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GRAMMATICALIZATION THROUGH METAPHORICAL EXTENSION OF BODY PARTS: A COMPARATIVE STUDY IN THADOU AND MEITEILON

Ngaineiting Baite and Potsangbam Chaobimeena

The paper shows instances of grammaticalization of body parts to spatial meanings, and explains the differences observed in Thadou and Meiteilon. In Meiteilon, grammaticalization stops after metaphorical extension of body part terms, whereas in Thadou, grammaticalization continues and came to be used as locative adverbs and temporal adverbs.

Keywords: spatial, temporal, desemanticization, grammaticalization

1 Introduction

The paper first discusses the theoretical background of grammaticalization and give a very brief introduction of the languages to be compared i.e. Thadou and Meiteilon, which are both Tibeto-Burman languages. The paper will move on to compare the data collected from both the languages and therefore discuss the observations and conclusions at the end of the paper. The comparison will be on how body part terms of both the languages get grammaticalized and which parameters were used, and to what extent does the grammaticalization process proceed.

2 Grammaticalization

Grammaticalization theory is concerned with the genesis and development of grammatical forms. Its primary goal is to describe how grammatical forms and constructions arise and develop through space and time. Grammaticalization is usually defined as the process whereby lexical items develop into grammatical items, and grammatical items develop into more grammatical forms. The term 'grammaticalization' was first coined by the French linguist, Antoine Meillet in 1912. Meillet defined grammaticalization as the evolution of grammatical forms (function words, affixes, etc) out of the earlier lexical forms. In simple words, it is the process in which linguistic elements: phonetics, morphemic, syntactic, semantic, etc becomes constituents of grammar. According to Heine and Reh, it is "An evolution whereby linguistic units lose in semantic complexity,

pragmatic significance, syntactic freedom and phonetic substance."

Grammaticalization involves four main interrelated mechanisms. They are:

a. Desemanticization

Desemanticization is also known as semantic bleaching, where the semantic content of the original word is lost partially, or completely in few cases. Here, concrete meaning of the original words are reinterpreted in specific contexts to give more abstract and grammatical meanings. This process may be best explained through the grammaticalization of body parts to spatial meanings through metaphorical extension.

b. Extension

As the name itself suggest, the meaning of the original word is extended. The context is generalized, or used in new context. This may sometimes occur together with desemanticization. For example, in English the preposition 'in' may be used in three different contexts – as a spatial preposition, temporal meaning, and causal meaning, as shown in the following examples.

(1) John died in London

(2) John died in December

(3) John died in a car accident

c. Decategorialization

After undergoing desemanticization, the lexemes may lose their original morphological and syntactic properties. When they undergo decategorialization, they may lose their morphological abilities to take inflections or modifiers, and they may also lose their syntactic properties of being able to move freely in a sentence. The distal demonstrative 'that' in English may be taken as an example. When the demonstrative 'that' gets grammaticalized to a complementizer, it can no longer be pluralized, and also lose 'this' as its co-member.

2 / Grammaticalization through...

d. Erosion (or Phonetic reduction)

Erosion, also known as Phonetic Reduction, is the last to apply in the grammaticalization process, and it is not obligatory. Here, a linguistic expression may lose its phonetic substance as a result of grammaticalization. It may include the loss of full syllables as in English 'because' to 'cuz', or loss of suprasegmental properties as in Adjective 'full' to derivational suffix '-ful', or phonetic simplification as in 'going to' to 'gonna'.

In most of the mechanisms involved loss of properties are observed. However, there are gains also, in that they get new existence. They can be used in new contexts with their meanings getting more generalized.

Grammaticalization is a unidirectional process. The process involves change from lexical to grammatical, or grammatical to more grammatical forms, and not the other way round. Few contradictory examples of the unidirectionality hypothesis were found in few languages, but they were discarded due to insufficiency of data, and also because they were too few as compared to the very large instances which conforms to the unidirectionality hypothesis.

