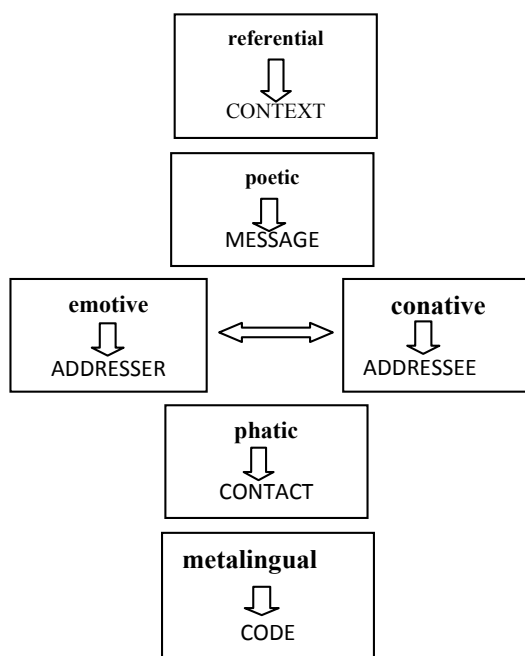


Figure 1: Jakobson's 'scheme of the functions' of language (modified) (Note that the upper case letters denote the object of focus and the lower case ones denote functions)

Building somehow on Jakobson's scheme, Criper and Widdowson (1974: 195-200) identified seven types of 'speech functions' determined by the constituent factors in the 'speech event'-addresser, addressee, message form, channel, setting, topic and code. They proposed that:

- a. The referential function is realized by an utterance which focuses on the topic, whose principal purpose is to present a proposition of one kind or another e.g. 'Albert is leaving'.
- b. The expressive (or emotive) function is one which mostly focuses on the addresser and is mo an expression of his personal attitudes and feelings e. g. 'I wish God he would go!'
- c. The directive (or conative) function is one whose purpose is principally to direct the addressee to do something, e.g. 'Clear off!'
- d. The phatic (or contact) function denotes that language is used to open up or maintain a channel of communication- a psychological link between the addresser and addressee, which ensures that messages are not only being received but also being processed, e.g. 'Hello' (over the telephone).
- e. The contextual function suggests that an utterance may focus on the setting, e. g. 'Well, this is the forest of Arden' (on the Elizabethan stage).
- f. The metalinguistic function indicates that the principal purpose of certain utterances is to ensure that the addressee understands the meaning of the code the addresser is using, e. g. 'X means Y' or 'X is defined as Y'.
- g. The poetic function evinces that in speech the message form itself is the focus of attention, e. g. 'Peter Piper picked a peck of pepper'.

Another personality who has continually been involved in the functional studies of language - both theoretical (view-based) and empirical (data-based) - right from the inception of linguistic functionalism is Michael Halliday. Building on his structural-functional view, Halliday developed a grammar called systemic functional grammar, which assumes that the system (forms or structure) exists in order to express language functions. Systemic functional grammar regards forms as the means to the end that is functions. He connected the functional study of language to both pedagogy and andragogy. As Keenan (1975: 248),

argued, "Halliday maintains that language develops in response to the child's personal and social needs." According to her, these needs are: instrumental (to satisfy some material need), regulatory (to regulate the behavior of others, interactional (to maintain and transform social relationships), personal (to express individual identity and personality), heuristic (to investigate the speaker's environment), imaginative (as used in fantasy and play), and representational (to express propositions).

Halliday also maintained that one important child-adult linguistic transition can be marked by the functional uses of language. According to him, child utterances have mono-functional interpretations whereas adult language reveals the multiplicity of functions. As he maintained, child language is explicable in terms of seven 'specific functions' (mentioned above) whereas, adult language is limited to three 'meta-functions' (Webster 2009:249): ideational (to encode experience), interpersonal (to express social and political relations), and textual (to tie information to linguistic and non-linguistic context).

Thus, it can be argued that it was Halliday who first opened a clear door to the forum of the pedagogic tradition for functional language teaching.

## 2.2 PEDAGOGIC ORIENTATION

The influential advent of linguistic functionalism also resulted into the emergence of communicative language teaching (CLT), an alternative to the structural-situational and audio-lingual methods, when Hymes (1972) talked "on communicative competence", a notion that suggested towards a need for CLT. In fact, CLT is a broad approach that focuses on "communication as the organizing principle for teaching rather than a focus on the mastery of the grammatical system of language" (Richards 2010: 36). CLT fully found its global space since the latter half of the 1970s and continued as a mainstream roadmap of language teaching methodology, syllabuses and materials during the 1980s and 1990s. However, it seems that, CLT is still far from the recognition of the Nepalese tradition and mindset of language teaching designs and methodology (See section 3). CLT, unlike the then-popular audio-lingual

and structural-situational approaches, focuses highly on communication as the prime principle of teaching and the development of communicative competence in the learner. Then efforts geared towards establishing the theory and principles of CLT, and the syllabuses, methodology and materials needed for teaching communicative competence. The major efforts towards achieving these ends are summarized in the forthcoming text.

The paradigm shift in language pedagogy (i. e. from the accuracy aspect to the appropriacy aspect), was substantially supported by the revolutionary decision taken by the Council of Europe in 1969 stating that "... the language barriers between them [the member countries] must be removed" (Richards 2010: 26). Accordingly, a "Threshold Level English" (the lowest level of foreign language ability to be recognized in the unit-credit system) based on the European unit/credit system for modern language learning for adults was prepared for the Council of Europe by van Ek (1975). This course, perhaps for the first time, addressed the shift from grammar as a core component of language to the contextual use of language by speakers in various contexts of communication. In fact, it marked a shift from grammatical competence to communicative competence as the main goal of teaching and learning English. The "Threshold Level English", according to van Ek (1975: vii), "has afforded a basis for the detailed and concrete examination of syllabuses in schools, colleges and universities as well as in adult education". The course set up the following categories of language functions needed for verbal communication:

- a. imparting and seeking factual information;
- b. expressing and finding out intellectual attitudes;
- c. expressing and finding out emotional attitudes;
- d. expressing and finding out moral attitudes;
- e. getting things done (suasion); and
- f. socializing.

In addition to the language functions and the 'behavioural' language acts, the "Threshold Level English" distinguished four components of situations that the T-level learners have to be

prepared for: social roles, psychological roles, settings and topics.

Though on some 'subjective' criteria, the course also specified, 'introspection, intuition, experience', the three specific topic-related notions: notions of entities (2), notions of properties and qualities (4), and notions of relations (6).

Indeed, van Ek's work was a consumption-oriented attempt to address the curricular aspect of functional language teaching which largely derived from the previous theoretically-oriented views of language functions.

Similarly, another attempt made towards the technicality of functional language teaching was Wilkins' (1976) work "Notional Syllabuses" which thoroughly revised the then-existing syllabuses of language teaching. According to him, the notional syllabus is one where "we ask what it is that they [speakers] communicate through language. We are then able to organize language teaching in terms of the content rather than the form of the language" (Wilkins 1976: 18). Wilkins viewed that a fully notional syllabus is one which covers both functional and conceptual categories. Among other categories (semantic-grammatical categories and categories of modal meaning), Wilkins identified the 'categories of language functions' as one of the categories for a notional syllabus. He recognized the following 'six kinds of things we do with language', or six types of communicative function, in other words which are:

- a. Judgment and evaluation: a category dealing with assessments and the subsequent expression of those assessments: valuation, verdiction, committal, approval etc.
- b. Suation: categories of utterance designed to affect the behaviour of others, e.g. inducement, compulsion, prediction etc;
- c. Argument: categories relating to the exchange of information and views, and also overlapping with suation and rational enquiry and exposition (given below), e.g. information, agreement, disagreement, concession etc.
- d. Rational enquiry and exposition: a category relating to the rational organization of thought



and speech, e. g. drawing conclusions, making conditions, comparing, defining, explaining reasons and purposes, conjecturing and verifying etc.;

- e. Personal emotions: a category expressing the speaker's emotional reactions to events and people, e.g. positive emotions (pleasure, enjoyment, satisfaction etc.) and negative emotions (shock, dissatisfaction etc.); and
- f. Emotional relations: largely phatic utterances expressing various relationships with the person addressed, e. g. greetings, sympathy, gratitude, flattery, hostility etc.

Similarly, Finocchiaro and Brumfit (1983: 61-62) placed the functional categories under the following headings.

- a. Personal: clarifying or arranging one's ideas; expressing one's thoughts or feelings, e. g. love, joy, pain, anger; everyday feelings of hunger, thirst, fatigue, cold etc.;
- b. Interpersonal: enabling us to establish and maintain desirable social and working relationships: greetings, leave taking etc.;
- c. Directive: attempting to influence the actions of others; accepting or refusing direction, e. g. making requests and suggestions, persuading someone to change his point of view;
- d. Referential: talking or reporting about things, actions, events or people in the environment in the past or future and talking about language. This is often termed as the metalinguistic function, e. g. identifying people in certain settings, asking for a description, contrasting and comparing things; and
- e. Imaginative: discussing a poem, a story, music, a play; creating rhymes, poetry, solving problems or mysteries.

Building on these models several proposals for CLT syllabi. Richards and Rogers (1986: 74) summarized a modified version of Yalden's (1987) classification of communicative syllabus types under these headings: structures plus functions (Wilkins 1976), functional spiral around a structural core (Brumfit 1980), structural, functional, instrumental (Allen 1980), functional (Jupp and Hodlin 1975), notional (Wilkins 1976), interactional (Widdowson 1979), task-based

(Prabhu 1987) and learner generated (Candlin 1981).

Similarly, a considerable number of textbooks and language teaching and learning materials have also been produced to support CLT. Among many, some of such textbook producers are Matriyek (1983), Jones (2010), Blundel, Higgins and Middlemiss (2009), Doff, Jones and Mitchell (1997), and Carter, Hughes and McCarthy (2000).

### 2.3 REVIVAL/EXPANSION OF THE THEORY

It can be observed that linguists have almost continually cast their thoughts and views to the macro functions of language again after the advent of the new millennium. In this sub-section a few of them have been reviewed on the historical basis as a sample.

Among sociolinguists working in the area of language functions there seems to be a tendency of being more 'scientific' and 'practical' about the description and classification of language functions, although they seem to be primarily based on the earlier efforts of the 1960s and 1970s. Robinson (2003), for example, provided a framework of functions with an intention of being subjected to an empirical evaluation. In fact, he elaborated and modified Jakobson's taxonomy and added a few of his own. He presented a framework of eight language functions claiming that they "are more useful than the original six of Jakobson's because they retain his [Jakobson's] logic, but extend the range in psychologically and socially useful ways". He proposed the following model:

- a. Function 1: Encounter regulation (Greetings, turn taking, leave taking) e.g. Hi! How are you? What do you think?
- b. Function 2: Regulation of self (states and behaviour) (Talking to oneself, soliloquizing) e.g. Right, that's enough of that nonsense.
- c. Function 3: Regulation of others (states and behaviour) (Jokes, jibes, commands, requests, threats) e.g. Jump! You must...Unless you...
- d. Function 4a: Regulation of social relationships (phrasal names like 'Keeping the peace',) e. g. My excuse is..., Can't we compromise?

- e. Function 4b: Marking of social relationships e.g. Yes, sir! Sweetie! Let us pray.
- f. Function 5a: Expression of states (involuntary exclaiming) e. g. Darling!
- g. Function 5b: Marking characteristics of emitter (emotional state, personality, social identity) and setting e.g. I, I, I think... I'm scared.
- h. Function 6: Performative utterances (bet, promise etc.) e.g. I promise you I'll...
- i. Function 7: Representation (statements, arguments, reports, memories, ideas, problem-solving, analysis, synthesis) e.g. The cat is on the mat. All gone, daddy.
- j. F7 a: Instruction (teaching)
- k. F7 b: Inquiry (questioning) e.g. What is he...?
- l. Function 8: Meta-language (linguistics, psycholinguistics, sociolinguistics, philosophy, language courses)

(Notably, he fixed three other functions to his list: phatic communion, escapism and avoidance, and conformity to norms.)

Crystal (2007: 10-13), identified seven functions as summarized below.

- a. Emotional expression: Language is a means of getting rid of our nervous energy when we are under stress- a means used for 'emotional outpourings' e. g. What a sight!
- b. Social interaction: Language is used to maintain a comfortable relationship between people for avoiding a situation which might, otherwise, be found embarrassing, though no factual content is involved in the exchange, e.g. Good morning. This function is commonly termed as 'phatic'.
- c. The power of sound: Sometimes, the reason for the use of language is the effect the sounds have on the users or listeners as in children's rhymes and games, which may even be nonsense.
- d. The control of reality (the performative function): Forms of supernatural belief involve the use of language as a means of controlling supernatural forces. Various prayers and formulae directed at God, devils, spirits, objects, and other physical forces are the examples, e. g. This is my body (pronounced at a Roman Catholic Mass).

- e. Recording the facts: This function of language basically represents the writing mode. In other words, by writing, information is stored for use in the future.
- f. The instrument of thought: People sometimes speak their thoughts aloud to help concentration, as in performing mathematical calculation 'in their head', sometimes accompanied by a verbal commentary. Thus this seems to be similar to Vygotsky's (1896-1934) concept of 'inner speech'.

The expression of identity: Language is sometimes used for fostering identity, that is, language unites rather than informs: the chanting of a crowd at a football match, the shouting of names or slogans at public meetings, etc. are a few examples.

Holmes (2008) took a referential (or informative) function and an affective (or social) function as 'pervasive and basic'. According to her, the referential function expresses information. By the affective (or social) function she means the one which is employed to express feelings. Contrasting this function with the former, Holmes (2008: 11) argued "Interactions which are more concerned with expressing feelings often have little in the way of new information to communicate".

Indicating the possibility of distinguishing a great variety of different functions depending upon the focus or purpose of research, Holmes (2008: 271) elsewhere presented a list of six categories of functions and claimed that they "are useful as guides for analysis". She also made it clear that these functions are not mutually exclusive. Her list includes the following 'functions of speech':

- a. Expressive utterances express the speaker's feelings, e. g. I'm feeling great today.
- b. Directive utterances attempt to get someone to do something, e. g. Clear the table.
- c. Referential utterances provide information, e. g. At the third stroke it will be three o'clock.
- d. Metalinguistic utterances comment on language itself, e. g. 'Hegemony' is a...
- e. Poetic utterances focus on the aesthetic features of language, e.g. a poem, an ear-catching motto, a rhyme like 'Peter piper picked a peck of pickled peppers'.

f. Phatic utterances express solidarity and empathy with others, e.g. Hi, how are you? Lovely day, isn't it!

### 3. THE NEPALESE CONTEXT: PROVISIONS, PRACTICES, VIEWS AND BELIEFS

Nepali, "the national language" and the main "official language" (The Constitution of Nepal, 2015:1), has been the major medium of instruction in the majority of schools and colleges in Nepal and has long been placed as a compulsory subject in the educational curricula up to the Bachelor's level at university in two faculties (Humanities and Education), and is even commonly used as a medium of instruction in college and university classes provided that they are non-English subject classes. It has also been offered as an optional subject throughout the school curricula and as one of the major/specialization subjects in the aforementioned university faculties. It would, therefore, be logical to briefly present a tiny scenario of the provisions and practices of Nepali language teaching and testing with a view to portraying the Nepalese language teaching tradition.

Because grades eight and ten mark the special references of transition of school education in Nepal (respectively basic and secondary education) and specially standardized tests (district level and Secondary Education Examination, SEE) are provided at these points, the relevant contents and the testing model provided for those grades have first been assessed in this section. Then, the results of the investigation of the views held by the teachers of Nepali regarding the accuracy and appropriacy elements as the contents of the syllabus have also been brought to the fore.

#### 3.1 THE SYLLABI AND THE TREND OF TESTING

A thorough observation of the curricula and the testing system in the Nepalese context, particularly those of the Nepali language as a compulsory subject, shows that the major coverage of 'language elements' offered for grades eight and ten are orthography and grammar with the following specifications:

**Orthography (weightage3%):** It includes spelling, punctuation and placement of words together/separately for correction (for grade eight) plus correction at word and sentence-levels (for grader ten), and

**Grammar (weightage15%):** It comprises word-classes; word formation- prefix and suffix, compounding and separation-; tense and meanings, transformation of sentences and their synthesis and analysis; transformation of the voice, and synthesis and analysis; and free sentence construction (for both grades).

As can be observed, some salient properties of the language contents in the syllabi of Nepali are the following:

- i. focus on forms rather than the actual communicative use;
- ii. focus on accuracy rather than appropriacy,
- iii. focus on developing linguistic competence rather than communicative competence;
- iv. manipulative rather than communicative nature; and
- v. associated with literary genres: biographies, stories and essays.

These characteristics indicate that the formal aspect is dominant over the functional aspect of language teaching. Thus, teaching is aimed at developing grammatical awareness in the learner(s), the appropriacy aspect of language teaching/learning being neglected. This suggests that teaching may not be properly helping how to use the Nepali language appropriately in the appropriate context. Notably, the syllabi emphasize that these elements should be taught along with literary genres: stories, biographies, essays etc., and not in separate periods. Upon examining the testing provisions, one might easily notice a focus on the formal testing to suit the formal 'language elements'.

However, the practical test (25%) given as part of the standardized district level examination or the national SEE seem to provide some room for the functional use of the language. The 'Listening' portion focuses on listening to news, dialogue, literary expressions or a well-messaged fiction for answering questions based on the text, whereas the 'Speaking' portion emphasizes the

effectiveness, style, grammatical correction tempo and gestures while describing some subject matter, circumstances or pictures.

### 3.2 THE TEACHERS' MINDSETS AND BELIEFS

Using an interview guide as a tool, a survey was conducted among five Nepali teachers from two schools of Kirtipur, one private and one government-aided, two from the former and three from the latter as available, to investigate their views regarding what actual language elements need to be fundamentally included in the syllabus of Nepali so that they would be treated as part of classroom teaching activities. All of them were at least Bachelor of Education in Nepali (the ones teaching Nepali at the lower secondary level), with two of them having the Master's degree (the ones teaching Nepali at the secondary level), and ranged in experience from 22 to 33 years of teaching the subject (at various levels). The following elements (presented in a mixed form in the interview) could be conceived as having the formal/structural elements associated with the accuracy aspect and the communicative/functional elements associated with the appropriacy aspect of language:

Accuracy elements	Appropriacy elements
- Tense and its aspects	- Requesting
- Negative-affirmative	- Introducing
- Changing the voice forms	- Inviting
- Spelling	- Advising
- Word compounding	- Agreeing-denying

The data revealed that all those teachers of Nepali perceived the accuracy elements as the language elements (contents for the syllabus) which need to be taught in the language class. In other words, they assumed that language development in the learner is basically possible through the teaching and learning of formal/structural elements of language. This indicates towards their priority to the structural syllabus over the communicative/functional one. Yet, comparatively teachers with the Master's degree in Education (M. Ed.) in the respective subject were found more aware of the possibility of functional-communicative language teaching.

However, it is not to be noted that the appropriacy elements were entirely rejected as language

elements to be taught and learned. For example, as they opined, 'Introducing' and 'Advising' were worth being incorporated in the syllabi and taught. One teacher regarded both types of elements worth teaching.

Nonetheless, towards the end of the interview the participants concluded with a different trend of views. (I, the researcher, was thoroughly conscious that no external influence should be imposed on them.) Some of the most significant points they made about the exclusion of the appropriacy elements from the existing syllabi and classroom teaching included the following:

- i. The accuracy elements are naturally acquired by the process of assimilation and practice with teachers, peers, and family and community members; and
- ii. Those elements can be taught in integration with teaching grammar (but 'research should be made into the methods of teaching grammar in a more useful way').

Finally, and freely, they expressed their conviction (and suggestions) that:

- i. The curriculum and other resources (the textbook and teacher's guide) need to be amended with all these things (about speaking/communicating) in mind. Writing is even more sensitive anyway. This aspect [appropriacy] should be provided as a separate part in the syllabus without reducing the formal grammar;
- ii. All these things [appropriacy elements] are needed. Maybe, they have not been included because of such constraints as time and space. The teacher him/herself should consider them. They should also be incorporated in the curriculum [syllabus]. A little of teacher training would be necessary then;
- iii. Some [parts] of the literary genres could be reduced so as to incorporate this [appropriacy] aspect ; and
- iv. If these points [appropriacy elements] are also included, only then the curriculum [syllabus] would be comprehensive.

These views indicate that the participants were unaware of the appropriacy aspect as language

elements to be developed in the learners, but towards the end of the interview they realized that they are worth being learned and taught.

#### 4. CONCLUSION

Linguistic functionalism is believed to have been initiated in 1923 when Malinowski talked about the 'context of situation' and coined the term 'phatic communion'. Only in the 1970s, it reached its theoretical culmination with a number of macro-model language functions. Nonetheless, more concrete and pedagogically-oriented categories were developed as attempts to design communicative syllabi in the 1970s and 1980s, followed by the development of appropriate methodology, textbooks and other resources for CLT as an approach. Its theoretical tradition revived after the advent of the new millennium and is still continuing as an important component of sociolinguistic and pedagogic studies.

However, a study on the provisions and the beliefs of the process agents (teachers) in the Nepalese context reveals that the formal, accuracy aspect of language teaching is still a tradition, suggesting that there is nearly no room for the functional aspect of language pedagogy. Yet, the teachers (participants) in this study ultimately agreed that the issue should be addressed by reforming the curriculum and resources in the light of the functional, appropriacy component. In so doing, as they advised, 'grammar' should not be reduced from the syllabus; a little reduction can be made from the literary genres to incorporate this aspect in the existing syllabi; and some teacher education/training would be necessary for a successful implementation of function-oriented classroom pedagogy in the Nepalese context.

Pedagogically, language is a practical skill. Therefore, merely imparting the knowledge of the formal rules of language, which substantially represents the language teaching tradition in Nepal, does not seem to ensure the development of actual language skills in use. Such discrepancy prevailing in the Nepalese context is not doing full injustice to the students, especially to the non-native speaking language learners including those of Nepali. Therefore, it is high time that the curriculum designers, the textbook writers, the policy-level people, teachers and the test givers of

the Nepali language (and other mother tongues in Nepal) considered it seriously so as to address this issue by incorporating at least some basic language functions in the curricula, the textbooks and the testing component. For this end, the provision of suitable materials and exercises is equally important and teacher training on functional teaching methodology is desired.

ACKNOWLEDGEMENTS: This paper grew out of the proposal prepared for my PhD pursuit which was registered with the Faculty of Education, Office of the Dean, Tribhuvan University, and was inspired by the fellowship awarded by UGC, Nepal in 2016. I would like to acknowledge both of the institutions.

#### REFERENCES

- Abercrombie, David. 1973. Paralinguistic communication. In Allen, J. B. P. & S. Pit Corder (eds.), *Readings for applied linguistics*, 1: 31-36.
- Austin, J. L. 1973. Speech acts. In Allen, J. B. P. and S. Pit Corder (eds.) *Readings for applied linguistics*, 1: 37-52.
- Blundell, Jon, Jonathan Higgins & Nigel Middlemiss. 2009. *Function in English*. Oxford: Oxford University Press.
- Brumfit, Christopher J. 1980. *Problems and principles in English teaching*. Oxford: Oxford University Press.
- Candlin, C. 1981. *The communicative teaching of English: Principles and an exercise typology*. London: Longman.
- Carter, Ronald, Rebecca Hughes & Michael McCarthy. 2000. *Exploring grammar in context*. Cambridge: Cambridge University Press.
- CBS. 2012. *National population and housing census 2011 (National report)*. Kathmandu: Central Bureau of Statistics.
- CDC. 2069 B. S. *Basic education curriculum*. Curriculum Development Centre: Sanothimi, Bhaktapur.
- CDC. 2071 B. S. *Secondary education curriculum (classes 9 & 10)*. Curriculum Development Centre: Sanothimi, Bhaktapur.
- Criper, C. & H. G. Widdowson. 1974. Sociolinguistics and language teaching. In Allen, J. B. P. S. Pit Corder (Eds.) *Papers in applied linguistics*, 2: 155-209.

- Crystal, David. 2007. *The Cambridge encyclopedia of language*. Cambridge: Cambridge University Press.
- Finch, Geoffrey. 2003. *How to study linguistics*. Houndmills: Palgrave Macmillan.
- Finocchiaro, Marry & Christopher Brumfit. 1983. *The functional-notional approach*. Oxford: Oxford University Press.
- Firth, J. R. 1973. Personality and language in society. In Allen, J. B. P. & Corder, S. Pit (eds.) *Readings for applied linguistics, 1*, pp. 15-21.
- Government of Nepal. 2015. *The Constitution of Nepal*. Kathmandu: GON Ministry of Law, Justice and Parliamentary Affairs.
- Holmes, Janet. 2008. *An introduction to sociolinguistics* (3<sup>rd</sup> ed.). London: Longman
- Hudson, R. A. 1996. *Sociolinguistics*. Cambridge: Cambridge University Press.
- Hymes, Dell. 1972. *On communicative competence*. *Sociolinguistics*. Harmondsworth: Penguin, pp. 269-293.
- Jakobson, Roman. 1973. Functions of language. In Allen, J. B. P. & S. Pit Corder (eds.), *Readings for applied linguistics, 1*: 53-57.
- Jones, Leo. 2010. *Functions of English*. Cambridge: Cambridge University Press.
- Jupp, T. C. & Hodlin, S. 1975. *Industrial English*. London: Heinemann.
- Keenan, Elinor O. 1975. Review. *Language in Society*, 4 (2): 247-253.
- Malinowski, Bronislaw. 1923. The problem of meaning in primitive languages. In Ogden, C. K. and Richards, I. A. (eds.), *The meaning of meaning*. London: Kegan Paul, Supplement I, pp. 451-510 [Reprinted 1984]
- Matriyek, Walter. 1983. *Communiting in English*. New York: Pergamon Press.
- Prabhu, N. S. 1987. *Second language pedagogy*. Oxford: Oxford University Press.
- Richards, Jack C. & Rogers, Theodore. 1986. *Approaches and methods in language teaching*. New York: Cambridge University Press.
- Richards, Jack C. 2010. *Curriculum development in language teaching*. Cambridge University Press.
- Robinson, Peter W. 2003. *Language in social worlds*. UK: Blackwell Publishers Ltd.
- Smith, Lydia A. H. 1984. The function of language for the child: A report on research and experiences in England 1972-1982. *The Journal of Education*, 166 (3): 273-290.
- van Ek, John. 1975. *Threshold level English*. Strasbourg: Council of Europe.
- Webster, Jonathan J. 2009. An introduction to Continuum Comparison to Systemic Functional Linguistics. In Halliday, M. A. K. & Jonathan J. Webster (eds.) *Continuum comparison to systemic functional linguistics*. London: Continuum.
- Wilkins, D. A. 1976. *Notional syllabuses*. London: Oxford University Press.
- Yalden, John. 1987. *The communicative syllabus*. Englewood Cliffs, NJ: Prentice Hall.

CONTRIBUTOR'S EMAIL:

<kkpoudel2023@gmail.com>

# INCLUSIVITY AND EXCLUSIVITY IN DUMI

NETRA MANI DUMI RAI

*The focus of this paper is an attempt to explore the inclusivity and exclusivity in the Dumi language within the descriptive morphological framework. Dumi marks the inclusivity with the suffix-i for both past and non-past tense and exclusivity with the suffix-a for non-past and -u for past tense.*

Keywords: inclusivity, exclusivity, framework pronominalization, affixes

## 1. INTRODUCTION

Dumi [dus] refers to the ethnic Kirati people as well as the language they speak. It is one of the least described and pre-literate Kirati languages of the Rai group that belongs to the East Himalayish sub-branch within the Tibeto-Burman branch of Sino-Tibetan language family (Rai 2017:1). Dumi is considered to be closer to the neighbouring two Kirati languages of the Rai group: Khaling [klr] and Koyu/Koyee [kkt] (Epele et al 2012:45). According to the census report (2011), the total Dumi population is 7,638. Among them 4,078 (53.4%) are female and 3,560 (46.6%) are male. The main settlements of the Dumi people are in the Makpa, Jalapa, Baksila, Sapteshwor and Kharmi areas in the Northern Khotang district in the Sagarmatha zone of the Eastern Nepal. Some Dumi people are also found in other 20 districts throughout the country and in some areas of the West Bengal, viz., Darjeeling, Kalingpong, Assam, Kharsang, Sikkim, etc. Besides, there are also Dumi people in Bhutan, Burma (Myanmar), Hong-Kong, UK, USA, Canada, etc.

The 'LinSuN's report (2014) provides the latest information that Dumi has three variations distinctly separated by the Rawa and Tap rivers, and by the geographical boundaries: north-western (the Makpa area where Dumi is spoken by three generations: children, youths and adults), southern-east (the Jalapa-Kharmi area where Dumi is spoken only by the young and old generation), and northern-east (the Baksila-Sapteshwor area where Dumi is spoken only by

young and old generation). In contrast, van Driem (1993:4) claims a dialect mosaic of four areas that emerge in the Dumi homeland in the Khotang district of Sagarmatha zone of the Eastern Nepal.

The main purpose of this paper is to highlight the inclusivity/exclusivity in this language based on the primary data elicited during the sociolinguistic field survey (2014), which was carried out by the Linguistic Survey of Nepal (LinSuN) in the Dumi homeland (or their origin) and the writer's intuition inevitably from the Makpa area as well.

Describing a unique feature of many Kirati languages, known as inclusivity/exclusivity as a grammatical category, this paper is further organized into the following five sections. Initially, section (2) presents personal pronouns, followed by pronominal affixes in section (3). In section (4), we describe the tense affixes, and finally, section (5) summarizes the findings as the concluding part of the paper.

## 2. PERSONAL PRONOUNS

Givón (2001:401) claims about the personal pronouns in such a way that person concerns the grammaticalization of conceptual distinctions between participants involved in speech activities. The personal pronouns are analyzed in terms of four categories: Speech Act Participants (i.e., SAPs), persons, number, inclusion/exclusion and case-role. He further continues to point out 'grammars typically combine such distinctions and reduce the system to three terms grammaticalizing the roles of speaker (i.e., first person), addressee (i.e., second person) and other (i.e., third person), respectively', which is the most common system practiced while dealing with the languages of the world.

Dumi follows the most common system of distinguishing between the speaker, the listener and others too. There are distinct lexical items referring to each of the participants and the referents of the speech act. Initially, we analyze

them in terms of persons, numbers and inclusion/exclusion. Then, we look at the case roles in the personal pronouns. Dumi distinguishes the three persons: 1<sup>st</sup> vs. 2<sup>nd</sup> vs. 3<sup>rd</sup>, and the three numbers: singular vs. dual vs. plural and inclusion vs. exclusion as well.

Table 1 presents the personal pronouns in terms of number, person and inclusion/exclusion in Dumi.

Table 1: Personal pronouns in Dumi

	Singular	Dual		Plural	
		Inclusive	Exclusive	Inclusive	Exclusive
1 <sup>st</sup> person	<i>aŋu</i>	<i>int<sup>s</sup>i</i>	<i>unt<sup>s</sup>u</i>	<i>iŋki</i>	<i>uŋku</i>
2 <sup>nd</sup> person	<i>ani</i>	<i>ant<sup>s</sup>i</i>		<i>animu</i>	
3 <sup>rd</sup> person	<i>um</i>	<i>unt<sup>s</sup>i</i>		<i>unimu</i>	

Table 1 shows the three numbers of the personal pronouns: singular, dual and plural. Among them, the first person presents the distinction between inclusivity and exclusivity in non-singular (i.e., dual and plural) numbers as illustrated in (1).

(1) a. First person dual (inclusive)

*int<sup>s</sup>riji*

*int<sup>s</sup>i*      *rij-i*

1DU.INCL laugh-1DU.INCL.PST

‘We (DU.INCL) laughed.’

b. First person dual (exclusive)

*unt<sup>s</sup>riju*

*unt<sup>s</sup>u*      *rij-u*

1DU.EXCL laugh-1DU.EXCL.PST

‘We (DU.EXCL) laughed.’

c. First person plural (inclusive)

*iŋkiriŋki*

*iŋki*      *rikk-i*

1PL.INCL laugh-1PL.INCL.PST

‘We (PL.INCL) laughed.’

d. First person plural (exclusive)

*uŋkurikku*

*uŋku*      *rikk-u*

1PL.EXCL laugh-1PL.EXCL.PST

‘We (PL.EXCL) laughed.’

In examples (1a-d), the verb root *ri* ‘laugh’ is affixed by the dual inclusive marker *-i* in (1a), and is affixed by the dual exclusive marker *-u* in (1b), respectively. Similarly, the verb root *rik* ‘laugh’ is affixed by the plural inclusive marker *-i* in (1c), and is affixed by the plural exclusive marker *-u* in (1d), respectively. Thus, we can conclude that in past tense, the inclusive and exclusive markers in both dual and plural forms are ‘*-i*’ and ‘*-u*’, respectively.

### 3. PRONOMINAL AFFIXES

In Dumi, the verb registers three persons with an inclusive vs. exclusive distinction in the first person non-singular (i.e., dual and plural) numbers. Dumi is a three number system (i.e., singular vs. dual vs. plural) of actors in all types of verbs (i.e., intransitive, transitive and ditransitive) constructions.

Table 2 presents the distinction between inclusivity and exclusivity in free pronouns.

Table 2: Pronominal affixes (Non-past tense)

	PRONOUNS	PATIENT	
		PERSON	
		2 <sup>ND</sup>	3 <sup>RD</sup>
AGENT	1DI	<i>int<sup>s</sup>ŋ</i>	$\Sigma$ -t-i
	1PI	<i>iŋki</i>	$\Sigma$ -t-i
	1DE	<i>unt<sup>s</sup>ŋu</i>	$\Sigma$ -t-u
	1PE	<i>uŋku</i>	$\Sigma$ -t-a

Table 2 shows that there is the distinction between inclusivity and exclusivity in free pronouns, and the inclusivity/exclusivity reference of the agent participant is indexed to the verb root by the suffix *-u/-i* along with the common person marking as illustrated in (2).

(2) a. *int<sup>s</sup>ŋ saulo k<sup>h</sup>ut<sup>s</sup>ŋ*

*int<sup>s</sup>i*      *saulo*      *k<sup>h</sup>ut<sup>s</sup> (\*k<sup>h</sup>ak)-i*

1DU.INCL jungle go-1DU.INCL

‘We (DU.INCL) went to the jungle.’

b. *unt<sup>s</sup>ŋ saulo k<sup>h</sup>ut<sup>s</sup>ŋu*

*unt<sup>s</sup>u*      *saulo*      *k<sup>h</sup>ut<sup>s</sup> (\*k<sup>h</sup>ak)-u*

1DU.EXCL jungle go-1DU.EXCL

‘We (DU.EXCL) went to the jungle.’



- c. *ijki saulo k<sup>h</sup>Akki*  
 ijki saulo k<sup>h</sup>Ak-k-i  
 1PL.INCL jungle go-M.ETR-1PL.INCL  
 ‘We (PL.INCL) went to the jungle.’

- d. *ujku saulo k<sup>h</sup>Akku*  
 ujku saulo k<sup>h</sup>Ak-k-u  
 1PL.EXCL jungle go-M.ETR-1PL.EXCL  
 ‘We (PL.EXCL) went to the jungle.’

In examples (2a-d), the first person dual inclusive is marked by the suffix *-i* in *k<sup>h</sup>ut<sup>ɔ̃</sup>* ‘we (DU.INCL) went’ in (2a), the first person dual exclusive is marked by the suffix *-u* in *k<sup>h</sup>ut<sup>ɔ̃</sup>u* ‘we (DU.EXCL) went’ in (2b). Likewise, the first person plural inclusive is marked by the suffix *-i* in *k<sup>h</sup>Akki* ‘we (PL.INCL) went’ in (2c) and the first person plural exclusive is marked by the suffix *-u* in *k<sup>h</sup>Akku* ‘we (PL.EXCL) went’ in (2d).

Table 3: Pronominal affixes (past tense)

		PERSON/PATIENT		
		PRONOUNS		
			2 <sup>ND</sup>	3 <sup>RD</sup>
AGENT	1DI	<i>int<sup>ɔ̃</sup>i</i>	-	Σ-i
	1PI	<i>ijki-i</i>		Σ-i
	1DE	<i>unt<sup>ɔ̃</sup>u</i>	Σ-u	Σ-k-u
	1PE	<i>ujku-u</i>	Σ-u	Σ-k-u

Table 3 demonstrates the distinction between inclusivity and exclusivity with the reference of an agent participant, indexed to the root of the verbs. The pronominal suffixes *-i* for the inclusivity of dual *int<sup>ɔ̃</sup>* ‘We (DU.INCL)’ and plural *ijki* ‘We (PL.INCL)’ and *-u* for the exclusivity of dual *unt<sup>ɔ̃</sup>u* ‘We (DU.EXCL)’ and plural *ujku* ‘We (PL.EXCL)’, respectively, along with the common person marking as illustrated in (3).

- (3) a. (1DU.INCL → 3)  
*int<sup>ɔ̃</sup>ua umlai ku:li*  
 int<sup>ɔ̃</sup>i-a um-lai  
 1DU.INCL-ERG 3SG-DAT  
 ku:l-i  
 chase-1DU.INCL.PST  
 ‘We (DU.INCL) chased him.’

- b. (1PL.INCL → 3)  
*ijkiaumlaiAkki*  
 ijki-a um-lai  
 1PL.INCL-ERG 3SG-DAT  
 kAl-k-i  
 chase-M.ETR-1PL.INCL.PST  
 ‘We (PL.INCL) chased him.’

- c. (1DU.EXCL → 3)  
*unt<sup>ɔ̃</sup>ua umlai kulu*  
 unt<sup>ɔ̃</sup>u-a um-lai  
 1DU.EXCL-ERG 3SG-DAT  
 kul (\*kAl)-u  
 chase-1DU.EXCL.PST  
 ‘We (DU.EXCL) chased him.’

- d. (1PL.EXCL → 3)  
*ujkua umlai kAlku*  
 ujku-a um-lai  
 1PL.EXCL-ERG 3SG-DAT  
 kAl-k-u  
 chase-M.ETR-1PL.EXCL.PST  
 ‘We (PL.EXCL) chased him.’

In examples (3a, b), the root of the verbs are indexed by the inclusive marker *-i* along with the common person marker in order to encode the person reference of the inclusive agent participant acting on the third person patient. Similarly, in examples (3c, d), the verb roots are indexed by the exclusive suffix *-u* along with the common person marker in order to encode the person reference of the agent participant acting on the third person patient.

Likewise, the prefix *a-* precedes the root of the verbs while the third person is acting on the first person inclusive/exclusive as illustrated in (4).

- (4) a. (3 → 1DU.INCL)  
*uma int<sup>ɔ̃</sup>lai aku:li*  
 um-a int<sup>ɔ̃</sup>i-lai  
 3SG-ERG 1DU.INCL-DAT  
 a-ku:l-i  
 3SG-chase-1DU.INCL.NPST  
 ‘He chased us (DU.INCL).’

- b. (3 → 1DU.EXCL)  
*uma unt<sup>ɔ̃</sup>lai aku:lu*  
 um-a unt<sup>ɔ̃</sup>u-lai  
 3SG-ERG 1DU.EXCL-DAT  
 a-ku:l-u

3SG-chase-1DU.EXCL.PST  
‘He chased us (DU.EXCL).’

c. (3 → 1PL.INCL)

*uma ijkilai akAlki*  
um-a ijki-lai  
3SG-ERG 1PL.INCL-DAT  
a-kAl-k-i  
3SG-chase-M.ETR-1PL.INCL.PST  
‘He chased us (PL.INCL).’

d. (3 → 1PL.EXCL)

*uma uŋkulai akAlku*  
um-a uŋku-lai  
3SG-ERG 1PL.EXCL-DAT  
a-kAl-k-u  
3SG-chase-M.ETR-1PL.EXCL.PST  
‘He chased us (PL.EXCL).’

In examples (4a-d), the prefix *a-* occurs/precedes the verb root *kAl* ‘chase’ while the third person is acting on the first person inclusive.

Likewise, the prefix *a-* precedes the root of the verbs while the second person is acting on the first person exclusive as illustrated in (5).

(5) a. (2SG → 1DU.EXCL)

*ania unt<sup>s</sup>ulai aku:lu*  
ani-a unt<sup>s</sup>u-lai  
2SG-ERG 1DU.EXCL-DAT  
a-ku:l-u  
2SG-chase-1DU.EXCL.PST  
‘You chased us (DU.EXCL).’

b. (2SG → 1PL.EXCL)

*ania uŋkulai akAlku*  
ani-a uŋku-lai  
2SG-ERG 1PL.EXCL-DAT  
a-kAl-k-u  
2SG-chase-M.ETR-1PL.EXCL.PST  
‘You chased us (PL.EXCL).’

In examples (5a, b), the prefix *a-* occurs/precedes the verb root *kAl* ‘chase’ while the second person is acting on the first person non-singular exclusive cases.

#### 4. TENSE AFFIXES

In Dumii, there are inclusive and exclusive affixes in the first person non-singular (i.e., dual and

plural) numbers. There is distinction in inclusive vs. exclusive affixes in past and non-past tenses.

Table 4 presents the distinction between inclusivity and exclusivity in the past and non-past tenses. It expresses the distinction between the inclusivity and exclusivity in the non-past tense. The distinction in the inclusivity/exclusivity in the non-past tense is illustrated as in (6).

Table 4: Tense affixes in Dumii

		PATIENT			
		PRONOUNS		NPST	PST
AGENT	INCL	1DI	<i>int ŋ</i>	$\Sigma$ -t-i	$\Sigma$ -i
		1PI	<i>ijki</i>	$\Sigma$ -t-i	$\Sigma$ -k-i
	EXCL	1DE	<i>unt ŋu</i>	$\Sigma$ -t-u	$\Sigma$ -u
		1PE	<i>uŋku</i>	$\Sigma$ -t-a	$\Sigma$ -k-u

(6) Intransitive verb construction (non-past tense)

a. *int ŋ saulo k<sup>h</sup>usti*

int<sup>s</sup>i saulo k<sup>h</sup>us-t-i  
1DU.INCL jungle go-NPST-1DU.INCL  
‘We (DU.INCL) go to the jungle.’

b. *unt ŋu saulo k<sup>h</sup>ustu*

unt<sup>s</sup>u saulo  
1DU.EXCL jungle  
k<sup>h</sup>us-t-u  
go-NPST-1DU.EXCL  
‘We (DU.EXCL) go to the jungle.’

c. *ijki saulo k<sup>h</sup>Akti*

ijki saulo  
1PL.INCL jungle  
k<sup>h</sup>A-k-t-i  
go-M.ETR-NPST-1PL.INCL  
‘We (PL.INCL) go to the jungle.’

d. *uŋku saulo k<sup>h</sup>Akta*

uŋku saulo  
1PL.EXCL jungle  
k<sup>h</sup>A-k-t-a  
go-M.ETR-NPST-1PL.EXCL  
‘We (PL.EXCL) go to the jungle.’