It is observed from the mechanisms discussed above that grammaticalization is not an abrupt change, but a gradual process where words leaves a particular class and enters another class by a gradual series of individual shifts forming a chain, which is called a Cline. The stages involved during the process may differ from language to language, but there is a famous pattern of cline proposed by Hopper and Traugott, which is found to be followed by majority of languages.

Content word > grammatical word > clitic > inflectional affix

This cline is popularly known as 'the cline of grammaticality'.

3 About the languages

3.1 Meiteilon

Meiteilon belongs to the Tibeto-Burman language family, mainly spoken in the North-eastern part of India. Although the native speakers of Meiteilon mostly reside in the state of Manipur, there are

speakers of Meiteilon in the neighbouring states such as Assam, Tripura and countries such as Myanmar and Bangladesh. Meiteilon also known as Manipuri, is the lingua franca of Manipur.

3.2 Thadou

Thadou, as recorded in the Linguistic Survey of India. Vol 3, Tibeto-Burman Family part 3 by Grierson (1903-1928), belongs to the Northern Kuki-Chin sub-group of Tibeto-Burman sub-family which in turn belongs to the Sino-Tibetan family of languages. It is spoken mainly in Manipur, Nagaland and some parts of Assam, Mizoram and Myanmar.

Thadou follows the Subject-Object-Verb (SOV) word order. It is also a tonal language. "Thadou phonemic inventory consists of twenty nine phonemes, of which twenty one are consonants, eight vowels and three tones: rising (H), high falling (HL) and low falling (L)". Pauthang (2008)

4 Metaphorical extension of body parts

As already mentioned above, Desemanticization is one of the parameters where semantic bleaching occurs. One of the most important mechanisms contributing to semantic bleaching is metaphorical extension. When a lexical source is compared with the resulting grammatical meaning, a metaphorical relation is often found. The meaning of an entity is shifted from concrete to abstract by using metaphor and metonymy, but the original meaning expressed is preserved in some way or the other. Grammaticalization through metaphorical extension is often observed in body part terms. It may be noted that not all metaphorical extensions contribute to grammaticalization. As already known, grammaticalization is not an abrupt change but a gradual process. Therefore, metaphorical use of body parts occurs first, as observed in almost all languages of the world, but not all languages grammaticalize the metaphors to mean spatial or temporal adverbs. In this paper study will be made based on body part terms comparing instances from two Tibeto-Burman languages.

Given below are few instances of metaphorical extension observed from Meiteilon. It is observed in Meiteilon that body part terms undergo

metaphorical extension but only few gets grammaticalized and are later used in spatial contexts. About 17 instances of metaphorical extension of body part terms are observed, and below mentioned only few of them.

i. Mouth > Front

- (4) jum-gi t^hoŋ-jin
house-GEN door-mouth
'Threshold of the house'

ii. Face > Surface>>Front

- (5) ciŋ-mai-dələi jam sət-li
Hill-face-LOC flower much
bloom-PRST
'Flowers are blooming on the surface of the hill.'

- (6) upu mə-mai kai-re
cupboard 3-face broke-PRF
'The front of the cupboard has broken.'

iii. Foot > Down/Bottom of

- (7) mə-k^hoi u-k^hoŋ-də hip-pi
3.PL tree-foot-LOC lay-PRST
'They are lying at the base of the tree.'

- (8) ciŋ-k^hoŋ-də turel məca əma cel-li
hill-foot-LOC river small one flow-PRST
'A small river is flowing on the foot of the hill.'

iv. Head>front

- (9) jon-nə pərik^ha-də məkok ta-i
John-NOM exam-LOC head fall-PST
'John topped the examination.'

- (10) ma-nə məkok tə leppi
3-NOM head LOC stand-PRST
'He is standing in front'.

Therefore, it is observed in Meiteilon that body part terms in fact has metaphorical uses, but not all gets grammaticalized except very few of them like 'head' and 'face'.

Given below are instances of grammaticalization of body parts to spatial meanings and temporal meanings collected from Thadou.

v. Back> behind > later.

- (11) Kə-nuŋ ə-dəp e
1CLT-back 3CLT-cold DCL
'My back is cold.'

- (12) m-nuŋ
house-back
'Back of the house'

- (13) kə-nuŋ-a huŋ m
1CLT-back-LOC come IMP
'Come behind me.'

- (14) nuŋ-le? nə-ki-si? dŋ əhi
back-TEMP 2CLT-VR-regret FUT DCL
'You will regret later.'

vi. Buttock >end/bottom/edge

- (15) Xun-tə
bed-buttock
'The lower part of the bed.'

- (16) Xə-tə
Village-buttock
'End/bottom/edge of the village'

vii. Stomach/Belly> inside/in

- (17) kə-suŋ ə-na e
1CLT-stomach 3CLT-pain DCL
'My stomach is aching.'

- (18) m-suŋ t^hε? m
House-stomach sweep IMP
'Sweep the (inside of the) house.'

- (19) Xən-suŋ-a t^hou tʃu
Cup-stomach-LOC fly DEF
'The fly in the cup.'

viii. Face > front/before

- (20) nə-mai ə-nam e
2CLT-face 3CLT-smooth DCL
'Your face is smooth.'

- (21) m-mai
house-face
'The area in front of the house.'

- (22) nə-mai-a dŋ nu
2CLT-face-LOC stand FEM
'The girl standing in front of/before you.'

4 / Grammaticalization through...

ix. Flanks > beside

(23) kə-pəŋ ə-na e
 1CLT-flank 3CLT-pain DCL
 'My flank hurts.'

(24) kə-pəŋ-a dɪŋ nu
 1CLT-flank-LOC stand FEM
 'The girl standing beside me.'

x. Mouth > front

(25) nə-muʔ səp in
 2CLT-mouth wash IMP
 'Wash your mouth.'

(26) gari-muʔ
 vehicle-mouth
 'The front of vehicle (vehicles with protruding front).'

xi. Navel > middle/core

(27) ə-lai kə-mu e
 3CLT-navel 1CLT-see DCL
 'I saw his/her navel.'

(28) ə-lai-a dɪŋ in
 3CLT-middle-LOC stand IMP
 'Stand in the middle.'

xii. Heart > middle/core (intensified)

(29) luŋ-lai-a
 heart-navel-LOC
 'Core of the heart.'

(30) lai-luŋ-a
 navel-heart-LOC
 'Core of the core/the very middle of'

Therefore, from the analysis of the given data it may be concluded that Thadou also make metaphorical uses of body part terms. However, it proceeds to give new grammatical meanings when combined with locatives. It gives spatial meanings and it is also observed in example like 1(d), that the spatial meaning is in turn grammaticalized to give a temporal meaning when combined with a temporal marker. As seen in example 13 (a) and (b), compounding of two or more body parts may act as intensifiers. The mechanism of change involved here is Desemanticization. The original forms undergo metaphorical extension and its

meaning is generalized from concrete objects to give abstract meanings.

5 Conclusion

From the analysis of the data collected from both languages it is concluded that both languages use metaphorical extensions. However, Meiteilon uses very few grammaticalization of body parts, while in Thadou almost all the metaphorical uses proceed further to give those grammatical meanings, of course after occurring together with locatives. Also in Thadou, the grammaticalization process does not end there but move on to grammaticalize the spatial locatives to give temporal meanings, which is absent in Meiteilon.

Abbreviations

1	FIRST PERSON
2	SECOND PERSON
3	THIRD PERSON
1CLT	FIRST PERSON CLITIC
2CLT	SECOND PERSON CLITIC
3CLT	THIRD PERSON CLITIC
DCL	DECLARATIVE
DEF	DEFINITE
FUT	FUTURE
GEN	GENITIVE
IMP	IMPERATIVE
LOC	LOCATIVE
NOM	NOMINATIVE
PL	PLURAL
PRF	PERFECTIVE
PRST	PRESENT
PST	PAST
TEMP	TEMPORAL
VR	VERBAL REFLEXIVE

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NOMINALIZATION AND RELATIVIZATION IN GYALSUMDO

Dubi Nanda Dhakal

The nominalizers, such as -pa, -sa, and -ke are used for various functions, and appear in various kinds of constructions in Gyalsumdo. By contrast, some affixes, such as -tse and -ma are used only in deriving nouns at lexical level whereas others appear only in the complement, and relative clauses.