In examples (6a-d), the first person dual inclusive is marked by the suffix-*i* in *k<sup>h</sup>usti* ‘we (DU.INCL) go’ in (6a), and the first person dual exclusive is marked by the suffix-*u* in *k<sup>h</sup>ustu* ‘we (DU.EXCL) go’ in (6b), respectively. Likewise, the first person plural inclusive is marked by the suffix-*i* in *k<sup>h</sup>akti* ‘we (PL.INCL) go’ in (6c) and the first person plural exclusive is marked by the suffix-*a* in *k<sup>h</sup>akta* ‘we (PL.EXCL) go’ in (6d), respectively.

In case of the intransitive verb construction, the distinction between the inclusivity and exclusivity in the past tense is illustrated as in (7).

(7) Intransitive verb construction (past tense)

- a. *int<sup>s</sup>i saulo k<sup>h</sup>ut<sup>s</sup>i*  
 int<sup>s</sup>i saulo  
 1DU.INCL jungle  
 k<sup>h</sup>ut<sup>s</sup>-i  
 go-1DU.INCL.PST  
 ‘We (DU.INCL) went to the jungle.’
- b. *unt<sup>s</sup>u saulo k<sup>h</sup>ut<sup>s</sup>u*  
 unt<sup>s</sup>u saulo  
 1DU.EXCL jungle  
 k<sup>h</sup>ut<sup>s</sup>-u  
 go-1DU.EXCL.PST  
 ‘We (TWO.EXCL) went to the jungle.’
- c. *injki saulo k<sup>h</sup>akki*  
 injki saulo  
 1PL.INCL jungle  
 k<sup>h</sup>ak-k-i  
 go-M.ETR-1PL.INCL.PST  
 ‘We (PL.INCL) went to the jungle.’
- d. *ujku saulo k<sup>h</sup>akku*  
 ujku saulo k<sup>h</sup>ak-k-u  
 1PL.EXCL jungle go-M.ETR-1PL.EXCL.PST  
 ‘We (PL.EXCL) went to the jungle.’

In examples (7a-d), the first person dual inclusive is marked by the suffix-*i* in *k<sup>h</sup>ut<sup>s</sup>i* ‘we (DU.INCL) went’ in (7a), and the first person dual exclusive is marked by the suffix-*u* in *k<sup>h</sup>ut<sup>s</sup>u* ‘we (DU.EXCL)

went’ in (7b), respectively. Likewise, the first person plural inclusive is marked by the suffix-*i* in *k<sup>h</sup>akki* ‘we (PL.INCL) went’ in (7c), and the first person plural exclusive is marked by the suffix-*u* in *k<sup>h</sup>akku* ‘we (PL.EXCL) went’ in (7d), respectively.

Likewise, the distinction between the inclusivity and exclusivity in the non-past tense in the transitive verb construction is illustrated as in (8).

(8) Transitive verb construction non-past tense

- a. First person dual (inclusive)  
*int<sup>s</sup>ia gu surti*  
 int<sup>s</sup>i-a gu  
 1DU.INCL-ERG clothes  
 sur-t-i  
 wash-NPST-1DU.INCL  
 ‘We (DU.INCL) wash clothes.’
- b. First person dual (exclusive)  
*unt<sup>s</sup>ua gusurtu*  
 unt<sup>s</sup>u-a gu  
 1DU.EXCL-ERG clothes  
 sur-t-u  
 wash-NPST-1DU.EXCL  
 ‘We (DU.EXCL) wash clothes.’
- c. First person plural (inclusive)  
*injkiagu surti*  
 injki-a gu  
 1PL.INCL-ERG clothes  
 sur-t-i  
 wash-NPST-1PL.INCL  
 ‘We (PL.INCL) wash clothes.’
- d. First person plural (exclusive)  
*ujkua gusurta*  
 ujku-a gu  
 1PL.EXCL-ERG clothes  
 sur-t-a  
 wash-NPST-1PL.EXCL  
 ‘We (PL.EXCL) wash clothes.’

In examples (8a-d), the first person dual inclusive is marked by the suffix-*i* in *insurti* ‘we (DU.INCL) wash’ in (8a), and the first person dual exclusive is marked by the suffix-*u* in *insurtu* ‘we (DU.EXCL) wash’ in (8b), respectively. Similarly, the first

person plural inclusive is marked by the suffix-*i* *insurti* ‘we (PL.INCL) wash’ in (8c), and the first person plural exclusive is marked by the suffix-*a* *insurta* ‘we (PL.EXCL) wash’ in (8d), respectively.

The distinction between the inclusivity and exclusivity in the past tense in the transitive verb construction is illustrated as in (9).

(9) Transitive verb construction (past tense)

a. First person dual (inclusive)

*int<sup>s</sup>ʔa gu suri*

int<sup>s</sup>i-a            gu  
1DU.INCL-ERG clothes  
sur-i  
wash-1DU.INCL.PST

‘We (DU.INCL) washed clothes.’

b. First person dual (exclusive)

*unt<sup>s</sup>ʔagusuru*

unt<sup>s</sup>u-a        gu  
1 DU.EXCL clothes  
sur-u  
wash-DU.EXCL.PST

‘We (DU.EXCL) washed clothes.’

c. First person plural (inclusive)

*ijkiagu surki*

ijki-a            gu  
1PL.INCL-ERG clothes  
sur-k-i  
wash-M.ETR-PL.INCL.PST

‘We (PL.INCL) washed clothes.’

d. First person plural (exclusive)

*uŋkua gusurku*

uŋku-a            gu  
1PL.EXCL-ERG clothes  
sur-k-u

wash- M.ETR-1PL.EXCL.PST

‘We (PL.EXCL) washed clothes.’

In examples (9a-d), the first person dual inclusive is marked by the suffix-*i* in *suri* ‘we (DU.INCL) washed’ in (9a), and the first person dual exclusive is marked by the suffix-*u* *insuru* ‘we (DU.EXCL) washed’ in (9b), respectively. Similarly, the first person plural inclusive is marked by the suffix-*i* *insurki* ‘we (PL.INCL) washed’ in (9c), and the first person plural

exclusive is marked by the suffix-*u* *insurku* ‘we (PL.EXCL) washed’ in (9d), respectively.

## 5. CONCLUSION

Dumi is one of the least described and pre-literate Kirati languages of the Rai group that belongs to the East Himalayish sub-branch within the Tibeto-Burman group of Sino-Tibetan language family. The main purpose of this study is to highlight the inclusivity/exclusivity in this language. In Dumi, the verb registers three persons with an inclusive vs. exclusive distinction in the first person non-singular (i.e., dual and plural) numbers. Dumi is a three number system (i.e., singular vs. dual vs. plural) of actors in all types of verbs (i.e., intransitive, transitive and di-transitive) constructions.

There is the distinction between inclusivity and exclusivity with the reference of an agent participant, indexed to the root of the verbs by the respective suffixes *-i* and *-u* along with the common person marking. The dual and plural inclusive marker in both past and non-past tense is ‘-i’, whereas the dual exclusive marker in both past and non-past tense is ‘-u’, and the plural exclusive marker in non-past tense is ‘-a’, but the plural exclusive marker ‘-u’ in case of the past tense. Likewise, the prefix *a-* precedes the verb roots while the second person is acting on the first person exclusive.

## REFERENCES

- Central Bureau of Statistics. 2012. *National Population and Housing Census 2011: National Report*. Kathmandu: Central Bureau of Statistics.
- Eppele, John W., M. Paul Lewis, Dan Raj Regmi and Yogendra P. Yadava. (eds.) 2012. *Ethnologue: Languages of Nepal*. Kathmandu: Linguistic Survey of Nepal (LinSuN).
- Givón, Talmy. 2001. *Syntax: An Introduction*, Vol. 1. Philadelphia/Amsterdam: John Benjamins.

- Givón, Talmy. 2001. *Syntax: An Introduction*, Vol. 2. Philadelphia/Amsterdam: John Benjamins.
- Hanßon, Gerd. 1991. *The Rai of Eastern Nepal: Ethnic and Linguistic Grouping Findings of the Linguistic Survey of Nepal*; Werner Winter (ed.) Kathmandu: LSN and CNAS.
- Payne, Thomas E. 1997. *Describing Morphosyntax: A Guide for Field Linguists*. Cambridge: Cambridge University Press.
- Rai, Bagdevi. 2004. Exclusivity and inclusivity in Chamling Rai. *Nepalese linguistics* (ed.) by Yogendra P. Yadava et al. 20:117-124. Kathmandu: Linguistic Society of Nepal.
- Rai, Netra Mani. 2008. Dumi verb morphology. Unp. M.A. dissertationsubmitted to the Central Department of Linguistics, Tribhuvan University.
- Rai, Netra Mani. 2009. TAM in Dumi language. *Nepalese linguistics* (ed.) by Jai Raj Awasthi et al. 24:253-262. Kathmandu: Linguistic Society of Nepal.
- Rai, Netra Mani. 2016. A Grammar of Dumi. A PhD Dissertation. Tribhuvan University, Nepal.
- Rai, Netra Mani. 2017. *A Grammar of Dumi*. Lincom Europa, Academic Publications, Germany.
- Rai, Netra Mani and Rajendra Thokar. 2014. *Sociolinguistic survey, detailed report (unpublished)*, Linguistic survey of Nepal, Central Department of Linguistics, T.U., Kathmandu, Nepal.
- Rai, Netra Mani and Krishna Paudel. 2008. *Documentation of Dumi language*, Central Department of Linguistics, Tribhuvan University.
- van Driem, George. 1993. *A Grammar of Dumi*. Mouton Grammar Library. Berlin New York: Mouton de Gruyter.
- Note:* This article is an improved version of the paper presented at the 37<sup>th</sup> annual conference of the Linguistic Society of Nepal that held in November 26-27, 2016.

CONTRIBUTOR'S EMAIL:  
<netramrai@gmail.com>

# AGREEMENT PATTERNS IN THE KOYEE VERB

TARA MANI RAI

*This paper examines the agreement patterns of the Koyee verb. Since Koyee is one of the agglutinating languages, verbs tend to appear as non-concatinative in nature. In Koyee, a single suffix such as <-ni> indicates the third person, plural and thus indicating person, number and case. Similarly, the marker <-ŋa> appear to be first person, singular number and past tense. So agreement patterns in Koyee pose a complex problem in exploring verb agreement. Prefixes except the negative morpheme <-a, ʌ> are not much productive in the language.*

Keywords: Koyee language, agreement, typology, number, person

## 1. INTRODUCTION

Koyee is one of the Rai Kirati languages of the Himalayish sub-group within Tibeto-Burman group of Sino-Tibetan language family (Eppelle et al. 2012, 57). The term 'Koyee' refers to the people as well as the language they speak. This language is considered to be closer to the neighboring languages, namely, Dumi and Khaling (Hanßon 1991: 45-46). Although the Koyee language is mainly spoken in Sungdel village of Khotang district, it is also spoken in some other places of Jhapa, Morang, Sunsari, and Kathmandu districts by the migrated Koyee speakers (Rai and Budhathoki 2008: 1-2).

Koyee is one of the pre-literate, endangered and least studied languages of Nepal. The latest Census gives the number of mother tongue speakers as 1,271 which is 0.0054 percent of the total population 26,494,504 (CBS 2012). But the distribution of the speakers recorded in the Census 2012 is not reliable which needs more exploration. No dialects are traced out in Koyee language<sup>1</sup>. However, Hanßon (1991: 46) notes that there are two dialects: Sungdel and Behere (Byare).

In this paper, we have tried our best to analyze the agreement patterns in the Koyee verbs. It consists of three sections. Section 2 focuses the affixal slot in terms of the Number, Person, TAM (Tense-Aspect-Modality). Section 3 summarizes the findings of the paper.

## 2. AFFIXES

In Koyee, a single suffix such as <-ni> indicates the third person, plural and thus indicating person and number. Similarly, the marker <-ŋa> appear to be first person, singular number and past tense. So agreement patterns in Koyee pose a complex problem in exploring verb agreement.

Table 1: Koyee verbal template

Prefix PF (-1)	Stem (0)	Person SF (+1)	Number SF (+2)	TAM SF (+3)	Copy morpheme SF (+4)	Reflexive SF (+5)
<a- ~ʌ-> NEG	Σ	<-ŋ >1SG <-n >2SG <-k>PL <- i>INCL <- ʌ>EXCL	<-∅ >1SG <-si> DU <-ni> PL	<-a~ u> PST <-e,- ∅> NPST	< i > < si >	<-si-s> RFLX or MID

As Watters (2002: 372) states that agreement<sup>2</sup> patterns in all Kirati languages are based on the person of participants rather than on their semantic or grammatical roles. In Koyee, the

<sup>1</sup> Toba et al (2002) has shown no dialects in Koyee in the UNESCO Language Survey Report.

<sup>2</sup> Subbarao (2012: 93) notes that typologically, South Asian languages (SALs) exhibit a variety of agreement patterns in the verb, ranging from no agreement on one hand to agreement with arguments. Tibeto-Burman languages like Bodo, Kokborok, Manipuri, Rabha and Tangkul do not exhibit agreement with any constituent in the clause. To the contrary, Kirati languages have agreement system with person and number.

agreement pattern developed by Watters is symmetrical to some extent (Rai 2015).

## 2.1 PREFIX

The negative morpheme  $\langle a \sim A \rangle$  (NEG) is the only prefix in Koyee. This morpheme is a cognate of the Tibeto-Burman simple negative  $*-ma$ , which is often prefixed, or negative imperative  $*ta$  (Benedict 1972:96), the Bahing negative particle  $\langle ma- \rangle$  the Dumi negative markers  $\langle -ma \rangle$  and  $\langle -\eta A \rangle$  (van Driem 1993b: 121-122), and the Yamphu negative markers  $\langle -men \rangle$ ,  $\langle a? \rangle$  and  $\langle -n \rangle$  (Rutgers 1998:110-211). Ebert (1994:30) notes that Chamling has negative markers  $\langle ta- \rangle$  and  $\langle ma- \rangle$  as the prefix. The negative prefix can be attached to all types of finite verb forms, such as simplicia, optatives, indefinites and ablatives, imperatives and gerunds, and also to several types of deverbatives, such as imperatives and verbal adjectives.

## 2.2 SUFFIXES

The suffixal slot in simplex verb forms is more complicated than the prefixal slot. We find that the presence of person suffixes is primarily determined by the ranking of participants, rather than the syntactic roles of the participants, or the semantic roles for the matter.

The person hierarchy is simply  $1 > 2 > 3$  or, in other words; the more remote the person is from the speech act or the speaker, the lower it ranks in the person hierarchy<sup>3</sup>. Watters (2002) states:

<sup>3</sup> On forms reflecting a third person agent and a non-third person patient, we find object number agreement only. On forms of with a third person patient we find number marking for both participants, except in  $3 \rightarrow 3$  where only one marker is found that corresponds to the highest numbered participant. Watters (2002: 402) introduces a typological yardstick where languages fall in either of two classes according to the number agreement found in non-singular-non-singular participant combinations. Type A is a language where in those conditions the number marking corresponds with the object, while type B is a language where number affixes correspond to the subject. By this, Koyee clearly is a type A language. However, number-marking is yet another instance of the phenomenon, that marking is not only determined by

- agreement is with first or second is preference to third and;
- with the object where both participants are first or second person,

It shows that correspondence between the person hierarchy and agreement as reflected in verbal affixes.

### 2.2.1 PERSON SUFFIXES

The conjugation of a verb for a single tense indicates 11 categories of person. The division of person is made into first, second and third. There are inclusive and exclusive distinction in first, second and third person. There are found *portmanteau* morphemes that may indicate person, number and case markers. For example, the marker  $\langle -ni \rangle$  appears to be the plural number and the person. First person agentivity and subjectivity is determined by the type of the verb it occurs with.

The 1SG > 2 suffix

Basic morph :         $\langle -n \rangle$   
Label:                1SG>2

The 1SG > 2 morpheme  $\langle -n \rangle$  occurs in all 1SG>2 forms and signals a transitive relationship between first singular agent and second person patient. It appears to be the SF 2 and is attached immediately after the verb as in (1a-c).

- (1) a.    *aŋ umu jəmne*  
          aŋ    umu    j<sub>AM</sub>-n-e  
          1SG   2SG   beat-1>2 –NPST  
          'I will beat you'
- b.    *aŋ umu bine*  
          aŋ    umu    bi-n-e  
          1SG   2SG   give-1>2 –NPST  
          'I will give you'

The examples (1a-b) show that the marker  $\langle -n \rangle$  is used for indicating 1SG> 2 person in the Koyee

---

role, but more so by ranking. In all of the third person series, the agent also leaves a footprint in the number marking. The split by person ranking is visible in the B verb suffixes when it interacts with the number ranking as well.

language. The marker in (1c) is given in the past tense form.

The first person plural morpheme

Basic morph : < -k >  
Label: 1PL

The suffix <-k> indicates plural first person actant as shown in (2a-b).

(2) a. *iŋki k<sup>h</sup>utsiki*  
aŋ k<sup>h</sup>utsi-k-i  
1PL.INC go-PL-INCL  
'We (and you) go.'

b. *iŋki fuŋiki*  
aŋ fuŋi-k-i  
1PL.INC enter-PL-INCL  
'We (and you) enter.'

In the examples (2a-b), we find that the marker <-k> used for indicating 1PL in the Koyee language. They have been tested in both past and non-past tenses.

The first person

Basic morph : <-ŋ >  
Label: 1SG

The first person singular morpheme <-ŋ> occurs as SF1 filler in 1SG >3 and past forms of the transitive verbs. This is illustrated in (3a-b).

(3) a. *aŋ luŋa*  
aŋ lu-ŋ-a  
1SG tell-1SG-PST  
'I told him/her.'

b. *aŋ fuŋa*  
aŋ fu-ŋ-a  
1SG tell-1SG-PST  
'I entered.'

The examples (3a-b) show that the first person singular marker <-ŋ> is used in the transitive of the past form.

The inclusive morpheme

Basic morph : < -i >  
Label: INCL

The inclusive suffix indicates in first person forms. The inclusive morpheme <i> is a person slot. The inclusive morpheme may occur as a copy morpheme.

(4) a. *iŋki k<sup>h</sup>utsiki*  
iŋki k<sup>h</sup>utsi-k-i  
1PL.INC see-PL-INCL  
'We (and you) go.'

b. *iŋki lɔptsaki*  
iŋki lɔpts-a-k-i  
1PL.INC see-PST-PL-INCL  
'I saw him or her'

In the examples (4a-b), the marker <-i> appears to be the inclusive marker in Koyee.

The exclusive morpheme

Basic morph : < -A ~u >  
Label: EXCL

The exclusive suffix indicates exclusiveness in first person form. In plural forms, the regular morpheme <-A> appears whereas the allomorph <-u> is realized in the first person dual exclusive form.

(5) a. *ɔŋka lɔptsakA*  
ɔŋkA lɔpts-a-k-A  
1PL.EXCL catch-PST-1PL-EXCL  
'We catch.'

b. *ɔŋka sitsekA*  
ɔŋkA sits-e-k-A  
1PL.EXCL die-NPST-1PL-EXCL  
'We die.'

c. *lɔptsasu*  
lɔpts-a-s-u  
catch-1DU-EXCL.PST  
'we caught.'

c. *ɔntsɔ lɔptsasɔ*  
ɔntsɔ lɔpts-a-s-u  
1DU.EXCL die-PST-1DU-EXCL  
'We die.'

The examples (5a-b) show that the exclusive regular morpheme <-A> whereas the allomorph <



-u> can be seen in (5c) which is realized in the first person dual exclusive form.

## 2.2.2 NUMBER SUFFIXES

Unlike Kirati languages like Limbu (Wiedert and Subba: 1985), Dumi (van Driem 1993), Athpare (Ebert 1997), Yamphu (Rutgers 1998), Wambule (Opgenort 2004), Bantawa (Doornenbal 2009), Chhathare Limbu (Tumabahng 2011), Koyee does not possess the non-singular marker. It has rather three markers as singular, dual and plural in third person number. As other Kirati languages, the singularity is formally unmarked in Koyee. Only the duality and plurality are found to be marked in the verb paradigms. These number marking affixes carry case meaning such as subject, object and agent along with them, and they cannot be separated.

### Singular marking suffix

Basic morph : <- $\phi$ >  
Label: 1SG

Singularity of first person and second person subject and object are not formally marked on the verb form. In the case of third person, both person and singularity are formally unmarked as can be seen (6a-c).

- (6) a. *ana umu lapduŋa*  
 aŋ-a umu l<sub>AP</sub>du-ŋ-a  
 1SG-ERG 2SG catch-1SG-PST  
 'I caught him or her.'
- b. *umu seŋa*  
 umu se-ŋ-a  
 2SG kill-1SG.PAT-PST  
 'He killed me.'
- c. *umu k<sup>h</sup>utsa*  
 umu k<sup>h</sup>uts-a  
 2SG go-PST  
 'S/he went.'

In (6a), <-ŋ> indicates first person, singular subject and in (6b), it indicates first person, singular object morpheme. In (6c), third person subject does not appear, and its singularity is also unmarked.

### Dual number marking suffix

Basic morph : <-si>  
Label: DU

The suffix <-si> indicates duality of subject in all three persons and of object in the first and second person verb forms in an identical phonetic shape as in (7a-c).

- (7) a. *antsu k<sup>h</sup>utsasi*  
 antsu k<sup>h</sup>uts-a-si  
 1DU.EXCL go-PST-1DU.EXCL  
 'We (two) went.'
- b. *antsinusi k<sup>h</sup>utsasi*  
 antsinusi k<sup>h</sup>uts-a-si-na  
 2DU go-PST-2DU-PST  
 'You (two) went.'
- c. *umu k<sup>h</sup>utsasi*  
 umnusi k<sup>h</sup>uts-a-si  
 3DU go-PST-3DU  
 'He (two) went.'

In examples (7a-c), the suffix marker <-si> indicates duality of subject in all three persons as we observed in intransitive verbs. In the first person, the duality is realized differently in terms of the inclusivity and exclusivity.

### Plural marking suffix

Basic morph : <-ni>  
Label: PL

The suffix <-ni> appears to be the plurality of subject and object in second person verb forms. In the intransitive verb, the marker appears in 2PL, 3PL. But in the transitive verb, the marker <-ni> appears in 1PL>3PL, 3SG> 3PL, 3PL> 3PL whereas 1SG> 3PL exhibits the marker <-nu> as in (8a-c).

- (8) a. *anitsa k<sup>h</sup>utsini*  
 anitsa k<sup>h</sup>uts-i-ni  
 2PL go.NPST-2PL  
 'You (all) go.'
- b. *umtsawa umu p<sup>h</sup>iŋ-e-ni*  
 umtsa-wa umu k<sup>h</sup>uts-i-ni  
 3PL-ERG 2SG go.NPST-2PL  
 'You (all) go.'

- c. *umtsawa piktanu*  
*umtsa-wa* pikta-nu  
 3PL-ERG hang.NPST-3PL >1SG  
 'They hang me.'

The examples (8a-c) show that the suffix <-ni > is used as the plurality of subject and object in the second person verb forms. In the intransitive verb, the marker appears in 2PL, 3PL as in (8a). But in the transitive verb, the marker <-ni > appears in 1PL > 3PL, 3SG > 3PL, 3PL > 3PL whereas 1SG > 3PL exhibits the marker <-nu> in example (8c). This plural marker is realized as the honorificity in due course of grammaticalization. This is an indospheric feature which can be found in most of the Kirati languages.

The tense morpheme

In Koyee, there are realized two kinds of tense: past and non-past. The past is marked by the suffixes <a, ~u, φ> and non-past by <-e>.

The non past morpheme

Basic morph : <-e>  
 Label: NPST

The past tense morpheme

Basic morph : <a, ~u, φ>  
 Label: PST

The Koyee language exhibits non-past and past with the morphemes <-e> and <-a~u, -φ>, respectively as can be seen in (9a-d).

- (9) a. *d<sup>h</sup>ana matte hobuna ba?a*  
*d<sup>h</sup>ana matte fiobu-na ba?a*  
 There after only own-GEN language  
*Amitse fala*  
 Λ-mits-e fala  
 NEG-die-NPST IRR  
 'Only then our language would not die.'
- b. *bi?hants<sup>h</sup>a?ηara dz<sup>h</sup>o?ηa*  
*bi?hian ts<sup>h</sup>a?ηara dz<sup>h</sup>o?η-a*  
 morning goat graze-1SG-PST  
 'I used to graze the goats we had.'
- c. *udzjalobi?ηa iptsu*  
*udzjalo-bi?ηa ipts-u*  
 bright-give-EMPH sleep-1SG-PST  
 'I slept till the late morning.'

- d. *umwa dza: dza*  
*um-wa dza: dza-Ø*  
 3SG-ERG rice eat-PST  
 'S/he ate rice.'

In (9a), the non-past is usually marked by <-e> whereas the past is usually marked by morphemes <-a ~u, -φ> as in (9-d).

### 3. CONCLUSION

Koyee is one of the agglutinating languages. The verbs in Koyee tend to be interacting with other grammatical categories like number, person and tense. In Koyee, a single suffix such as <-ni> indicates the third person, plural and thus indicating person, number and case. Similarly, the marker <-ηa> appear to be first person, singular number and past tense. So agreement patterns in Koyee pose a complex problem in exploring verb agreement. Prefixes except the negative morpheme <-a, Λ-> are not much productive in the language. Unlike Kirati languages like Limbu (Wiedert and Subba 1985), Dumi (van Driem 1993), Athpare (Ebert 1997), Yamphu (Rutgers 1998), Wambule (Opgenort 2004), Bantawa (Doornenbal 2009), Chhathare Limbu (Tumbahang 2011), Koyee does not possess the non-singular marker. It has rather three markers as singular, dual and plural in third person number. As other Kirati languages, the singularity is formally unmarked in Koyee. Only the duality and plurality are found to be marked in the verb paradigms. These number marking affixes carry case meaning such as subject, object and agent along with them, and they cannot be separated.

### REFERENCES

- Benedict, Paul. 1972. *Sino-Tibetan: A Conspectus*. Cambridge: Cambridge University Press.
- Central Bureau of Statistics. 2012. *Population Census 2011: National Report*. Kathmandu: CBS.
- Doornenbal, Marius Albert. 1970. *A Grammar of Bantawa*. The Netherlands: LOT.
- Ebert, Karen H. 1994. *The Structures of Kirati languages: Comparative Grammar and Texts*. Zurich: ASAS, Universitat Zurich.

- Ebert, Karen H. 1997a. *Camling*. Newcastle: LINCOM EUROPA.
- Ebert, Karen H. 1997b. *A Grammar of Athpare*. München: LINCOM EUROPA.
- Eppele, John W., M. Paul Lewis, Dan Raj Regmi and Yogendra P. Yadava. (eds.) 2012. *Ethnologue: Languages of Nepal*. Kathmandu: Linguistic Survey of Nepal (LinSuN).
- Hanßon, Gerd. 1991. *The Rai of Eastern Nepal: Ethnic and Linguistic Grouping Findings of the Linguistic Survey of Nepal*; Werner Winter ed. Kathmandu: LSN and CNAS.
- Noonan, Michael. 1999. Converb constructions in Chhantyal. *Topics in Nepalese Linguistics*. Kathmandu: Royal Nepal Academy.
- Opgenort, Jean R. 2004. *A Grammar of Wambule*. Leiden. Boston: Brill.
- Opgenort, Jean R. 2005. *A Grammar of Jero*. Leiden. Boston: Brill.
- Rai, Tara Mani. 2015. A Grammar of Koyee. A PhD dissertation submitted to the Dean's office of Humanities and Social Sciences at TU.
- Rutgers, Roland. 1998. *Yamphu*. Leiden: Research School CNWS.
- Subbārão, Kārumūri V. 2012. *South Asian Languages: A Syntactic Typology*. Cambridge: Cambridge University Press.
- Toba, Sueyoshi; Ingrid Toba; and Novel K. Rai. 2002. UNESCO. Language Survey Report: Nepal. Kathmandu: UNESCO.
- Tumbahang, Govinda B. 2011. *A linguistic study of Chhatthare Limbu*. Kathmandu: Centre for Nepal and Asian Studies (CNAS)
- van Driem, George. 1987. *A Grammar of Limbu*. Berlin: Mütton de Gruter.
- van Driem, George. 1993. *A Grammar of Dumi*. Berlin: Mütton de Gruter.
- Watters, David E. 2002. *A Grammar of Kham*. Cambridge: Cambridge University Press.
- Weidert, Alfons & Bikram Subba. 1985. *Concise Limbu Grammar and Dictionary*. Amstarmdam: Lobster Publications.

CONTRIBUTOR'S EMAIL:  
<raitaramani@gmail.com>

# ROLE OF MTBMLE IN ACHIEVING SOME OF THE MAJOR SDGs IN THE ETHNO-LINGUISTIC COMMUNITIES IN NEPAL

AMBIKA REGMI

*Poverty, gender inequality and illiteracy still persist in ethno-linguistic communities in Nepal. Such communities are still to achieve poverty reduction, quality education and gender equality till 2030. Such SDGs goals can be achieved by integrating these issues into overall process of teaching through MTBMLE and ensuring quality basic education in these communities.*

Keywords: poverty reduction, quality education, gender equality, linguistic assimilation, linguistic diversity

## 1. INTRODUCTION

This paper attempts to examine the role played by MTBMLE (mother-tongue based multilingual education) in achieving some of major SDGs (Sustainable Development Goals), viz. poverty reduction, quality education, gender equality, reduced inequalities, climate action and partnership for the goals especially in ethno-linguistic communities in Nepal and suggest some strategies (i.e., based on experiences gained in the linguistic survey of Nepal) for meeting challenges and barriers in those communities for achieving those goals.<sup>1</sup> Nepal has more than 125 officially recognized caste and ethnic groups with distinct social and cultural background and around 123 officially recognized languages of four language families, namely, Indo-Aryan, Tibeto-Burman, Austro-Asiatic and Dravidian and Kusunda, a language isolate (CBS 2011). Of 123 languages enumerated in 2011 Census of Nepal, more than 56 % are unsafe (Regmi 2013). Ethno-linguistic communities constitute more than 55% of total population (CBS 2012).<sup>2</sup> They are characterized mostly by illiteracy, unemployment, mass poverty, gender inequality, domestic violence against women and ignorance of climate change. In practice, the quality basic of education is made

inaccessible in almost ethno-linguistic communities enforcing reading materials written in Nepali. Nepali, the lingua-franca, is more or less the compulsory medium of instruction in Nepal.

This paper is organized into six sections. Section 2 looks at the SDGs in ethno-linguistic communities. In section 3, we discuss the situation of languages in the ethno-linguistic communities. Section 4 enumerates the challenges and barriers for achieving the SDGs in those communities. In Section 5, we suggest some strategies for removing the challenges and barriers for achieving the SDGs. Section 6 summarizes the findings of the paper.

## 2. SDGs IN ETHNO-LINGUISTIC COMMUNITIES

United Nations (2015:3-6) has maintained that ‘unprecedented efforts’ were made in eradicating extreme poverty and hunger, achieving universal primary education, promoting gender equality and empowering women, reducing child mortality, ensuring environmental sustainability and developing a global partnership for development. Nepal has also claimed that it has almost achieved the MDGs related to poverty and hunger, universal primary education, gender equality and women’s empowerment, except environmental sustainability and global partnership (NPC/N, 2013). United Nations (2015:7) has rightly noted: “Despite many successes, the poorest and most vulnerable people are being left behind.” In ethno-linguistic communities in Nepal, poverty and gender inequality still persist and many people in the remote areas are living without access to quality basic education, knowledge of climate change and partnership for development.

Nepali, which is spoken as mother tongue by 44.6%, has been serving as the lingua franca as well as the medium of basic education in Nepal for a long time. Multilingual education planning and policy has not yet been clearly framed in Nepal for ethnolinguistic communities (Regmi and Regmi 2015). There is digital divide in

---

<sup>1</sup> This is a fully revised version of the paper presented at the 37th Annual Conference of Linguistic Society of Nepal held in Kathmandu on 26-27 November, 2016.

<sup>2</sup> However, Eppele et al. (2012) presents 124 languages and dialects in Nepal.

ethnolinguistic communities in Nepal (Turin 2004).

### 3. LANGUAGE SITUATION IN ETHNO-LINGUISTIC COMMUNITIES

In Nepal, about 30 languages are vigorous, 51 are threatened, 11 are shifting and rest are either moribund or nearly extinct (Regmi 2013, 2017).<sup>3</sup> Most of the endangered and shifting languages belong to ethno-linguistic communities in Nepal that naturally demands multilingual policy. However, the issues related to minority/ethnic languages were deliberately ignored and made them functionally marginalized. Around thirty ethnic languages are vital and viable to be used for basic education: Kaiké, Tharu and its different dialects, Tamang and its dialects, Magar and its dialects, some Rai-Kirat languages, Newar and its dialects, Gurung, Lowa, Lohmi, Sherpa, Ghale, Jumli, Thakali, Dhimal, Rajbansi, Manage, Limbu, Lepcha, etc.

### 4. CHALLENGES AND BARRIERS FOR ACHIEVING THE SDGs

Achieving SDGs, i.e., poverty reduction, quality education, gender equality, reduced inequalities, climate action, etc., in ethno-linguistic communities in Nepal is not an easy task. These SDGs are cross-cutting issues to be integrated into the overall activities for the development. One of the major activities to address these cross-cutting issues is education for which language is very crucial. The deep-rooted ideology of linguistic assimilation is still, in fact, reflected lingering in education policy and practice in Nepal. Even though primary education may be attained constitutionally in respective mother tongues, due to the gaps in policy, still, formally, the medium of instruction in basic education is Nepali in ethno-linguistic communities in Nepal.

Teaching materials and textbooks are also in Nepali. Such materials and textbooks have ignored students' own knowledge and experience learned from their parents and others in their home community (Regmi 2012). Neither students understand them nor are teachers likely to share

students' social and cultural background or to speak students' language. Schools have been simply just 'an unfamiliar place teaching unfamiliar concepts in an unfamiliar language' (Sheldon 2007).

Such situation has posed double sets of challenges to the children of ethno-linguistic communities: learning a new knowledge embodied in a new language. Due to this, for them quality basic education is inaccessible leading to be marginalized and excluded from most of the development process of the nation.

### 5. SOME STRATEGIES FOR MEETING CHALLENGES

Indeed, there is no lack of legal provisions supporting the fundamental right to receive basic education in mother tongue in Nepal. Despite these facts, Nepal has not achieved the goals in this respect as it was expected. Unfortunately, many schools where MLE was implemented as a pilot project have been stopped due to the lack of incentives, lack of teachers and reading materials.

It is multilingual education, which promotes life-crucial knowledge and cognitive development for quality education, has to be implemented compulsorily in these communities with a strategy of integrating these cross-cutting issues into the overall process of teaching in mother-tongue. Some specific strategies are as follows:

- a. Framing multilingual education policy: As per the spirit of the constitution (2015), a true multilingual education policy has to be framed and implemented in ethno-linguistic communities. Then they will have access to quality basic education in their respective mother tongues. Inequality in access to basic education in terms of ethnicity and language will have been reduced.
- b. Writing the textbooks and reading materials: While writing textbooks and reading materials in the local language, special attention has to be paid in including local economic resources, local medicines, local cultures and traditions and livelihood system in the textbooks and reading materials. When the students learn the proper use and importance of local resources, they will not attempt to migrate from their

<sup>3</sup> This categorization is primarily based on the model proposed by Lewis, M. P. and G. F. Simons (2010).

native places for employment. Mass poverty will be eradicated.

- c. Creating awareness: Every community is blessed with particular natural resources. In most of the ethno-linguistic communities, people are made ignorant of the life-crucial knowledge embodied in their languages because their languages are gradually shifting to Nepali or tending to be endangered. Whatever education they get in the present system of education is not directly related to their local needs and aspiration on the one hand, they do not understand the value of education imparted in other tongues in basic education. Creating awareness in climate action is more effective in the mother tongue.
- d. Responding to the aspiration: Most of the indigenous community have aspired that MLE schools be established immediately as suggested by Appreciative Inquiry Tool.<sup>4</sup> It helps to involve the community for sustaining MLE effectively for quality basic education in such communities.
- e. Recognizing forms of speech: MLE should be started immediately in whatever language/dialect/ forms of speech the majority of the indigenous children know/speak as suggested by the use of a participatory tool referred to as Dialect Mapping Tool. This fosters the recognition of language/ dialect/ forms of speech in the minds of children.
- f. Developing writing system: Most of the indigenous languages are preliterate. They are not written, if they are to be written, they are to be written in the Devanagari script as suggested by the reports of sociolinguistic survey of the languages of Nepal conducted by Central Department of Linguistics, TU. Especially language activists, not linguists, are creating issues in writing system. As children have to transit to Nepali, with the consent of the respective speech communities, Devanagari writing system should be adapted for the indigenous languages.
- g. Making compulsory MLE for basic levels: Transitional bi/multilingual education should be made compulsory in such indigenous communities like Western Tamang and Thami speech communities where the local teachers are adequately proficient in Nepali, nor do the children understand what is taught in Nepali in basic levels.
- h. Non-formal education in mother tongues: Apart from MLE in basic levels, indigenous languages and cultures may be fostered by conducting non-formal education in mother tongues.
  - i. Researching in languages and cultures: When MLE is introduced, gradually it necessitates conducting ethnographic documentation, writing grammars, compiling dictionaries; and other linguistic activities in the concerned languages.
  - j. Declining the migration rate: Many ethnic communities, mainly in search of better opportunities for livelihood, are migrating to urban areas. When MLE is introduced, the younger generations will understand what opportunities are there in their own area. Then migration rate will slow down. Both languages and cultures will be seen as valuable resources.
  - k. Recognizing MLE teachers' role: When MLE is started and role of MLE teachers is properly recognized, they will gradually teach the communities not only about the importance of language and cultures but also about reducing poverty reduction, providing quality education, reducing gender inequality, maintaining reduced inequalities, being aware of climate action and partnership for the development of the ethno-linguistic communities.

## 6. CONCLUSION

Till the date, no attempt has been made to integrate SDGs (i.e., cross-cutting issues) into education, i.e., multilingual education. From the present MLE policy in Nepal, it is very difficult to achieve SDGs, i.e., poverty reduction, quality education, gender equality, reduced inequalities, climate action, etc., in ethno-linguistic

---

<sup>4</sup> It is a tool used to evaluate the community desires and planning to language development in sociolinguistic survey of the languages of Nepal ([www.cdltu.edu.np](http://www.cdltu.edu.np))

communities in Nepal. Young generations have to be first familiar with their own cultures before they get introduced to mainstream and global cultures.

They need to observe the structural relationship of their family and community, surrounding environments, flora and fauna, economic resources, cultural and religious matters. To create a conducive situation, in a true spirit, MLE policy has to be framed based on linguistic pluralism. Mother tongues must be made compulsory medium of instruction for the pre-primary and primary levels. The curriculum, textbooks and reference materials have to be prepared in line with linguistic diversity into account to maintain retention rate and to ensure inclusive and equitable quality education. Multilingual education, which is indispensable to promote life-crucial knowledge and cognitive development for quality education, has to be implemented compulsorily with a strategy of integrating these cross-cutting issues into the overall process of teaching in mother-tongue.

#### REFERENCES

- Central Bureau of Statistics. 2012. *National Population and Housing Census 2011: National Report*. Kathmandu: National Planning Commission.
- Eppele, M. John, Paul Lewis, Dan Raj Regmi and Yogendra P. Yadava (eds.) 2012. *Ethnologue: Languages of Nepal*, Kathmandu: Central Department of Linguistics and SIL International.
- Lewis, M. P. and G. F. Simons. 2010. "Assessing Endangerment: Expanding Fishman's GIDS." *Revue Romaine de Linguistique* 55. 103-120.
- National Planning Commission (NPC/N), 2013. *Nepal Millennium Development Goals: Progress Report 2013*. Kathmandu: National Planning Commission, Nepal.
- Regmi, Dan Raj. 2012. "Multilingual Education in Nepal: Policy and Practice." *TU Bulletin Special 2012-13*: 136-149.
- Regmi, Dan Raj. 2013. "Nepalka Bhasaharuko sarvekshan: Isthiti ra chunauti (Linguistic survey of the languages of Nepal: Situation and challenges)". A paper presented at the national workshop on the development of language policy in Nepal organized jointly by Ministry of

Education and Nepal Academy, July 10, 2013, Kathmandu.

- Regmi, Dan Raj. 2017. Convalescening the endangered languages in Nepal: Policy, practice and challenges, *Gipan*, Vol. 3.1, January, 2017.
- Shaeffer, Sheldon. 2007. 'Foreword.' *Advocacy Kit for Promoting Multilingual Education: Including the Excluded (Overview of the Kit)*. Bangkok: UNESCO Bangkok.
- Turin, Mark. 2004. 'Minority Language Policies in Nepal and the Himalayas.' Position Paper for SCALLA 2004 Working Conference on Crossing the Digital Divide: Shaping Technologies to Meet Human Needs, 5-7 January, 2004, Kathmandu.
- United Nations. 2015. *The Millennium Development Goals Report 2015: Summary*. Retrieved on 1 August, 2017 from [http://www.un.org/millenniumgoals/2015\\_MDG\\_Report/pdf/MDG%202015%20Summary%20web\\_english.pdf](http://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20Summary%20web_english.pdf)

CONTRIBUTOR'S EMAIL:

<ambikaregmi@gmail.com>

# ORTHOGRAPHY IN NEPAL: ISSUES AND ORIENTATION

BHIM NARAYAN REGMI

*Both home and foreign scholars have intensive discussions on the issues of orthography of 123 languages spoken in Nepal, and fifteen scripts. They have mainly oriented towards a unified orthography, though they also leave space to the scripts having longer tradition on the basis of identity for the community, following the spirit of the report of the UNESCO meeting in 1951. However, the result of this discussion has not become perceivable to date.*

Keywords: orthography, representation, identity, ICT, economy

## 1. INTRODUCTION

Writing system in Nepal has a history of about 2300 years from the Ashokan pillar inscribed in Brahmi script in Pali language (Malla 1973: 101). Among the 123 languages spoken in Nepal (CBS: 2012), currently about 15 scripts have been used in Nepal (Yadava and Shakya 2065 BS: 61-62) in varying degrees of efficiency, functional domains, and socio-geographical spread. Many languages have yet to be entered into tradition of writing system, some of the languages with writing systems have also facing various kinds of problems including the efficiency, support in development, social dilemma, and so on. Though orthography has got central position in the scholarly discussion at least from the last 30 years, still there are issues as these were at the beginning of the discussion. This paper presents the issues related to orthography in the Nepalese context and the orientation of the scholarly discussions in Nepal.

## 2. ISSUES RELATED TO ORTHOGRAPHY

Orthography has number of issues — some more technical and concrete, and some others more abstract and emotional. It attracts people from various disciplines of knowledge as well as the language users. Some of the major issues are discussed in the following sections.

### 2.1 IDENTITY AND PRESTIGE

Identity is an abstract concept which can be established as means of group solidarity which is realized through either a tangible symbol such as land, dress, food, etc. or through an intangible symbol such as language, religion, history, etc. It is also accepted by the group itself, as well as the outsiders.

Noonan (2006: 162-163) extends the identity to even deeper level 'consciousness' as he mentions:

...ethnic consciousness manifests itself in attempts to 'define' the ethnic group, establishing what it means to be a member of the group; in this way, ideas like language, dress, religion, history are used to 'define' the group, and thus become both conscious and politicized — subject to debate both within the community itself and in the larger political arena.

Language has become a strong means of identity because it is not only a means of identity but also a means of advocating identity which may have been established through other symbols. Orthography, as a graphical representation of language and the reliable source of recording, has also become a symbol of identity.

In Nepal, when the issue of identity is getting intensified, the language is playing a key role to establish orthography as a symbol of identity of that language. They believe that the script is inseparable, which is in reality a misconception. We have already seen that one language can have many scripts and the many languages can have one script which is also attested in the history of the languages in Nepal.

The misconceptions in Nepalese communities regarding orthography have been observed in some scholarly papers. Some of the observations are as follows:

...some of the communities have misconception that a separate script is needed for the



development of their mother tongue. Though it is true to some extent, it is not likely to be practical to have separate script for each language (Dumi Rai 2016: 110).

... I have often heard it said that the Thangmi language once had its own script but has since lost it, a kind of fall from linguistic grace. Such a belief reflects the widespread, if mistaken, assumption that all “real” languages were once written as well as spoken and that only through recovering a lost script will the Thangmi language activists be able to validate their claims to linguistic antiquity and autochthony in the areas which they presently inhabit. (Turin 2006: 68-69).

...many of the indigenous communities in Nepal who speak Tibeto-Burman languages are reluctant to use a script derived from an Indo-Aryan language to which their language is genetically unrelated. The “Nepalification” through script or lexicon of indigenous Tibeto-Burman languages is strongly resisted by many more militant members of the ethnic movement in Nepal (Turin 2006: 67).

There exist three types of misconceptions: (i) every language needs to have its own script, (ii) all language used their own script in the past but some of them have lost their script, and now the lost script needs to be revived, and (iii) script also needs to be developed based on the language family of spoken language. As a result, there are Indo-Aryan scripts, Tibeto-Burman scripts, and so on. All the misconceptions have already been proved that these are not the realities, as we can see from the history of writing system in Nepal, from the fact developed during twentieth century that spoken form of any language is primary and the writing system is secondary. It is not true that every language which has been used needs to have its own script. It is also not true that from the fact presented above that most of the scripts, if not all, used by both the Tibeto-Burman and the Indo-Aryan languages are descendants of Brahmi script, the common source.

The further issues which are based on the dichotomies, such as ethnic/communal or national

identity, and singular or plural identity. The positive side of the results from the misconceptions we have discussed above is that there is a growing consciousness towards ethnic identity. However, there is the national identity at the other side. Toba et al. (2005: 16) have noted one observation regarding national identity through script is:

...since the national language Nepali, has been considered a unifying factor for the country, indigenous peoples have received little encouragement to develop their own writing systems. Instead, they have been encouraged to become competent in the national language in both speaking and writing. Thus, all of these people, including those having their own scripts, have been using the Devanagari script as well. Some individuals have tried to make the necessary adaptations, even creating new letters to accommodate a sound and tone system not represented in Nepali.

The different orientation regarding identity is the reality in our society, however the solution relies on whether we are seeking singular identity — that denies other identity or we are expecting various ethnic/communal identities within the national boundary or sometimes even crossing the national boundary as in the case with Maithili, Bhojpuri and Nepali itself, or we are seeking plural identity — that accepts other identities within the national boundary or even wider context.

One more issue related to orthography-based identity is that whether it is with written tradition or without written tradition. There is no alternative way to think script based identity of the languages with long and matured tradition such as Nepal Bhasha/Newari and Limbu. However, it would be better to use the script like Devanagari which is widely used in the country for the languages with no writing system at all or for the languages having recently created or modified orthographies with appropriate modifications to suit the language. In the latter's case the script will not be the symbol of identity; of course, the language itself is a strong means.

Another issue related to orthography is prestige, which is also an abstract concept related to identity that we can show something to others which we possess. Singh (1986: 405) writes:

Language with writing systems of their own are placed higher in a sociolinguistic hierarchy by the speakers of these languages themselves and by the neighbouring speech communities. It is for this reason that a linguistic group does not normally give up its writing system, however defective, technologically or otherwise.

Besides, there are the cases where the orthography is a parameter for a language whether it has any opportunity to elaborate its functions.

## 2.2 LITERACY, EDUCATION AND POWER

Literacy rate of Nepal as of 2011 is 65.9% (CBS 2012: 4). Literacy, however, in this data is confined to Devanagari script and Nepali language because all the school products are literate in Devanagari as Nepali is a compulsory subject, and the government programs on adult literacy are also based on Devanagari in Nepali language.

According to Yadava et al. (2008) (cited in Yadava and Shakya 2065 B.S.: 66-69), there are fifty languages among the 78 surveyed languages, which have all or some of the resources of newspaper, magazine, and journal, reading materials, literacy material. This can be taken as the proof of the use of script. These languages are:

Awadhi	Bahing	Bantawa
Baram	Bhojpuri	Bhujel
Byansi	Chamling	Chhantyal
Chhintang	Churete/Pahade	Darai
	Muslim	
Dhimal	Dolpo	Dumi Rai
Dura	Gurung	Hindi
Khaling	Koyi/Koyu	Kulung
Limbu	Magahi	Magar
Kham	Maithili	Majhi
Marwari	Nachhiring	Nepal
		Bhasha
Nepali	Nepali Sign	Pahari
	Language	
Puma	Rajbanshi	Sampang

Sanskrit	Sherpa	Singsa
		Bhote
Tajpuriya	Tamang	Thakali
Thami	Tharu	Rana Tharu
Thulung	Urdu	Wambule
Yakkha/ Yaksa	Yolmo/Yholmo.	

Among these languages 'Tharu' and 'Rana Tharu' are under single name 'Tharu' in the census report. So, these are 49 languages among the 123 languages of Nepal which have one or other form of writing system. Among these 49 languages only 12 have all the above mentioned resources: these are Awadhi, Limbu, Maithili, Marwari, Nepal Bhasha, Nepali, Nepali Sign Language, Sanskrit, Sherpa, Tamang, Tharu, and Urdu. This situation is what Noonan (2006: 166) mentions:

...these languages have no tradition of literacy and have only recently come to be written, and even then not often, and when they are written they are written so as to provide examples of writing in the language rather than as media of communication.

The question regarding literacy is whether it is basic literacy or functional. To be able to read and write is basic literacy whereas to accomplish any task which is related to daily life, or more specifically, supporting livelihood through reading and writing is functional literacy. Toba et al. (2005: 25) suggest how literacy can be functional and how literacy (through non-formal education) and formal education complement each other at least at the early grades in Nepalese context, providing the following note:

Mother tongue literacy classes of a non-formal nature for adults, together with primary education in the mother tongue would result in a functionally literate society that could easily make the transition to become literate in the national language. Such a society would take the initiative to preserve their mother tongue and culture, thus contributing to the wealth of language and culture in Nepal.

Whether the orthography is easy to learn and use, or whether it is for first language or second language, is another issue regarding education. This question is raised well in Adhikari (2066

B.S.: 16, 37) who mentions three different situations based on script regarding teaching Nepali as a second language:

- a. it will be easier to teach Nepali as second language to those learners whose language shares the same script with Nepali, i.e., Devanagari,
- b. it will be more difficult to those learners whose language does not share the same script but uses the script with similar system, for example Limbu, and
- c. the teaching strategy will be different for the learner whose language uses script from different system, for example Urdu. His argument is based on the load for learning the script which is based on the inherent system of the script.

LPRC (2050 BS: 16) goes even further and argues for unified orthography which will support learning second language:

Learning a second language in addition to one's mother tongue for intralanguage communication and contact has been a day-to-day necessity for people living in a multilingual country like Nepal. In such a context, if the uniformity in script is maintained, it will be more convenient to learn a second language because one does not have to become familiar with a new script first.

Education has other requirements beyond orthography, such as resources for first and second languages, resources for bilingual and multilingual education (especially bilingual or multilingual dictionaries, grammars, and reading materials, etc.), resources for non-formal, distant, online and machine-aided learning materials. Whatever educational materials we are concerned, orthography is at the core of all these resources.

However, there exists a misconception even within the linguists. One such an example from Noonan (2006: 170) is:

Literacy in minority language communities is not necessary for language documentation efforts since documentation can be carried out by outsiders using conventional fieldwork techniques, recordings, and so on. It is

necessary, however, for standardization if the minority communities are to carry out this work themselves, and for language preservation efforts.

The view cited above is misconception in the sense that unless any linguistic work, which is at least directly related to the communities like documentation, is in access to the community members through literacy which can not support the community. The work which can not support the community to get them literate and educated has no any value to them. Thus it is necessary to have such a functional orthography for a particular language which can be used for literacy and education as well as any linguistic purpose such as documentation, or at least, it should be convertible to that script.

Ultimately, literacy and education are related to power, as one has literacy and education, s/he knows the surroundings oneself, and can negotiate for better. They can be linked to the wider world. Absence of the link between scholarly works and the language community is the barrier for the communities to achieve literacy-education-power. It is perhaps because of the absence of the link that our situation is somewhat similar what it was 34 years back, as in Malla (1973: 109-110):

Even if all other factors were favourable, there are no resources, no pre-conditions for language maintenance because the literacy rate in speech communities is abysmally low. Where Bubishi is a problem, language loyalty is a sheer luxury and language maintenance or linguistic self-determination a fallacy of idealism. With the rise in literacy and economic standards, a distinct sense of oneness with the tribe (language serving as an immediate marker of group identity and loyalty) may grow, but it is unlikely to go further than that.

The issue needs to be addressed through appropriate orthography.

### 2.3 ADMINISTRATION

Role of language in public administration as a function of official language is another issue related to the script. Yadava and Shakya (2065:

83) have presented an elaborate representation of the scope of official languages in Nepal, though the new constitution has limited other languages only at the province level, there are still those areas where multiple languages have their own role. In the situation where there are multiple languages in administration, the issue of orthography becomes more crucial. The decisions need to be made regarding the orthography of official documents, especially regarding public records/records of the people, place and person names, etc. which need standard forms with additional symbols to represent the proper names in any of the languages of Nepal not only in Devanagari but also to those scripts which are used in the official function.

There must be a provision of the authentic version of the document exist in multiple languages as well as the interchangeability between the orthographies. Regmi (2074 BS) has raised some such concerns regarding Devanagari in the new role where there are multiple languages in official function.

Annamalai et al. (1986: 397) have, without using the term administration, noted some of the issues on broader concern:

The use of common script may, however, be restricted to certain purposes, such as name boards of places, milestones, and signboards of distances and direction. The titles of books and authors may also be given secondarily in the common script. This will help specific group of people such as travellers and librarians. This will also help the people who know a language but not its script.

## 2.4 INFORMATION AND COMMUNICATION TECHNOLOGY

When Information and communication technology (ICT) comes down to its medium of message, i.e., language from equipment and devices, orthography becomes the central issue. Unless we have standard set of codes, input devices, and systems to render those codes, it is almost impossible to use language functionally. Hall et al. (2014: 62) lists the core technological issues of encoding in the following four points:

- a. input-output systems: the way input mechanisms from keyboard and stylus tracing and OCR are transformed into internal codes, and the way sequences of internal codes are rendered in print and on screen;
- b. text processing: collation and matching, the separation of concerns of styles (including fonts) from content and the encodings involved, typical computational processes that are undertaken on texts;
- c. localization and internationalization methods;
- d. standards: the importance of standards and the role they play in ensuring interoperation of computer systems.

Orthography has central role in basic and information technological tasks like typing and printing a language, creating databases, developing corpus, forms and styles, making online platforms, as well as the language specific tasks such as machine translation, Optical character recognition (OCR), Text-to-Speech (TTS), Speech-to-Text (STT), machine-aided learning, machine translation, and so on. The lack of appropriate orthography is the factor in Nepali society to have blessed with digital device but cursed with digital divide. Orthography has to address this issue.

## 2.5 HUMAN RIGHTS

Linguistic right or more widely used term 'linguistic human right' is the right of a linguistic group to preserve, use and promote own language. It also includes the right of a community to choose any one or more languages or any form of a language, i.e., written or spoken in all or certain functions. Constitution of Nepal 2074 B.S. has provisions regarding linguistic rights of the communities. The article 31 on right to education, and 32 on right to language and culture are directly related to the above discussion.

These provision in Article 31 (5) mentions "Every Nepalese community residing in Nepal shall have the right to get education in its mother tongue and, for that purpose, to open and operate schools and educational institutes, in accordance with law." and Article 32 (3) states "Every Nepalese community residing in Nepal shall have the right

to preserve and promote its language, script, culture, cultural civilization and heritage." Script appears in Article 32 but not in Article 31. However, when one chooses the education, one needs to think on script as basic means of visual representation of the language.

This right to culture relates the community to its past where one of the argument always raised is that if there is any change in the script, the connection is lost. It is more visible in the cases of minor modification in the spelling system for educational purposes often create debates among the language users. It is even of the greater concern regarding the choice between the orthographies.

## 2.6 LANGUAGE PRESERVATION AND PROMOTION

Orthography has been proved to be the most reliable means for preservation of a language though the recent development in science and technology has provided more powerful means such as audio-visual recording. Noonan (2006: 170) mentions "...literacy in these languages would, in turn, encourage the use of minority languages in writing, and this could have a major impact on language preservation efforts." So, the orthography has central role in language preservation.

Besides, orthography brings the language to the wider contexts and the elaborate functions, as it is only possible for a language to be used in education, in mass media, especially print media and online news portals, and in official use.

## 2.7 RELATING TO THE OTHER COMMUNITIES

'Unification of orthography' or more specifically, 'unification based on Devanagari' seems to be a central issue in the scholarly discussion of both home and abroad writers who are writing on the issues of orthography (see section 3 for details). The argument for this unification is that such a unified orthography would connect the various language groups in Nepal through education, mass media, and the official function.

The issue is that while choosing orthography, it should be taken into account that whether the orthography will connect the community to other

communities. Of course, the opposite view is about relating the community to its past, especially regarding those communities which have their own writing system.

## 2.8 PHONOLOGICAL REPRESENTATION

It is a purely linguistic question whether the orthography and its spelling system represents the sound system of the language or not. From the linguistic perspective, it is a basic requirement for orthography and its spelling system that comply with the phonology of the language that uses it. Such orthography can only support the language community in literacy and education. LPRC (2050 BS: 17) mentions:

The attempt at reducing the differences between the phonemes and graphemes will not only help in mother tongue education but also in the teaching of the second language. It is necessary to study the sound system of national languages and to make the aforementioned improvements...

Inconsistency in spelling is a hindrance to standardization. It is necessary to reduce the gap between the spoken and written form, thus developing a more consistent spelling system.

LPRC (2050 BS: 17) also made clear about the agents who can support elaborate the use of such representative system, "Teachers of the respective languages, people involved in teaching and printing including journalists should have a leading role in this development because they will be most affected by the improvement of the spelling."

## 2.9 ECONOMY

Among the crucial issue regarding orthography is the economy. In this context, economy has two sides. First, economy is concerned with whether the orthography in question is easy to write and read as well as to be handled in machines. As Annamalai et al. (1986: 394-395) notes, "One should look at the question of efficiency not only from the human point of view but also from the point of view of modern technology such as typewriting, printing processes, computerization, and the like."

Second, economy is concerned with the amount of resources - such as human, financial or other - needed in order to adopt, adapt or create an orthography for sustaining it, and the return - financial or other - from the investment. The simple idea is that if the investment is huge and the return is less, whatever it is, it is just a burden economically. Annamalai et al. (1986: 396) have rightly observed this in this note:

A simple law of economics is that the greater the production, the lower the cost. So the argument is that if one script for all the languages, it is economical and technologically efficient with no need for investment in different machines and in devices for script conversion; it is pedagogically advantageous, requiring less investment in time for learning new script.

Of course, creating a new orthography may be easy, however, developing fonts, developing standard codes, developing input method, getting it to the international standard, getting it into many types of digital machines, and getting it regularly updated are costly businesses, as there are techno giants always keeping their eyes at profit at one side, and there are many languages with the population size, where even if all the community members are involved in these tasks, there will be no sufficient human resources to accomplish the tasks at the other.

The meaning is clear that if there is a smaller community, it will be economically appropriate to adopt a script from other larger language community. However, the issue of economy is rather contradictory to some extent to the issue of identity, thus needs to have balance.

Among the issues discussed above, language preservation and promotion are self-centered to the language in question, and rest of the issues are concerned to the users of the orthography. Further, phonological representation is purely linguistic issue and needs linguists to handle it. The issue of literacy and education need linguists, literacy experts and educationists. Issue of information and communication technology falls under the scope of linguistics as well as computer

science and technology. Legal experts and administration specialists need to get involved in the issues such as administration and linguistic rights. The issues like identity, prestige, power, and connection to the past and other community are more abstract political issues concerned with language activists and community leaders. The users of the language are at the center of all the issues who gain when all other concerned parties success but loose when other concerned parties fail.

### 3. ORTHOGRAPHY IN THE SCHOLARLY DISCUSSION

In the seminars, discussions, and scholarly publications on language policy and planning in Nepal after the Language Planning Recommendation Commission (henceforth LPRC) was formed in 2050 BS. The Commission had main task to formulate policy recommendations for implementation of the constitutional provisions on languages of Nepal.

We will observe these scholarly discussions and publications to see their ideological orientation regarding orthography in Nepal.

Pokharel (2050 BS: 46) states that "...if a language does not have its own traditional script, the policy should be to encourage towards using Devanagari by adapting according to the features of the language."

Yadava (2050 BS: 66-68) notes if there is uniformity in orthography it would be easier to learn second or national language Nepali for various mother tongue users of Nepali which would also be beneficial in other areas of life as Devanagari is widely used script in Nepal. However, he suggests considering the community members views on using Devanagari for their language, as he observes some of the language communities do not agree in using Devanagari for their language.

Bandhu (2050 BS: 88) writes "if there is uniformity in script, it will be easier for one to learn other's language in the multilingual country".

Dahal and Regmi (2058 BS: 30) mention:

...language policy of Nepal should be for national unity, social-cultural promotion and development. Thus it is desirable to use the widely used script among the traditional scripts. As Devanagari is the script used by majority among these, it seems appropriate to use it but while using it needs to be adapted in order to write all the segmental and suprasegmental phonemes of all the languages of Nepal, and easy to write.

Watters and Rai (2005: 60) note:

...practical orthographies need to be developed for these languages, including choice for script. A great deal of knowledge has been acquired in this area by linguists and literacy experts in the past decades. This should not be attempted without the input of linguistic experts.

Pokharel (2071 BS: 29-30) is in favour of using Devanagari based orthography, as it is widely used orthography in Nepal. She argues that people may be uninterested in learning mother tongue through other scripts because they are already literate in Devanagari.

Pokharel (2074 BS: 43-44) suggests using Devanagari script for languages of Nepal. She has noted, besides other points, that it will benefit both sides, i.e., Nepali and all other languages of Nepal because the technical and scientific vocabulary can be transferred to other languages from Nepali, and the general vocabulary can be transferred to Nepali from other languages of Nepal.

The views cited above have two faces — technical and sociolinguistic. From the technical side most of the scholars suggest unification in orthography, and from the sociolinguistic side they show respect the people's views regarding preserving and promoting the scripts present in the languages of Nepal as means of identity.

LPRC has also similar views on the orthography in Nepal (2050: 16-17). The following thoughts are relevant regarding the selection of the script:

- To adopt Devanagari script for all languages of Nepal for maintaining consistency in language learning.

- To adopt Devanagari script for all languages of Nepal but to preserve the conventional script of any language as a cultural heritage.
- To adopt an indigenous script with some modification to make it more suitable.

The root of the scholars' views cited above is in the Report of the UNESCO Meeting of Specialists, 1951 which mentions:

where there are several major regional languages in one country or where more than one language has official status, it is of value to have relative uniformity in the way in which they are written. To the extent that they are similar, the learning of the additional language is facilitated (UNESCO 1953: 60-61).

The Report (UNESCO 1953: 62) summarizes all the technical issues related to orthography in the following 7 points:

- Spelling in conformity with contemporary pronunciation.
- Agreement with phonemes of the language.
- Simplicity in typography (available types, limited numbers of characters, etc.)
- Letters without diacritics (if equally satisfactory).
- Digraphs in preference to new characters unless they cause ambiguity.
- Derivation of new characters from prevailing scientific usage.
- Agreement between different languages of the region or country, especially with the national or official language.

However, before presenting the points the report reminds considering "the attitudes of the population toward their orthographic traditions".

The balance between these technical or linguistic and sociolinguistic views — often rather conflicting seems to be the problem in realizing the UNESCO report or LPRC report or the scholars' views in the context of Nepal. As Angdembe (2014: 44) points out, in a slightly different context — regarding addressing language movements — as he questions about the reason of failure "Is it because the linguists and the language policy makers appointed by the state have no idea about how all languages can be

saved? Or is it because the demands of the agitating parties are not scientific?"

These questions are related to both sides: linguists and the language communities. The orthography questions can be solved if the linguists support language communities in understanding the scientific nature of the orthography and if the linguists try to find the appropriate means of identity which can be offered to the communities.

Regmi (2008) seeks to offer solution which could address both the technical and the sociolinguistic interests by modifying the present Devanagari script, so as to represent all the sounds of the languages of Nepal as multi language orthography.

#### 4. CONCLUSION

From the above discussions, it is found that 'identity' (of the language community through orthography) and 'unification' (of the orthography in order to achieve larger socio-economic goals) are the prominent issues in Nepal, and the scholarly discussions are oriented towards both the directions at the same time. In fact, the issues related to orthography invite people from different areas to work together in a harmony which is complicated situation in itself. However, if the issue related to phonological representation is handled properly, it can be implemented for literacy, education, ICT, and administration. It also offers the language community power and prestige, which ultimately can be a means of identity. In this way, if the more basic and more technical issues, which have concrete and visible outcomes, are addressed at first, the more abstract issues are automatically addressed.

#### REFERENCES

- Adhikari, Hemanga Raj. 2066 BS. *Dosro bhāshāko rupmā Nepālī shikshaṅ: paridrishya ra kāryadishā* (Teaching Nepali as second language: Vision and mission). In Amrit Yonjan-Tamang and Ganesh Prasad Poudel (ed.) *Dosro bhāshāko rupmā Nepālī shikshaṅ*. Bhaktapur: Inclusive Education Section, Department of Education, Nepal Government. 12-18, 34-39.
- Angdembe, Tej Man. 2014. Saving endangered languages: Just two formulas. Kathmandu: Yalambar Foundation.
- Annamalai, E., B. M. Dahal, G. C. Ahuja, D. N. Koul, P. Madhubala Devi, and J. C. Sharma. 1986. Creating and changing a writing system: Social, economic, pedagogical and linguistic criteria for choice. In Annamalai, E., Björn H. Jernudd and Joan Rubin (ed.) 1986. 390-404.
- Annamalai, E., Björn H. Jernudd and Joan Rubin. 1986. *Language Planning: Proceeding of an Institute*. Mysore: Central Institute of Indian Languages.
- Bandhu, Chura Mani. 2050 BS. Nepālkā sandarbhamā bhāṣā yojanā (Language planning in the context of Nepal). *Prajñā*, 79. 73-105.
- CBS (Central Bureau of Statistics). 2012. *National population and housing census 2011: National report*. Kathmandu: CBS.
- Constitution of Nepal*. 2015 (2074 BS). Kathmandu: Kanun Kitab Vyavastha Samitee. Government of Nepal.
- Dahal, Ballabh Mani and Bhim Narayan Regmi. 2058 BS. Rāstrabhāṣā ra rāṣṭriya bhāṣāharuko sahayātrā evam vikāskā apekṣāharu (Co-march of the National language and the Languages of the nationalities and expectations of their development). *Prajñā*, 95. 9-34.
- Dumi Rai, Netra Mani. 2016. Dumi. *Kirāt Prajñā*, 2:2. 99-116.
- Hall, Pat, Bal Krishna Bal, Sagun Dhakhwa and Bhim Narayan Regmi. 2014. Issues in encoding the writing of Nepal's Languages. In Alexander Gelbukh (ed.) *Computational Linguistics and Intelligent Text Processing, 15th International Conference, CICLing 2014, Kathmandu Nepal, April 6-12, 2014 Proceedings, Part I*. LNCS 8403. Verlag: Berlin : Hidelberg: Springer. 52-67.
- LPRC. 2050 BS. *The Report of the Language Policy Recommendation Commission 1994 (2050 BS)*. Kathmandu: National Language Policy Recommendation Commission.
- Malla, Kamal P. 1973. Language. In Pashupati Shumshere Rana and Kamal P. Malla (ed.)



- Nepal in perspectives*. Kathmandu: The Centre for Economic Development and Administration. 101-118.
- Noonan, Michael. 2006. The politicization of language in west-central Nepal. In Saxena, Anju and Lars Borin (ed.) 2006. 161-174.
- Pokharel, Madhav Prasad. 2050 BS. Nepālle angikār garnuparne bhāṣik niti ra bhāṣik yojanā (Language Policy and planning to be followed by Nepal). *Prajña*, 79. 31-55.
- Pokharel, Madhav Prasad, Chura Mani Bandhu and Daya Ram Shrestha (ed.) 2074 BS. *Jagadambā Nepālī sāhityako brihat itihās pahilo thelī: Bhāṣā, vyākaraṇ ra abhilekh* (Jagadamba Comprehensive history of Nepali literature first volume: Language, grammar and inscription). Lalitpur: Kamal Mani Prakashan.
- Pokharel, Shailaja. 2071 BS. Nepālkā lāgi ādarsha bhāṣā nīti (Ideal language policy for Nepal). *Prajña*, 110. 21-31.
- Regmi, Bhim Narayan. 2008. Developing a Devanagari-based multi-language orthography for Nepalese languages. Paper presented at Second International Conference on Language Development, Language Revitalization and Multilingual Education in Ethnolinguistic Communities, 1-3 July 2008, Twin Towers Hotel, Bangkok, Thailand.
- Regmi, Bhim Narayan. 2074 BS. Nepali bhashako adhunikaranka pramukh ayam (Major dimensions of modernization of Nepali language). Paper presented at a three-day National Literature Seminar organized on the occasion of Diamond Jubilee of Nepal Academy, Kathmandu, 2074 Jeth 6-9.
- Saxena, Anju and Lars Borin (ed.). 2006. *Lesser-known languages of South Asia: status and policies, case studies and applications of information technology. Trends in linguistics. Studies and monographs*, 175. Berlin: Mouton de Gruyter.
- Singh, Udaya Narayan. 1986. Scriptal choice and spelling reform in Bengali: An attitudinal survey. In Annamalai, E., Björn H. Jernudd and Joan Rubin (ed.) 1986. 405-417.
- Toba Sueyoshi, Ingrid Toba and Novel Kishor Rai. 2005. *Diversity and Endangerment of Languages in Nepal. UNESCO Kathmandu Series of Monographs and Working Papers: No 7*. Lalitpur: UNESCO Kathmandu.
- Turin, Mark. 2006. Minority language policies and politics in Nepal. In Saxena, Anju and Lars Borin (ed.) 2006. 61-71.
- UNESCO. 1953. *The use of vernacular languages in education. Monographs on fundamental education*. Paris: UNESCO.
- Watters, David E. and Novel Kishore Rai. 2005. The indigenous languages of Nepal (ILN): Policy, planning and recommendation. In Yadava, Yogendra P. and Pradeep L. Bajracharya (ed.) *The indigenous languages of Nepal (ILN): Situation, policy planning and coordination*. Lalitpur: National Foundation for Development of Indigenous Nationalities (NFDIN). 55-63.
- Yadava, Yogendra P., Rajendra Thokar, Gopal Thakur, and Sulochana Sapkota. 2008. Linguistic diversity in Nepal: Situation and policy planning, SIRD report, SNV Secretariat.
- Yadava, Yogendra P. and Purna Man Shakya. 2065 BS. Samakāfin Nepālmā dekhā parekā bhāṣik muddaharu tathā samābeshī bhāṣā nīti. 49-90. In *Rājya Punah samrachanāko sandharbhamā Nepālko vartamān bhāṣik sthiti ra samābeshī bhāṣā nīti: Seminār prativedan 2065 Māgh*. Kathmandu: Centre for Nepal and Asian Studies and Social Inclusion Research Fund, SNV.
- Yadava, Yogendra P. 2050 BS. Nepālko sandarbhamā bhāṣā vikās (Language development in the context of Nepal). *Prajña*, 79. 63-72.

CONTRIBUTOR'S EMAIL:

<bhimregmi@gmail.com>

# INTEGRATING ICT INTO MTBE IN DEVELOPING COUNTRIES: PROSPECTS, BARRIERS AND SOME STRATEGIES

DAN RAJ REGMI

*Integration of ICT is an irrefutable necessity to mitigate major problems faced by MTBE in developing countries of South Asia. However, it is not an easy task. It demands exploring realistic strategies for meeting barriers perceived in such integration. ICT can support MTBE to improve access to quality basic education in non-dominant speech communities.*

Keywords: basic education, learning outcomes, linguistic pluralism, electronic technology, human resources

## 1. INTRODUCTION

This paper attempts to introduce the prospects and barriers of integrating ICT (Information and Communication Technology) into MTBE (Mother-tongue based education) in the developing and multilingual countries of South Asia, viz., Nepal, India, Bangladesh, Pakistan, Sri Lanka and Bhutan and suggests some strategies to cope up with such barriers.<sup>1</sup> It also attempts to highlight the state of affairs of use of ICT in MTBE in such countries. Indeed, this is the age of ICT globalization. ICT generally refers to a diversity of sets of technological tools and resources (i.e., computers, internet, broadcasting technologies, software and telephony) which are commonly used to communicate, create, disseminate, store and manage information (Tazhibayeva and Karabasova 2017).

In South Asian countries, attempts, on behalf of both governmental and non-governmental agencies, have been made to implement MTBE (i.e., a new instructional approach) with a view to improving learning outcomes in the primary levels. MTBE, in these countries, has been employed with a hope for ensuring improved academic achievement, increased efficiency and promoting a greater socio-cultural cohesion (ACDP 2014). Instruction, as per the basic

principle of MTBE, is given exclusively in a child first language (L1). There is usually a planned gradual transition to a second language (L2) or foreign language at a specified time period in primary schools (Ball 2011:62). This approach aims at facilitating the students in learning core concepts and life crucial knowledge primarily in a familiar language, i.e., Mother-tongue. Nowadays, MTBE is argued to have potential to enhance the cognitive development in the children. Especially, in minority speech communities, MTBE has been able to create some success stories of improved learning outcomes as expected.<sup>2</sup>

Undoubtedly, in developing countries, MTBE is facing a number of crucial problems. There is not only lack of textbooks and reading materials in the mother tongues but also trained manpower. More importantly, these developing countries are lagging behind in the effective integration of ICTs into MTBE. Consequently, the children are generally deprived of the right of quality basic education. Integrating ICT into MTBE is one of the fundamental prerequisites for achieving such education based on the convention of linguistic pluralism. Definitely, ICT can sufficiently support MTBE in different ways in improving desired access to education and reading and learning outcomes. It can additionally facilitate in improving internal educational competence and children's self-concept and identity (RTI International 2013). Integrating ICT into MTBE is not an easy task. Surely, attempts to integrate ICTs without apposite needs assessment may contribute to the further endangerment of the values of local cultures and encourage the speech communities to be assimilated into the mainstream cultures associated with the dominant as well as international languages. In order to avoid such predicament, the needs assessment is

---

<sup>1</sup> This is a fully revised version of the paper presented at the 37th Annual Conference of Linguistic Society of Nepal held in Kathmandu on 26-27 November, 2016.

---

<sup>2</sup> MLE program implemented by NNLPI funded by SIL Intl (Nepal) in Rajbangsi in three schools of Jhapa offers ample examples of such stories (Regmi et al., 2016).

required to be made based on the criteria such as relevance, responsiveness, effectiveness, flexibility, context-sensitivity and fit-for-purpose. The developing countries have tried their best to employ ICTs in MTBE. ICTs can be of immense help for MTBE in achieving the desired leaning outcomes in primary education. In other words, there are a number of prospects of integration ICTs into MTBE in the developing countries. However, a number of barriers have been perceived in the proper integration of ICT into MTBE. Such barriers can be effectively removed away by exploring realistic and pragmatic strategies so that MTBE can be effectively supported by ICTs to ensure quality basic education to the children from non-dominant speech communities of these countries of South Asia.

This paper is organized into six sections. Section 2 presents the state of affairs of use of ICT in MTBE in the developing countries. In section 3, we discuss the prospects of integrating ICT into MTBE in relation to the major issues of MTBE in this region. Section 4 enumerates the barriers to the successful integration of ICTs into MTBE. In Section 5, we suggest some strategies for removing the barriers of integrating ICT into MTBE. Section 6 summarizes the findings of the paper.

## 2. STATE OF AFFAIRS OF USE OF ICTS IN MTBE

A number of attempts have been made to mitigate the major problems faced by MTBE (i.e., lack of quality and sufficient textbooks, reading materials, trained teachers and positive attitudes) with the support of ICTs in developing countries of South Asia. However, these countries, in general, do not provide any encouraging picture of the use and integration of ICTs in MTBE. In Nepal, except in Nepali, electronic technology (the web, text and speech recording, spell/grammar checker, machine translation, web dictionary, uni-codification, etc.) has been sparsely used to support other mother tongues (Yadava 2013). In Nepal, MTBE is not properly facilitated with the use of ICTs (Regmi and Regmi Banjara, 2016). In Sri Lanka, the use of ICTs for MTBE is still in its infancy. The Kothmale Community Radio Internet is an attempt to employ different technologies in

combination to facilitate the sharing of information and provide educational opportunities in a rural community in Sri Lanka.

In India, the Indira Gandhi National Open University has combined the use of print, recorded audio and video, broadcast radio and television, and audio conferencing technologies for sharing of information and provide educational opportunities. Wagner et al. (2010) rightly indicate that India also lags behind in using ICTs effectively for the poor and illiterate children and youth and suggest that local language multimedia software for literacy be developed, and the use of existing computer infrastructure be used to narrow down the digital divide.

Nisar et al. (2011) reports some attempts have been made to make ICTs accessible in education in order to improve the knowledge and learning skills of students in Pakistan. As a result, educational efficiency has been improved; however, integration of ICTs into MTBE is not yet satisfactorily materialized. Since 2003, Bhutan has also been trying to integrate ICTs into basic education and implement a national awareness-raising campaign of the benefits of ICT. Bhutan has set a goal of providing one computer to one student. Indeed, it is a praiseworthy attempt. Kangas and Mohanty (2009) point out there is a very positive impact of MLE in Nepal. However, there is lack of books in mother tongues in Nepal. It further notes that translation from Nepali is very difficult for non-Nepali speaking community like Tamang. Halim (2015) remarks that Bangladesh due to lack of technical capacity and human resources has not been able to effectively implement the policy of multilingualism in non-dominant speech communities. Bangladesh government has very recently decided to transform the country into “Digital Bangladesh” to narrow down the ‘digital divide’ and promote literacy in ICTs. These attempts made, though not enough for the desired effect, clearly indicate that these countries are gradually stepping forward to integrating ICTs into total education structure including MTBE in order to ensure quality education in primary levels.

### 3. PROSPECTS OF INTEGRATION OF ICT INTO MTBE

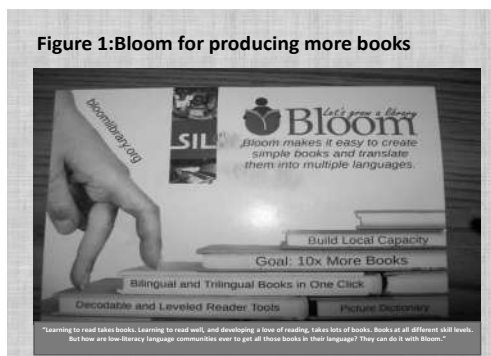
Undoubtedly, ICT is of immense support to MTBE to improve the learning outcomes in the primary levels. Integration of ICTs into MTBE is a necessity. Sadiq (2012) argues that "ICT enhances academic experience (educate), ensure students achievement (assess), facilitates educational stakeholders (collaborate) and manages resources and operations efficiency (manage)." A report of ADB (ADB 2009:1) very rightly notes "ICT has the potential to "bridge the knowledge gap" in terms of improving quality of education, increasing the quantity of quality educational opportunities, making knowledge building possible through borderless and boundless accessibility to resources and people, and reaching populations in remote areas to satisfy their basic right to education." Additionally, information literacy has been defined by this report as the sustaining force of a knowledge society and one of the basic human rights in the digital world. However, neither the potentiality of ICTs in MTBE, nor inevitability of MTBE has been properly realized in these countries.

MTBE in these countries, in common, are facing a number of problems/issues. Firstly, there is no access to quality education, especially in many communities speaking non-dominant languages. The children are mostly instructed in alien/dominant languages. Consequently, there is delayed enrolment, high repetition and drop-out rates and low enrolment of girls in primary levels. Besides, the children of such communities are also suffering from "digital divides" (Swart 2017). Secondly, there is lack of quality textbooks and reference materials in sufficient number. Whatever materials are prepared, they lack local needs and contexts. Many materials, which are framed on national curriculum framework, are simply translated from dominant languages of the countries. They have not been prepared in compatible with the local contexts and needs. Thirdly, teacher quality (especially, primary school teachers) is always questionable. There is lack of adequate academic qualifications, training and content knowledge in the teachers of primary levels. Neither are they able to use effective

teaching methodology nor are they familiar with the emerging technology. Fourthly, in this region, there is mass illiteracy (especially in girls), innumeracy and deprivation of life crucial knowledge resulting in high drop out without basic skills of reading and writing and life crucial knowledge. Fifthly, in these countries, many languages are preliterate. Attempts have been made to propose orthographies without considering linguistic and socio-cultural aspects. Some speech communities are discontented with adapting the orthographies of dominant languages. Very often, unfruitful debates on writing systems for preliterate languages have also hindered the implementation of MTBE in these countries. Sixthly, there is a lack of linguistic description as well as dictionaries of non-dominant languages. They are urgently needed for the purpose of references while writing textbooks, reference materials in mother tongues. Seventhly, there is a lack of positive attitude in teachers and communities towards MTBE in these countries. In the hegemonic position of English and official dominant languages as the medium of instructions, other non-dominant languages are lagging behind in creating of positive attitudes towards MTBE. Eighthly, there is a lack of coordination and proper spirit of MLE in implementation. Lastly, there is lack of sustainability as well as clear perspectives and models of MLE.

These major issues of MTBE are not easy to be resolved. Only effective integration of ICTs into MTBE can facilitate to solve these issues in different ways (Swart 2017). Unless MTBE is made compulsory and substantial resources are allocated, it is not possible to ensure the access of quality education in minority speech communities in such countries. Different strategies have to be implemented to reduce dropouts and repetition and encourage retention. ICTs can help to collect and analyze the data in more timely and systematically to inform about the situations to concerned stakeholders and authorities for better planning. There is a need of producing sufficient number of textbooks and reference materials based on local needs and contexts with active involvement of teachers, experts and speech communities. Such has been made possible by using software referred to as Bloom developed by

SIL. Bloom can create simple book and it can be translated into multiple languages (See Figure 1).

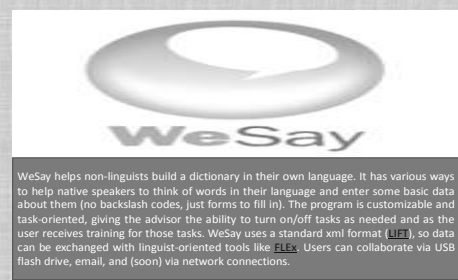


Intensive training to teachers should be provided. Besides, they should be provided the opportunity for professional development and involvement in producing self-guided quality materials including the use of ICTs. For this, we can use and integrate different types of technologies (radio, video, CDs, on-line, ODL and multi-media) to ensure quality instruction, improved learner participation and attention. Moreover, priority to literacy, mathematics and life crucial knowledge should be given while framing the curriculum. Various components of reading and writing should be taught by trained teachers and structured and self-guided materials should be developed. ICTs (radio, TV, video, CDs, on-line) and various digital literacy materials and programs for learners can effectively help in this respect. Pedagogical grammars and trilingual dictionaries (MT, dominant language and English) and pictorial dictionaries have to be immediately prepared. With help of software referred to as Toolbox, we can compile dictionaries and prepare grammars of undescribed languages. Following is a sample head entry in Tookbox in Bhujel.

\lx lexical item दपाएमए  
 \pr pronunciation /dəpəyməy/  
 \psn POS in Devanagari स.क्रि.  
 \gn gloss in Nepali शोषण गर्नु  
 \ps POS in English vt.  
 \ge gloss in English exploit

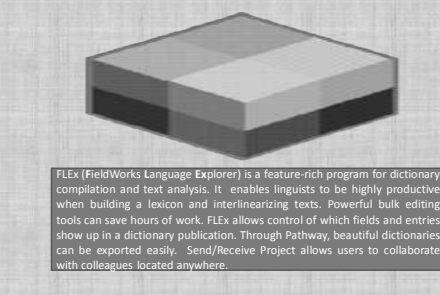
WeSay is software which can be easily used by non-linguists to compile dictionaries in their own language (See Figure 4).