Keywords: nominalization, relativization, complement clauses

1 Gyalsumdo: An introduction

Gyalsumdo is spoken in the three main villages, viz. Chame, Bagarchap including Thonche, and in Tal villages in the Manang district of western Nepal (cf. Hildebrandt and Joe 2011, Dhakal, Hildebrandt and Krim 2016). However, it is neither included as a distinct language in the national census (cf. CBS 2012), nor in the *Ethnologue* (cf. Eppele 2012). Tournadre (2013: 122) also notes that Gyalsumdo falls within southwestern section of Tibetan languages. Similarly, Gyalsumdo is a Tibetan variety, and it is closely affiliated with Kyirong Tibetan. The genetic affiliation of Gyalsumdo as proposed by Hildebrandt and Joe (2011) is given in Figure 1.

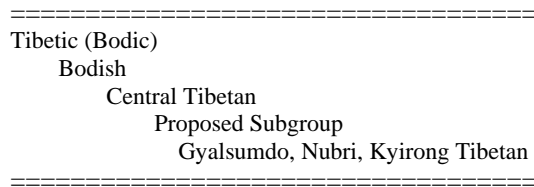


Figure 1: Genetic classification of Gyalsumdo

Gyalsumdo is a verb-final language. The numerals, demonstratives, and adjectives follow the head nouns, but the demonstratives precede the nouns in noun phrase structures (cf. Dhakal 2015). Gyalsumdo also makes use of the definite marker *-ko*, such as *bhidza-ko* 'child-DEF'. The verbs take finite morphology in the clauses. The copulas are used to carry different tenses, aspects and evidentials. Like Tibetan varieties, Gyalsumdo makes a distinction between the

'conjunct', and 'disjunct' forms in finite verb morphology although the detailed study of verbs, verb morphology and evidentiality is still awaiting.

This article is organized as follows. With a brief typological introduction of Gyalsumdo in section 1, nominalization is briefly introduced in section. Similarly, section 3 concentrates on the nominalizers and lexical derivation of nouns in Gyalsumdo. The clause nominalization except the relative clauses are discussed in section 4. Section 5 presents the relative clauses marked with special set of nominalizers. A short notes on some suffixes which might have distant relation with some nominalizers, but have less degree of resemblance at present, are also discussed in section 5. And finally, this article is summarized in section 6.

2 Nominalization

The term 'nominalization' refers to the process in which certain items are changed into a noun. As put by Comrie and Thompson (2007:334) nominalization refers to 'turning something into a noun'. This essentially refers to the derivational process. There are a number of derivational suffixes in Gyalsumdo which are used to derive nouns from other categories (from nouns and verbs). They are illustrated in the following sections.

In addition to this, there are some suffixes which mark the clause-level constituents. The constituents they mark function as a noun phrase (cf. Genetti et al. 2008:98). In other words, "nominalizers often extend beyond their core function of deriving nominal expressions" (Yap, Karen-Hårsta, Wrona 2011: 2) in these languages. This is a very productive process at clause-level nominalization. Genetti et al. also make a difference between more derivational kind of nominalization as opposed to clause-kind of nominalization.

There are studies dealing with the nominalization in different languages of Nepal. For example,

Chantyal (cf. Noonan 1997), Kiranti languages (Bickel 1999, Watters 2008), Bhujel (Regmi 2010), Kaike (Regmi 2010), Chintang (Paudyal 2011), Magar (Grunow Hårsta 2011), among others. The descriptive grammars also include this topic as a linguistic phenomenon in some Tibetan languages, such as Kyirong (2003), and Dong Tibetan (Bartee 2007), and classical and Lhasa Tibetan (cf. DeLancey 2003a,b).