**Figure 2: WeSay**



FLEx is a tool for dictionary compilation and text analysis (See Figure 3).

**Figure 3: FLEx**



Orthography of preliterate languages has to be developed by considering both linguistic and social factor. While developing the orthography of preliterate languages, as far as possible, attempts have to be made to adapt from the writing system of dominant languages. ICTs can help in this respect too. Graphite is a package which is highly supportive of bringing unwritten languages into written tradition (See Figure 4).

**Figure 4: Graphite**



Graphite is a package that can be used to create "smart fonts" capable of displaying writing systems with most complex behaviors. Minority languages are often written with slightly different shaping, ligating, positioning, or ordering rules than well-known languages that use the same script, and Graphite was developed to provide the flexibility needed to support these lesser-known languages. The Graphite system comprises a rule-based programming language that can be used to describe the behavior of a writing system, a compiler for that language, and a rendering engine that can serve as the layout component of a text-processing application. It renders TrueType fonts.

#### 4. BARRIERS FOR INTEGRATION OF ICTS INTO MTBE

Integrating ICTs into MTBE is a complex process. There are a number of barriers for integration of ICTs into MTBE in these countries. One of the most crucial barriers is related with economy. In developing countries, the budget is not even sufficient for the salary and regular management for the schools. It is even more difficult for the schools in non-dominant speech communities to have an access to ICTs developed for enhancement in education. ICTs are gradually updated and improved technically and functionally. Without regular trainings and rigorous practices, it is not possible to be updated with new the technology. There are again psychological barriers for integration of ICTs into MTBE. Teachers, in general, are neither confident nor competent to play with modern technology. Integration of ICT into BTBE requires training to teachers for new skills in employing the tools effectively. Neither are they open to change nor have they positive attitudes towards new technology. It is very difficult to convince the teachers that ICTs have high level of potentiality in solving the problems perceived in the implementation of MTBE in such countries. Bingimlas (2009) has described this type of barrier as teacher level barriers which include lack of teacher confidence, lack of teacher competence, resistance of change and negative attitudes. Generally, schools are not able to manage the additional time for the use of ICTs. Besides, schools do not have access to ICTs on the one hand; they do not have technical support from the trained manpower on the other. Bingimlas (2009) refers this category of barrier as school level barriers which include lack of time, lack of effective training, lack of accessibility and lack of technical support. In reality, it is very difficult to find trained and dedicated teachers to use ICTs as complementary tools to textbooks and reference materials.<sup>3</sup> These barriers commonly exist in all these countries. In these countries, internet facility is not efficiently accessible to

those parts of the countries where non-dominant language communities reside with the urgent need of MTBE. Neither is there power supply regular. Overcrowded classrooms, lack of textbooks and reading materials are common phenomenon hindering effectiveness of MTBE in developing countries (Viatonus and Kayode 2012).

It is indubitable that the internet and other forms of information and communication technology are of enormous benefit to the education system. However, the internet has been proved to be boon as well as curse. It contains many obscene sites. Such things may open morally wrong doors to, especially, teenagers and youths. In this region, it is not easy to regulate and control over such matters. Even the teachers are not totally immune from the obscene sites. Besides, it is not easy to upgrade or familiarize the teachers with ICT and its application in the classroom setting. Generally, electricity, phone lines, internet facilities are not only irregular but also expensive. In many schools in Nepal, ICTs, donated by governmental and non-governmental agencies, are locked in storage closets because of the lack of trained manpower. An additional barrier is the physical situation of the schools in these countries. Language and computer labs, in general, are as rare as snakes in Ireland. There is no specific model for the implementation of MTBE in these countries. Thus, it has been difficult for modeling ICTs to suit the inherent goal of MTBE. By far the most conspicuous barrier is the lack of clear policy and planning for making MTBE goal oriented at the government level. There is a "To be or not to be" type of predicament/dilemma in the non-dominant speech communities about the need of MTBE. These communities are gradually shifting their focus to get their children instructed in dominant languages of the nation as well as in international language like English.

#### 5. STRATEGIES FOR REMOVING THE BARRIERS OF INTEGRATING ICT INTO MTBE

Indeed, it is not straightforward to explore and suggest strong and fool-proof strategies for removing the barriers of integrating ICT into MTBE. First and foremost, enough and regular budget should be allocated for setting up, regular update and maintenance ICTs for MTBE. If the governments are not singly able to manage the

<sup>3</sup> Taimur-ul-Hassan and Sajid (2012) have explored the barriers to the integration of Information and Communication Technologies (ICTs) at the secondary level learning in Pakistan.

budget, they have to invite international donor agencies for funding for the management of ICTs. In order to remove the psychological barriers MTBE teachers have to be provided basic training to the maximum use of ICTs at the national and school levels. Such trainings contribute to the personal development for the teachers. Besides, the trained teachers have to be encouraged to continue their services in the schools. Such trainings are also urgently necessary for the students to use ICT in their learning processes. Both the teachers as well as students should be upgraded and familiarized with the use and application of ICT facilities in MTBE. Curriculum and education policy for MTBE should be framed in compatible the emerging ICT technology. MTBE schools have to be located in the areas where constant/regular supply of electricity and internet facilities can be provided. ICT labs have to be set up in all MTBE schools. Such labs have to be maintained regularly by trained manpower. Enough numbers of computers, both for teachers and students, should be made available in schools. Adequate extra-remuneration should be provided to the teachers trained in ICTs. Advocacy programs for MTBE supported by ICTs should be launched in active participation of non-dominant speech communities. Almalki and Williams (2012) urge that a supportive environment should be created institutionally by providing training and technical support for a regular maintenance of hardware and software for the proper use of ICTs in education. There should be a full participation of the speech communities in deciding the use of ICTs in relation to the local needs and contexts. Needs assessment has to be properly conducted in schools located communities for viability and sustainability of the use of ICTs in primary levels. Governments should frame a policy/legislation to control and standardize contents in the internet in order to avoid cultural conflicts. Will power and good intention on behalf of the authorities at the policy levels and proper encouragement to the institutions as well as the communities at the implementation levels are urgently required for proper integration of ICTs into MTBE. Some of the major strategies can be summed up in following radial vein diagram (See Figure 5).



Figure 5: Some of the major strategies in radial vein diagram

## 6. SUMMARY

In this paper, we tried to introduce the prospects and barriers of integrating ICTs into MTBE and suggest some strategies to meet those barriers in developing countries like Nepal, India, Bangladesh, Bhutan and Pakistan. Some cursory attempts have been made to use ICTs, particularly, in general primary education. However, thanks to the lack teachers with confidence, competence and positive attitudes, the attempts of MTBE supported by ICTs have not yet been made able to be goal-oriented. No doubt, there is no question as to the prospects of integration of ICTs into MTBE. Major issues of MTBE can be mitigated by the support of ICTs. Theoretically, integration is urgently needed for improving learning outcomes in primary levels. However, neither the authorities at the policy framing levels, nor the non-dominant speech communities have been fully convinced about the potentiality of MTBE supported by ICTs to enhance and ensure the quality basic education. There are barriers mostly connected to financial, technical, managerial and psychological aspects. All these barriers can be removed away by employing effective strategies. First and foremost, needs assessment should be conducted in the concerned schools in relation to the socio-cultural complex of the speech communities. Confidence and competence in the teachers have to be

promoted through trainings in the use of ICTs in MTBE in compatible with such socio-cultural complex. By far the most crucial thing is to sustain the will power in the concerned authorities (at the policy level) as well as in the speech communities (at the implementation level). Without delay, ICTs have to be integrated into MTBE for assuring basic quality education in the developing countries of South Asia.

#### REFERENCES

- ACDP Indonesia. 2014. Mother-tongue based Multilingual Education. A Working Paper, November 2014. Retrieved August 5, 2017 from <https://www.adb.org/sites/default/files/publication/176282/ino-mother-tongue-multilingual-education.pdf>.
- Asian Development Bank. 2009. *Good Practice in Information and Communication Technology for Education*. Mandaluyong City, Philippines: Asian Development Bank.
- Almalki, Gafar and Neville Williams. 2012. A Strategy to Improve the Usage of ICT in the Kingdom of Saudi Arabia Primary School. *International Journal of Advanced Computer Science and Applications*, 3 (10). Retrieved August 2, 2017 from <http://dx.doi.org/10.14569/IJACSA.2012.031007>.
- Ball, Jessica. 2011. *Enhancing Learning of Children from Diverse Language Backgrounds: Mother tongue-based Bilingual or Multilingual Education in the Early Years*. Analytical Review Commissioned by the UNESCO Education Sector. United Nations Educational, Scientific and Cultural Organization. Retrieved August 25, 2017 from <http://unesdoc.unesco.org/images/0021/002122/212270e.pdf>.
- Bingimlas, Khalid Abdullah. 2009. Barriers to the Successful Integration of ICT in Teaching and Learning Environments: A review of literature. *Eurasia Journal of Mathematics, Science and Technology Education*, 5(3), 235-245. Retrieved August 1, 2017 from <http://vtelibrary.net/public/uploads/270.pdf>.
- Halim, Sakeda. 2015. State of Multilingualism in Bangladesh. A paper presented at International Seminar on Promotion of Mother Languages and Multilingualism, held in Dhaka, Bangladesh (22 February, 2015).
- Johnson, L., R. Smith, A. Levine, and K. Haywood. 2010. *2010 Horizon Report: K-12 Edition*. Austin, Texas: The New Media Consortium.
- Kangas, Tove Skutnabb and Ajit Mohanty 2009. Policy and Strategy for MLE in Nepal. A report submitted to Multilingual Education Program for All Non-Nepali Speaking Students of Primary Schools of Nepal Ministry of Education Department of Education Inclusive Section Sanothimi Bhaktapur, 4-14 March 2009.
- Nisar, M. Wasif, Ehsan Ullah Munir and Shafqat Ali Shad. 2011. Usage and Impact of ICT in Education Sector: A Study of Pakistan. *Australian Journal of Basic and Applied Sciences*, 5(12): 578-583.
- Regmi, Dan Raj and Ambika Regmi Banjara. 2016. Role of Multilingual Education Planning and Policy [MEPP] for the Development of Indigenous Languages and Cultures in Nepal. A paper presented at the International Conference on Language Policy in Multicultural and Multilingual Settings, held in Mandalay, Myanmar( 8-11 February, 2016)
- Regmi, Dan Raj, Sashidhar Sharma, Jay Lal Tiwari, Nava Raj Rijal and Ganga Ram Basnet. 2016. *SIL Language, Education and Development (Nepal) Project*. A report of final evaluation submitted to Social Welfare Council, Samaj Sewa Bhawan, Lainchaur, Kathmandu, Nepal (August, 2016).
- RTI International MTB MLE Network. 2013. Improving Learning Outcomes through Mother Tongue-Based Education. Final updated in January 2013. Retrieved August 25, 2017 from <http://www.mlenetwork.org/sites/default/files/Mother%20tongue-based%20instruction%20and%20learning%20outcomes%20brief%20Jan%202013.pdf>.
- Sadiq, M. S. Mohammed. 2012. Shaping the Future of Education and Training with ICT. Retrieved August 9, 2017 from [www.slideshare.net/.../shaping-the-future-of-education-training-with-ict](http://www.slideshare.net/.../shaping-the-future-of-education-training-with-ict).
- Swart, Patti. 2017. Main Issues, Possible solutions and Opportunities for ICTs. (Prepared by Patti Swart for Global e-schools and communities initiative (GeSCI)). Retrieved August 10, 2017



- from [https://ictedupolicy.org/system/files/main\\_issues\\_possible\\_solutions\\_and\\_opportunities\\_for\\_icts.pdf](https://ictedupolicy.org/system/files/main_issues_possible_solutions_and_opportunities_for_icts.pdf).
- Taimur-ul-Hassan and Abdur Rahim Sajid. 2012. ICTs in Learning in Pakistan. *International Journal of Evaluation and Research in Education* (IJERE) Vol.1, No.2, December 2012, pp. 51~60. [https://www.researchgate.net/publication/275405951\\_ICTs\\_in\\_Learning\\_in\\_Pakistan](https://www.researchgate.net/publication/275405951_ICTs_in_Learning_in_Pakistan).
- Tazhibayeva, E. R and A. Karabasova. 2016. What are ICTs and what Types of ICTs are Commonly used in Ed? Retrieved August 11, 2017 from <https://prezi.com/ebqmalev6fci/what-are-icts-and-what-types-of-icts-are-commonly-used-in-ed/>
- Viatonu, Olumuyiwa and Elusakin Titus Kayode. 2012. Improving the Teaching and Learning of English Language Through the Use of Information and Communication Technology: Prospects and Challenges. Retrieved August 12, 2017 from [conference.pixel-online.net/ICT4LL2012/.../38-IBT104-FP-Viatonu-ICT2012.pdf](https://conference.pixel-online.net/ICT4LL2012/.../38-IBT104-FP-Viatonu-ICT2012.pdf).
- Wagner, Daniel A., C. J. Daswani and Romilla Karnati. 2010. Technology and Mother-Tongue Literacy in Southern India: Impact Studies among Young Children and Out-of-School Youth. *USC Annenberg School for Communication & Journalism*. Volume 6, Number 4, Winter, 2010, 23–43.
- Wallet, Peter. 2014. *Information and communication technology (ICT) in education in Asia: A comparative analysis of ICT integration and e-readiness in schools across Asia*. Montreal, Quebec: UNESCO Institute for Statistics.
- Yadava, Yogendra. P. 2013. MLE policy and practices in Nepal: an appraisal. A paper presented at 4<sup>th</sup> International Conference on Language and Education: Multilingual Education for All in Asia and the Pacific-Policies, Practices and Processes, held in Bangkok, Thailand.

CONTRIBUTOR'S EMAIL:

<danrajregmi8@gmail.com>

# THANGMI SURNAMES

PRATIGYA REGMI

*The Thangmi language community has an atypical surname and clan system, which is basically differentiated by gender. Males and females have different surnames and clans. Surname and clan identity is passed down from the same sex parents, so two opposite sex siblings from the same biological parents have different clan affiliations.*

Keywords: surname, ethnolinguistic, forefather, clan, foremother

## 1. INTRODUCTION

This paper is an attempt to present the Thangmi surnames system. Thangmi belongs to the Sino-Tibetan family, Tibeto-Burman, Western Tibeto-Burman, Himalayan, Central Himalayan, Thangmi-Baraamu (Ethnologue 2012). Thangmi inhabits many districts of Nepal although indigenous and autonomous to only Dolakha, Sindhupalchock and Ramechhap districts of Nepal (Turin 2006:74). They are also distributed in different parts of India like West Bengal, Assam, Sikkim and China. Thangmi is an endangered Tibeto-Burman language spoken by 23,151 of the 28,671 ethnic Thangmi (Census 2012). According to Turin (2006:57), *Thangmi*, *Thami* and *Thani* are the existing ethnonyms for the Thangmi ethnic group. There are two dialects of Thangmi, spoken in the districts of Dolakha and Sindhupalchock, referred respectively as Dolakha dialect and the Sindhupalchock dialect (Turin 2006:78).

A surname is a hereditary name common to all members of a family. A clan name is not necessarily a surname. A clan is a group that is not necessarily related to the people having the same surname, such as having different surnames like *Khanal* and *Panthi* entertain same clan affiliation in the Brahmin community. According to Keesing (1935), “a unilineal descent group whose members trace their descent from a known ancestor and know the genealogical connections to that ancestor, is technically called a *lineage*. In patrilineal system, they are called *patrilineages*; in a matrilineal system, they are called *matrilineages*. Lineages are distinguished,

however, from unilineal descent groupings whose members believe they are descended from a common ancestor, but do not know the genealogical connections. Such categories of groups are called clans.” In general, a surname or clan name is a name that comes down from the father's side, from the grandfather, father, son, great grandson, etc. but in Thangmi, the system is different. According to the Furer-Haimendorf notes, as referred in Turin (2006:34), a double decent system is the most important social characteristics of Thangmi, by which men inherit clan membership from their fathers, and women through their mothers. It is an uncommon feature of social structures of Himalayan groups.

This study is primarily based on the ethnolinguistic research carried out in March-April 2014, among the Thangmi language community of the Doramba Village Council-1 (former Daduwa VDC), Tinghare in Ramechhap district. This paper employs the ethnolinguistic approach to present and analyze the data. In this paper, we present the indigenous Thangmi interpretation of their surname and clan origin, as well as the semantic analysis of the various surnames and clan names.

This paper is organized into six sections. Section 2 outlines the model of the Thangmi surname and clan system. The ethnolinguistic basis of the surname and clan systems of males and females is presented in section 3. In section 4, we look at the marriage practices of Thangmi in reference to surname and clan. Section 5 outlines a comparison of surname/clan system and marriage practice of Thangmi with other Tibeto-Burman communities. We summarize the findings of the paper in section 6.

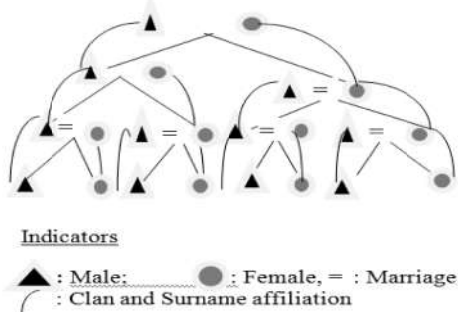
## 2. MODEL OF SURNAME AND CLAN

The Thangmi<sup>1</sup> surname and clan system is basically differentiated by gender. Male and

---

<sup>1</sup>Thangmi people basically use the collective surname *Thami* rather than opting for their respective clan names or surname. In light of that, official Nepali census reports and statistics also

females are associated with different surnames and clans. Surname and clan identity is passed down from the same sex parents, and therefore two opposite sex siblings from the same biological parents have different clan membership. There is no clan affiliation between mother-in-law, father-in-law and daughter-in-law. A similar system is applied to son-in-law as well. The following figure represents the parallel descendent family tree of Thangmi:



### 3. ETHNOLINGUISTIC BASIS FOR SURNAME AND CLAN SYSTEM

According to the *Thangmi*<sup>2</sup> shaman of Tinghare, the Thangmi first man (forefather) is known as *japatits<sup>h</sup>uku*<sup>3</sup> and the first Thangmi woman (foremother) is *sonari adzi*<sup>4</sup>, who came from

---

identify Thangmi people as Thami (Shneiderman and Turin 2006:123)

<sup>2</sup>On death ceremony, Thangmi Shaman (*dz<sup>h</sup>akri*) used to fleg a cock in rememberce of a dead person for his/her liberation of soul, this process is called *t<sup>h</sup>aj tasa* in Thangmi, so it is assumed thatthe group of people having this ritual system are called Thangmi.

<sup>3</sup>*japatits<sup>h</sup>uku* is the combination of four morphemes *ja* á type of taro'(Pidalu-Nepali)orsenoir/elder, *pa* ismost likely cognate with Thangmi *apa* 'father'and *pati*, probably derived from Nepali term 'husband',*ts<sup>h</sup>uku*'father-in-law' reflects two completely different roles, not possible to mingle together in the Thangmi community. *japati ts<sup>h</sup>uku* plays both roles as a 'father' and 'father-in-law' to all Thangmi.

<sup>4</sup>*Sonariadzi* is the combination of three morphemes *so* 'who' *nari* likely to derive from Nepali 'female' and *adzi* denotes mother, elder woman or mother-in-law as well in Thangmi. Shealso plays the role of mother and mother in-law to all Thangmi.The morpheme *so*seems not to be directly related

Simranghad around 17<sup>th</sup> century. On their way, they came across Thankot (now at Kathmandu district), where they settled for some years, and also set a pillar (Nepali:*Tham*). Consequently, people began to call them *Thami*<sup>5</sup> (*Tham*'pillar', *mi*'person').After some years, *japatits<sup>h</sup>uku* and *sonari adzi* left Thankot and headed towards the Eastern part of Nepal. When they reached Thimi (Now at Bhaktapur district), they decided to live there. After spending many years at Thimi, they went to Dolakha. They found the place as desired and finally settled there, so it is assumed that Suspa V.D.C (former) of Dolakha district is the location of the Thangmi people.

Thangmi surnames and clans were not assigned by birth; these later appeared to deal with the social boundary for marriage (sibling incest). According to the origin story, Thangmi foreparents had given birth to the seven sons and seven daughters.They all grew up and reached to the marriageable age. There was no one except brothers and sisters in the community, so they could not found a suitable partener.They believed that to marry with own sibling would be sinful, hence the parents planned to do something for their children. They organized archery contest. They requested their sons to dispatch the arrow, seven boys landed their arrows in varing places and things (mostly flora), Based on the names of the places and the things inwhich their arrow landed, then they received the surname and clan. Likewise, the seven daughters received their clan name at the same time as their brothers. While the surnames and clan names of the boys were determined by the place and flora their arrows hit, the surname and clan names of the girls were derived from whatever domestic task they were engaged at home and whatever they like the most. After assigning seperate surname and clan, boys and girls now with distinct identification, were socially accepted to marry. The children were paired up by age, i.e. eldest son got married with

---

with the actual meaning eventhough it may have some kind of association. It needs further research.

<sup>5</sup>Tham and Simranghad are Indo-European term even though Thangmi is Tibeto-Burman term. There is a question left, how they are connected. Further research is required to solve it.

eldest daughter, and so on. After determining separate surnames and clan names for all children, Thangmi parents declared that descendants must strictly follow the rule to maintain clans and surnames for marriage practices, where they were compelled to find potential spouse from the other clans, apart from their parents clan.

### 3.1 MALE SURNAME SYSTEM

There were seven sons of *japatits<sup>h</sup>uku* and *sonariadzi*. The existing clans were determined after archery exercise, as described in section 3 above. Descendants of all brothers are found in Dolakha but not in Ramechhap. According to the Shaman of Tinghare, seven brothers and their surnames that still exist in Dolakha are presented in Table 1.

Table 1: Seven brothers and their surnames

Sons	Places and things (arrow was landed)	Surnames
First	Suspa	Rismi
Second	Iewang 'tree of sandalwood'	akjanjmi
Third	Dumkot	k <sup>h</sup> urpe
Fourth	Lapilarj	t <sup>h</sup> anj <sup>h</sup> oŋmi
Fifth	kjanpol 'the place where the tree of <i>tsilaune</i> (schimawallichii) can be found'	tampe
Sixth	bigu, tsema 'tree of <i>katus</i> ( <i>castanopsisindica</i> )'	bud <sup>h</sup> apere
Seventh	ruku 'the tree of <i>dzaip<sup>h</sup>ul</i> '	dzaid <sup>h</sup> ane

According to the Shaman of Tinghare, there are nine different surnames for males in Ramechhap, only six of which were taken from the seven brothers, and rest were more recently created by the Thangmi people as needed. The surnames for male in Ramechhap are described as;

a. *masant<sup>h</sup>ali*: It is one of the main branches of the *akjanjmi*. The word *masant<sup>h</sup>ali* is the combination of two words *masan* 'ghost' and *t<sup>h</sup>ali* 'place'. *masant<sup>h</sup>ali* thus means 'the place of the spirit'. The son, who landed his arrow in *intsihane dandi* 'burial place', received the surname as *masant<sup>h</sup>ali*.

- b. *t<sup>h</sup>anj<sup>h</sup>oŋmi*: The surname *t<sup>h</sup>anj<sup>h</sup>oŋmi* is the combination of *t<sup>h</sup>anj* 'store of wooden pots, *t<sup>h</sup>oŋ* 'dzaã in wooden pot' and *mi* 'person' in Thangmi. The son, who rooted his arrow into the wooden pot filled with *dzad*, received the surname as *t<sup>h</sup>anj<sup>h</sup>oŋmi*.
- c. *kesai*: It is assumed that it is one of the branches of *tampe*. The word *kesai* is derived from *kjanj* 'the tree of *tsilaune*'. The son rooted his arrow into the tree of *tsilaune*, received the surname as *kesai*.
- d. *bud<sup>h</sup>apere*: The surname *bud<sup>h</sup>apere* is derived from the word *bigu* (a place of Dolakha). The son, who rooted his arrow in *bigu*, received the surname as *bud<sup>h</sup>apere*.
- e. *dzaid<sup>h</sup>ane*: The son, who rooted his arrow into the tree of *dzai* 'a type of flower', received the surname as *dzaid<sup>h</sup>ane*.
- f. *t<sup>h</sup>olai*: The surname *t<sup>h</sup>olai* is derived from the word *t<sup>h</sup>olo* 'needle type grass.' When the son rooted his arrow, it slipped into *t<sup>h</sup>olo*, and therefore received the surname as *t<sup>h</sup>olai*. It is assumed as the branch of *akjanjmi* in Dolakha, but in Ramechhap it has a more distinct identification.

Additionally, there exist other more recently borrowed surnames for males which are not specified as pure surnames but still accepted as Thangmi. It is assumed that these types of surnames emerged from illegal circumstances. They are described as;

- a. *danjsa*: The word *day* refers to 'search or to find' in Thangmi. The daughter of *dzaid<sup>h</sup>ane* gave birth to a child in her maternal place (*maiti*) secretly; having sexual relations with a Magar boy before marriage and the boy left her. Thangmi brothers searched and found her after, so they created new surname for the newly born baby as *danjsa*.
- b. *ruimi/roimidati*: This surname arrived later in the Thangmi community. It is assumed that the daughter of a Thangmi family married with a Newar boy and gave birth to a child. A new surname is created for newly born child, which

is called *ruimiḍati*. The Thangmi people call Newar as *ruimi* or *roimi* and Nepali *dzati* ‘caste’ is used interchangeably with *ḍati*. Thus, *ruimiḍati* simply refers to ‘the Newar group or clan’ on account of the paternity of the newly born son.

- c. *daᅅguri*: There is another clan *daᅅguri*. The daughter of *ruimiḍati* had sexual relations with a boy from another community. She left her maternal place and gave birth to a son. The seven brothers searched and found her, and then created a new surname for newly-born baby as *daᅅguri*. The word *daᅅ* refers to ‘search or to find’ in Thangmi.

Sub-surnames are also identified for two major surnames: *rismi* and *akjaᅅmi*. They are presented as;

- a. *rismi*: *simi*, *isi*, *t<sup>h</sup>oro*, *poᅅlaᅅ*, *rot<sup>h</sup>o*, *ologore*, *bot<sup>h</sup>ore*, *dolak<sup>h</sup>e*, *tsaldarismi*
- b. *akjaᅅmi*: *sansari*, *tsitre*, *saibo*, *pentetali*, *rismi*, *gole*, *masant<sup>h</sup>ali*, *duᅅma*, *kuᅅkuᅅ*, *jek<sup>h</sup>a*, *rot<sup>h</sup>ak*

There are other sub-surnames for Thangmi males, however, there is a level of confusion in the classification of these sub-surnames under major surname types. They are listed as;

- |                                             |                                              |
|---------------------------------------------|----------------------------------------------|
| (1) <i>kjaᅅpole</i>                         | (14) <i>begumpale</i>                        |
| (2) <i>utsjanaike</i>                       | (15) <i>gub<sup>h</sup>uᅅa</i>               |
| (3) <i>gork<sup>h</sup>ja</i>               | (16) <i>ḍump<sup>h</sup>ale</i>              |
| (4) <i>altapolt<sup>h</sup>oro</i>          | (17) <i>abjak<sup>h</sup>ja</i>              |
| (5) <i>ᅅnera</i>                            | (18) <i>potsokt<sup>h</sup>ali</i>           |
| (6) <i>laiwa</i>                            | (19) <i>kᅅᅅsabati</i>                        |
| (7) <i>paᅅguri</i>                          | (20) <i>gaᅅmbal</i>                          |
| (8) <i>saiba</i>                            | (21) <i>sᅅlaha</i>                           |
| (9) <i>dz<sup>h</sup>aᅅt<sup>h</sup>ali</i> | (22) <i>gohora</i>                           |
| (10) <i>naik<sup>h</sup>ala</i>             | (23) <i>potsjo</i>                           |
| (11) <i>silsildᅅᅅguri</i>                   | (24) <i>koᅅ<sup>h</sup>e</i>                 |
| (12) <i>dz<sup>h</sup>janaiki/</i>          | (25) <i>ajudᅅguri dzeᅅ<sup>h</sup>anaiki</i> |
| (13) <i>gumḍa</i>                           | (14) <i>sjarpi</i>                           |

### 3.2 MALE CLAN<sup>6</sup> SYSTEM

According to the origin history, after shaping the surname, the fore parents again organized an archery competition to determine the clan name of their sons. The clan of the male was determined by the items, mostly flora, in which their arrow landed. Seven sons received seven different clans. According to the Thangmi historian and Shaman of Tinghare, Thangmi clan system of Ramechhap is quite different from in Dolakha and Sinduplachock. According to Turin (2006:103), the clans for male in the village of Suspa, Dolakha are *akalakyaᅅmi*, *kyaᅅpoleakyaᅅmi*, *aᅅᅅakyaᅅmi*, *ḍumlaakyaᅅmi*, *daᅅguriakyaᅅmi*, *mosan thali akyaᅅmi* and *jāidhaneakyaᅅmi*.

Descendants of all brothers have been found in Dolakha but not in Ramechhap. According to the Shamans of Tinghare, clans for seven brothers have been existing in Dolakha, are presented in Table 3.

Table 3: Clan system of Thangmi male

Sons	Place and things (arrow was landed)	Clans
First	b <sup>h</sup> uᅅ ‘land’	dzimi
Second	lewaᅅ ‘tree of sandal wood’	lewaᅅ
Third	sila ‘stone’	sila
fourth	alta ‘tree of Rhododendron’	alta
fifth	kjaᅅ ‘tree of <i>tsilaune</i> ’	kjaᅅ
sixth	tsema ‘tree of <i>kᅅᅅus</i> ’ or bᅅku ‘a type taro found in the forest’	tsema or ja
seventh	ruku or bena ‘tree of <i>k<sup>h</sup>ᅅsru</i> ’	bena

There are six different clans for males in Ramechhap. Among nine surnames, only six of them received their clan names. According to the Thangmi Shamans of Tinghare, clans for the males are described as;

<sup>6</sup> According to Shneiderman and Turin (2006:152), “clan structure consists of roughly seven clans for each sex, although the specific clan names and numbers vary from village to village.” Here, we can also figure out some differences between the clan names and numbers presented by Shneiderman and Turin (2006), and found in Tinghare, Ramechhap.

- a. leway: The word *leway* refers to the ‘tree of sandal wood’ in Thangmi. The son, who rooted his arrow in the tree of sandal wood, received the clan as *leway*.
- b. kjaŋ: The word *kjaŋ* refers to ‘the tree of *tsilaune*’ in Thangmi. The son rooted his arrow into the tree of *tsilaune*, received the clan as *kjaŋ*.
- c. alta/patareŋ: The word *patareŋ* refers to the ‘tree of Rhododendron’ in Thangmi. The son, who rooted his arrow into the tree of Rhododendron, received the clan as *alta* or *patareŋ*.
- d. tsema: The word *tsema* refers to the ‘tree of chestnut’ in Thangmi. The son rooted his arrow into the tree of chestnut, received the clan as *tsema*.
- e. *bena:bena* refers to the tree of *k<sup>h</sup>Asru* in Thangmi. The son, who rooted his arrow into the tree of *k<sup>h</sup>Asru*, received the clan as *bena*.
- f. *t<sup>h</sup>i*: The word *t<sup>h</sup>i* is derived from the word *t<sup>h</sup>olo* ‘needle type grass.’ The son, who rooted his arrow in the needle type grass, received the clan as *t<sup>h</sup>i*.

### 3.3 SURNAMES<sup>7</sup> (CLANS<sup>8</sup>) OF FEMALE

Unlike males, females have different types of surnames in Thangmi. As mentioned earlier in section 3, surnames or clans of girls were derived from whatever domestic task they were engaged at home and whatever they liked the most. There is a gender marker *mesmudza* for female. The word *siri* is attached with all surnames. According to Turner (1997:575 and 609) as referred to in Turin (2006: 106), “all clan names for Thangmi female end with the word *siri*, almost certainly cognate with and derived from Indo-Aryan *siri* ‘good fortune, prosperity and happiness’.” Turin

<sup>7</sup> Both surnames and clans for males and females (surname/clan) are found in Tinghare, Ramechhap, but Shneiderman and Turin (2006), presents only the Thangmi clan system in detail and mentions that Thami is in use as a collective surname to all Thangmi. Hence, it represents the distinction adaption of surname and clan system of the Thangmi community, which may vary place to place.

<sup>8</sup> Thangmi females do not entertain surname and clan differently as males, so they are identified by a single surname/clan. Here, both terms (surname/clan) are used interchangeably for women.

(2006:105), has presented the seven different clans for female as *būdati*, *yate siri*, *khaṭu siri*, *caltā siri*, *alta siri*, *khasa siri* and *bampa siri*. Basically there are seven daughters of *japati ts<sup>h</sup>uku* and *sonariadzi*. In addition to that, two other types appeared in Ramechhap, but Thangmi people do not know their actual origin. According to the historian of Tinghare, nine different clans for Thangmi women are found. They are described as;

- a. jantesirimesmudza: The word *jante* refers to the ‘quern’ (Nepali:dzāṭo) in Thangmi. The daughter, who worked perfectly inside the house (household works), received the surname *jantesirimesmudza*.
- b. apansirimesmudza: In Thangmi, *apan* refers to the ‘wife of forest Shaman’. The daughter, who was physically different (abnormal) from other sisters, received the surname *apansirimesmudza*.
- c. *pAharisirimesmudza*: The word *pAhar* denotes the ‘hills’ in Thangmi. The daughter, who preferred to live in the forest, in a nearby river or in a moist place, received the surname *pAharisirimesmudza*.
- d. *ŋoŋŋsirimesmudza*: The word *ŋoŋŋ* refers to ‘the loom’ (*tan*) in Thangmi. In the past, Thangmi people did not have access to the market. They used to wear home-made cloth (*b<sup>h</sup>aŋra*), which was made from the fiber of nettle (*allo*, *sisnu*). The nettle fiber was woven by women on small wooden hand looms. The daughter, who used to make *b<sup>h</sup>aŋra* with the small wooden hand loom, received the surname *ŋoŋŋsirimesmudza*.
- e. *aŋeŋsirimesmudza*: The word *aŋeŋ* denotes the *Ark<sup>h</sup>aulo* ‘a type of tree’ in Thangmi. The daughter, who typically adored the tree of *Ark<sup>h</sup>aulo*, received the surname *aŋeŋsirimesmudza*.
- f. *tsjaŋkitsirimesmudza*: The word *tsjaŋkit* refers to the ‘tree of *tsap*’ in Thangmi. The daughter, who usually liked the tree of *tsap*, received the surname *tsjaŋkitsirimesmudza*.

- g. *gjalb<sup>h</sup>asirimesmudza*: The word *gjalb<sup>h</sup>a* refers to ‘laziness’ in Thangmi. The daughter, who had a large body, and was lazier, received the surname *gjalb<sup>h</sup>asirimesmudza*.

Additionally, there are two other clans for females in Ramechhap, which are not assumed as the main clan, though they still exist in the Thangmi community.

- a. *k<sup>h</sup>usbusirimesmudza*: The word *k<sup>h</sup>usbu* denotes ‘the beautiful thing’. The daughter, who was beautiful, received the surname *k<sup>h</sup>usbusirimesmudza*.
- b. *golesirimesmudza*: Thangmi people of Tinghare don’t know the history regarding this clan, but it is still existing in the community.

There are various types of sub-surnames for female but there is confusion as to the classification of these sub-surnames under the major surname type. They are listed as;

- |                                     |                                 |
|-------------------------------------|---------------------------------|
| (1) <i>gjal dibut<sup>h</sup>ru</i> | (6) <i>taŋkit/tsjaŋkit</i>      |
| (2) <i>ra maŋ</i>                   | (7) <i>t<sup>h</sup>aŋbala</i>  |
| (3) <i>ra ŋoŋ</i>                   | (8) <i>golet<sup>h</sup>ali</i> |
| (4) <i>tsalat<sup>h</sup>ali</i>    | (9) <i>k<sup>h</sup>aspo</i>    |
| (5) <i>da maŋ</i>                   | (10) <i>ŋjapit</i>              |

#### 4. MARRIAGE PRACTICES

Marriage ritual is known as *bore* in Thangmi. There are three steps of marriage in the Thangmi community: *sainonasa bore* (*tsardamko bihe*), *lagan bore* (*sindur halne bihe*) and *tabdu bore* (*daido dine bihe*). The female clans or surnames do not change after marriage in Thangmi. According to Turin (2006:101), “with regard to marriage, Thangmi are group-endogamous and clan-exogamous, although the latter is more closely adhered to than the former.” There is no cross-cousin marriage and a girl cannot marry a man of her father’s clan, even though she is of the clan of her mother’s and cannot marry a member of her mother’s clan either (Shneiderman and Turin 2006:110). The surname of her father-in-law or mother-in-law should not be matched with the daughter-in-law. If they match, they are assumed as brother and sister, therefore it is very important

to manage surname/clan for marriage practices. Similar trends are applicable to the boys as well.

Basically, all existing surnames for males and females can marry each other irrespective of their socio-economic class. There is no distinction made between all surnames accepted as Thangmi but people are suggested take account the intra-ethnic classes of the male and female. It shows that Thangmi people also follow the animal based age counting system (on the basis of Tibetan calendar), which is common among the Himalayan ethnic groups.

There are altogether 12 intra-ethnic classes: rat, cow, tiger, cat, dog, horse, sheep, snake (*nag*), monkey, *garud*, bird and pig. The class of the boy should be higher than the girl’s class for marriage. For example, the boy from cow class and the girl from tiger class could not get married.

Additionally, there is most interesting naming system of the bridegroom in the final marriage ceremony. The newly created names are determined by various notable gestures of the bridegroom and other marital activities happening on the final day of the marriage ceremony. Some of them are described as;

- a. *k<sup>h</sup>aro*: If more salty vegetable is served in the marriage party.
- b. *g<sup>h</sup>oksaj*: If the bridegroom is sitting like a dump in the marriage ceremony.
- c. *raktoŋ*: if the sour *dzañ* is served in the marriage party.
- d. *krepla*: if the bridegroom weeps in the marriage ceremony.
- e. *g<sup>h</sup>amatsja*: if the bridegroom seems egoistical in the marriage ceremony.

#### 5. COMPARISON WITH OTHER TB LANGUAGES

Most Tibeto-Burman groups use hereditary surnames passed through the male line but in Thangmi, males and females have distinct surname system. Unlike other Tibeto-Burman groups, Thangmi surname and clan identity is passed down from their same sex parents, by which two opposite sex siblings from the same biological parents belongs to separate clans.

According to Shneiderman and Turin (2006:98), “their parallel descent system in which men and women each inherit their clan membership from their same-sex parent is uncommon anywhere in the world”. According to Yonjan-Tamang (2006:158), both the son and daughter inherit their father’s clan and clan of the female is not changed after marriage in Tamang tradition. There is no separate clan name and surname in Tamang. (based on personal communication with Amrit Yonjan-Tamang). According to Shrestha (2015:69), the Tamang surname is determined by flora, personal trait, profession and origin. There is both a native and more recently borrowing surnames in Tamang. Likewise, surname and clan name is the same in Magar tradition as well (based on personal communication with Bishnu Singjali). According to Baral Magar (2012:25), there are some major surnames and sub-surnames within major surname types in the Magar tradition. Some sub-surnames are also determined by unethical marriage practices as well. Moreover, clan and surname entertain different identities in Surel, but different surnames may have same the clan affiliation. Unlike Thangmi, surnames and clans are passed down from the father’s side in Surel. Surname and clan of females are changed after marriage and the Surel community does not accept cross cousin marriage (based on the personal communication with Surel shaman in the Suri village).

The Thangmi language community has a different system of marriage ritual from some other Tibeto-Burman language communities of Nepal. There is no cross-cousin marriage in Thangmi. Some Tibeto-Burman communities like the Magar and Tamang communities accept cross cousin marriage. Tamang accepts two-way cross cousin marriage (Yonjan-Tamang 2012:24), whereas Magars only accept one-way cross cousin marriage (Baral Magar 2012:64). In the Magar tradition, the maternal uncle’s daughter is allowed to marry their nephew’s son. The girl’s family must give first priority to him, but the maternal uncle’s son could not get married with his nephew’s daughter (ibid.).

## 6. CONCLUSION

The Thangmi language community has the most typical surname and clan system, basically differentiated by gender. Males and females have different surnames and clans. There is parallel a descendent system in Thangmi, in which men and women each inherit their clan membership from their same-sex parent. This system is rare and uncommon anywhere else in the world. Both males and females have nine different surnames in Tinghare, Ramechhap. Male received six clans and three other clans have yet to be identified. All clans and surnames exist with their particular meaning, which contribute a unique identity to each Thangmi individual. Apart from some identified sub-surnames under major surname types, there exist other sub-surnames for both males and females; still there confusion as to the classification of these sub-surnames under the major surname types.

Unlike some other Tibeto-Burman communities like Magar and Tamang, Thangmi does not accept the cross-cousin marriage. The main surname and clan of both males and females are basically taken into account in marriage practices. Hence, surnames, clans and marriage system in the Thangmi community seem relatively different from other Tibeto-Burman language communities of Nepal.

## REFERENCES

- Baral Magar, Keshar Jung. 2012 (2<sup>nd</sup> edition). *Palpa, Tanahura Syangjaka Magar hruko Sanskriti*. Kathmandu: Asmita Books Publishers and Distributors.
- Central Bureau of Statistics. 2012. *National Population and Housing Census 2011 (National Report)*. Kathmandu: Central Bureau of Statistics.
- Eppele, John W., M. Paul Luis, Dan Raj Regmi and Yogendra P. Yadava. (eds). 2012. *Ethnologue: Languages of Nepal*. Kathmandu: Linguistic Survey of Nepal.
- Keesing, Roger M. 1935. *Kin groups and Social Structure*. USA: Holt, Rinehart and Winston, Inc.
- Shneidermann, Sara, and Mark Turin. 2006. “Revisiting Ethnography, recognizing a Forgotten People: The Thangmis of Nepal and



- India.” *Studies in Nepali History and Society*. Online: [http://www.digitalhimalaya.com/projectteam/turin/downloads/SINHAS\\_Revisiting.pdf](http://www.digitalhimalaya.com/projectteam/turin/downloads/SINHAS_Revisiting.pdf).
- Shrestha, 2015. Tamang surname. *Cognition Research Journal* 1. 68-72.
- Turin, Mark. 2006. *A Grammar of the Thangmi Language*. Universiteit Leiden: Amsterdam.
- Turner, Ralph Lilley. 1997 [1931]. *A Comparative and Ethnological Dictionary of the Nepali Language*. New Delhi: Allied Publishers Limited.
- Yonjan-Tamang, Amrit. 2006. *Tamang Pahichanka Sandarbharu*. Kathmandu: D.R. Public Housing.
- Yonjan-Tamang, Amrit, 2012. *Tamang sahyako Itihas*. Kathmandu: Nepal Academy.

CONTRIBUTOR’S EMAIL:

<pratigyaregmi1@gmail.com>

# PASSIVE AND ANTIPASSIVE IN THE TYPOLOGY OF VOICE SYSTEMS

PETER SELLS

*It is typical to characterize voice systems as primarily involving a binary split in languages: a Nominative-Accusative type or an Ergative-Absolutive type. We might expect a Nominative-Accusative language to have a Passive and an Ergative-Absolutive language to have an Antipassive, but in fact the range of voice alternation possibilities is much greater.*

Keywords: antipassive, ergative, inverse, passive, voice

## 1. THE SPACE OF VOICE SYSTEMS

In this paper I look at the typological space of voice systems – addressing the question of what different kinds of voice systems can be found. This issue has been considered in previous literature, including Bricker (1978), Klaiman (1991), Nichols (1992), Dixon (1994), Legendre et al. (1993), Sells (1998, 2001). However, there is no clear conceptual framework within which to locate voice systems (Shibatani 2006); and not all languages have voice systems.

It is typical to characterize voice systems as primarily involving a binary split: a Nominative-accusative type of language or an Ergative-Absolutive type of language. However, when we look at what is coded by voice morphology in various languages, we find that there are several different types of language. We might expect a Nominative-Accusative language to have a Passive and an Ergative-Absolutive language to have an Antipassive, but in fact there are more possibilities. My main goal here is to show the range of voice systems, and to look at which types of voice can be found in a given voice system.

### 1.1 BASIC ASSUMPTIONS ABOUT VOICE

Some terminology and abstractions will be necessary to provide a common background for the various specific voice types discussed below.

My characterization of the voice types is restricted to two-place predicates with schematic arguments of Actor and Undergoer, to use the macrorole terms of Foley and van Valin (1984), which represent clusters of semantic properties of the arguments. Hence a verb will have an argument

structure <Actor, Undergoer>. The discussion is restricted to semantically two-place predicates, and the realization of their arguments. I take it that the function of voice is to relate the semantic arguments to their surface realization, described here in terms of grammatical functions, Subject, Object and Oblique. These functions can be taken as generalizations over surface syntactic coding and behavioral properties. I identify four different types of voice with regard to a canonical 2-place predicates, the four types being Active, Passive, Inverse and Antipassive. Then I consider which combinations of these four types are found (most of them are found), and I also consider which combinations of voice types do not seem to exist.

Additionally, I restrict myself here to languages in which there is a systematic morphosyntactic exponent of each non-basic voice, which applies in principle to all predicates of the relevant valence(s). For example, Japanese has an unmarked Active voice and a marked Passive (the verb root is suffixed by *(r)are*); English can also be considered to have a marked passive form, involving an auxiliary and the past participle of the verb. Putative voice types or voice alternations which involve no change in the morphology or constructional form of the verb are not part of my discussion. In some accounts, English is considered to have an Antipassive, due the possibility of examples such as *The man chewed a while*, meaning ‘The man chewed something for a while’. This is not considered to be a true anti passive here, even though it has a low-status patient, any more than *I wrote my aunt a letter* is considered an applicative, unlike, say, a Bantu language where there is a dedicated morpheme expressing some shift in argument structure (as in these Swahili examples from Marten (2003)):

- (1) a. A-li-andik-a           barua  
SM1-PAST-write-FV   letter  
‘S/he wrote a letter.’  
b. A-li-mw-andik-i-a  
SM1-PAST-OM1-write-APPL-FV  
shangazi barua  
aunt       letter  
‘S/he wrote the aunt a letter.’

While I would not dispute that what is marked overtly in Bantu may have a syntactic analysis which would apply equally to English, even though it is not marked in English, it is usually the case that unmarked diathetical alternations are restricted to sub-classes of all of the potentially applicable verbs, while overt diathetical alternations typically apply “across the board” to (almost) all expected verbs.

Passive and Antipassive generally reduce the surface valence of their host verb by one. Both may apply to ditransitive verbs to yield transitive verbs. This property is well-known for passive, but is much less well-known for Antipassive. However, examples of antipassives of ditransitives are given in Bickel et al. (2007:10) for the Kiranti language Puma; in Spreng (2010:566) for Inuit data first presented in Nagai (2006); and in Kyriakaki (2009) for Ojibwe. Hence it is not necessary that Antipassive should produce an intransitive verb. As antipassives in a language such as English are only found with unmarked predicates which are surface intransitive, this is another reason to be careful about what is classed as Antipassive in a typological survey.

To emphasize the potential symmetry between Passive and Antipassive, I will also only consider here those Antipassive forms which code the Undergoer argument as an (optional) Oblique. Other Antipassive forms may involve an incorporated argument, or a completely implicit Undergoer (see Polinsky 2008). For example, in K’ekchi Mayan, there is a clear difference between the Oblique-marked Antipassive and incorporated-argument Antipassive (Berinsein 1985). The Antipassive marker itself is marked in bold:

- (2) a. eb li cuink x- é-siç-**o**-c  
 PL the man TNS-3pl.ABS-pick-**Anti**-ASP  
 r-e li cape  
 3sg.ERG-DAT the coffee  
 ‘(Those are) the men (who) picked the coffee.’
- b. x- é-siç-**o**-c cape li cuink  
 TNS-3pl.ABS-pick-**Anti**-ASP coffee the man  
 ‘The men picked the coffee.’

The morphology is somewhat complex in (2)a, but the crucial part is the final phrase *li cape*, marked as an indirect argument with dative case. In (2)b

the same argument is bare, incorporated into the verb, and therefore preceding the Actor.

## 1.2 ERGATIVITY

Next come the issues of ergativity. Anderson (1976) showed that some ‘ergative’ languages have subjecthood properties very similar to those in accusative languages. This led to the distinction between morphological ergativity and syntactic ergativity. Syntactic (sometimes known as ‘deep’) ergativity concerns the mapping of arguments to grammatical functions— a kind of voice – and is not necessarily directly related to surface properties such as case marking. As Aldridge (2008) notes in a recent survey paper: “To summarize the main conclusions of this article, we have seen that the morphological and syntactic properties of ergative and absolutive arguments cannot be satisfactorily captured by a theory that equates case with grammatical function. Rather, as Anderson (1976), Manning (1996), Murasugi (1992), and others have pointed out, A and S arguments function as subjects in both accusative and ergative languages.”

In order to be sure that we are considering true voice-related phenomena, I also base my discussion on the notion that the relevant sense of ‘ergativity’ is that of a language being syntactically ergative, and not simply morphologically ergative (e.g., having an ergative system of case marking) on a nominative-accusative syntax. Hence potentially ergative languages such as Hindi (which shows ergative case marking in perfective clauses but is syntactically accusative), or Tongan, Basque or Abkhaz (on all three, see Anderson 1976 for their accusative-language-like subjecthood properties) will not be considered here. Some morphologically ergative languages do have an Antipassive, not to change the grammatical functions of arguments, but in order to have a different argument coded as nominative/ absolutive. Bittner and Hale (1996) characterize Warlpiri as a language of this type.

In an ergative language, the mapping of arguments and function is reversed compared to that in an accusative language such as English, termed below the Inverse voice. In the Inverse, the Undergoer is the unmarked Subject, and it must be demoted if

the Actor is to be Subject. Examples from Greenlandic Eskimo (Foley and van Valin 1984) illustrate, where the agreement markers and Antipassive marker are in bold:

- (3) a. arna-p niqi niri-vaa (Ergative)  
 woman-ERG meat.ABS eat-**3sg:3sg**  
 ‘The woman ate the meat.’
- b. arnaq niqi-mik  
 woman.ABS meat-with  
 niri-**NNig**-puq (Antipassive)  
 eat-**Antipass-3sg**  
 ‘The woman ate (at) some of the meat.’

The constituent order in (3)a is actually OSV, but with the Actor preceding the Undergoer. Several of the languages presented in this paper have a basic argument ordering of Actor < Undergoer when both are term arguments (Subject or Object). The verb in (3)a shows transitive agreement, for both Subject and Object. In the Antipassive in (3)b, the verb is now formally intransitive and the Undergoer is coded as an Oblique.

### 1.3. VOICE TYPES

For the characterization of voice systems, I adopt the four voice types in (5–8), whose properties are given in (4). I use the term ‘Active’ for a canonical transitive “accusative” voice type – such as English or Japanese Active, as opposed to Passive. I use the term ‘Inverse’ for a canonical transitive syntactically “ergative” language, precisely the inverse of the Active in terms of mapping from arguments to grammatical functions.

- (4) a. Active, Passive; Inverse, Antipassive.  
 b. Active and Inverse have 2 core arguments.  
 c. Passive and Antipassive have 1 core argument and 1 oblique.  
 d. In Inverse, the hierarchy in argument structure of Actor > Undergoer is linked inversely to the hierarchy of grammatical functions (GFs) of Subject > Object > Oblique (Keenan and Comrie 1977), leading to a split between Actor properties and Subject properties (Manning 1996; see (9)).  
 e. Antipassive has Undergoer as Oblique; Passive has Actor as Oblique.

These properties then play out in these four voice systems, which I take as my basis in this paper.

- (5) Active: *verb* <Actor, Undergoer>  
 GFs:           Subj   Obj
- (6) Passive: *verb* <Actor, Undergoer>  
 GFs:           Obl    Subj
- (7) Inverse: *verb* <Actor, Undergoer>  
 GFs:           Obj    Subj
- (8) Antipassive: *verb* <Actor, Undergoer>  
 GFs:                   Subj   Obl

In languages with the Inverse voice type, syntactic constructions are typically differentiated as controlled by the Actor (regardless of surface GF) or by the Subject. Manning (1996) presents the typical split, as in (9):

Actor	Subject
Imperative Addressee	Agreement
Control target	Relativization
Antecedent of reflexive	Specific/wide scope
	Associates with floating quantifiers

In a discussion of voice types, it is important to keep argument structure properties separate from surface grammatical function properties (Manning 1996; Paul and Travis 2006; Aldridge 2008).

For instance, in Tagalog, the addressee in an imperative is always the Actor, regardless of the voice of the verb (and therefore regardless of which argument of the verb is the surface subject). This can be illustrated by the examples in (10) from Kroeger (1993), where the voice of the verb (marked in bold) determines which argument is the Subject, marked nominative.

- (10) a. mag-bigay ka sa kaniya ng kape  
**ActV**-give 2sg.NOM DAT him ACC coffee  
 ‘(You) give him coffee.’
- b. bigy-an mo siya ng kape  
 give-**DatV** 2sg.ACC 3sg.NOM ACC coffee  
 ‘(You) give him coffee.’
- c. i-bigay mo sa kaniya ang kape  
**InstV**-give 2sg.ACC DAT him NOM coffee  
 ‘(You) give him the coffee.’

In the complex voice system of Tagalog, which is not fully explored in this paper, Actor or Recipient or Undergoer may be the surface Subject, as shown in the examples in (10), respectively.

The rest of the paper is organized as follows. In section 2 I briefly provide a way of being able to

talk about the functions of two different voice types relative to each other. This can then be used to hypothesize which combinations of voice types might be found in different voice systems. In sections 3 and 4 I present data illustrating, respectively, what I call asymmetric and symmetric voice systems. Section 5 concludes the paper, with considerations of what very basic properties a syntactic approach to voice should have, and what the typology of voice systems actually looks like.

## 2. VOICE SYSTEMS AND RELATIVE PROMINENCES

Voice *systems* in the sense intended here involve various combinations of (5)–(8), not just Active coupled with Passive or Inverse coupled with Antipassive. There may be functional reasons why these voice types cluster together, but essentially all combinations of voice types are attested.

Legendre et al. (1993) proposed a schematic system of mappings, relating arguments to overt expression, based on a notion of the relative ‘prominence’ of arguments. In their approach, ‘prominence’ is a combination of surface grammatical function and case, and the basic idea is a familiar one – that in an Active, the Actor is more prominent than the Undergoer, while in a passive, the Undergoer is more prominent than the Actor. Their ideas were expanded, at a high level of abstraction, in Sells (2001).

What we need is a simple way to characterize what it is that syntax and voice provide. We know that there is a hierarchy of likely candidates for topicality in which Actor outranks Undergoer (Givón 1979), and we also know that subjects are more likely topics than objects, as well as having more syntactic access to different constructions. It also seems plausible that demoting an argument to oblique as in Passive or Antipassive reduces the potential topicality of that argument to zero. I assign ‘scores’ to argument positions based on these very gross yet intuitive characterizations, as in (11), giving the ‘prominence values’ for the 4 voice types, shown in (12)–(15):

- (11) Prominences  
 Suppose that Actor=2, Undergoer=1; and  
 Subject=2, Object=1, Oblique=0

- (12) Active: *verb* <Actor, Undergoer>  
 GFs:                   Subj   Obj  
 Prominence:           4     2
- (13) Passive: *verb* <Actor, Undergoer>  
 GFs:                   Obl     Subj  
 Prominence:           2     3
- (14) Inverse: *verb* <Actor, Undergoer>  
 GFs:                   Obl     Subj  
 Prominence:           2     3
- (15) Antipassive: *verb* <Actor, Undergoer>  
 GFs:                   Subj   Obl  
 Prominence:           4     1

If we imagine that a voice system in a language is there to provide different prominence profiles for arguments, then looking at these scores, we see that Antipassive does not provide much of an alternative for Active, and Passive does not provide much of an alternative to Inverse. There appear to be no voice systems which consist of only and exactly these pairs, but almost every other combination of these voice types is possible. In the next two sections of the paper I discuss different combinations of these voice types.

## 3. ASYMMETRIC VOICE SYSTEMS

The Inverse voice type above captures the core syntactic behavior of a prototypically syntactically ergative language. While languages with this Inverse voice type also typically have Antipassive and would appear to be dysfunctional without Antipassive (Dixon 1994:174 – it is not uncommon for such languages also to have Passive (see Nichols 1992: 158ff.; Dixon 1994: 149ff)). I refer to these systems as ‘asymmetric’ as they only have one fully transitive clause type – the Inverse. This contrasts with the ‘symmetric’ languages in the next section, which have two transitive clause types, Active and Inverse.

For example, Greenlandic Eskimo is a syntactically ergative language (essentially similar to Inuit and Central Arctic Eskimo, as analyzed by Manning 1996), yet it has both Antipassive and Passive forms (Foley and Van Valin 1984; Sadock 1980). The a-examples in (16)–(17) show transitive agreement, and are of the Inverse type; the b-examples contrast in showing intransitive

agreement, indicating that the Undergoer (in Antipassive) and the Actor (in Passive) is a surface oblique, so the verb only agrees with the subject. Constituent order in Greenlandic Eskimo does not strictly follow an SOV pattern but rather is a combination of Actor < Undergoer < V and a preference for core arguments to precede obliques.

- (16) a. arna-p            niqu    niri-vaa  
 woman-ERG meat eat-3sg:3sg  
 ‘The woman ate the meat.’  
 b. arnaq            niki-mik    niri-**NNig**-puq  
 woman.ABS meat-with eat-**Antipass**-3sg  
 ‘The woman ate (at) some of the meat.’  
 (17) a. angut-ip    arnaq            taku-vaa  
 man-ERG woman.ABS see-3sg:3sg  
 ‘The man saw the woman.’  
 b. arnaq            (anguti-mit) taku-**tau**-puq  
 woman.ABS (man-by) see-**Pass**-3sg  
 ‘The woman was seen (by the man).’

Mayan languages are display ergative characteristics, and in my terms, some have Inverse, Antipassive, and Passive as well. The Passive and Antipassive forms in K’ekchi Mayan are documented at length in Berinstein (1985); Bricker (1978) discusses these two voices in Yucatec Maya. In Mam, the oblique status of arguments is indicated by the presence of a relational noun (RN) (England 1988), illustrated by the b-examples below, which are Antipassive and Passive, respectively. The marking here coded as ‘Erg’ and ‘Abs’ is often presented as ‘Series A’ and ‘Series B’ in Mayan studies.

- (18) a. ma Ø-tsaj            t-tzyu-ʔn            cheep chit  
 TNS3sg.ABS-Aux3sg.ERG-grab-DIR José bird  
 ‘José grabbed the bird.’  
 b. ma Ø-tzyuu-**n**            cheep t-iʔj chit  
 TNS3sg.ABS-grab-**Anti** José 3sg.ERG-PAT.RN  
 bird  
 ‘José grabbed the bird.’  
 (19) a. ma Ø-jaw            t-txeeʔma-n            cheep tzeeʔ  
 TNS3sg.ABS-Aux 3sg.ERG-cut-DIR José tree  
 ‘José cut the tree.’  
 b. ma Ø-txeeʔm-**at**            tzeeʔt-uʔn            cheep  
 TNS3sg.ABS-cut-**Pass** tree3sg.ERG-by-RN José  
 ‘The tree was cut by José.’

What is of interest in all these asymmetric languages is the perhaps surprising feature that Undergoers are never structural objects – they are

either subjects, in Inverse or Passive, or they are obliques (or incorporated). There are also languages which have the voice types Active, Passive and Antipassive.

#### 4. SYMMETRIC VOICE SYSTEMS

Many Austronesian languages have what I call a ‘symmetric’ voice system, in which Actor and Undergoer are mapped to subject or object, using the Active or Inverse voice types (see also Mulder and Schwartz 1981; Kroeger 1993; Manning 1996; Sells 1998). In Austronesian linguistics, the term ‘Actor Voice’ is used for the Active voice type and ‘Undergoer Voice’ is the Inverse voice type.

##### 4.1 AUSTRONESIAN LANGUAGES ARE TYPICALLY NOT ERGATIVE

Tagalog has quite a complex voice system, but the two examples in (20) illustrate the typical properties found in Austronesian. ‘man’ is the Subject in (20) and ‘fish’ is the Subject in (20)b (Kroeger 1993):

- (20) a. b-um-ili ang lalake ng isda sa tindahan  
 (Active)  
 buy.**ActV** NOM man ACC fish DAT store  
 ‘The man bought (a) fish in the store.’  
 b. b-in-ili-Ø            ng lalake ang isda sa tindahan  
 (Inverse)  
 buy.PERF-**UndV** ACC man NOM fish DAT store  
 ‘The man bought the fish in the store.’

Most Austronesian languages show some sort of bias in favor of Undergoer over Actor. For example, in Tagalog, an Undergoer should be the Subject if it is definite. Hence (20)b typically involves a translation involving ‘the fish’, while (20)a involves ‘a fish’ or ‘fish’. The marking of voice also shows an asymmetry towards Undergoer – the Undergoer Voice (Inverse) is often morphologically unmarked, while the Actor Voice (Active) involves an overt prefix or infix. Strictly speaking in (20), the Undergoer voice is unmarked – the infix *in* is an aspect marker – while in the Actor voice the infix *um* is the indicator of that voice.

Symmetric languages also make the notion of an ‘ergative parameter’ very problematic (Paul and Travis 2006), as it simply is not the case that languages are either accusative or ergative. Moreover, as there is typically a mix of syntactic

properties in Austronesian languages relating to argument structure, GFs, or perhaps even a combination of the two, Paul and Travis observe that a given language might even look ‘ergative’ in one construction and ‘accusative’ in another.

Consideration of facts like those in (20) have prompted some linguists to analyze (some) Austronesian languages as being fundamentally ergative. Formally, this means that (20)b is considered the basic, ‘ergative’ form, with (20)a representing an Antipassive. Some linguists take the opposite starting point, considering (20)a to be an Active, with (20)b representing a Passive. In each of these cases, the motivation appears to be theoretical –specifically, the adoption of a set of syntactic assumptions which have the effect of only generating *asymmetric* voice systems (Active & Passive or Inverse & Antipassive).

However, Austronesian languages quite robustly present evidence that each non-subject argument in a transitive clause is still a core argument, a term. They are symmetric in having two different voice types with core GFs of Subject and Object. To show that Actor Voice (Active) is not in actuality an Antipassive, we need to show that the Undergoer is still a core argument, not an oblique. This is the position argued for Tagalog by Foley and Van Valin (1984:177), Kroeger (1993: 47–8), and Gerassimova (2005, ch.3); for Balinese by Wechsler and Arka (1998, sec. 2.3); for Indonesian by Arka and Manning (2008); and see Mithun (1994:272) on Kapampangan. Austronesian languages are generally quite clear as to which arguments are terms and which are obliques, and this applies to Undergoers in Active clauses. The only sense in which such clauses look Antipassive is that the Undergoer is typically interpreted as less definite, as examples such as (20)a show, but in terms of surface syntax and coding, the Undergoer is an Object.

#### 4.2. TOBA BATAK

The data in this section are from the Toba variety of Batak, spoken in Northern Sumatra (Silitonga 1973; Nababan 1981; Percival 1981; Schachter 1984). This language has unusual phrase structure properties which are invariant across voice types (see also Manning 1996). Toba Batak has a simple symmetric two-way voice system, Active and

Inverse, and what is relevant to this paper is the fact that there is a perfect structural symmetry between the expression of the Undergoer in Active voice (as an Object) and the Actor in Inverse voice (also as an Object). (21) a illustrates the Active, with the prefix *man(g)*, and (21) b the Inverse, with the prefix *di*. Proper names are preceded by a marker *si*, glossed as ‘PN’.

- (21) a. Manongos si Torus ahu tu imana.  
**ActV**.send PN Torus I to (s)he  
 ‘I sent Torus to her.’
- b. Ditongos imana surat tu si Ria.  
**UndV**.send (s)he letter to PN Ria  
 ‘She sent a letter to Ria.’

The clausal order is V-O-S-X, where X is any adjunct or non-core argument. An optional particle may appear between O and S, marking off a VP-like constituent consisting of just V and O (see Percival 1981: 81ff.; Schachter 1984). The particle *do* shows this in (22)a. The other examples in (22) illustrate the basic clausal order.

- (22) a. [Manghindat poti i]VP do [baoa i].  
 [ActV.lift case the] PART [man the]  
 ‘The man lifted the case.’
- b. [Ditongos imana]VP [surat] [PP tu si Ria].  
 [UndV.send (s)he] [letter] [PP to PN Ria]  
 ‘She sent a letter to Ria.’
- c. [Mangalean poda]VP [guru i]  
 [ActV.give advice] [teacher the]  
 [PP tu dakdanak i].  
 [PP to child the]  
 ‘The teacher gives advice to the child.’

The VP can never contain more than one constituent in addition to V, and that constituent must be an Object. In the examples in (23), the predicate selects the form of the preposition in the clause-final PP, even though the particle *do* shows that the ‘VP’ is just the single-word predicate (Percival 1981):

- (23) a. manhatai do nasida tu hoda  
**ActV**.talk PART they to horse  
 ‘They talk to horses.’
- b. pajuppan do hita marsogot dihoh ibana  
 meet PART we tomorrow with her  
 ‘We will meet with her tomorrow.’

Even though the PP is notionally an internal argument of the verb, because it is an Oblique, it cannot appear internal to the initial VP constituent.

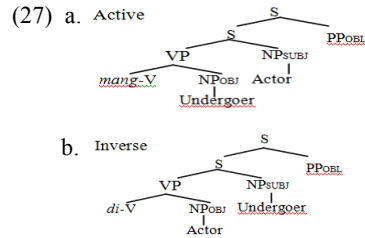
Schachter (1984) presents traditional constituency tests for VP. An adverb (here, *nantoari*) may appear in principle anywhere, in any clause type, except between V and its NP object, which form the VP (bracketed below). This is illustrated for both voice types in (24)–(25):

- (24) a. Nantoari [mangida si Ria] si Torus.  
yesterday [**ActV**.saw PN Ria] PN Torus  
'Torus saw Ria yesterday.'
- b. \*[Mangida nantoari si Ria] si Torus. (\*Adverb in VP)
- c. [Mangida si Ria](nantoari) si Torus (nantoari).
- (25) a. Nantoari [diida si Torus] si Ria.  
Yesterday [**UndV**.saw PN Torus] PN Ria  
'Ria was seen by Torus yesterday.'
- b. \*[Diida nantoari si Torus] si Ria. (\*Adverb in VP)
- c. [Diida si Torus] (nantoari) si Ria (nantoari).

If the matrix predicate is transitive and has a VP complement of some kind, that complement VP may in fact be the surface subject, as in (26)a from Nababan (1981:113); as the voice marker is *di*, this means that the highest argument of the predicate ('he') is the Object and the complement VP is the Subject. (26)b from Schachter (1984) is an example in which all of the semantic arguments of the surface intransitive verb *marjanji* ('promise') appear external to the matrix VP:

- (26) a. [ditorusson ibana]<sub>VP</sub> do  
[**UndV**.continue he] PART  
[<sub>VP</sub> manurat surakna i]  
[<sub>VP</sub> **ActV**.write letters his]  
'He continued to write his letters.'
- b. [marjanji]<sub>VP</sub> si John (tu si Bill)  
[**ActV**.promise] PN John (to PN Bill)  
[<sub>VP</sub> manuhor biang].  
[<sub>VP</sub> **ActV**.buy dog]  
'John promised (Bill) to buy a dog.'

To summarize, Object and Subject are bare NPs, core arguments, and are licensed positionally (notionally: within VP, next to VP). All other arguments and adjuncts follow the subject. The simplified representations of Toba Batak phrase structure in (27) show the exact parallelism of the two core arguments in the two voice types. The labels on the nodes are not crucial, as long as the syntax guarantees the generalizations at the beginning of this paragraph:



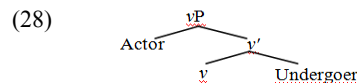
The Subject but not the Object is accessible for a variety of syntactic constructions (Schachter 1984; Cole and Hermon 2008); however, binding is largely determined by the thematic hierarchy in argument structure (Clark 1985; Manning 1996; cf. (9) above). Once those phenomena which relate to argument structure, and therefore are invariant across voice types, are factored out, we see that Toba Batak is a perfectly syntactically symmetric language, across its two voice types.

## 5. IMPLICATIONS

In this concluding section I briefly draw out a few implications of the observations above for syntactic approaches to voice, and for the typology of voice systems.

### 5.1. CONSEQUENCES FOR SYNTACTIC THEORY

There is no evidence that languages with Inverse have different argument structure properties from any other languages— in fact, there is evidence that the hierarchy of arguments in argument structure is very stable cross-linguistically (Manning 1996; Bresnan 2001, ch.1). This means that symmetric voice systems require parallel licensers for both Actor and Undergoer when these arguments are Objects, even though we might otherwise expect Actor and Undergoer not to be able to have equal privilege as Objects. To illustrate this point, suppose that the basic structural representation of argument structure is as shown in (28). We know that one of the arguments will be licensed as a Subject, somewhere higher up in the structure, due to the presence of some functional categories.



What we find in Austronesian is that the non-Subject argument is also licensed, presumably outside of VP, because its surface properties hold equivalently for Actor (in Inverse) or Undergoer



(in Active). So, in principle either argument in (28) is equally accessible from higher positions in order to acquire Subject properties, and then the remaining argument is equally accessible from those positions which confer Object properties. For instance, in the account of Tagalog in Rackowski and Richards (2005), any argument may first move to the edge of vP which one is indicated by the voice morphology in order to be structurally higher than any other argument, and therefore the argument that will be the surface Subject in the higher functional structure. The licensing of the non-Subject argument has received less attention.

The fact that argument structure properties are evened out in the different voices of Austronesian languages prompts Cole and Hermon (2008:188) to write of Toba Batak: “What should be clear ... is that internal to vP ... that is, within the domain created by Merge – the underlying linear order of the constituents plays no role whatsoever in surface word order, extraction possibilities, and binding.” Paul and Travis (2006) observe that the voice-related syntactic properties of Austronesian languages are not easily captured in accounts which start from a hierarchically asymmetric structure, as in (28).

## 5.2 CONSTRAINTS ON VOICE SYSTEMS?

A language may have no voice alternation, but if it does, at least the various combinations in (29) are possible (Y marks the presence of a voice type in a given language). Every language has an Active or an Inverse. Which voice type ‘comes next’, so to speak, cannot be easily predicted (though see Sells 2001). I am not aware of any language which has all 4 voice types, though it might be that Chamorro comes closest, having both Passive and Antipassive, according to Cooreman (1982, 1988) and Dukes (1998), as well as a vestigial Austronesian system of Active and Inverse, according to Donohue and MacLachlan (1999).

The Inverse voice type here has quite ‘balanced’ prominences (see (14)), argument-structure going one way, the hierarchy of GFs going the other. Any other voice type provides a functionally useful alternative. Active or Antipassive can provide asymmetric Actor prominence.

(29)

Language	Active	Inverse	Passive	Antipassive
English	Y		Y	
Dyirbal		Y		Y
Toba Batak	Y	Y		
Pangutaran Sama	Y	Y	Y	
Greelandic Eskimo		Y	Y	Y

There are also languages with Active, Passive and Antipassive and ideally, to make this demonstration, these should be languages with no canonical ergative properties. According to Nichols (1992:158), in addition to being found in ergative languages (having Inverse but not Active), Antipassive is also found in accusative languages (having Active but not Inverse) if they have object agreement (see also Dryer 1986). Nichols writes as follows (she uses ‘O’ in the Dixonian sense of characterizing verbs in terms of S, A and O): “Generalizing over these patterns, we can state that antipassives are associated with languages in which the O is central to clause morphosyntax: ergative languages, where the O takes the unmarked case, and those accusative languages in which there is agreement with the direct object. It is thus observationally true, as traditionally maintained, that the antipassive is associated with ergativity; but the causal factor is evidently not the ergative alignment per se but the special structural status of the O which is basic to ergativity.”

Nichols cites the names of about 10 languages which are accusative but which have Antipassive. Polinsky (2008) also cites several other languages as having this same profile, though her list and Nichols’ are entirely disjoint, probably due to different sampling techniques. Without going into detail in any given language, though, we can test the likely existence of languages with Active and Antipassive using the World Atlas of Language Structures (WALS) database. We can investigate which languages in WALS have Antipassive and also have Passive (Siewierska 2008), on the assumption that a regular accusative language will have a Passive. WALS provides 9 languages, spread around the world, which have both Passive and Antipassive (I include here only those voice types where the demoted arguments are expressed as obliques, rather than necessarily being left implicit, so these are ‘true’ semantically 2-place Passives and Antipassives). And there are no languages in WALS which have consistent

accusative syntax and Antipassive, but no Passive. (In contrast, WALS provides 62 languages which have neither Passive nor Antipassive, with quite a wide distribution across the globe. However, there are no languages of Europe and almost no languages of Trans-Eurasia which lack both of these voice types.)

All combinations of voice types in (5) – (8) appear to be possible voice systems, with the likely exception of Active & Antipassive or Inverse & Passive. The reasons for these restrictions seem to be functional, not formal though it would be theoretically interesting to investigate if there is some formal assignment of syntactic properties that would rule the combinations out. The combination of Active & Antipassive is found in languages with object agreement (languages also having Passive), and Inverse & Passive is regularly found in Austronesian languages, which also have Active. If there can be a typology of voice systems, I suggest that the four voice types considered here should form its basis, with the relationships between argument-structure and GFs represented as transparently as possible.

#### REFERENCES

- Aldridge, Edith. 2008. Generative approaches to ergativity. *Language and Linguistics Compass* 2, 966–995.
- Anderson, Stephen R. 1976. On the notion of subject in ergative languages. In Charles Li (ed.), *Subject and Topic*. New York, Academic Press, 3–23.
- Berinstein, Eva. 1985. *Evidence for Multi attachment in K'ekchi Mayan*. New York, Garland Publishing, Inc.
- Bickel, Balthasar, Martin Gaenszle, Arjun Rai, Prem Dhoj Rai, Shree Kumar Rai, Vishnu S. Rai, and Narayan P. Sharma. 2007. Two ways of suspending object agreement in Puma: between incorporation, antipassivization, and optional agreement. *Himalayan Linguistics* 7, 1–18.
- Bittner, Maria, and Ken Hale. 1996. Ergativity: Towards a theory of a heterogeneous class. *Linguistic Inquiry* 27, 531–604.
- Bresnan, Joan. 2001. *Lexical-Functional Syntax*. Oxford, Blackwell Publishing.
- Bricker, Victoria. 1978. Antipassive constructions in Yucatec Maya. In Nora England (ed.), *Papers in Mayan Linguistics*, Vol. 2. University of Missouri, Columbia, 3–24.
- Clark, Robin. 1985. The syntactic nature of logical form: Evidence from Toba Batak. *Linguistic Inquiry* 16, 663–669.
- Cole, Peter, and Gabriella Hermon. 2008. VP raising in a VOS language. *Syntax* 11, 144–197.
- Cooreman, Ann. 1982. Topicality, ergativity, and transitivity in narrative discourse: Evidence from Chamorro. *Studies in Language* 6, 343–374.
- Cooreman, Ann. 1988. The antipassive of Chamorro: variations on the theme of transitivity. In Masayoshi Shibatani (ed.), *Passive and Voice*. Amsterdam, John Benjamins, 561–593.
- Dixon, R. M. W. 1994. *Ergativity*. New York, Cambridge University Press.
- Donohue, Mark, and Anna MacLachlan. 1999. What agreement in Chamorro? In *Proceedings of AFLAVI (Toronto Working Papers in Linguistics 16.2)*. Univ. of Toronto, Dept. of Linguistics, 121–132.
- Dryer, Matthew. 1986. Primary objects, secondary objects, and antitativity. *Language* 62, 808–845.
- Dukes, Michael. 1998. Kinds of objecthood in Chamorro grammar. In G. Webelhuth, J. P. Koenig, and A. Kathol (eds.), *Lexical and Constructional Aspects of Linguistic Explanation*. Stanford, CSLI Publications, 15–30.
- England, Nora C. 1988. Mam voice. In Masayoshi Shibatani (ed.), *Passive and Voice*. Amsterdam, John Benjamins, 525–545.
- Foley, William, and Robert van Valin. 1984. *Functional Syntax and Universal Grammar*. New York, Cambridge University Press.
- Gerassimova, Veronica. 2005. *Unbounded Dependency Constructions in Western Austronesian*. Doctoral dissertation, Stanford University.
- Givón, Talmy. 1979. *On Understanding Grammar*. New York, Academic Press.
- Keenan, Edward L., and Bernard Comrie. 1977. Noun phrase accessibility and universal grammar. *Linguistic Inquiry* 8, 63–99.
- Klaiman, Miriam H. 1991. *Grammatical Voice*. New York: Cambridge University Press.
- Kroeger, Paul. 1993. *Phrase Structure and Grammatical Relations in Tagalog*. Stanford, Dissertations in Linguistics, CSLI Publications.
- Kyriakaki, Maria. 2009. The antipassive of Ojibwe

- and its phenomenal objects. In Frédéric Mailhot (ed.), *Proceedings of the 2009 annual conference of the Canadian Linguistic Association*. Univ. of Toronto, Dept. of Linguistics.
- Legendre, Géraldine, Paul Raymond, and Paul Smolensky. 1993. An Optimality-Theoretic typology of case and Grammatical voice systems. In J. Guenter, B. Kaiser, and C. Zoll (eds.), *Proceedings of the 19<sup>th</sup> Annual Meeting of the Berkeley Linguistics Society*. Univ. of California, Berkeley, Dept. of Linguistics, 464–478.
- Manning, Christopher D. 1996. *Ergativity: Argument Structure and Grammatical Relations*. Stanford, Dissertations in Linguistics, CSLI Publications.
- Marten, Lutz. 2003. The dynamics of Bantu applied verbs: An analysis at the syntax-pragmatics interface. In Kézié K. Lébikaza (ed.), *Actes du 3e Congrès Mondial de Linguistique Africaine Lomé 2000*. Köln, Köppe, 207–221.
- Mithun, Marianne. 1994. The implications of ergativity for a Philippine voice system. In Barbara Fox and Paul J. Hopper (eds.), *Voice: Form and Function*. Amsterdam, John Benjamins, 247–277.
- Mulder, Jean, and Arthur Schwartz. 1981. On the subject of advancements in the Philippine languages. *Studies in Language* 5, 227–268.
- Nababan, P. W. J. 1981. *A Grammar of Toba-Batak*. Canberra, Pacific Linguistics D-37, The Australian National University.
- Nagai, Tadataka. 2006. *Agentive and Patientive Verb Bases in Northern Alaskan Iñupiaq*. Doctoral dissertation, University of Alaska.
- Nichols, Johanna. 1992. *Language Diversity in Space and Time*. Chicago, Chicago University Press.
- Paul, Ileana, and Lisa Travis. 2006. Ergativity in Austronesian languages. In Alana Johns, Diane Massam, and Juvenal Ndayiragije (eds.), *Ergativity*. Dordrecht, Springer, 315–335.
- Percival, W. K. 1981. *A Grammar of the Urbanised Toba-Batak of Medan*. Canberra, Pacific Linguistics B-76, The Australian National University.
- Polinsky, Maria. 2008. Antipassive constructions (chapter 108). In M. Haspelmath et al. (ed.), *Word Atlas of Language Structures Online*. Munich, Max Planck Digital Library. <http://wals.info>.
- Rackowski, Andrea, and Norvin Richards. 2005. Phase edge and extraction: A Tagalog case study. *Linguistic Inquiry* 36, 565–599.
- Sadock, Jerrold M. 1980. Noun incorporation in Greenlandic: A case of syntactic word-formation. *Language* 57, 300–319.
- Schachter, Paul. 1984. Semantic-role-based syntax in Toba Batak. In Paul Schachter (ed.), *Studies in the Structure of Toba Batak*. UCLA Occasional Papers in Linguistics Number 5, 122–149.
- Sells, Peter. 1998. The functions of voice markers in the Philippine languages. In Steven G. Lapointe, Diane Brentari, and Patrick Farrell (eds.), *Morphology and its Relation to Phonology and Syntax*. Stanford, CSLI Publications, 111–137.
- Sells, Peter. 2001. Form and function in the typology of grammatical voice systems. In Géraldine Legendre, Jane Grimshaw, and Sten Vikner (eds.), *Optimality-Theoretic Syntax*. Cambridge, MIT Press, 355–391.
- Shibatani, Masayoshi. 2006. On the conceptual framework for voice phenomena. *Linguistics* 44, 217–269.
- Siewierska, Anna. 2008. Passive constructions (chapter 107). In M. Haspelmath et al. (ed.), *Word Atlas of Language Structures Online*. Munich, Max Planck Digital Library. <http://wals.info>.
- Silitonga, Mangasa. 1973. *Some Rules Reordering Constituents and their Constraints in Batak*. Doctoral dissertation, University of Illinois.
- Spreng, Bettina. 2010. On the conditions for antipassives. *Language and Linguistics Compass* 4, 556–575.
- Wechsler, Stephen, and I. Wayan Arka. 1998. Syntactic ergativity in Balinese: An argument structure based theory. *Natural Language and Linguistic Theory* 16, 387–442.

CONTRIBUTOR'S EMAIL:

<peter.sells@york.ac.uk>

# NOMINALISATION STRATEGY IN PUMA

NARAYAN P. SHARMA

*The Puma language has a penchant for nominalizing sentences typically via a marker that is also used in the citation-form of agents and verbs and that has a relative, genitive or general function in other constructions. Puma exemplifies a very complex relativisation pattern, where nominalisation is a main device to form relative clauses.*

Keywords: nominalisation, relativisation, antipassive, nominalisers, arguments,

## 1. INTRODUCTION

Puma, a Tibeto-Burman (Central-Kiranti) language spoken in Nepal, is a polysynthetic and complex pronominalised language. This paper presents discussion of nominalization and relativisation strategies found in Puma. In addition, the paper focuses on cross-linguistic typological variation of nominalisation constructions particularly in Kiranti languages.

The aim of this paper is to examine the link between nominalisation, relativisation and genitivation in Puma which is common in Tibeto-Burman languages (Matisoff 1972) as well, and nominaliser types and their functions, highlighting and analysing from typological perspective. In this paper I illustrate Puma nominalised constructions and argue that Puma appears to be unusual in some constructions in neighbouring Kiranti languages.

This paper is organized as follows: in §2 I provide a brief discussion of the nominalization in Tibeto-Burman language; in 3§ I discuss about the nominalization in Kiranti languages; in 4§ I describe brief discussion about nominalization in Puma; in §5 I present link between nominalization, relativisation and genitive; in §6 I discuss about nominalisers and their distribution; in §7 I present Puma nominalisers types; in §8 I provide brief discussion about the relativisation; in §9 I explore some interesting observations on miratives; in §10 I provide nominalization of interrogatives; in §11 I discuss about clausal

nominalization; and in §12 I provide conclusion and discussion of the facts presented in the paper.

## 2. NOMINALISATION IN T-B LANGUAGES

Matisoff (1972) first recognised the relational phenomenon of nominalisation, relativisation and genitivation in Lahu, a Tibeto-Burman language spoken in China, Thailand, Myanmar, and Laos. Lahu has the same morpheme *ve* which functions as a genitive marker, relativiser, and nominaliser, while in others such as some dialects of Tibetan (DeLancey 1999) nominalisers are identical and co-occur with the genitive marker and relativiser in some constructions. This morphological congruence of syntactic functions has been referred to the ‘Standard Sino-Tibetan Nominalisation’ (SSTN) pattern (Bickel 1999). This pattern is quite common across the Kiranti languages. A number of scholars have reported similar phenomena of SSTN in a number of Tibeto-Burman languages (Bickel 1999; DeLancey 1999; DeLancey 2002; Ebert 1994; Herring 1991; Kölver 1977; Lahaussais 2003; Noonan 2008; Watters 2008).

DeLancey (2002:56) notes that relativisation in Tibeto-Burman languages is a subspecies of clausal nominalisation. The modifying clause is nominalised, and then stands in either a genitive or an appositive relation to the head noun. In addition, there is another major construction of nominalisation in the Tibeto-Burman languages namely the ‘stand-alone’ nominalisation constructions which is used to express meanings like miratives/exclamatives and other attitudinal stances (DeLancey 1997; Bickel 1999; Grunow-Harsta 2011; Watters 2008).

Nominalisation constructions frequently take on attributive functions in the Tibeto-Burman languages. While such uses of nominalisations are not restricted to Tibeto-Burman, similar phenomena have been reported in other languages such as Chinese and Japanese (Matisoff 1972), Mongolian (Binnick 1979:90), Quechua (Weber 1989:9), and Papuan languages (Foley 1986:204).

### 3. NOMINALISATION IN KIRANTI LANGUAGES

While nominalisation is, generally, a pervasive feature of Tibeto-Burman languages, it is particularly highly productive and prominent in Kiranti languages such as Limbu (van Driem 1987), Athpare (Ebert 1997), Camling (Ebert 1997) Belhare (Bickel 1999), Kulung (Tolsma 1999), Thulung (Lahaussais 2002), Bantawa (Doornenbal 2009), Chintang (Paudyal 2011) and Bodic languages such as Chantyal (Noonan 1997), Kham (Watters 2002; 2008), Dolakha Newar (Genetti et al. 2008), Manange (Genetti et al. 2008), and Magar (Grunow-Harsta 2011). Individual Kiranti languages vary in the number of nominalisers they employ, and in the kinds of distinction they encode.

### 4. NOMINALISATION IN PUMA

Puma is rich in using distinct nominalisation constructions such as subordination and stand-alone nominal which have the ability to occur extensively as independent utterances like other Tibeto-Burman languages (Watters 2008; Bickel 1999; DeLancey 2011; Genetti 2011).

Puma has six distinct nominalisers and these nominalisers are multifunctional as they are used in more than one function. Following the Kiranti fashion of active participle or agentive participle plus general nominaliser, Puma has a *ka-* prefix for active nominalisation, and a clitic *=ku* for general nominalisation which is the most productive clitic. Similarly, *=kha* is a locational nominaliser which is also used extensively in location. There are two more nominalisers *-ma=yu* and *-ma=pa* which are used for instrument and non-instrument nominalisations. Besides this, the other suffix *-pa* is found extensively in Puma. This *-pa* nominaliser, which is derived from Proto-Tibeto-Burman (PTB) *\*pa* ‘father’; ‘masc’ (Benedict 1972), is used in numerous functions (Watters 2008; DeLancey 2002; LaPolla 2008). The nominaliser *-pa* is the oldest Tibeto-Burman nominaliser, and is associated with perfectivity in most Bodish languages (DeLancey 2002; 2011). The scope and distribution of *-pa* also extends into other Kiranti languages like Puma which also encodes perfectivity.

The *-pa* nominaliser, which is also a masculine marker in the case of Puma, often requires an active participle *ka-* in a sequence of *kaΣpa* where  $\Sigma$  indicates the affix attaches to stems, as in *ka-dhe-pa* [ACT.PTCP-beat-MASC] ‘the man who beats’. So it gives agentive nominal such as *-er* in English like teacher, builder, baker, beater etc. As in many Kiranti languages, Puma makes extensive use of clausal nominalisation, a syntactic process where a whole clause can function as a noun or noun phrase and be an adnominal modifier.

### 5. LINK BETWEEN NOMINALISATION, GENITIVE AND RELATIVISATION

Relativisation through nominalisation is a ubiquitous phenomenon among Tibeto-Burman languages, including the sub-branch of Kiranti languages. Puma shows an interesting distinction between nominalisation, relativisation and possessive which is slightly different from Lahu. This pattern is not as neat as in Lahu, but the prefix *ka-* relates to the three functions of nominalisation, relativisation, and possessive in Puma.

I argue that the prefix *ka-* often participates in more than one function and it serves as a nominaliser, relativiser and possessiviser, as in (1)<sup>1</sup>. However, it is important to note that such a relationship functions only with third person possession construction, as first person and second person uses different possessive markers. *ka-* is prefixed directly onto the verb, or onto the possessed constituent. In fact, structural and semantic factors help to distinguish between these functions in actual contexts of use.

- (1) a. NOMINALISATION  
       [*ka-duj*]                    *puks-a*  
       ACT.PTCP-drink    go-PST  
       ‘The drinker went.’
- b. RELATIVISATION  
       [*mobail ka-khet-pa*]  
       mobile    ACT.PTCP-break-MASC  
       *cha*                    *ta-a*  
       child.ABS    come-PST  
       ‘The boy who broke the mobile came.’

<sup>1</sup> The abbreviations used in this paper follow the Leipzig Glossing Rules, with the addition of the abbreviations sg ‘singular’.

- c. POSSESSIVE  
*ka-bo*                    *ka-pa*  
 3SG.POSS-GEN    3SG.POSS-father  
 ‘His/her father.’

## 6. NOMINALISERS AND THEIR DISTRIBUTION

Many Kiranti languages have more than one nominaliser with multiple functions. It is important to note that there is variation in the number of nominalisers which have developed in Kiranti languages. Languages like Kulung, Limbu, Camling, and Athpare have two basic nominalisers (cf. Watters 2008; 2002), while Puma has five distinct nominalisers with different functions for each. Table 1 lists the nominalisers found in the Puma language. The distribution of nominalisers listed in Table 1 can be found in various levels such as morphological level, syntactic level and semantic level ( see Sharma 2013 for details).

Table 1: Nominalisers

Nom.	Gloss	Structural form	Function
<i>ka-</i>	ACT.PTCP	<i>ka-Σ (-pa/-ma)</i>	active participle
<i>=ku</i>	NMLZ	<i>V=ku</i>	gen. nominal
<i>-ma=pa<sub>2</sub></i>	INSTR.NMLZ	<i>Σ-ma=pa</i>	instr. entity
<i>-ma=yu</i>	NON.INSTR.NMLZ	<i>(ka-)Σ-ma=yu</i>	non-inst. entity
<i>=pa<sub>3</sub></i>	NMLZ	<i>pa</i> or <i>paa</i>	time adverbial
<i>=kha</i>	LOC.NMLZ	<i>Σ=kha</i>	location

## 7. NOMINALISER TYPES

As already mentioned above, Puma has six types of nominalisers which are described below:

### 7.1 Active participle (*ka-*)

Many Kiranti languages such as Puma, Camling (Ebert 1997), Athpare (Ebert 1997), Bantawa (Doornenbal 2009), Limbu (van Driem 1987), Kulung (Tolsma 2006), Thulung (Lahaussois 2002), Chintang (Paudyal 2011), Koyihave two basic nominalisers- one that has been variously called an ‘active participle’ or an ‘agentive noun’, and the other ‘general’ nominaliser used in multiple functions. For my purpose, I use the term ‘active participle (ACT.PTCP)’. Across Kiranti languages, cognates of the Puma active participle *ka-* are found in the nominalisation constructions that relativise S/A arguments of a modified clause, and makes use of a *-pa<sub>1</sub>* masculine marker. Relativisation of agents (A) in finite constructions and subjects (S) in non-finite constructions

requires *ka-*, with or without subsequent gender markers *-pa<sub>1</sub>* (masculine) or *-ma* (feminine) ending. It should to be noted that while grammatical marking of gender is not widespread in Kiranti languages, Puma does not distinguish genders in person marking except by lexical nouns.

Kiranti languages demonstrate diverse behaviours for using active participles. The *-pa<sub>1</sub>* nominaliser in some languages such as Kulung and Thulung stands on its own as a primary nominaliser, while it occurs in other languages like Puma, Bantawa, and Limbu in combination with a cognate *ka-*, *ka-* or *ke-* as a secondary nominaliser. Sharma (2014:330) lists the paradigms of distinct active participles and nominalisers of some Kiranti languages which is illustrated in Table 2.

Table 2: Active participles and general nominalisers in Kiranti languages

Languages	Active particip.	Gen. nominaliser
Puma	<i>ka-Σ(-pa<sub>1</sub>/ma)</i>	<i>-ku</i>
Bantawa	<i>ka-Σ-pa</i>	<i>-ʔo</i>
Chintang	<i>ka-Σ-pa</i>	<i>-go</i>
Camling	<i>ka-Σ(-pa)</i>	<i>-ko</i>
Athpare	<i>ka-Σ(-pa)</i>	-
Limbu	<i>ke-Σ-pa</i>	<i>ba/be</i>
Dumi	<i>kpi ~ -pi /</i>	<i>-kpa    -m</i>
Kulung	<i>-pa / -p</i>	<i>-kə</i>
Thulung	<i>-pa</i>	<i>-m</i>
Belhare	<i>ʔ<sup>2</sup></i>	<i>(k)ha (k)</i>

Puma employs an active participle which is a basic criterion in distinguishing an agent nominalisation from general nominalisation, and other kinds of nominalisation. All A arguments are marked with *ka-*, while all subjects and patients are marked with *=ku*. However, in (2c) human subject takes *ka-* on subject nominalisation instead of *=ku* that is extensively used on most of human subject, while *=ku* is used with non-human subject and patient nominalisation.

- (2) a. [*khokku-lai ka-cet (-ma)*]  
           3SG-DAT    ACT.PTCP-hit-FEM

<sup>2</sup> I do not find the Belhare active nominaliser yet in the Kiranti typological literature

- marchacha khap-a*  
 girl.ABS weep-PST  
 ‘The girl who hit him wept.’
- b. [*khokku-lai ka-cet (-pa<sub>i</sub>)*]  
 3SG-DAT ACT.PTCP-hit-MASC  
*cha khap-a*  
 child.ABS weep-PST  
 ‘The child who hit him wept.’
- c. [*aika-ta*] *manna-a*  
 today.ABS.PTCP-come man-ERG  
*ŋa-lai pa-tup-ŋ*  
 1SG-DAT 3S/A-meet-1SG.S/P.PST  
 ‘The man who came today met me.’

In (2a-b) the masculine nominaliser *-pa*, and the feminine nominaliser can be optionally dropped, respectively. It is interesting to note that the general nominaliser also can be used in (2c).

#### 7.1.1 A ARGUMENT NOMINALISATION IN AP

Like many Kiranti languages, two-place and three-place argument verbs in Puma can be expressed intransitively, using the antipassive marker *kha-* where *kha-* always entails a human P. It is interesting to note that it is possible to relativise the detransitivised (demoted) object argument where an overt object is prohibited (cf. Sharma 2014; Sharma 2013b; Bickel et al. 2007). It is possible to relativise on the nominalised detransitivised A argument.

- (3) a. [*marchacha ka-dhe*] *manna*  
 girl.ABS ACT.PTCP-beat person  
 ‘The person who beat the girl.’
- b. [*kha-ka-dhe*] *manna*  
 ANTIP-ACT.PTCP-beat person  
 ‘The person who beat (someone).’

I see that the syntax of relativisation on the A argument in both transitive and antipassive constructions is very simple, as there is neither case assignment nor agreement. Not surprisingly, overt object *marchacha* ‘girl’ of example (3a) is prohibited in (3b) with the use of *kha-* which entails, as usual, someone in generic reference.

#### 7.1.2 Semantic restriction on *ka-*

Puma nominalised active participles are restricted to humans. The fact that the active nominaliser *ka-* only expresses a human referent can be seen in the following examples cited in (Sharma 2014:344–345):

- (4) a. *\*[ka-pan]* *manna*  
 ACT.PTCP-fly person  
 Intended: ‘the person who flies’
- b. [*pilen ka-pan*]  
 plane ACT.PTCP-fly  
 ‘the one who flies a plane’ ~ ‘a pilot’

Example in (4a) is not grammatical because a human being cannot fly. However, (4b) is acceptable as a pilot can fly an airplane (cf. Rai et al. 2007). Consider the following examples from Sharma (2014:344–345):

- (5) a. *\*[ka-pan]* *pilen*  
 ACT.PTCP-fly plane  
 Intended: ‘the plane which flies’
- b. *\*[ka-onh]* *khipa*  
 ACT.NMLZ-run dog  
 Intended: ‘the dog which runs/ ran’
- c. [*onh-a=ku*] *khipa*  
 run-PST=NMLZ dog  
 ‘the dog that ran.’

The constructions become ungrammatical in (5a-b) because *ka-*, as already mentioned above, obligatorily requires a human referent. The active participle does not entertain living referents other than humans.

#### 7.2 THE GENERAL NOMINALISER =*ku*

Puma, like many Kiranti languages, distinguishes between A-nominalisation and P-nominalisation. The clitic =*ku* is a versatile general nominaliser which is used for all S and P arguments, nominalised clauses, adjectives, sentence nominalisation, and clause nominalisation. I find the other subject nominalisation type marked by fully inflected verbs plus =*ku* as in:

- (6) [*puks-a=ku manna*] *lipd-a*  
 go-PST=NMLZ man return-PST  
 ‘The person who went returned.’

Example (6) is the same as the nominaliser used to construct P-nominalisation in finite constructions as in:

- (7) [*ŋa-a dher-u-ŋ=ku manna*]  
 1SG-ERG beat-3P-1SG.A=NMLZ man  
 ‘the person whom I beat’

Puma possesses both S=P type and S=A type nominalisation constructions. With the S=P type, both S and P take the general nominaliser *-ku*, while with the S=A type, the active nominaliser *ka-* should be used. Sharma (2014:305)

summarises relativisation strategy in Puma, as in Table 3.

Table 3: Relativisation strategy

Arguments	Structural form
A	$k_A-V$
S human	$k_A-V$ or $V=ku$
S non-human	$V=ku$
P	$V=ku$

### 7.2.1 P ARGUMENT NOMINALISATION IN ANTIPASSIVE

It is interesting to note that it is possible to relativise the detransitivised (demoted) object argument where an object is in generic reference. The given below example is detransitive counterpart of (7).

- (8) [*ŋa qher-onŋ=ku*] *manna*  
 1SG.ABS beat-1SG.S/P.PST=NMLZ person  
 ‘Some one whom I beat<sub>PST</sub>.’

In Puma all S-arguments, P-arguments, G-arguments and T-arguments can be relativised using  $V=ku$ . Only A-arguments and human S-arguments can be relativised using  $k_A-V$ . Observe the examples from (Sharma 2014:342).

- (9) THEME (T) REL-CLAUSE  
 [*ŋa-a cha-lai itd-u-ŋ=ku*]<sub>rel</sub>  
 1SG-ERG child-DAT give-3P-1SG.A=NMLZ  
*kaphekwa*  
 money.ABS  
 ‘The money that I gave.’
- (10) GOAL (G) REL-CLAUSE  
 [*ŋa-a kaphekwa itd-u-ŋ=ku*]<sub>rel</sub>  
 1SG-ERG money.ABS give-3P-1SG.A=NMLZ  
*cha*  
 child.ABS  
 ‘The child that I gave the money.’
- (11) AGENT (A) REL-CLAUSE  
 [*cha-lai kaphekwa k\_A-it*]<sub>rel</sub> *manna*  
 child-DAT money.ABS ACT.PTCP-give man.ABS  
 ‘The person who gave the money to the child.’

Relativisation cannot apply to the detransitivised P of a *kha*-antipassive construction, as in (12).

- (12) \*[[*papa kha-phad-a=ku*]<sub>rel</sub> *mama*] [*takku*]  
 father.ABS ANTIP-help-PST=NMLZ mom.ABS DEM  
 Intended: ‘These are the kinds of mothers that father helped.’

### 7.3 INSTRUMENT AND NON-INSTRUMENT NOMINALISATION

Puma makes a distinction between instrument nominalisation and non-instrument

nominalisation. Two distinct nominalisers  $-ma=pa_3$  and  $-ma=yu$  are used to nominalise instruments and non-instruments, respectively. However, the verbs with these nominalisers  $-ma=pa_3$  and  $-ma=yu$  are not indexed for person, number or any verbal agreement. Puma is actually rather unusual cross-linguistically in using two types of instrument nominalisers in distinguishing agent-type instrument entities and patient-type entities as this feature is not widely attested in other Kiranti languages.

#### 7.3.1 THE NOMINALISER $\Sigma$ - $ma=pa_3$

In Puma the instrumental clitic  $-ma=pa_3$  particularly refers to instruments. In the formula  $\Sigma$ - $ma=pa_3$ ,  $-ma$  indicates infinitive form while  $-pa_3$  functions as a generator of deriving instruments from infinitives. The instrument nominaliser  $=pa_3$  obligatorily attaches to infinitival forms.

- (13) a. *khu-ma=pa biha*  
 steal-INF=NMLZ marriage.ABS  
 ‘Marriage by capture.’ (coribiha:02)
- b. *ciŋhiŋ chap-ma-pa saman*  
 letter write-INF=NMLZ thing  
*medaŋ=ni raŋ-a*  
 NEG.NPST=REP say-PST  
 ‘Don’t you have writing materials?’ he asked.  
 (LH\_M\_01:434)

#### 7.3.2 THE NOMINALISER $\Sigma$ - $ma=yu$

The non-instrument nominaliser  $-ma=yu$  is used primarily in creating non-instrument entity reference from verbs. Note that (Rai et al. 2007) treat  $=yu$  as a single object nominaliser in Puma, however it never occurs with other than infinitival form  $-ma$ . The clitic  $=yu$  is used with infinitives, like  $=pa_3$  does, in limited environments.

- (14) *paŋ doro doro ma-mu*  
 SEQ what what 3PL.S/A-do  
 [*ca-ma=yu*]  
 eat-INF=N.INSTR.NMLZ  
 ‘What of those stuff do they prepare for food?’ (children 02:095)

From examples above, we can readily see that the instrument nominaliser  $-ma=pa_3$  is critically distinct from the object nominaliser  $-ma=yu$  in denoting instruments as opposed to objects.



7.4 THE NOMINALISER =*pa*<sub>2</sub>

Puma extensively makes use of a clitic =*pa*<sub>2</sub> or =*paa* particularly in adverbial nominalisations, referring to adverbial clauses like *while*, *when* etc. The adverb nominaliser =*pa*<sub>2</sub> in Puma is very likely functionally related to the Nepali word =*kheri* ‘during, as both are used primarily to reference time in general for the same reference which shows simultaneous action. Consider examples from Sharma (2014:367):

- (15) a. [*pa-ta-a-ci=pa<sub>2</sub>-a*]  
3S/A-come-PST-NS=(SIML-ERG)~ while  
‘While they came,’ (bulu\_batuko\_02: 015a)
- b. [*khap-yaj=pa*]  
weep-IPFV=SIML  
‘While she was weeping,’  
(bulu\_batulo\_02: 078)

7.5 THE NOMINALISER =*kha*

Many Kiranti languages like Puma, Bantawa, Camling, and Chintang have one nominaliser for locative nominalisation, while languages like Thulung have two nominalisers. It is interesting to note that Kiranti languages like Puma, Bantawa, Camling, and Chintang use =*kha* to create locative nouns. In contrast, the other Kiranti languages like Thulung uses =*khom* and =*khop* as a locative nominalizer (Lahaussais 2002). The relativised locative nominal occurs with possessors followed by a bare verbal root, as in:

- (16) [*uj-yuj=kha*]                      *khim*  
1SG.POSS-stay= LOC.NMLZ house.ABS  
‘The house where I stay/stayed.’

The function of locative nominaliser is to derive locations from verbs. However there should be locative reference. Example (17) is fully grammatical utterance but there should be obligatorily possessor reference while it is used in the context.

- (17) *im=kha*  
sleep=LOC.NMLZ  
‘Place for sleeping, bedroom’

## 8. RELATIVIZATION

Like many neighbouring Kiranti languages, one of the most important features of nominalised clauses in Puma is their ability to be embedded into noun phrases and their use as modifiers of nouns. Such a feature extends beyond Kiranti

syntax to Tibeto-Burman syntax and as a result this phenomenon is very widespread in Tibeto-Burman languages (Genetti 2011). The Puma language consistently shows the Kiranti association in terms of relativisation and nominalisation. Hence, nominalisation is a main device to form relative clauses in Puma (see Sharma 2014).

In Puma relative clauses are formed from the general nominaliser =*ku*, and the agent nominaliser *ka-* optionally followed by a male gender marker *-pa* and its counterpart female gender *-ma*. The nominalising prefix *ka-* and suffix =*ku* are used quite productively to form nominals in Puma. It is important to note here that under no circumstances can the agent marker and general marker be dropped in relativisation, while a male gender marker *-pa* and its counterpart female gender *-ma* which usually follow the agent marker are dropped.

While the identity of relativisation with nominalisation constructions is widespread in Tibeto-Burman, Burmese is a prima facie exception to the claim that relative clauses are universally nominalisations in Tibeto-Burman (DeLancey 2002).

In Puma, relativisation on intransitive subjects arguments (S) and transitive patients (P) requires =*ku*. The general nominaliser =*ku* is the most versatile nominaliser which can be used in multiple functions (see Sharma 2014).

- (18) a. [*si-a-d-a=ku*]  
die-PST-TEL-PST=NMLZ  
*manna kanimak pee*  
person.ABS good NEG  
‘The person who died was not good.’
- b. [*som-tuk-ma-do waj-a=ku*]  
love-love-INF-GEN.LOC get.in-PST=NMLZ  
*marchacha uj-bo uj-nicha*  
girl 1SG-GEN 1SG.POSS-younger sister  
‘The girl who fell in love is my sister.’

As can be seen from above examples the general nominaliser =*ku* can be attached with any type of verbal inflection such as a past reference, an imperfective reference, and non-past reference. The most striking feature of the Puma general nominaliser is its ability to create relative clauses that are parallel to those formed by the A-

nominaliser. Note that the derived relative clauses using general nominaliser do not have the same semantic scope in terms of expressing TAM contrasts. Examples from Puma Sharma (2014) illustrate relativization of S argument:

- (19) a. [yuy-a=ku] cha  
stay-PST=NMLZ child  
'The child who stayed.'
- b. [yuy-yay=ku] cha  
stay-IPFV=NMLZ child  
'The child who is staying.'
- c. [yuy=ku] cha  
stay=NMLZ child  
'The child who stays.'
- d. [ka-yuy] cha  
ACT.PTCP-stay child  
'The child who stays/stayed/is staying.'

In subject nominalisation constructions, the general nominaliser can derive three relative clauses, as in (19a-c) where these clauses demonstrate three time references – past, imperfective and non-past. Actually, these nominalised constructions are parallel to a single active nominalised construction, as exemplified in (19d). We can argue that the *ka-* nominaliser has no time reference and is context dependent. On the other hand, the general nominaliser can derive relative clauses, distinguishing all three time references (past, non-past and imperfective).

## 9. NOMINALISATION AND MIRATIVES

The use of miratives in independent clause nominalisation constructions is widely attested in Tibeto-Burman (Sharma 2014). This issue has been discussed in previous literature as it has also been observed in Kiranti languages that the sentence-final mirative particle '*raicha* ~ *racha*' is borrowed from Nepali (Ebert 1997; Bickel 1999; Watters 2008 and among others). According to Watters (2008) nominalisation is compatible with mirativity in many Bodic languages, into which the Nepali mirative particle has been borrowed. As already mentioned above, like many other neighbouring Kiranti languages Puma uses the mirative particle '*raicha* ~ *racha*'. This particle, in Puma, is preceded by nominalised verbs (Sharma 2014); nevertheless, the verbs do not necessarily have to be nominalised, as in the case of Camling.

The mirative in Puma can be preceded by both nominalised and non-nominalised verbs, as in the following:

- (20) a. [pəŋ=na kaɖaŋ=na laɖāi li-ma  
CONN=PTCL back=PTCL fight be-INF  
mu-a-ŋa=ku] [raɕha]  
do-PST-IPFV=NMLZ MIR  
'(The training started and) the war was about to begin.' (Sharma 2014)
- b. ak-ta laŋpa-a sat-loss-i [raɕha]  
one-CLF Kshetri-ERG pull-TEL-3P MIR  
'One Kshetri pulled her out.' (Sharma 2014)

Likewise, consider the following examples from Camling and Wambule, as cited in Watters (2008:26), and Bantawa (Doornenbal 2009:204):

- (21) a. CAMLING  
[i-ra mina jāl am-si khata-ko] [raɕha]  
one-CLF man net throw-PURP go-NMLZ REP  
'A man went fishing, (it is told).'
- (b) WAMBULE  
jamma gipt-u-ø-me [raɕha]!  
in.all roll.up-3NP.A-23S-AFF MIR  
'It had fully wrapped him up!'
- (c) BANTAWA  
[am-cha baddhe i-kharu  
your<sup>s</sup>-child very his/her-mind  
mett-u-ŋ-ʔo] [raɕha]  
apply-3P-PROG-3P-NOM MIR  
'Your son appears to be very clever.'

In Puma, the mirative particle is reinterpreted in many texts to signal a reported sense. Puma makes extensive use of the mirative particle *raicha* ~ *raicha*, preceding by nominalised verbs and non-nominalised verbs (see Sharma 2014).

## 10. NOMINALISATION OF INTERROGATIVES

The functions that the interrogatives carry in nominalisation constructions are quite distinct. Watters (2008) assumes whether this may or may not be a reflex of the politeness principle of Newar in Camling. In contrast, in Puma interrogative constructions with nominalisation we can argue that this so-called principle of politeness appears not to apply as both non-nominalised and nominalised questions can occur in the same setting of a conversation.

- (22) a. en goru-ci dem  
1PL.INCL.POSS bullock-NS how.many  
ka-ra la jammā-bo  
ACT.PTCP.CLF PTCL total-GEN

*en-goru-ci?*  
 1PL.INCL.POSS-bullock-NS  
 ‘How many are our bullocks?’

- b. *khoi konta.*  
 INDSV INDSV  
 (‘I do not know!’) (Not sure about the number!)
- c. *ta-sind-in-yen?*                      d. *ahã.*  
 2-know-NEG-NEG.IPFV                      no  
 ‘You do not know?’                      ‘No.’
- e. [*ta-sind-in-yen=ku*?]  
 2-know-NEG-NEG.IPFV=NMLZ  
 ‘You do not know?’ (‘You should know, why do not you know?’) (Sharma 2014)

Example (22) is part of a conversation taking place between an adult and two children. At the beginning of the conversation, the question is asked whether a child knows how many bullocks are there in his house, without using the nominaliser =*ku*, as in (22a). But the answer is not ‘no’ though he does not know the number of bullocks. The child is hesitant about that. Then in the next turn, the adult speaker again puts the question to the child addressee whether the child does not know the number of bullocks, again without using the nominaliser =*ku*, as in (22c). The child answers ‘no’. This means that at this moment the child gives his definite answer that he does not know the number of bullocks. Now, interestingly, the conversation continues and the adult presumably feels embarrassed by the answer of the child. Then, the adult speaker most probably gets angry with the child and he again asks the same question, but this time using the nominaliser =*ku*, as in (22e). After his nominalised question, the child remains silent and his friend replies. Eventually, his friend knows the number of bullocks (see Sharma 2014). Apparently, this is not so much a matter of politeness as in Newari, but simply a matter of focus, as Bickel (1999) notes in Belhare.

We see that some Tibeto-Burman languages employ nominalised questions as polite greetings, much as in Newari. It is interesting to note that such phenomena are found in a very wide range in Nepali. Three questions that are not actually questions though they are in the question form are very popular among Nepali people. They are:

*sancai hunuhuncha?* ‘how are you?’, *ciyã khãnu bhayo?* ‘have you had your tea?’, and *khãnã khãnu bhayo?* ‘have you had your meal?’ (cf. Sharma 2014). These questions can be asked of anyone who is an intimate, and are just a kind of greeting and is more like a formality. These types of expressions, according to Malinowski (1936), are ‘phatic communion’.

## 11. CLAUSAL NOMINALISATION

Puma makes extensive use of clausal nominalisation. Nominalisation functions on both lexical and clausal levels. Genetti (2011) observes that one of the reasons that nominalisation is so pervasive in Tibeto-Burman is that it applies at clausal and derivational level. Nominalisation functions on both lexical and clausal levels are observed not only in Kiranti languages but also across the Tibeto-Burman languages (Bickel 1999; Genetti 2011; Genetti et al. 2008; Noonan 2008; Watters 2008; Grunow-Harsta 2011).

In Puma, a whole clause can be nominalised by the general nominaliser =*ku* which then modifies the entire clause to function as a noun phrase, as in (23) which actually is factive.

- (23) [*khokku-ci-a naya khim*  
 3NS-ERG new house  
*ban-a-pa-mu-a=ku*]  
 build-PST-3S/A-do-PST=NMLZ  
*ŋa-a khaŋ-u-ŋ*  
 1SG-ERG see-3P-1SG.A  
 ‘I saw that they have built the new house.’ (Sharma 2014:372)

Example (23) demonstrates that a dependent clause which is nominalised with =*ku* primarily precedes the matrix clause. It is interesting to note that the agreement in this example is very striking. The 3P agrees with the whole nominalised clause.

## 12. CONCLUSION

This paper presents an overview of nominalization in Puma. The six types of nominalisers have been identified and their multifunctions have been described. Puma distinguishes between transitive and intransitive nominalisations and person, number, tense are fully indexed with finite nominalisations. Relative clauses (dependent clauses) that are embedded into a noun phrase typically precede the matrix

clause. Puma appears to be unusual across Kiranti languages in that it contrasts the nominal that can be used as instruments, relativising by  $-ma=pa_2$  and the nominal that can be used non-instrument, relativising by  $-ma=yu$ . The active participle  $ka$ -relativises only human A arguments, while the general nominaliser  $=ku$  can relativise all S human and non-human and P arguments. The nominaliser  $=paa$  or  $=pa_3$  primarily deals with adverbial nominalisation whereas  $=kha$  is used with locative. In interrogative constructions with nominalisation we can argue that the principle of politeness appears not to apply as both non-nominalised and nominalised questions can occur in the same setting of a conversation. We see that some Tibeto-Burman languages employ nominalised questions as polite greetings. Clausal nominalization is especially striking in the Puma language as a whole clause can be nominalised by the general nominaliser  $=ku$  which then modifies the entire clause to function as a noun phrase.

#### ACKNOWLEDGEMENT

The data discussed in this paper were made possible by the Endangered Languages Documentation Programme, ELDP Grant- IGS 0094 (2010-2013) and the DoBeS-funded Chintang and Puma Documentation Project (CPDP) (2004-2008) which is hereby gratefully acknowledged. The examples without a reference were elicited during my fieldwork in 2010 and 2012. I would like to thank my language consultants particularly Mr. Shree Kumar Rai and Mr. Prem Dhoj Rai for their help.

#### REFERENCES

- Benedict, Paul K. 1972. *Sino-Tibetan: A Conspectus*. (ed.) James A. Matisoff. Cambridge: Cambridge University Press.
- Bickel, Balthasar. 1999. Nominalisation and focus constructions in some Kiranti languages. In Yogenrda P. Yadava & Warren W. Glover (eds.), *Topics in Nepalese linguistics*, 271–296. Kathmandu: Royal Nepal Academy.
- Bickel, Balthasar, Martin Gaenzle, Arjun Rai, Premdhoj Rai, Shree K. Rai, Vishnu S. Rai & Narayan P. Sharma. 2007. Two ways of suspending object agreement in Puma: between incorporation, antipassivization, and optional agreement. *Himalayan Linguistics Journal* 7. 1–18.
- Binnick, Robert. 1979. *Modern Mongolian: A Transformational Approach*. Toronto: University of Toronto Press.
- DeLancey, Scott. 1997. Mirativity: The grammatical marking of unexpected information. *Linguistic Typology* 1. 33–52.
- DeLancey, Scott. 1999. Relativisation in Tibetan. In Yogenrda P. Yadava & Warren W. Glover (eds.), *Topics in Nepalese Linguistics*, 231–249. Kathmandu: Royal Nepal Academy.
- DeLancey, Scott. 2002. Relativisation and Nominalisation in Bodic. *Proceedings of the Twenty-Eighth Annual Meeting of the Berkeley Linguistic Society: Special Session on Tibeto-Burman and Southeast Asian Linguistics*, 55–72. Berkeley: Berkeley Linguistic Society.
- DeLancey, Scott. 2011. Finite structures from nominalisation constructions in Tibeto-Burman. In Foong Ha Yap, Karen Grunow-Harsta & Janick Wrona (eds.), *Nominalisation in Asian languages: Diachronic and typological perspectives*, 343–359. Amsterdam: John Benjamins Publishing Company.
- Doornenbal, Marius A. Albert. 2009. A grammar of Bantawa: grammar, paradigm tables, glossary and texts of a Rai language of Eastern Nepal. Utrecht: LOT.
- Driem, George van. 1987. *A grammar of Limbu*. Berlin: Mouton de Gruyter.
- Ebert, Karen H. 1994. *The structure of Kiranti languages: comparative grammar and texts*. Zürich: Seminar für Allgemeine Sprachwissenschaft.
- Ebert, Karen H. 1997. *A grammar of Athpare*. München: LINCOM Europa.
- Ebert, Karen H. 1997. *Camling*. München: LINCOM Europa.
- Foley, William. 1986. *The Papuan Languages of New Guinea*. Cambridge: Cambridge University Press.
- Genetti, Carol. 2011. Nominalisation in Tibeto-Burman languages of the Himalayan area: A typological perspective. In Foong Ha Yap, Karen Grunow-Harsta & Janick Wrona (eds.), *Nominalisation in Asian languages: Diachronic and typological perspectives*, 163–193. Amsterdam: John Benjamin Publishing Company.

- Genetti, Carol, Ellen Bartee, Alec R. Coupe, Kristine Hilderbrandt & You-Jing Lin. 2008. Syntactic aspects of nominalisation in five Tibeto-Burman languages of the Himalayan area. *Linguistic of the Tibeto-Burman Area* 31(2). 97–143.
- Grunow-Harsta, Karen. 2011. Nominalisation in Magar. In Foong Ha Yap & Janick Wrona (eds.), *Nominalisation in Asian Languages: Diachronic and Typological Perspectives: Sino-Tibetan and Iranian languages*, vol. 1. Amsterdam: John Benjamin Publishing Company.
- Herring, Susan C. 1991. Nominalisation, relativisation and attribution in Lotha, Angami, and Burmese. *Linguistic of the Tibeto-Burman Area* 14 (1). 55–72.
- Kölver, Ulrike. 1977. Nominalisation and lexicalisation in modern Newari. *Arbeiten des Kölner Universalien-Projektes* 30.
- Lahaussois, Aimée. 2002. Nominalisation, Relativisation, Genitivisation in Thulung Rai. *Proceedings of the Twenty-Eighth Annual Meeting of the Berkely Linguistics Society*, 87–98. Berkely: Berkely Linguistic Society.
- Lahaussois, Aimée. 2003. Nominalisation and its various uses in Thulung Rai. *Linguistics of the Tibeto-Burman Area* 26.1. 33–57.
- LaPolla, Randy J. 2008. Nominalisation in Rawang. *Linguistics of the Tibeto-Burman Area* 31(2). 45–65.
- Malinowski, Bronislaw. 1936. The problem of meaning in primitive languages. In Charles K Ogden & Ivor A Richards (eds.), *The meaning of meaning*, 296–336. New York: Kegan Paul.
- Matisoff, James A. 1972. Lahu nominalisation, relativisation, and genitivisation. In John P Kimball (ed.), *Syntax and Semantics*, vol. 1, 235–57. New York: Academic Press.
- Noonan, Michael. 2008. Nominalisation in Bodic languages. In María José López-Couso & Elena Seoane (eds.), *Rethinking Grammaticalization: New Perspectives*, 219–237. Amsterdam: John Benjamin Publishing Company.
- Noonan, Michael P. 1997. Versatile nominalisations. In Joan L. Bybee, John Haiman & Sandra A Thompson (eds.), *Essays on Language Function and Language Type: Dedicated to T. Givón*. Amsterdam & Philadelphia: John Benjamin Publishing Company.
- Paudyal, Netra P. 2011. Nominalisation in Chintang. In Govinda P. Bhattarai, Krishna P. Chalise & Balaram Prasain (eds.), *Nepalese Linguistics*, vol. 26, 116–129. Kathmandu: Linguistic Society of Nepal.
- Rai, Vishnu S., Balthasar Bickel, Narayan P. Sharma, Martin Gaenszle, Shree K. Rai & Arjun Rai. 2007. Nominalisers in the Puma Language. 40th International Conference on Sino-Tibetan and Linguistics. China.
- Sharma, Narayan P. 2013a. Nominalisation in Puma. A paper presented at the Language Documentation and Linguistic Theory (LDLT) 4. SOAS, University of London.
- Sharma, Narayan P. 2013b. Argument structure of Puma. *The SOAS Working Papers in Linguistics* 16. 235–255.
- Sharma, Narayan P. 2014. Morphosyntax of Puma, a Tibeto-Burman language of Nepal. London: SOAS, University of London PhD dissertation.
- Tolsma, Gerard J. 1999. A grammar of Kulung. Leiden: University of Leiden PhD dissertation.
- Tolsma, Gerard J. 2006. *A Grammar of Kulung*. Leiden: Brill.
- Watters, David E. 2002. *A Grammar of Kham*. Cambridge: Cambridge University Press.
- Watters, David E. 2008. Nominalisation in the East and Central Himalayish languages of Nepal. *Linguistics of the Tibeto-Burman Area* 31(2). 1–43.
- Weber, David J. 1989. *A Grammar of Huallaga (Huánuco) Quechua*. Berkely: University of California Press.

CONTRIBUTOR'S EMAIL:  
narayan.sharma@soas.ac.uk

# UNIFICATION OF FONTS ENCODING SYSTEM OF DEVANAGARI WRITING IN NEPALI

TRISHNA SINGH AND SANTA B. BASNET

*We devise a generalized framework to unify the text written in single-byte TTF formats and the multi-byte Unicode format of Nepali Devanagari script. It incorporates finite state approach to understand text encodings and utilizes the character mapping table, runtime cache and the glyphs re-arrangement rules during conversion. We can seamlessly use the outcome of the system in Nepali language computation such as Spelling Correction, Information Retrieval and so on.*

Keywords: font-encoding, glyph, tokenizer, state transition, cache

## 1. INTRODUCTION

Writing system of around 95% languages in Nepal (Hall) uses Devanagari script which is also found in many Indian languages. Most computer applications afford people to use single-byte glyph based true type fonts (TTF) encoding technology to store computerized Nepali language text. The formation of a dependent or independent single character based on ASCII encoding relies on the composition of either single or multiple glyphs. For example: "७" is a single character in Nepali which maps to the letters "of" in the widely used TTF font Preeti. Some special symbols with single-byte code are mapped to represent composite characters in many TTF fonts for convenience in typing Nepali text. For example: ७ and ७ are mapped to the ASCII code 180 in Preeti and PCS Nepali fonts respectively. Many people have contributed to design the shape and the composition of glyphs for character formations using various computer tools. This has resulted in many non-standard and non-uniform true type character mapping fonts. These fonts are primarily designed with a focus on composing and writing Devanagari characters and less to represent the language itself. These irregularities are problematic for computational algorithms used in text processing.

The development of multi-byte Unicode encoding standard, which aims to cover almost all languages writing system used these days, make it

straight forward to encode wide range of characters. The range includes the Devanagari alphabets. Computer algorithms can easily process Unicode encoded Devanagari script. Many institutions and most publication houses in Nepal have however developed their own glyphs for TTF fonts and Unicode. A lot of them have established themselves as industry standard with a large number of active users and an enormous volume of content. Such unmanaged diversity hinders processing and exchange of information through computers.

Most of the publications and news houses uses traditional TTF fonts to generate significant amount of Nepali text daily. These institutions also publish these materials online. The trouble is that internet browsers cannot process the traditional TTF fonts unless the font resources are in the user machine. Institutions that understand the inconvenience uses free software tools available on the internet to convert a few single-byte TTF fonts to its equivalent representation in Unicode encoding. Most of these tools are limited to few characters or work for a specific font such as Preeti. This introduces inconsistencies and errors in writing system of the language. For example, the Devanagari character "३" can be obtained from two distinct sets of character combination in Unicode. The first is the single character denoted by the code 0x908. The second way to render the same character is to combine two characters, "३+ ३". This is not the correct representation for the language but nonetheless is available in the popular conversion tools. To resolve these issues, the paper puts forward a robust font unification system of the TTF family and Unicode in Devanagari script that preserves the integrity of all the glyphs conjuncts while writing Nepali text. The approach and its implementation can be useful to text processing system such as OCR, spelling correction, text archiving and searching and language parsing.

## 2. BACKGROUND OF FONT ENCODING AND CONVERSION

There have been earlier efforts to standardize the writing system of Nepali within computers. Nepal Codes for Information Interchange was proposed by a committee of experts from government organizations, universities and the telecommunications sector (NFSC 1998). The recommendation introduces a standard that encodes Nepali Devanagari characters by including some conjuncts, partial letters, matra forms of the vowels and other diacritics all within the code range from 0 to 255. Hall et al. (2014) and Hall (2015) explained the necessity and the problems of achieving the unified encoding system for small languages in computer. These present the text encoding history of Nepal's languages in computer. Only three languages of Nepal have their written traditions, viz., Nepali, Newari and Limbu. They point out the coding limitation that of the Unicode which does not encodes phonological arguments, limited to certain expertise and bias towards the separation of unified text encoding among small languages. One of the main barrier is that the multiple disciplines of encoding present barriers to the development of software such as OCR and written text processing. Hardie (2007) designed a set of mapping rules that converts the conjuncts created using half-form glyph-based 8-bit fonts to the equivalent conjuncts in Unicode for some South Asian languages. The effort produced a text conversion computer program named Unicodify<sup>1</sup> that has been used extensively in corpus building for South Asian languages.

Madan Puraskar Pustakalaya<sup>2</sup> has been active in developing font conversion tools, specifically non-Unicode fonts to Unicode. It has crafted a limited number of rules to convert text documents from few TTF fonts to Unicode and vice-versa. The tools are released with the name "*Conversion Tools 3.0*". The limited rules are manually encoded in individual program modules for the respective fonts and do not share common codes among font families. This contributes limited usability with its constricted coverage and

performance. UNESCO<sup>3</sup> has supported this work aiming to build the standard font for software professionals to develop language based utility applications such as dictionary, spell-checker in Nepali. There are many other similar small utility programs online to convert TTF to Unicode font and vice-versa. Most of them do not have the full coverage of TTF font codes and conjuncts assembled using the TTF font glyphs. These produces conversion errors and requires significant manual effort to correct them.

Raj and Prahallad (2007) have developed the font encoding identification scheme by utilizing the Vector Space Model (VSM) and the term frequency – inverse document frequency (tf-idf) metrics. Glyphs are used analogous to terms and the words with its sentences as the documents. The n-gram measures (uni-glyph, bi-glyph and tri-glyph) are used in document weighting to estimate the models output of all font-types during font identification. A set of generic glyph assimilation rules are designed to convert the font's data, which uses the predefined mapping table of glyphs, from one font to another for a particular language text. The glyph assimilation rules re-arrange to the proper position and combines some character glyphs so that it forms a conjunct during font conversion.

Lehal et al. (2014) propose a statistical model to convert multiple formats of available fonts encoded in ASCII to Devanagari Unicode. Mapping characters to a single code value in Unicode rely on Tri-gram language model and uses fonts mapping tables. The font mapping is done in two stages: first, it converts all the characters of detected fonts to the intermediate code which corresponds to the glyph of a font. The intermediate set of codes are designed and trained to cover all set of available fonts and the mapping rules are designed according to the glyphs. Second, the intermediate representation of codes is mapped to Unicode and re-arranged by the transformation rules. These rules are carefully crafted to perform the Unicode transformation based on the character categories.

<sup>1</sup><http://www.lancaster.ac.uk/staff/hardiea/unicodify.htm>

<sup>2</sup><http://www.madanpuraskar.org>

<sup>3</sup>[http://www.unesco.org/new/en/brasilgia/about-this-office/single-view/news/unesco\\_supports\\_nepali\\_font\\_standardization/](http://www.unesco.org/new/en/brasilgia/about-this-office/single-view/news/unesco_supports_nepali_font_standardization/)

Our method relies on the characters categorized in the TTF fonts, the position of glyph appearances with other characters and the font mapping table. We craft generic rules for the glyph re-arrangement and their cache so that the font conversion works in both directions easily. New fonts can be added in the conversion system by providing minimum amount of font information.

### 3. THE FONT UNIFICATION SYSTEM

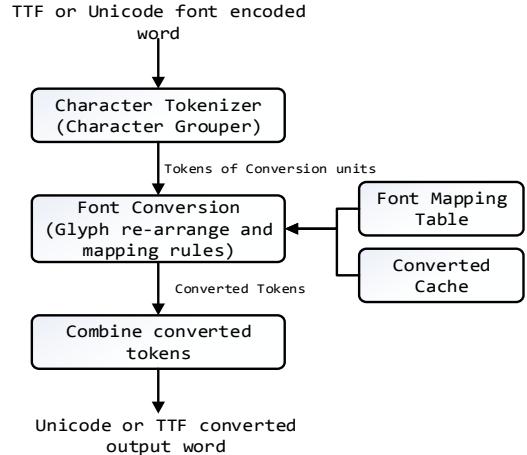
The unification means, we analyze most of the available writing system present currently in Nepali text expressed via true type i.e. the single byte and Unicode i.e. the multi-byte fonts and build a computational processing algorithm that understands the written conjuncts of character sequences. This preserves the integrity of glyphs expressed for a particular character used among diversified fonts. For example, the word "ज्ञानझुण्ड"(meaning: knowledge cluster) can be represented with many different fonts are shown in the following table.

Table 1: Sample word representation in different Nepali TTF fonts and Unicode.

Font	Word	Bytes Representation
Unicode	ज्ञानझुण्ड	91C 94D 91E 93E 928 91D 941 923 94D 921
Preeti	ज्ञानभ्रुण्ड,	31 66 67 B4 27 30 38, 31
	ज्ञानभ्रुण्ड	66 67 65 27 6D 30 38
PCS	ज्ञानझुण्ड,	21 66 67 B4 27 29 2A, 21
Nepal	ज्ञानभ्रुण्ड,	66 67 65 27 6D 29 2A
Kantipur	ज्ञानभ्रुण्ड,	31 66 67 B4 27 30 38, 31
	ज्ञानभ्रुण्ड	66 67 65 27 6D 30 38
Himalb	ज्ञानझुण्ड,	31 66 67 B4 27 30 38, 31
	ज्ञानभ्रुण्ड	66 67 65 27 6D 30 38

As shown in Table 3.1, the same word can be written in multiple forms (preserves the same meaning) in the same font as well as it varies the internal representation among different fonts. In particular, 'झ' and 'भ्र' shares common as well as different codes among same and different TTF font family. It also has variation length of glyphs. The character can be expressed single byte of code "B4" and also multi byte codes "65 6D". The equivalent representation of the same character in Unicode is "91D". In similar, there are a lot of code variations exists and that should be coped with the unification system.

Our unification system assumes that the Unicode is the standard to represent all the glyphs of font data. So, this system interacts with the following components in Fig 3.1 to unify all the fonts to



Unicode and vice versa.

Fig. 1 Font unification system components

Initially, we group the sequences of character glyphs in both TTF and Unicode encoded text as the minimal conversion unit by using a character tokenizer. The tokenized output then send to the conversion system which utilizes the font mapping rules and glyph re-arrange rules based the glyph category types. Finally, the converted sequences of characters then combined to form the whole word. The individual component details are described in the following sections.

#### 3.1 CHARACTER TOKENIZER FOR GLYPHS GROUPING

We manually organize the glyphs in the fonts in order to group categorized characters that could join with the others. The grouping of glyphs are based either on the position it could appear during conjunct formation, or whether they could appear alone. The assumption behind this grouping is that native speakers know which character goes where, that is, if it should be placed on the left, top, right and the bottom of the center character. The center character in this case could be whole consonant (WC) or whole vowel (WV). The same idea (Lehal et al.) is implemented for Telugu glyphs by assigning the position with number values. We define fifteen categories for font glyphs such as



whole consonants (WC), half consonants (HFC), compound characters (CSC) and right vowels (RV). For example, RV for the Kantipur TTF font is the set  $\{\text{r}, \text{r}'\}$ . All of the character groups (labelled with distinct acronyms) are given in Appendix A. We name these categories according to the order in the sequence of conjuncts. We then build a finite-state machine to capture the character transition in conjunct formation. The transition among the categories is described by a memory based state machine known as Pushdown Automata (PDA)<sup>4</sup>. The state machine for the TTF and Unicode character tokenizer is formally defined by five tuples, as follows:

**TTF Tokenizer ( $T_1$ )** = (  
 Set of States ( $Q$ ):  $\{1, 2, \dots, 20\}$ ,  
 Set of Input Categories ( $\Sigma$ ):  $\{\text{WC}, \text{WV}, \text{NUM}, \text{CSC}, \text{BV}, \text{TV}, \text{LV}, \text{RV}, \text{BDU}, \text{HLN}, \text{HFC}, \text{RHF}$  and  $\text{ELSE}\}$ ,  
 Starting state ( $q_0$ ): 1,  
 Set of final states ( $F$ ):  $\{19\}$ ,  
 Set of transitions ( $\delta$ ): See all transitions are shown in Appendix - C  
 )

Fig. 2 Definition for TTF text sequence tokenizer.

**Unicode Tokenizer ( $T_2$ )** = (  
 Set of States ( $Q$ ):  $\{1, 2, 3, 4, 5, 6, 7, 8\}$ ,  
 Set of Input Categories ( $\Sigma$ ):  $\{\text{WC}, \text{WV}, \text{NUM}, \text{PCM}, \text{ZWJ}, \text{ZWNJ}, \text{JNS}\}$ ,  
 Starting state ( $q_0$ ): 1,  
 Set of final states ( $F$ ):  $\{8\}$ ,  
 Set of transitions ( $\delta$ ): See all transitions are shown in Appendix - B  
 )

Fig. 3 Definition for Unicode text sequence tokenizer.

The word `"/fi6<<otfn]"` results from transitions that generate these tokens in sequence with given transitions among TTF fonts: `[f{WC_RV},li6<<{LV_HFC_WC_HLN},o{WC},tf{WC_RV},n]]{WC_TV}]`. For example, a character token sequence "li6<<" has LV, HFC, WC and HLN category types. These tokens are taken to be the minimal unit of conversion in order to apply the font conversion map and the glyph arrangement rules.

### 3.2 FONT MAPPING TABLE

The mapping table organizes both single and multiple mapping entries needed for all other fonts to Unicode and vice-versa conversion. We consider a set of ASCII codes are shared as a common code for a single glyph among all the TTF fonts. To accommodate it, we build the mapping table in two stages. First, we find intersection among all the codes in the TTF font family and select a set of commonly shared codes. We then prepare a mapping table for these entries. The key benefit of extracting common codes is that it saves a huge amount of run-time memory by avoiding redundant map entries among all the available fonts. In a system with  $k$  fonts, the codes are extracted using the following relation:

$$\text{Common Codes} = \bigcap_{i=1}^k (\text{TTF Font})_i \text{ --- (3.1)}$$

In the second stage, we build the mapping table for all uncovered codes. It also has few entries of composite characters (conjuncts) formed by multiple glyphs. This is done so that some of the common arrangement could easily be mapped from the entry itself.

### 3.3 FONT CONVERSION AND GLYPH ARRANGEMENT WITH CACHE

We now perform conversion on the output of the character tokenizer. Since we consider a token of character sequences to be the minimal meaningful conversion unit for font conversion, we apply the available fonts map to either to a single character or a sequence of characters. Our system utilizes several re-arrangement rules among the glyphs to preserve the sanity of the Nepali writing system.

The four bytes of information in `"li6<<{LV_HFC_WC_HLN}"`, shown in Fig. 3.4, is mapped to the 12 bytes of equivalent Unicode information. First re-arrangement of glyphs happens on the LV, i.e., the "f" character. It is sent to the end to meet the sequence in Unicode writing. The special character "." is mapped to four bytes by adding half maker (◌̣) to the previous character and a full character "𑑦". In another example, "ꣳ" can have two glyphs sequences: `[अ ा ˆ]` and `[अ ा ˆ ˆ]` in Preeti font. The

<sup>4</sup>[https://en.wikipedia.org/wiki/Pushdown\\_automaton](https://en.wikipedia.org/wiki/Pushdown_automaton)

re-arrangement rules need to address such type-sequence variations in order to preserve the integrity of Nepali writing. We devise 15 wide-ranging glyph re-arrangement rules for the TTF and Unicode fonts to deal with all possible writing style of Nepali commonly encountered in the computer.

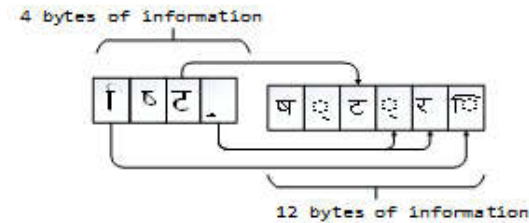


Fig. 3.4: 4 and 12 bytes of information

We build a runtime cache memory table produced in the forward conversion (i.e. from TTF to Unicode) with an aim to preserve the same set of glyphs that can be used while converting back from Unicode to TTF. There is a lot of one-to-many mappings from Unicode to TTF conversion. For instance, a character "झ" of Unicode can be mapped to either "i" or "em" in PCS Nepal font, i.e., while designing a TTF font, it is provided that multiple characters of single byte code can be mapped to same character symbol in Unicode. This especially happens to the composite type of characters, made from multiple glyphs. So, in case of backward conversion, we prioritize more to the runtime cache than the offline map table.

### 3.3.1 FORWARD CONVERSION—TTF TO UNICODE

In this step, the TTF character token sequences are given as the input, and it produces the character sequences in Unicode as the output.

Algorithm – 3.1: Conversion of TTF font to its equivalent Unicode representation.

-----  
 (1) Read a TTF font encoded word and build a stream of character tokens.

(2) For all tokens:

(a) Check if the token have single glyph, apply conversion map.

(b) Check if the token have two glyphs, apply conversion map with

left vowel and top vowel glyphs arrangement rules.

(c) Check if the token have multiple glyphs, apply conversion map with all the crafted glyphs arrangement rules.

(d) Store the applied map entry and rule in the runtime cache table.

(3) Concatenate all the converted tokens to form a new equivalent Unicode text.  
 -----

### 3.3.2 BACKWARD CONVERSION—UNICODE TO TTF

In this step, the Unicode character token sequences are taken as the input and it produces the character sequences in TTF fonts. During this conversion, it utilizes cache of the character map created during forward conversion to resolve the ambiguity of one-to-many mappings from a single Unicode character to the multiple characters in TTF glyphs.

Algorithm 3.2: Conversion of Unicode font to its equivalent TTF representation

-----  
 (1) Read a Unicode encoded word and build a stream of character tokens.

(2) For all tokens:

a. Check if the token have single glyph, apply conversion map and the cached map.

b. Check if the token have two glyphs, apply conversion map and the cached map with left vowel glyphs arrangement reverse rule.

c. Check if the token have multiple glyphs, apply conversion map and the cached map with all the crafted glyphs arrangement reverse rules.

(3) Concatenate all the converted tokens to form a new equivalent TTF text.  
 -----

#### 4. PERFORMANCE ANALYSIS

We prepare the hand labelled font converted word-list to measure the accuracy of the font unification system.

##### 4.1 TEST DATA PREPARATION AND CRITERIA

We sampled 3000 unique words from the total of 690,000 unique words extracted from the Nepali news corpus of approximately 700,000 documents. We prepare the test word-list encoded by the selected eight Nepali TTF fonts and the equivalent list in Unicode. Hence, we have eight sets of TTF encoded and its equivalent Unicode encoded test words.

##### 4.2 CORRECTNESS MEASURE

We match the source word to the converted word as a measure of string matching in both ways in the tests. We collect all the matched words as the correct words. The system evaluation given by the accuracy measure in percentage is given by the following relation.

$$Accuracy = \frac{\text{Correctly Converted Words}}{\text{Total Words}} \quad \text{--- (4.1)}$$

We calculate the average accumulated accuracy score of the system among all eight selected fonts by the following relation.

$$Average Accuracy = \frac{\sum_{i=1}^k Accuracy(Font)_i}{K} \quad \text{--- (4.2)}$$

The evaluation of font unification system result is shown in the following table 4.1.

Table 4.1: Summary result of accuracy evaluation

Font Name	Accuracy
Kantipur	100.00 %
Preeti	99.96 %
Himalb	100.00 %
PCS Nepali	99.88 %
Aalekh	99.73 %
Aakriti	99.73 %
Ganesh	100.00 %
Navjeevan	99.92 %
Avg. Accuracy = 99.90 %	

#### 5. CONCLUSION AND FUTURE WORKS

The paper presented a general framework to unify all the available Nepali TTF fonts and Unicode

encoded text. It enables to build computational frameworks on top of this system. The minimal data i.e. token groups and font map table can be easily extended to incorporate new font encoding for additional service. Our system makes it viable to build Nepali language tools such as spelling correction, information retrieval (searching) and morphology analysis without worrying about the font encoding used. We achieve nearly 100% accuracy on both direction of the font conversion pipelines. We can extend this framework to convert all of the writing scripts and languages of Nepal by utilizing statistical language and script detection components. The Vector-Space Model<sup>5</sup> with TF-IDF measure<sup>6</sup> can be useful in this regard. For more generalization, we can automatically learn the font-mapping table and the glyph re-arrangement rules using statistical machine learning methods. These two are our future works set to improve the unification system, make it robust and generalize so that no human involvement is required.

#### REFERENCES

- Hall, Pat, Bal K. Bal, Sagun Dhakhwa, Bhim N. Regmi. 2014. Issues in Encoding the Writing of Nepal's Languages, *CICLing 2014*, Part I, LNCS 8403, pp. 52-67.
- Hall, Pat. 2015. Computerized writing for small languages, *The Journal of Specialised Translation*, Issue 24.
- Hardie, Andrew . 2007. From legacy encodings to Unicode: the graphical and logical principles in the scripts of South Asia, *Language Resources and Evaluation*, Volume 41, Issue 1, pp 1-25.
- Lehal, Gurpreet S., Tejinder Singh, Saini P. K. Buttar. 2014. *Research in Computing Science* 86, pp. 9-23.
- Nepali Font Standardisation Committee. 1998. *Nepali Font Standards*, White Paper, Version 2.
- Raj, Anand A. Kishore Prahallad. 2007. Identification and Conversion of Font-Data in Indian languages, *International conference on Universal Digital Library (ICUDL 2007)*, Pittsburg, USA.

<sup>5</sup>[https://en.wikipedia.org/wiki/Vector\\_space\\_model](https://en.wikipedia.org/wiki/Vector_space_model)

<sup>6</sup><https://en.wikipedia.org/wiki/TF%E2%80%93idf>



# SOCIAL STATUS OF WOMEN IN INDIA: HOW HINDI ACCOUNTS FOR IT?

SWETA SINHA

*An attempt has been made in this paper to investigate if women experience linguistic discrimination which reduces their social status to powerless, subjugated creatures devoid of individual identity in the backdrop of Hindi, an Indo- Aryan language. The research is an attempt to evoke conscious rethinking on the part of native speakers and sociolinguists so that language should not be used as a tool to propagate gender biasness.*

Keywords: language and gender, feminist studies, Hindi, power, Indo- Aryan language

## 1. INTRODUCTION

Language not only reflects the reality of society, but it also has multiple functions to strengthen and maintain social existence and cohesiveness for the benefit of mankind. Given such a view, language does mirror gendered perspective and can also impact and contribute to changing people's perception of gender over time. Since the 1970s, the notion of gendered language as being sexist has been highly debated. With the evolution of feminist Sociolinguistics, assertions such as those of (Labov 1972) that women produce language close to Indian society with magnified patriarchy, the role of language becomes manifold crucial especially in determining gender relation with power. As Lakoff (1975) puts it "If it is indeed true that our feelings about the world color our expression of our thoughts, and then we can use our linguistic behavior as a diagnostic of our hidden feelings about thoughts." Such claims by feminist linguists, that language is fundamental to gender inequality have been supported by empirical data.

Differences in male and female gender roles are related to the power differential between men and women. Structural and institutional power resides in the forms of access to educational, economic, and political resources and opportunities. In most societies, access to these structural forms of power is the aspect of male privilege. According

to Kiesling (1997), "Along with the freedom brought by power...comes the expectation (or requirement) that a man will somehow embody this power in his identity". Resistance to the use of gender- neutral alternatives can take the form of refusal to change the language, but also of denial that women can be discriminated against through language.

With this train of thoughts this paper attempts to discuss the following points:

- a. to trace the various studies done on gender-language interface and how gendered language becomes the most powerful tool in determining roles in such societies,
- b. to illustrate gender biasness in Hindi- an Indo-Aryan language, with an aim to show as to how patriarchy is manifested through this language in various aspects like rituals, taboos, literature and day to day language usages and
- c. to enquire if women experience linguistic discrimination which reduces them to invisible frail creatures devoid of individual identity in the backdrop of this language.

## 2. LITERATURE OVERVIEW

Since the 1960s, sociolinguists (Cameron 1995; Labov 1994, 2010; Lakoff 1975; Trudgill 1975) have been exploring the gendered dimension of language. Although many sociolinguistic researches use sex and gender interchangeably, it is very critical to understand that sex refers to biological features such as XX chromosomes for females and XY chromosomes for males. Interpretations based on such notions result in numerous sociological claims relative to neurological factors about the relationship of male and female speech behavior.

On the contrary, gender refers to cultural and social attributes that have been acquired via the socialization process. However, numerous studies argue that gender categories have changed throughout history and varied depending on

specific race, ethnicity, culture, religion, nationality, region and class (Cameron 2010; Labov 1994; 2010; Lakoff 1975; Wardhaugh 2010). Eckert and McConnell-Ginet (2003) claim that “The force of gender categories in society makes it impossible for us to move through our lives in a non-gendered way and impossible not to behave in a way that brings out gendered behavior in others (2003:50) as cited in Wardhaugh (2010). When women speak they ‘chatter’ (compare it with the chattering of birds) while men ‘discuss’; women ‘gossip’ while men ‘debate’; women ‘nag’ but men ‘talk’; women become ‘hysterical’ while men ‘get angry’.

With the evolution of feminist sociolinguistics, assertions such as those of (Labov 1972) that women produce language colder to standard form than men were challenged far and wide. Beth Thomas (1989) found that a combination of age and tight-knit networks corresponded with more use of vernacular for women of a Welsh community. The issue of how sexism and bias is inherent in language was addressed by Lakoff (1975) who steered the gender research away from previous forms on grammar and phonetics towards syntactic, stylistic and semantic forms. Women use certain terms associated with surprise and politeness more often than men. Women’s language was described as weak, unassertive, tentative and women were presented as losers, as victims (Coates 1998:413). Holmes (1995) characterizes women’s speech as more polite than men’s.

### 3. RESEARCH METHODOLOGY

Linguists, cultural historians, anthropologists and other feminist thinkers have shifted the focus on the [+/- gender] attribute of languages in order to account for the limiting role of language on gender roles in society. The primary problem is not with the dichotomy of the attribute in a language but the complete denial of it in the first place. Submissiveness and subjugation of women in India is as much a product of explicit causes like illiteracy, poverty and lack of opportunities as implicit causes like social customs and the language the society speaks. The present research is an attempt to establish the role of Hindi in

creating and sustaining a gendered society (a patriarchal society) leading to situations of power polarity among genders.

For the current research, the data has been taken from two sources. Major data came from The Oxford Hindi-English Dictionary (1993); OUP and Rajapala Hindi-Angreji thesaurus (1992); Rajpal & Sons. Because of the need to document and verify the attitude of the society for each of the terms so frequent interactions and methods of interview were immensely useful. Though there are numerous words and expressions in Hindi that implicitly establish its gender polarity; however, for the current research only those terms have been discussed which are explicitly gendered. Different social settings like rituals & customs, taboos, occupations & social positions have been discussed separately so that the gender polarity of Hindi can be highlighted most effectively.

### 4. GENDER BIASNESS IN HINDI- IS HINDI A ‘SEXIST’ LANGUAGE?

Although one needs to think, often words keep us from thinking. For instance, whenever one comes across English words like ‘farmer, author, nurse, secretary’ most of the people attach a gender to each occupation without it being stated. Many of the major Indian languages like Hindi and Punjabi which belong to the Indo-Aryan language family identify two grammatical genders: masculine and feminine, while some languages like Sanskrit, Gujarati and Marathi have a third neuter gender too. This paper is an attempt to discuss such biasness as reflected in India’s most spoken language- Hindi. But is Hindi a sexist language? Bragin (1981) defines a statement as it creates, promotes, constitutes and exploits any irrelevant or impertinent marking of the distinction between the sexes. Thus a sexist statement refers to someone’s gender when gender is not relevant in the discourse. Lakoff (1987) claims that women experience linguistic discriminations not only in the way they are taught to use language but also in the way general language treats them. According to Dutta (2008) sexist language can be equated with social behavior which helps to create and maintain an atmosphere of inequality. In Hindi, aayaa (governess) and vaishyaa (prostitute) do not

have any implicit masculine reference at all. The President of the nation is referred to as raashtrapati which is a compound word (raashtra-nation and pati-lord/ master). Pati is essentially masculine because individually the word stands for husband. The paper seeks to explore the gender inequalities and sexism inherent in Hindi language which belongs to the Indo-Aryan language family. Following sub-sections would highlight language based gender-biasness with respect to some generic terms used widely by Hindi speakers and their origin; language used in certain rituals and customs; social taboos and certain idioms and phrases of the language.

#### 4.1 GENERIC TERMS AND THEIR ORIGIN

Gender is an inherently communicative process that is constructed and enacted largely through language. If one hears talking about people with names Ram, Kamal, Pranjali, Janak, we assume that they are male. Hindi names for females are often derived from or their diminutive forms like Ramaa, Kamala, Pranjali, Jaanaki etc. Hindi forces women to choose titles between sushri/shrimati in conventional terms of address marking their marital status. It is not so with men as shri is used for both married and unmarried men. Such usages reflect the social assumptions and the roles that society assigns to gender.

The Hindi word *maanavta* means 'humanity' in English but the term is a derivative of *maanav* which means man. It does not end here. The human race in Hindi is referred to as *maanavjaati*. Similarly, the Hindi word *purusharth* means 'efforts' but it is derived from the root word *purush* which again means human male. This entails that it is the 'man' and not 'woman' who is ascribed the role of significant efforts for the society.

#### 4.2 RITUALS AND CUSTOMS

Even the rituals discriminate between genders. During Hindu marriage ceremony the ritual of *kanyaadaan* is performed in which the bride's parents give her away to the bridegroom. The word *Kanyaadaan* is a compound word in Hindi made up of two words *Kanyaa* and *daan*. *Kanyaa* means daughter/ girl and *daan* means offering.

Offerings can only be made of inanimate objects. But in this case, the status of a girl is diminished to that of an object. Unmarried girls are widely referred to as *paraayaadhan* (other's wealth) as one day they would have to leave their parental home and go to her in-law's place. Marriage seems nothing but a ritual of transference of ownership rights from father to husband. The concepts of *ardhaangani* (the wife being half of the husband's soul and existence) and *pati-parmeshwar* (husband is God) are also very popular in Hindi. The husband gets elevated to the status of God and the wife becomes his most ardent devotee.

In baby shower rituals called *godbharaai* in Hindi, only *putravati* (women having sons) women are preferred to bless the mother to be and the most popular blessing is *dudhonahaaourputophalo* (may you have a prosperous life and numerous sons). The existence of *putri* (daughter) is totally ignored. Remarkably, the origin of *putri* is a derivative of *putra* meaning son. The blessing of being *akhandsaubhagyawati* (perpetual marital bliss) is bestowed upon married women. But the interpretation is far-fetched. It actually means that the woman's husband should be immortal. On the contrary, the men are blessed with terms like *dirghaayu* (long life), *yashaswi* (famous and prosperous) and so on. Another significant ritual is that of *pitritarpan* (offerings to dead ancestors). The term *pitri* means 'father' in Sanskrit. There is no such ritual as *maatritarpan* (here *maatri* means mother). Either the rituals are meant only for the dead male ancestors or the female ancestors are not considered holding separate identity from their male counterparts.

#### 4.3 SOCIAL TABOOS

If a woman fails to conceive she is referred to as *baanjh* but Hindi does not have any such usage for a man who is infertile. Probably because the society never considers infertility to be a male attribute. Polygamy was another rampant practice in ancient India therefore a word like *sautan* can be found in frequent use. This term depicts the relationship between wives of the same husband but since polyandry was rare and only situation driven, there is no such term which can describe

the relationship between two husbands of the same wife. Witch craft is another social evil in primitive Indian tribes and many a times women are ill-treated for their alleged witch-kind behavior and they are proclaimed as daayan and banished for life from the civil society or in extreme cases even raped and murdered.

#### 4.4 OTHER POPULAR REFERENCES

Stereotypes are often associated with and not easily separated from the salient variables such as race, class, culture, age, context etc. Matrimonial advertisements for brides list a number of desired attributes like *sundar* (beautiful), *gori* (fair), *gharelu* (domestic), *sushikshit* (well educated), *paarivaarik* (homely) and *sanskaari* (cultured) because every household wants to get a bride who is *sarvagunasampanna* (possessing all possible qualities). This is because after marriage the *gharkiizzat* (honour of the household) lies on the brides as they are *gharkilakshami* (the goddess of household prosperity). This is a very effective technique by which the Indian society lists Dos and Don'ts for the women that are so effectively manifested in Hindi.

One of the most widely read poems of Hindi on Indian freedom fighters is *Jhansi ki Rani* (the queen of Jhansi) in which the poetess describes the fighting skills of the queen with the adjective *mardaani* (displaying valour like a man). The adjective *mardaani* is derived from the root word *mard* which means 'man'. Idioms like *pet meinbaatnahipachna* (unable to hold a secret) have become synonymous with women. Men often use expressions like *ladkiyonjaisenakhre* (throwing tantrums like girls), *auratonkitarahrona* (crying like women), *biwikaghulaam* (hen-pecked husband) and *biwikakamaaikaanewaalaa* (one who survives on wife's earnings) as derogatory terms while talking to other men.

#### 5. CONCLUSION

Language is one of the most powerful tools that can influence human mind and culture. Every language reflects the prejudices of the society in which it evolved and as the patriarchal control over the society prevailed for a long time, the language has been organized with male-centric

views. Gender is so deeply engrained in our linguistic system, in our understanding of ourselves and of others, that uttering even a single word without taking gender into consideration becomes difficult. Gender neutral language has gained support from most major textbook publisher and from professional and academic groups like American Psychological Association and the Associated Press. (Romaine 1999) At present, many law journals, psychology journals and literature journals do not print articles that use gendered language. India has still not fully awakened to this issue. Primarily, a lack of gender discrimination consciousness and awareness plays a sinister role in this case. Now the time is ripe to take sincere efforts to eliminate the use of sexist language not just in written forms but in daily conversational discourse so that justice can be done to all the genders.

#### REFERENCES

- Cameron, D. 1995. *Verbal Hygiene*: London  
 Cameron, D. 2009. *The Myth of Mars and Venus: Do Men and Women Really Speak Different Languages?* USA: OUP.  
 Coates J. 1998. *Women, men, and language: a sociolinguistic account of sex differences in language*, Longman.  
 Dutta, H. 2008. *Language, power and gender: A critical appraisal of Assamese, an Indo- Aryan language*. MAI Review, Article 2.  
 Eckert, P & Sally McConnell-Ginet. 2003. *Language and Gender*. Cambridge: CUP.  
 Holmes J, Meyerhoff M. 1999. *The Handbook of Language and Gender*: Blackwell.  
 Kiesling, Scott F. 1997: *Review of Chambers 1995*, *Australian Journal of Linguistics*.  
 Labov, W. 1972. *Sociolinguistic Patterns*: Philadelphia: University of Pennsylvania Press.  
 Labov W. 1994. *Principles of Linguistic Change: Volume I*, (2010 ed). Oxford: Blackwell.  
 Lakoff, G. 1987. *Women, fire and dangerous things: What categories reveal about the mind*. Chicago: University of Chicago.  
 Lakoff, R. 1975. *Language and Women's Place*: New York: Harper and Rowe.  
 Romaine, S. 1999. *Communicating Gender*: London: Laurence Erlbaum.



- Trudgill, P. 1975. *Accent, Dialect and the School*: Edward Arnold.
- Thomas, Beth. 1989. "Maintenance and Shift: Socio- historical Evidence from a Mining Community in Wales" in *Third International Conference in Minority Languages: Celtic Papers* (Ed. Eoin, Ahlquist and O' hAodha): Philadelphia: Multilingual Matters.
- Vetterling-Bragin, M. (ed.). 1981. *Sexist language: A modern philosophical analysis*. Totowa, NJ: Littlefields Adams.
- Wardhaugh, R. 2010. *An Introduction to Sociolinguistics* (5<sup>th</sup> Edition): USA: Wiley Blackwell.

CONTRIBUTOR'S EMAIL:  
<apna1982@gmail.com>

# LANGUAGE FOR POWER AND PEDAGOGY: REDEFINING NEPAL'S LINGUISTIC ARCHITECTURE

LAVA D AWASTHI

## NEPAL'S LINGUISTIC TRADITION

Oriental cosmologies are guided by the philosophical foundation of *shabda-brahma* [शब्द-ब्रह्म] - words echoing the supreme soul (see International Journal of Indian Languages, 2013). Kapil Muni's Sankhya Darshan builds on the underpinnings of *shabda*. Bhagwat Geeta, in itself, is a glory of words. Mundum, in essence, is a living example of language ecology (see Kirat Rai Chamling Khambatim, 2071 BS). Likewise, Confucianism is a manifestation of the power of text (see Moore, 2003). Words in the East are not only hardware, they are embodiments of mysticism and spirituality. Languages in the local cosmologies are believed to be part of supernatural manifestations (see Schiffman, 1996). However, for Bourdieu (1991) or for Derrida (1996), for example, languages are merely material constructs.

Schiffman (1996) and Ferguson (1996b) carried out extensive research on languages in South Asia. Both of them recognize that the power of languages and richness of multilingualism in South Asia are all pervasive. Ferguson (1996b: 86) states that "every South Asian Country is multilingual in the sense that two or more languages are in regular use on the national scene of government, politics, education and the military". In Ferguson's view, many millions of South Asians daily make use of three or more languages, and there is widespread acceptance of the naturalness of multilingualism.

Multilingualism in the region is a lifeline and has been in use for generations. Ferguson (1996b) observes that multilingualism was officially recognized in the third century B.C. He also claims that no other region of the world has had such a long-continued pattern of socially accepted, governmentally institutionalized multilingualism. Nepal truly represents the reality of South Asia and has a long-standing tradition of

linguistic culture, transmitting cultures through languages.

One of the salient features of Nepal's linguistic culture is to maintain purity of language and preserve the sacred texts. As a part of linguistic tradition, the emphasis has always been placed on the purity and constancy of the text. In order to maintain the tradition, the focus is on memorizing the sacred text and transmitting it orally in a highly controlled manner to avoid the errors (Schiffman, 1996). The linguistic culture of Nepal seems to recognise that the spoken words have mystic power to invoke the intervention of the god (see Awasthi, 2004). One of the reasons for celebrating linguistic diversity in Nepal or in South Asia maybe because of spirituality and divinity attached to the language.

## LANGUAGES LAYING A STRONG FOUNDATION OF NEPALI NATION

Languages have proved to be key to the building of Nepal as a state-nation, leading to the consolidation of Nepali nation-state. The role of language has been central in the making of Nepal's history. Since the ancient times, people's loyalty to their language has played an important part in the making of Nepal as a nation (Rana, 1998a). Languages and cultures have received prominence throughout the history of Nepal. Language policies have been crucial for the rise and fall of the state and the state power. Nepal's history is an example of how languages and cultures influenced the life and fate of the people in the past.

Bista (1991: 8) highlights that "Nepal's strengths have always been in the indigenous qualities of its various ethnic groups." These qualities proved invaluable for maintaining linguistic diversity and for creating a feel of a nation. The emergence of Nepal as a multilingual nation-state is attributed to people's cultures and linguistic diversity.

Rana (1998a: 63) looks into Nepal's nationalism with reference to Kautsky's three patterns of nationalism: (a) evolutionary nationalism, (b) linguistic nationalism and (c) anti-colonial nationalism. These stages of nationalism could be compared with Fishman's (1989) (a) 'the state-nation [ality]' and (b) 'the nation[ality]-state. The state-nation starts with a political unity, whereas the nation-state starts with a linguistic and cultural unity. However, 'unity' is central in both cases.

In linguistic nationalism, the territorial unity is gained through linguistic and cultural means. Under this, the emphasis is placed on the linguistic identity of people to give them a sense of territorial feelings. The sense of linguistic identity leads to the creation of a political community. In anti-colonial nationalism a political community is developed by creating a threat from a foreign force. The emphasis is thus placed on creating unity in the country to face the challenges posed by outside forces (see Rana, 1998).

These models represent various phases of Nepal's nation building process. Nepali state-nation and Nepali nation-state are intrinsically linked. And, languages play a central role in making Nepal a strong nation.

#### LANGUAGES AND THE CONSTITUTION OF NEPAL

The Constitution of Nepal has 7 Articles dedicated to language related matters.

- Article 6 recognizes that all mother tongues are national languages.
- Article 7 states that Nepali shall be the official language of Nepal. States can use one or more languages, in addition to Nepali, as official language(s) of the State. Other matters related to language shall be decided upon by the Government based on the recommendations of the Language Commission.
- Article 18 (3) enshrines equal rights to the speakers of all languages, without any discrimination.
- Article 31 (5) enshrines the right to education through mother tongues.

- Article 32 guarantees the right of every individual and community for their language and culture.
- Article 51 stipulates the policy of the State for promoting linguistic cohesion and unity.
- Article 287 is dedicated to the Language Commission: Functions, duties and powers of the Language Commission shall be as follows:
  - a. To determine the eligibility criteria for a language to acquire the status of official language and give recommendations to the Government of Nepal,
  - b. To provide recommendations to the Government of Nepal regarding the measures to be taken for conservation, promotion and development of languages,
  - c. To measure the status of languages and provide recommendations to the Government regarding the use of languages in education, and
  - d. To conduct studies, research and monitoring functions.

The Government of Nepal, in coordination with the State Government, may establish branch offices of the Language Commission in the states. Other matters regarding functions, duties and powers as well as procedures of the Language Commission shall be as stipulated in the federal law.

The Constitution of Nepal has opened ways for making language a core agenda for empowerment, capability enhancement and pedagogical transformation. Despite its limitations, it is for the first time that Nepal's Constitution has been better positioned about language policies on both overt and covert levels. However, the visible challenge is how the articulations made in the Constitution become a reality and how we translate these Articles into action. Yet, for making a departure in the implementation of these Constitutional provisions our mindsets and deficiency orientations are likely to create hurdles (see Awasthi, 2004; Skutnabb-Kangas, 2004)

#### DEFICIENCY ORIENTATIONS

Deficiency orientations towards languages still persist in Nepal or elsewhere. Pattanayak (1988)

argues that linguistic, ethnic, religious and cultural identities and differences cannot be considered as deficiencies. In his opinion, life is rich and beautiful precisely because it is varied and it has plurality. The child's mother tongue and cultural and social background should be a positive starting point for the school. The existence of minorities is seen by some as costly but it is enriching for societies (see Skutnabb-Kangas 1990: 23). François Grin states in his studies of the economics of minority language promotion that the costs are in fact surprisingly low (see, Grin 2004).

May (2001) analyzes the 'deficit theories' with a view to suggesting alternative approaches to minority education. In the discussion on language, education and minority rights, May argues that the "increasing disenchantment among minority groups, and a related unwillingness to continue to accept the status quo, have contributed to a growing, albeit still tentative, exploration of alternative educational approaches more accommodating to cultural and linguistic diversity" (ibid:169).

Skutnabb-Kangas (1990) rejects the views that children are deficient. She claims that the main problems lie in schools and societies, not in the minority children. For her, it is unacceptable to 'see the child as deficient and lacking, and try to compensate for the 'deficiencies' in order for the child, her parents, group and culture to change, and in order to fit the school' (1990:22). She emphasizes that 'schools should be adapted to the children, not vice versa'.

Ruiz's typologies in language planning (1984:15-29) have been instrumental in understanding the orientations in language:

- a. Language-as-Problem: Where the targets of language policy are construed as social problems to be identified, eradicated, alleviated or in some other way resolved.
- b. Language-as-Right: Which confronts the assimilationist tendencies of dominant language communities with arguments about the legal, moral and natural right to local identity.

- c. Language-as-Resource: Most accommodative, language and the communities, which speak them, are viewed as a social resource.

Ruiz refers to his typologies as "orientations in language". He holds that orientations are "a complex of dispositions toward language and its role, and toward languages and their role in society" (ibid:16). He claims that these dispositions provide fundamental arguments about languages and are crucial for determining how language is perceived in society because the "orientations are related to language attitudes in that they constitute the framework in which attitudes are formed: they help to delimit the range of acceptable attitudes toward language, and to make certain attitudes legitimate" (Ruiz, 1984:16).

Although Ruiz provides a basis for analyzing language situation and language planning practices in a country like Nepal, in his typologies a rights-based approach is seen as being "at a lower level" than a resource based approach. It is crucial to note that language-as-right and language-as-resource are not mutually exclusive. For Nepal, the rights based approach employed by the Constitution is not enough until the resource goes hand in hand. The language policy of South Africa sets an example of how a country can address both aspects of language-as-right and language-as-resource. Nepal can also make gains from South African experience in language planning (see Awasthi 2004).

#### POWER OF LANGUAGE AND LANGUAGE OF POWER

The prevailing pedagogical practices, favoring the majority discourse have been a major cause of deprivation and disadvantage for the minority language groups (Awasthi, 2004). Because of the linguistic advantage attached to the power language(s), minority groups have been facing deprivations. Owing to socio-economic, political and historical situatedness of power languages, namely Nepali and/or English, minority languages are bound to face linguistic marginalization (see also Phillipson 1992, Cummins 2000). The dominating role of power languages has contributed to widening gaps between the two,

leading to social, economic and political inequalities (see Tollefson and Tsui, 2004).

Skutnabb-Kangas and Phillipson's (1986: 378-384) 'arguments for English' and Phillipson's (1992:273) 'types of power and arguments for English' can also be used to describe the 'types of power and arguments for Nepal's power language(s). Their arguments are classified into three sets that can be related to Nepal's local reality:

- Capacities: intrinsic argument ("is" power)
- Resources: extrinsic arguments ("has" power), and
- Uses: functional arguments ("does" power)

In comparison to English and/or Nepali, minority languages in Nepal have limited capacities, resources and uses. Meaning that they are low on their intrinsic, extrinsic and functional powers. The arguments for what a power language is, it is rich, high class, standard, elegant, varied, noble, pure, sweet, interesting, and so on. The arguments for what it "has" refer to textbooks, reference materials, dictionaries, grammar books, rich literature, authors, writers, poets, playwrights, trained teachers, experts, scholars, state support, money and so on. And, the arguments for what it "does" or "can do" are related to people-to-people contact, mass communication, religion, modernization, and to providing access to science and technology.

Thus, Nepal's power languages have these three powers at their disposal. The task ahead is how we collectively create equitable linguistic environment for enhancing "being power", "having power" and "doing power" to the minority languages so that they also reach a comparable level of the power language(s). A systematic language planning is key to making this happen. We also need to see how the "capital" that the power language has can also be available to the non-power category languages. Bourdieu (1993) sees capital simply as a resource, a form of wealth, which yields power. Bourdieu holds that there are immaterial forms of capital including cultural capital, symbolic capital, and social capital, and material or economic form of capital. And it is possible to convert one of these forms

into the other (ibid). Bourdieu's capital is multiform and convertible (see Skutnabb-Kangas, 2000). Bourdieu states:

[...] fundamental social powers are, according to my empirical investigations, firstly economic capital, in its various kinds; secondly cultural capital, or better, informational, again in its different kinds; and thirdly two forms of capital that are very strongly correlated, social capital, which consists of resources based on connections and group membership, and symbolic capital, which is the form the different types of capital take once they are perceived and recognized as legitimate (Bourdieu in Calhoun 1993:69-70).

According to Bourdieu, unlike educational credentials (cultural capital or social capital), economic capital is immediately and directly convertible (Calhoun, 1993:70).

#### CAPABILITY ENHANCEMENT FOR RESOURCE CONVERTIBILITY

According to the Nobel laureate Amartya Sen (1999:87) poverty is 'sensibly identified in terms of capability deprivation'. His claims in favour of the capability approach to poverty suggest that poverty situation can be improved by focusing not only on generating economic growth, but, more importantly, by enhancing people's *intrinsically* (emphasis added) important capabilities. In his opinion people's freedom of choice (to use their languages, cultures etc.) with 'alternative combinations of functionings' for their life contributes to reducing poverty, eliminating inequality and balancing the power structure. He thus argues that people's poverty is not their low level of income alone. For him it is a matter of choice to use their potentials, non-material resources to come out of an impoverished life. In the context of Nepal, development of minority languages should be seen as freedom of choice and freedom of using 'alternative combinations' that suit the local needs (Sen 1999). Thus, we need to understand poverty and deprivation in terms of '*lives people can actually lead and the freedoms they do actually have* [emphasis added] (Sen 1999:92). Sen sees poverty as 'capability

deprivation' and development as 'freedom of choice'.

Skutnabb-Kangas (2004:130) captures the importance of Sen's poverty concept for education in a way which is relevant in explaining consequences of the choice of medium of education. She claims the following:

If poverty is understood as "both a set of contextual conditions as well as certain processes which together give rise to typical performance of the poor and the disadvantaged" in school, and if of "all different aspects of such performance, cognitive and intellectual functions have been held in high priority as these happen to be closely associated with upward socio-economic mobility of the poor" (Misra & Mohanty 2000: 135-136), we have to look for the type of division of labour between languages in education that guarantees the best possible development of these "cognitive and intellectual functions" which enhance children's "human capabilities", rather than curtailing them and depriving children of the choices and freedom that are, according to Sen and others, associated with the necessary capabilities.

Drawing on Skutnabb-Kangas 2004 (for Sen and Mohanty & Misra), and Bourdieu, we can thus conclude that if we are interested in reducing the gaps between power and non-power languages, "poverty is no longer to be viewed simply in terms of generating economic growth; expansion of human capabilities can be viewed as a more basic objective of development" (Mohanty and Misra, 2000a: 263; Mohanty et al. 2009; Heugh & Skutnabb-Kangas 2010).

From Amartya Sen's capability approach, we can draw the following conclusions:

- Poverty should be seen in a capability perspective.
- Capability deprivations are *intrinsically* important (more intense than income deprivations)
- People's capacity can be generated through non-income interventions such as language and culture.

- People's low income does not mean that they are low on capability.

These theoretical insights suggest that, as an *intrinsically* important aspect of people's life, the human capital dimension of language as a non-income intervention can be employed to enhance people's capability (see also Bourdieu and Wacquant 1992). Using our theoretical framework, we can thus conclude that in order to raise people's linguistic capability and their cognitive and intellectual functions which then lead to enhanced general capabilities and therefore a better conversion potential through a "starting capital", there needs to be a freedom to use alternative combinations of functionings.

#### THE WAY FORWARD

Reconstructing Nepal's linguistic architecture is a pre-requisite for implementing Nepal's Constitution. The provisions in the Constitution call for a clear departure and provide a roadmap for change in Nepal's linguistic order. It is therefore imperative to work in harmony and build national consensus for how we bring about a desired change in Nepal's linguistic landscape. It is equally important to develop a national framework to respond to the Constitutional layout. National level coordination is crucial to pave the way for making visible gains in realizing the national aspirations. To augment this process the Language Commission will do every effort to create an enabling environment for garnering support and synergy in our endeavors.

The Linguistic Society of Nepal (LSN), as a national and international platform, has to play a catalytic role in offering intellectual inputs and technical backstopping. University Departments, scholars and research community will have to extend their support to make a difference in Nepal's linguistic architecture. The Language Commission will be honoured to work with you and engage in this process of transformation.

Some of the priorities for us to contemplate during the Conference can be as follows:

- a. Which of the four major Constitutional mandates of the Language Commission are

- appropriate for LSN's partnership? How can LSN play a part in them?
- b. How LSN becomes a forum for sharing local and global knowledge and experiences, and how it becomes a pool of national and international research scholars for generating new knowledge to cater to the need for language planning in the Language Commission?
  - c. How we work together and what strategies need to be employed to create appropriate working environment at intuitional and professional levels of LSN?
  - d. How can LSN assist the Language Commission in crafting Nepal's Language Policy and Master Plan?
  - e. What could be a doable working modality for a joint mechanism, drawing on the professionals from LSN, University Departments, research institutions, Government agencies and partner organizations?

## REFERENCES

- Awasthi, Lava Deo. 2004. *Exploring Monolingual School Practices*, Danish University of Education, Copenhagen.
- Bhagwat Geeta. Geeta Press, Gorakhpur.
- Bista, Dor Bahadur. 1994. *Fatalism and Development: Nepal's Struggle for Modernization*. Calcutta: Orient Longman Limited.
- Bista, Dor Bahadur. 2000 (7<sup>th</sup> edn). *People of Nepal*. Kathmandu: Ratna Pustak Bhandar.
- Bourdieu Pierre and Wacquant Loic J. D. 1992. *An Invitation to Reflexive Sociology*. Cambridge: Polity Press.
- Bourdieu, Pierre. 1977. *Outline of a Theory of Practice*. Trans. Richard Nice. Cambridge: Cambridge University Press.
- Bourdieu, Pierre. 1990. *The Logic of Practice*. Cambridge: Polity Press.
- Bourdieu, Pierre. 1991. *Language and Symbolic Power*. Cambridge: Polity Press.
- Constitution of Nepal. 2072 BS. Kanoon Kitab Byabastha Samiti. Babarmahal.
- Cummins, Jim. 2000. *Language, Power and Pedagogy: Bilingual Children in the Crossfire*. Clevedon: Multilingual Matters Ltd.
- Ferguson, Charles A. 1996a. Conventional Conventionalization: Planned Change in Language. In Thom Huebner (ed.), *Sociolinguistic Perspectives: Papers on Language in Society*, 304-312. Oxford: Oxford University Press.
- Ferguson, Charles A. 1996b. South Asia as a Sociolinguistic Area. In Thom Huebner (ed.). *Sociolinguistic Perspectives: Papers on Language in Society*, 1959-1994. Oxford: Oxford University Press.
- Fishman, Joshua A. 1968. Summary: UNESCO Meeting of Specialists, 1951. In Joshua A. Fishman (ed.). *Readings in the Sociology of Language*, 711-712. The Hague: Mouton.
- Fishman, Joshua A. 1989. *Language & Ethnicity in Minority Sociolinguistic Perspective*. Clevedon: Multilingual Matters.
- Grin, Francois. and Vaillancourt, Francois. 1997. The Economics of Multilingualism: Overview and Analytical Framework. *Annual Review of Applied Linguistics* 17, 43-65: Cambridge University Press.
- <https://newderrida.wordpress.com/2007/11/19/of-grammatology/>
- Ishvar, Krishna, Sankhya Karika, Kathleen Heugh and Tove Skutnabb-Kangas. 2010. *Multilingual Education Works. From the Periphery to the Centre*. Orient-Blackswan, Hyderabad. 376 pp. Peter Plüddemann University of the Western Cape.
- Mohanty, Ajit K. & Girishwar Misra (eds.). 2000. *Psychology of Poverty and Disadvantage*. New Delhi: Concept Publishing Company.
- Pattanayak, Debi Prasanna. 1988. Monolingual myopia and the petals of the Indian lotus: Do many languages divide or unite a nation? In Skutnabb-Kangas and Cummins (eds.), 379-389.
- Phillipson, Robert. 1992. *Linguistic Imperialism*. Oxford: Oxford University Press.
- Phillipson, Robert. 1995. Towards a Language Agenda: Futurist Outlook on the United Nations. In Sylvie (ed.), 399-422.
- Phillipson, Robert and Skutnabb-Kangas, Tove. 1986. *Linguicism Rules in Education*. Part 2. Roskilde: Roskilde University Centre.
- Rana, Pashupati Shumshere J. B. 1998a. The Evolution of Nepalese Nationalism. In Pashupati Shumshere J. B. Rana and Dwarika Nath

- Dhungel (eds.). *Contemporary Nepal*, 63-85. New Delhi: Vikas Publishing House.
- Rana, Pashupati Shumshere J. B. 1998b. The History of Nepal. In Pashupati Shumshere J. B. Rana and Dwarika Nath Dhungel (eds.). *Contemporary Nepal*, 14-41. New Delhi: Vikas publishing House.
- Ruiz, Richard. 1984. Orientations in Language Planning. *Journal of the National Association for Bilingual Education*. Vol. 8, No. 2, Winter, 15-34.
- Schiffman, Harold F. 1996. *Linguistic Culture and Language Policy*. London: Routledge.
- Sen, Amartya. 1999. *Development as Freedom*. Oxford: Oxford University Press.
- Skutnabb-Kangas, Tove. 1988. Multilingualism and the Education of Minority Children. In Skutnabb-Kangas, Tove & Cummins, Jim (eds.). *Minority education: from shame to struggle*. Clevedon, UK: Multilingual Matters, 9-44.
- Skutnabb-Kangas, Tove. 1990. *Language, Literacy and Minorities*. London: The Minority Rights Group.
- Skutnabb-Kangas, Tove. 1995a. Book review of *Bilingualism in a Multilingual Society: Psychological and Pedagogical Implications*, Ajit K. Mohanty. *TESOL Quarterly* 29:4, Winter 1995, 775-780.
- Skutnabb-Kangas, Tove. 1995b. Introduction. In Tove Skutnabb-Kangas (ed.). *Multilingualism for All*, Lisse: Swets & Zeitlinger, Amsterdam, Series European Studies on Multilingualism, 7-20.
- Skutnabb-Kangas, Tove. 2000. *Linguistic Genocide in Education or Worldwide Diversity and Human Rights?* Mahwah: Lawrence Erlbaum Associates.
- Skutnabb-Kangas, Tove. 2003a. (Why) should diversities be maintained? Language diversity, biological diversity and linguistic human rights. Glendon Distinguished Lecture 2003, Tuesday 14<sup>th</sup> October 2003, York University, Glendon College, Toronto, Ontario, Canada (in press).
- Skutnabb-Kangas, Tove. 2003b. Can a "linguistic human rights approach" "deliver"? Reflections on complementarities, tensions and misconceptions in attempts at multidisciplinaryities. Keynote paper at the International Conference on Language, Education and Diversity, University of Waikato, Hamilton, Aotearoa/New Zealand, 26-29 November 2003 (in press).
- Skutnabb-Kangas, Tove. 2004. "Do not cut my tongue, let me live and die with my language". A Comment on English and Other Languages in Relation to Linguistic Human Rights. In *Journal of Language, Identity and Education* 3(2), 127-134.
- Tsui, A & Tollefson, J. 2004. The Centrality of Medium of Instruction Policy in Sociopolitical Processes. In Tollefson & Tsui (eds.), 1-20. *Medium of Instruction Policies: Which Agenda? Whose Agenda?* Lawrence Erlbaum Associates: Mahwah, New Jersey, London.  
[www.sciencepublishinggroup.com/j/ijll](http://www.sciencepublishinggroup.com/j/ijll)

---

This keynote speech was delivered at 37<sup>th</sup> Annual Conference of the Linguistic Society of Nepal held at CEDA Hall, Tribhuvan University, Kirtipur, Kathmandu on November 26-27, 2016.

KEY NOTE SPEAKER'S EMAIL:  
<[lava.awasthi@gmail.com](mailto:lava.awasthi@gmail.com)>



## PRESIDENTIAL ADDRESS: 37<sup>TH</sup> ANNUAL CONFERENCE OF LSN

KAMAL POUDEL

Chief Guest, Honourable Minister for Culture, Tourism and Civil Aviation, Jeeban Bahadur Shahi; Special Guest, Prof Dr Tirth Raj Khaniya, Vice Chancellor, TU; Guest Prof Dr Jivendra Deo Giri, Member Secretary, Nepal Academy; Dr Lava Deo Awasthi, the Keynote Speaker to 37<sup>th</sup> Annual Conference of the Linguistic Society of Nepal and Chairman of Language Commission Nepal; Guest of honor Prof Dr Sudha Tripathi, Rector, TU; Guests Prof Dr Ram Chandra Dhakal, Director, CEDA; Head Central Dept of English, Prof Dr Amma Raj Joshi, Head Central Department of Linguistics, Prof Dr Dan Raj Regmi; Prof Dinesh Raj Panta, Academician Nepal Academy; Prof Dr Yagya Prasad Adhikari, Former Director CNAS; Prof Dr Churamani Bandhu; Prof Dr Ramawatar Yadav; Prof Tej Ratna Kansakar; Prof Dr Yogendra Prasad Yadav; Prof Dr Abhi Subedi; Prof Madhav Prasad Pokharel; Poet Tulsi Divasa; Executive members of LSN, Chief Editor, editors, LSN Life Members, distinguished linguists, presenters, participants from home and abroad, media persons, ladies and gentlemen!!!

I would like to extend my warm greetings to you on this auspicious occasion of the 37<sup>th</sup> Annual Conference of Linguistic Society of Nepal. I feel privileged to be on the path which was led by our former presidents. These personalities dedicated themselves to building and developing the society and brought it to this position. Their successful leadership always empowered the society.

In the world of democracy and rule of law, every individual possesses the unalienable rights of meaningful existence, development, freedom, equality and justice. Exactly in the same way, language's meaningful existence and sustainability are essentially significant. The loss of a language is the loss of culture, indigenous knowledge and practices, identity, history and many other related aspects of human life and society in the modern era, and thus, it is our fundamental responsibility that we work for the preservation and sustainability of the languages spoken in Nepal. We are one of the rich countries in the world from the point of view of diversity of

languages. We know the fact that the more diversity there is, the better life or pattern there is. The more languages we have, the more varieties and diversities there are. Along with this, we also understand that the languages have universals despite the fact that they descend from quite different roots. Considering the linguistic diversity, our land is a paradise—we have the list of 123 various languages that have officially been recognized, out of which many languages do not have their written tradition, grammar and dictionaries. The minority languages have been affected adversely. At this juncture, the documentation of such minority and endangered languages is the dire need. Such languages' history, oral tradition, grammar, literature and many other aspects need to be documented, so the present and coming generations will have the opportunity to expand their academic span.

Language is power, and the power is a source of creation and transformation. With the fundamental essence of power, humans have succeeded to come to the present situation which is marked with the notion of creativity. Considering creation, creativity and language, it is important to recall Noam Chomsky's often quoted words, 'Language is a process of free creation; its laws and principles are fixed, but the manner in which the principles of generation are used is free and infinitely varies. Even the interpretation and use of words involves a process of free creation.' Following Chomsky's expression, it is a high time that we started identifying the free and infinitely varying creations which are the abundant sources of various types of knowledge, skills, cultures and many more. Those creations are hidden within the framework and patterns of the 123 languages that are spoken in Nepal. I repeat, their preservation and development are essential requirements.

Envisaging these needs, LSN was established in 1979 by a group of linguists, and it is obvious that it has been a very successful forum for the linguists to disseminate their research works through presentations and its journal *Nepalese Linguistics*. The establishment of the Central

Department of Linguistics is its remarkable achievement, additionally.

The present constitution has opened the doors of opportunities to the development of all languages. Knowing the value of the existence of the languages, the Constitution of Nepal has seven Articles dedicated to language related matters. It clearly expresses that all mother tongues are national languages. Also, Nepali shall be the official language of Nepal. States can use one or more languages, in addition to Nepali, as official language(s) of the State. It proclaims the equality of all the languages. Similarly, all language communities now have right to mother tongue based education.

With the purpose of promoting and developing the languages, the constitution has made the provision of Language Commission. We believe its recommendations to the Government of Nepal regarding the measures to be taken for conservation, promotion and development of languages will pave a new path to the languages spoken in Nepal. At this point, I would like to stress that LSN, Central Department of Linguistics, Language Commission and other language development agencies need to work in collaboration with total solidarity so as to promote and develop the languages of Nepal.

Language itself does not exist without its speakers. The language is identity of the speakers and their community. It is important to note that everyone's identity is equally important. Additionally, language is the feeling and emotion too, which was expressed in Nelson Mandela's words: If you talk to a man in a language that he understands, that goes to his head. If you talk to him in his language, that goes to his heart.

In order to address the identity, feelings, emotions and other characteristics of the language speakers, language preservation and promotion are the present needs which have to be carried out finding the better ways as far as possible. It is noteworthy that the Central Department of Linguistics has carried out the survey of the languages spoken in Nepal.

The government should make a plan to establish a Language Academy which will perpetually work

for the languages of Nepal. The previous executives also stressed on this issue. For this purpose, the government needs support from the language development institutions like LSN, Central Department of Linguistics and others.

I would like to stress that LSN is determined to work for the languages of Nepal and, help the government in its mission of the language development. The future direction of LSN is to be engaged in language activities in more meaningful ways. The LSN activities in the form of talk, seminar, publications etc will help linguists disseminate the research works in the field of languages of Nepal. LSN's more meaningful engagement with the government and its agencies is what we are expecting in the days to come, because the nation is now at the verge of formulating the language policies at various layers, and, finally, present the transparent pictures of the languages of Nepal.

In addition to this, LSN's active relationship with SAARC country's linguistic societies is also further requirement now. This will encourage us to share the research works carried out in this region.

This year also, we are having the gathering of linguists from more than ten countries, and we have presentations of language research works that encompass the wider ranges of linguistics. To mention, we have received papers covering the areas of sociolinguistics, syntax, morphology, semantics, pragmatics, discourse, historical linguistics, typology, computational linguistics, language and technology, language situation and mother tongue education, ethno-linguistics, applied linguistics and more.

We are grateful to Dr Lava Deo Awasthi for accepting our invitation and request to address the conference as the key speaker. He is presenting on 'Language for Power and Pedagogy: Redefining Nepal's Linguistic Architecture'. We firmly believe that this will open new areas of academic activities leading towards further research works in the language studies in Nepal.

Importantly, we are grateful to the Chief Guest Minister for Culture, Tourism and Civil Aviation Jeeban Bahadur Shahi. Your gracious presence

encourages the linguists working in this region. Similarly, the presence of Special-distinguished Guest Vice Chancellor Prof Dr Tirth Raj Khaniya is an inspiration to the linguists and students working in this region. We believe the University in your leadership will find further ways to strengthen the language and linguistic studies within TU and beyond. Likewise, we are grateful to the Guest Member Secretary of Nepal Academy Prof Dr Jivendra Deo Giri. The Academy has always been source of encouragement especially in the areas of research and publications. We are deeming further support from you in the days to come. The presence of Prof Dr Sudha Tripathi, Rector, TU reassures the strengthening of language studies.

On behalf of Linguistic Society of Nepal, I extend my warm wishes and gratefulness towards all the foreign presenters and participants. Your knowledge and experience will definitely widen the local knowledge. We expect the similar exchanges of our expertise in the days to come. I wish you a pleasant stay and meaningful discussions during the conference. Likewise, we are thankful to the presenters and participants from various regions of the country. I believe your interactions with the linguists from diverse fields will widen your academic span.

We would not be able to organize the conference without the generous support of various institutions and individuals. We express our special gratitude to the Central Department of Linguistics and the Department Head Prof Dr Dan Raj Regmi. The support from the Department has always been stimulating.

We are particularly grateful to the co-organizer Central Department of English and the Department Head Prof Dr Amma Raj Joshi. We expect Prof Joshi's encouraging support in the days ahead as well. Likewise, we are grateful to SIL International for their regular support. We express our gratitude towards CEDA for providing us with the venue. Asmita Books Publishers Distributors pvt Limited's support is equally noteworthy and we expect the similar support in the days to come. Equally, we are grateful to Parkiar Catering, Jagat Mandir, and Loyalty academy for their supports.

Finally, I would like to extend my gratitude to the LSN Life Members, LSN Office Bearers, Chief Editor, and editors. Similarly, on behalf of LSN, we express our sincere indebtedness to the faculties and staff members of the Central Department of Linguistics.

To conclude, I wish you all very pleasant stay and constructive interactions during the conference.

PRESIDENT'S EMAIL:

<kamalpoudel@gmail.com>

LIST OF LIFE MEMBERS OF LINGUISTIC SOCIETY OF NEPAL

No	Name
1	001 Ramawatar Yadav, <ramyadav992@live.com>
2	002 Kamal Prakash Malla Maitidevi, <mallacorp@gmail.com>
3	003 Chandra Devi Shakya, Lalitpur.
4	004 Yogendra P. Yadava, CDL, Kirtipur, <ypyadava@gmail.com>
5	005 M.S. Ningomba, Manipur University, India.
6	006 Bernhard Kolver, University of Kiel, Germany.
7	007 Ulrike Kolver, Germany.
8	008 Shailendra Kumar Singh, P. K. Campus, Kathmandu.
9	009 Burkhard Schottendreyer, Spartado Aereo 100388, Columbia.
10	010 Tika Bahadur Karki, American Peace Corps, Kathmandu (late)
11	011 Richard R. Smith, United Mission to Nepal, Kathmandu.
12	012 Horst Brinkhaus, University of Kiel, Germany.
13	013 John P. Ritchott, USA.
14	014 Subhadra Subba, Kirtipur.
15	015 Ross C. Caughly, Australia, <ross_caughley@sil.org >.
16	016 James J. Donnelly, St. Xavier's School, Kathmandu.
17	017 Nishi Yoshio, University of Kyoto, Japan.
18	018 Shreedhar P. Lohani, Maitidevi, Kathmandu.
19	019 Tika P. Sharma, Mahendra Ratna Campus, Tahachal, Kathmandu.
20	020 Ronald Bielmeier, University of Berne, Switzerland.
21	021 Ian Alsop, Panipokhari, Kathmandu.
22	022 Ballabh Mani Dahal, Central Department of Nepali, Kirtipur. (Late)
23	023 Colin S. Barron, Britain
24	024 Shishir Kumar Sthapit, Baneshwar.
25	025 Chuda Mani Bandhu, CDL, Kirtipur, <cmbandhu@yahoo.com>.
26	026 Tej Ratna Kansakar, CDL, Kirtipur, <t.r.kansakar@gmail.com>.
27	027 Rameshwar P. Adhikari, Kathmandu.
28	028 Nirmal Man Tuladhar, LinSuN, CDL, Kirtipur, <nirmal_tuladhar2006@yahoo.com>.
29	029 Abhi Narayan Subedi <abhi@mail.com>.
30	030 Beverly Hartford, Indiana University, USA.
31	031 J. P. Cross, Pokhara.
32	032 Marshal Lewis, Indiana University, USA.
33	033 K.V. Subbarao, CDL, Delhi University, India.
34	034 Devi P. Gautam, CDN, Kirtipur.
35	035 Chandra Prakash Sharma, Kathmandu.
36	036 Werner Winter, Germany.
37	037 Baidyanath Jha, R. R. Multiple Campus, Janakpur.
38	038 Satya Ranjan Banerjee, Calcutta University, India.
39	039 George van Driem, G. P.O. Box 991, Kathmandu, <george.van.driem@gmail.com>.
40	040 Beerendra Pandey, CDE, Kirtipur.
41	041 Kalpana Pandey, c/o Beerendra Pandey.
42	042 Chandreshwar Mishra, DEE, Kirtipur.
43	043 Rudra Laxmi Shrestha, Lalitpur.
44	044 Khagendra K.C., Patan Multiple Campus, Patan.

45	045	Shambhu Acharya, Patan Multiple Campus, Patan. (late)
46	046	Durga P. Bhandari, Baneshwar, Kathmandu.
47	047	Rajendra P. Bhandari, CDE, Kirtipur.
48	048	Shree Krishna Yadav, Kathmandu.
49	049	Jai Raj Awasthi, DEE, Kirtipur, <jrawasthi@gmail.com>.
50	050	Novel K. Rai, LinSuN, CDL, Kirtipur, <drnovel4@yahoo.com>.
51	051	Padma P. Devakota, Maitidevi, Kathmandu.
52	052	Manfred G. Treu, CIL, Kathmandu.
53	053	Gautami Sharma, P. K. Campus, Kathmandu.
54	054	Sangita Rayamajhi, CDE, Kirtipur.
55	055	Bhuvan Dhungana, R. R. Campus, Kathmandu.
56	056	Baidaya Nath Mishra, Trichandra Campus, Kathmandu.
57	057	Krishna Pradhan, Saraswati Campus, Kathmandu.
58	058	K.B. Maharjan, Bernhardt College, Balkhu.
59	059	Hriseekesh Upadhyay, R. R. Campus, Kathmandu.
60	060	Nayan Tara Amatya, Kathmandu.
61	061	Sueyoshi Toba, G. P.O. Box 991, Kathmandu, <si_toba@sil.org>.
62	062	Sanjeev K. Uprety, CDE, Kirtipur.
63	063	Anand P. Shrestha, Central Department of English, Kirtipur.
64	064	Bishnu Raj Pandey, Kathmandu.
65	065	Mohan Prasad Banskota, Saraswati Campus, Kathmandu. (late)
66	066	Rupa Joshi, P. K. Campus, Kathmandu.
67	067	Keshab Gautam, Saraswati Campus, Kathmandu.
68	068	Krishna Kumar Basnet, Saraswati Campus, Kathmandu.
69	069	Nirmala Regmi, P. K. Campus, Kathmandu.
70	070	Jyoti Tuladhar, Kathmandu.
71	071	Bidya Ratna Bajracharya, Samakhusi, Kathmandu.
72	072	Shanti Basnyat, Kathmandu.
73	073	Madhav P. Pokharel, CDL, Kirtipur, <madappokhrel@yahoo.com>.
74	074	Ramchandra Lamsal, Department of Nepali Education, Kirtipur.
75	075	Arun Kumar Prasad, Trichandra Campus, Kathmandu.
76	076	Bijay Kumar Rauniyar, CDE, Kirtipur, <bijayrauniyar@hotmail.com>.
77	077	Sajag S. Rana, Patan M Campus, Patan, Lalitpur.
78	078	Balaram Aryal, CIL, Kathmandu.
79	079	Bed P. Giri, USA.
80	080	Amma Raj Joshi, CDE, Kirtipur.
81	081	Parshuram Paudyal, CIL, Kathmandu.
82	082	Martin W. Gaenzle, University of Heidelberg, South Asia Institute.
83	083	Maya Devi Manandhar, Saraswati Campus, Kathmandu.
84	084	Pradeep M. Tuladhar, Patan Campus, Patan.
85	085	Megha Raj Sharma, CIL, Kathmandu.
86	086	Mohan Sitaula, CIL, Kathmandu.
87	087	Anand Sharma, R. R. Campus, Kathmandu.
88	088	Nanda Kishor Sinha, Birgunj.
89	089	Ram Bikram Sijapati, Patan Multiple Campus, Patan.
90	090	Punya Prasad Acharya, Kanya Campus, Kathmandu.
91	091	Narayan P. Gautam, CDN, Kirtipur.
92	092	Mahendra Jib Tuladhar, Saraswati Campus, Kathmandu.

93	093	Govinda Raj Bhattarai, DEE, Kirtipur, <tu.govinda@gmail.com>.
94	094	Balthasar Bickel, Max-Planck Institute, The Netherlands, <bickel@rz.uni-leipzig.de>.
95	095	Bhusan Prasad Shrestha, Saraswati Campus, Kathmandu.
96	096	Anuradha Sudharsan, India.
97	097	Bert van den Hoek, University of Leiden, The Netherlands.
98	098	Harihar Raj Joshi, G. P. O. Box 2531, Kathmandu. (late)
99	099	Pramila Rai, P. K. Campus, Kathmandu.
100	100	Ram Ashish Giri, Melbourne, Australia.
101	101	Tulsi P. Bhattarai, Kathmandu.
102	102	Tika P. Uprety, Devkota Memorial School, Biratnagar-2.
103	103	Mohan Himanshu Thapa, Balkhu, Kirtipur.
104	104	Anusuya Manandhar, R. R. Campus, Kathmandu.
105	105	Austin Hale, Erli-Huebli, 8636 Wald (ZH), Switzerland, <austin_hale@sall.com>.
106	106	Larry L. Seaward, USA.
107	107	Sashidhar Khanal, Trichandra Campus, Kathmandu, <sashidhar7@hotmail.com>.
108	108	Boyd Michailovsky, France, <boydm@vjf.cnrs.fr>.
109	109	Mazaudon Martine, LACITO/CNRS, France.
110	110	Tsetan Chonjore, University of Wisconsin, USA.
111	111	Sushma Regmi, Ratna Rajyalaxmi Campus, Kathmandu. (Late)
112	112	Swayam Prakash Sharma, Mahendra Campus, Dharan.
113	113	Anjana Bhattarai, DEE Kirtipur.
114	114	Nivedita Mishra, P. K. Campus, Kathmandu.
115	115	Gunjeshwari Basyal, Palpa Campus, Tansen.
116	116	Philip Pierce, Nepal Research Center, Kathmandu.
117	117	Binay Jha, R. R. Campus, Kathmandu.
118	118	Mukunda Raj Pathik, CIL, Kathmandu.
119	119	Laxmi Sharma, P. K. Campus, Kathmandu.
120	120	Bhesha Raj Shiwakoti, P. K. Campus, Kathmandu.
121	121	Siddhi Laxmi Baidya, CIL, Kathmandu.
122	122	Sulochana Dhital, CIL, Kathmandu.
123	123	Simon Gautam, Bhaktapur Campus, Bhaktapur.
124	124	Geeta Khadka, CDE, Kirtipur.
125	125	Phanindra Upadhyay, P. K. Campus, Kathmandu.
126	126	Sundar K. Joshi, Patan Multiple Campus, Patan.
127	127	Shushila Singh, P. K. Campus, Kathmandu.
128	128	Ganga Ram Gautam, Mahendra Ratna Campus, Tahachal.
129	129	Lekhnath Sharma Pathak, CDL, Kirtipur, <lekhnathspathak@gmail.com>.
130	130	Rishi Rijal, Mahendra R. Campus, Tahachal.
131	131	Binod Luitel, Mahendra Ratna Campus, Tahachal.
132	132	Anju Giri, DEE Kirtipur.
133	133	Meena Karki, Mahendra Ratna Campus, Tahachal.
134	134	Netra Sharma, Mahendra R. Campus, Tahachal, Kathmandu.
135	135	Tanka Prasad Neupane, Mahendra Campus, Dharan.
136	136	Ram Raj Lohani, CDL, Kirtipur, <ramlohani@gmail.com>.
137	137	Balaram Prasain, CDL, Kirtipur, <prasain2003@yahoo.com>.
138	138	Kamal Poudel, CDL, Bharatpur-9, Chitwan, <kpoudeln@yahoo.com>.
139	139	Bhim Lal Gautam, CDL, Kirtipur, <bgautam2003@yahoo.com>.
140	140	Baburam Adhikari, Manamohan Memorial College, Kathmandu.

141	141	Ram Hari Lamsal, Saraswati Multiple Campus, Kathmandu.
142	142	Lekhnath Khanal, Hillbird English School, Chitwan.
143	143	Silu Ghimire, P. K. Campus, Kathmandu.
144	144	Krishna Prasad Chalise, CDL, Kirtipur, <krishna40e@yahoo.com>.
145	145	Uttam Bajgain, Baneswor, Kathmandu, <upb2062@yahoo.com>.
146	146	Bharat Raj Neupane, Nagarjun Academy, Kathmandu.
147	147	Dan Raj Regmi, CDL, Kirtipur, <danrajregmi8@gmail.com>.
148	148	Bhim Narayan Regmi, CDL, Kathmandu, <bhim_regmi@yahoo.com>.
149	149	Ajit Man Tamang, Kathmandu, <ajitman4@yahoo.com>.
150	150	Meera Shrestha, Mahendra Ratna Campus, Tahachal.
151	151	Puspa Karna, Mahendra R. Campus, Tahachal, Kathmandu.
152	152	Hemanga Raj Adhikari, Department of Nepali Education, Kirtipur.
153	153	Usha Adhikari, IOE, Pulchok.
154	154	Dev Narayan Yadav, Patan Multiple Campus. <devnarayan_yadav@yahoo.com>.
155	155	Khagendra Prasad Luitel, CDN, Kirtipur.
156	156	Rasmi Adhikari, Manmohan Memorial College, Kthmandu.
157	157	Toya Nath Bhattarai
158	158	B. K. Rana
159	159	Nabin K. Singh, CDC, Sanothimi.
160	160	Til Bikram Nembang (Bairagi Kainla), Nepal Academy, Kathmandu.
161	161	Khadka K. C., Sanothimi Campus, Bhaktapur. (Late)
162	162	Kedar Prasad Poudel, Mahendra Campus, Dharan, <kedarpdpoudel@yahoo.com>.
163	163	Ram Prasad Dahal, Modern Kanya Campus, Kathmandu.
164	164	Govinda Bahadur Tumbahang, CNAS, Kirtipur, <govindatumbahang@yahoo.com>.
165	165	Keshar Mohan Bhattarai, Chabahil, Kathmandu.
166	166	Omkareswor Shrestha, Central Department of Nepalbhasa, Patan, <omkareshwors@yahoo.com.in >.
167	167	Binda Lal Shah, Sanothimi Campus, Bhaktapur.
168	168	Deepak Kumar Adhikari, Asam, India.
169	169	Begendra Subba, Dharampur, Jhapa, <begendra@yahoo.com>.
170	170	Ganga Ram Pant, CDL, Kirtipur.
171	171	Tika Ram Paudel, Kathmandu <trpoudel@hotmail.com>
172	172	Bharat Kumar Bhattarai, CDN, Kirtipur.
173	173	Stephen Watters, Texas, USA, <steve_watters@sil.org>.
174	174	Bhabendra Bhandari, Madhumalla, Morang, <bhandaribb@yahoo.com>.
175	175	Vishnu P. Singh Rai, DEE, Kirtipur, <vpsrai@yahoo.com>.
176	176	Viswanath Bhandari, Patan Multiple Campus, Patan.
177	177	Dilli Ram Bhandari, Surkhet.
178	178	Ananta Lal Bhandari, Gulmi.
179	179	Tek Mani Karki, Kathmandu, Tahachal, Kathmandu.
180	180	Dip Karki, Mahendra Ratna Campus, Tahachal.
181	181	Nandish Adhikari, CDL, Kirtipur.
182	182	Hari Prasad Kafle, Mahendra Ratna Campus, Tahachal.
183	183	Dubi Nanda Dhakal, CDL, Kirtipur, <dndhakal@yahoo.com>.
184	184	Narayan P. Sharma, SOAS, UK, <narayan.sharma57@gmail.com>.
185	185	Krishna P. Parajuli, CDL, Kirtipur, <parajuli2025@yahoo.com>.
186	186	Nabin Khadka, Arun Valley Cultural Group, Kathmandu.
187	187	Ambika Regmi, LinSuN, CDL, Kirtipur, <ambikaregmi@gmail.com>.

188	188	Bag Devi Rai, Anamnagar, Kathmandu, <pakucha2002@yahoo.com>.
189	189	Jyoti Pradhan, CDL, Kirtipur, <jyoti100np@yahoo.com>.
190	190	Amrit Hyongen Tamang, Baneshwor, Kathmandu, <amrityonjant@yahoo.com>.
191	191	Dilendra Kumar Subba, Patan, Lalitpur.
192	192	Laxman Ghimire, Greenfield National College, Kathmandu.
193	193	Kamal Thoklihang, R. R. Campus, Kathmandu.
194	194	Lal-Shyākarelu Rapacha, Research Institute of Kiratology, Kathmandu, <kiranti.muru@hotmail.com>.
195	195	Lok Bahadur Chhetri, Ministry of Foreign Affairs, Kathmandu.
196	196	Krishna Chandra Sharma, CDE, Kirtipur.
197	197	Devi Prasad Sharma Gautam, CDE, Kirtipur.
198	198	Bal Gopal Shrestha, CNAS, Kirtipur.
199	199	Netra Prasad Paudyal, Germany, <netrapaudyal@yahoo.com>.
200	200	Rajendra Thokar, Chandranigahapur-1, Rautahat, <raaj_062@yahoo.com>.
201	201	Sulochana Sapkota (Bhusal), LinSuN, CDL, Kirtipur, <sapkota_sulochana@hotmail.com>.
202	202	Kishor Rai, GPOB 10866, Kathmandu, <raikishor@hotmail.com>.
203	203	Suren Sapkota, LinSuN, CDL, Kirtipur.
204	204	Gopal Thakur, Kachornia-1, Bara, <gtbs@ntc.net.np>.
205	205	Dhruba Ghimire, Saraswati Campus, GPOB 13914, Kathmandu, <sugdhi@enet.com.np>.
206	206	Laxmi Prasad Khatiwada, Kathmandu, <lkhatiwada@mpp.org.np>.
207	207	Kamal Mani Dixit, Madan Puraskar Pustakalaya, Patan Dhoka, <kmltxt@wlink.com.np>.
208	208	Gelu Sherpa, Baudha, Kathmandu, <g.sherpa@gmail.com>.
209	209	Bal Mukunda Bhandari, Department of English Education, Kirtipur, <bhandaribm@yahoo.com>.
210	210	Bir Bahadur Khadka, Maharanijhoda-7, Jhapa.
211	211	Chandra Khadka, Madan Bhandari Memorial College, Kathmandu, <ckhadka77@gmail.com>.
212	212	Goma Banjade, Kathmandu, <gbanjade@yahoo.com>.
213	213	Ichha Purna Rai, Dhankuta Campus, Dhankuta, <timmerai@gmail.com>.
214	214	Karnakhar Khatiwada, CDL, Kirtipur, <karnakhatiwada@yahoo.com>.
215	215	Kedar Bilash Nagila, Kathmandu <kedarnagila@yahoo.com>.
216	216	Krishna Kumar Sah, LinSuN, CDL, Kirtipur.
217	217	Krishna Paudel, Amalachaur-8, Baglung, <kpbinnyas_23@yahoo.com>.
218	218	Peshal Bastola, Canada.
219	219	Ramesh Khatri, LinSuN, CDL, Kirtipur.
220	220	Ramhari Timalisina, Kathmandu.
221	221	Prem B. Phyak, DEE, Kirtipur, <pphyak@gmail.com>.
222	222	Ram Nath Khanal, IOE, Pulchowk, Kathmandu.
223	223	Sajan Kumar Karna, Thakur Ram Multiple Campus.
224	224	Carl Grove, SIL International.
225	225	Indresh Thakur, Central Department of Linguistics, TU.
226	226	Jivendra Deo Giri, CDN, TU.
227	227	Kwang-Ju Cho, <kwangjucho@hotmail.com>.
228	228	Laxmi B. Maharjan, Central Department of English Education, TU.
229	229	Mahesh Kumar Chaudhari, Mahendra B. M. Campus, Rajbiraj.



230	230	N. Pramodini, University of Manipur, India.
231	231	Shova K. Mahato, LinSuN, CDL, Kirtipur.
232	232	Shova Lal Yadav, <relative_nepal@yahoo.com>.
233	233	Toya Nath Bhatta, Maryland College, Kathmandu.
234	234	Uma Shrestha, Western Oregon University, USA.
235	235	Binu Mathema, Cosmopolitan College, Kathmandu.
236	236	Dipti Phukan Patgiri, University of Guhati. India.
237	237	Diwakar Upadhyay, Manmaiju-7, Katmandú, diwakarupadhyay@hotmail.com.
238	238	Krishna Prasad Paudyal, Ratnanagar, Chitwan, <krishnapdyl@gmail.com>.
239	239	Om Prakash Singh, Prajatantra Secondary School, Morang, <omsingh33@gmail.com>.
240	240	Bishnu Chitrakar, Dally Awas, Swayambhu, <bishnuchitrakar@hotmail.com>
241	241	Durga Dahal, Mahendra Ratna Campus, Tahachal, Kathmandu.
242	243	Durgesh Bhattarai, Madan Bhandari Memorial College, Kathmandu.
243	243	Kamal Neupane, Madan Bhandari Memorial College, Kathmandu.
244	244	Kamal Prasad Sapkota, Madan Bhandari Memorial College, Kathmandu.
245	245	Khila Sharma Pokharel, Bhairawashram, MSS, Gorkha. <neltakhila@yahoo.com>.
246	246	Niruja Phuyal, Madan Bhandari Memorial College, Kathmandu.
247	247	Purna Chandra Bhusal, Madan Bhandari Memorial College, Kathmandu.
248	248	Shobakar Bhandari, Madan Bhandari Memorial College, Kathmandu.
249	249	Bharat Kumar Ghimire, nesoia_bharat@hotmail.com.
250	250	Binod Dahal, <sabdha.binod@gmail.com>
251	251	Hemanta Raj Dahal, Chabahil, Kathmandu. <hemant_dahal@hotmail.com>
252	252	Keshab Prasad Joshi, Arunima Educational Foundation, <aefjoshi@gmail.com>
253	253	Moti Kala Subba (Deban), <motikala_dl@hotmail.com>
254	254	Rishi Ram Adhikari
255	255	Ramesh Kumar Limbu
256	256	Pam Bahadur Gurung, CDE, Kirtipur. <pam.gurung@gmail.com>
257	257	Rakesh Kumar Yadav, Imadol-8, Lalitpur. <rakeshsarlahi@gmail.com>
258	258	Tara Mani Rai, <raitaramani@yahoo.com>
259	259	Pankaj Dwivedi, India, <pankaj.linguistics@gmail.com>
260	260	Prem Prasad Poudel, Mahendra Ratna Campus, <premprasadpoudel@hotmail.com>
261	261	Ekku Maya Pun, Kathmandu University
262	262	Fatik Thapa
263	263	Vikram Mani Tripathi
264	264	Hansawati Kurmi
265	265	Padam Rai
266	266	Ganesh Kumar Rai
267	267	Amar Tumyahang
268	268	Balram Adhikari, Mahendra Ratna Campus
269	269	Upendra Ghimire
270	270	Sanjog Lapha
271	271	Dhan Prasad Subedi <subedi.dhanp@gmail.com>
272	272	Gulab Chand, India <gulab.chand@iitpr.ac.in>
273	273	Mahboob Zahid, AMU, India, <zahidmahboob4u@gmail.com>
274	274	Mani Raj Gurung, Cosmopolitan College, Chabahil
275	275	Tek Mani Karki, Mahendra Ratna Campus, Tahachal, <tmkarki@gmail.com>
276	276	Arun Nepal, Ilam Mutiple Campus, <nplaran@gmail.com>
277	277	Netra Mani Rai, <netramrai@gmail.com>

Abbreviations used in this list:

CDC	Curriculum Development Centre	CDE	Central Department of English
CDL	Central Department of Linguistics	CDN	Central Department of Nepali
CIL	Campus of International Languages	CNAS	Centre for Nepal and Asian Studies
DEE	Department of English Education	IOE	Institute of Engineering
LinSuN	Linguistic Survey of Nepal		