In bird's eye view, there are three categories of affixes appearing in the contexts of nominalization and relativization in Gyalsumdo. Firstly, there are some affixes which appear both in deriving lexical nouns and in encoding clausal nominalization. Secondly, some affixes appear only in deriving nouns, but they do not appear in clausal nominalization. Thirdly, some affixes appear only in clause nominalization and relativization, but they are not used to derive nouns at lexical level.

3 Nominalizers

Gyalsumdo mainly makes use of four nominalizers *-sa*, *-pa*, *-tse*, and *-ma* to derive nouns. The frequency of these nominalizers differ in deriving nouns from the other categories at lexical level. This section is concentrated on lexical nominalization in Gyalsumdo.

3.1 Nominalizer *-sa*

We obtain an object noun, typically utensils by making use of the suffix *-sa*. This nominalizer is etymologically identical with the noun *sa* 'earth' (cf. DeLancey 1999:238; DeLancey 2003b:276), and thus seems to be grammaticalized from *sa* 'earth'. Although Kyirong Tibetan employs the suffix *-sã*, the Gyalsumdo suffix further erodes and retains only the suffix without the nasal part (cf. Huber 2003:10). Most of the nouns derived by making use of this suffix are nouns related to cooking utensils or pots. Literally, they yield the meaning of 'the place/thing for doing X'.

Examples follow.

- | | | | | |
|-----|-------------|---------|---------------|--------------------|
| (1) | <i>thuy</i> | 'drink' | <i>thuṅsa</i> | 'pot for drinking' |
| | <i>tfoe</i> | 'cook' | <i>tfoesa</i> | 'pot for cooking' |
| | <i>kol</i> | 'boil' | <i>kolsa</i> | 'pot for boiling' |

In examples (1), the suffix *-sa* is locational/instrument nominalizer. It is also used to relativize the location (section 5.3). The relationship between the derivational nouns and clausal nominalization is found with this nominalizer.

3.2 Nominalizer *-pa*

The suffix *-pa* marks the complement clause, and purpose clause in addition to relative clauses in Gyalsumdo. We obtain an object noun, or inhabitant nouns by making use of the derivational suffix *-pa*.¹ This suffix is usually attached to the place names. Also see DeLancey (2003a, b). Noonan (1997) also notes that the suffix *-pa* occurs as a nominalizer in Tibetan languages. Examples follow (2).

- | | | | | |
|-----|--------------|-------------|----------------|---------------------|
| (2) | <i>bhø</i> | 'Tibet' | <i>bhøpa</i> | 'Tibetan' |
| | <i>jàmpu</i> | 'Kathmandu' | <i>jàmpupa</i> | 'Kathmanduite' |
| | <i>nar</i> | 'Nar' | <i>narpa</i> | 'inhabitant of Nar' |

The suffix *-pa* also yields the meaning of 'follower', agent noun, or merely the 'deverbal noun'. This is similar to 'person having to do with' as mentioned in Beyer (1992:120). The derived nouns have occupational meanings referred by the derived nouns. The suffix *-pa* may be attached to verbs (3b) or nouns (3a).

- | | | | |
|-----|----|-----------------|--------------------------|
| (3) | a. | <i>tʃhølu</i> | 'religion' |
| | | <i>tʃhølupa</i> | 'follower of a religion' |
| | | <i>ṅà</i> | 'fish' |
| | | <i>ṅàpa</i> | 'fisherman' |
| | | <i>tsøn</i> | 'prison' |
| | | <i>tsønpa</i> | 'prisoner' |
| | b. | <i>kjue</i> | 'to vomit' |
| | | <i>kjupa</i> | 'vomit' |

The clause level derivation by making use of the suffix *-pa* is given in (section 5.1).

As explained in DeLancey (2002), the suffix *-pa/-ba* and *-ma/-mo* are related in a number of Bodic languages merely to differentiate gender. This is true in Tibeto-Burman languages as well (cf. Benedict 1972: 96). Since there exist a different

¹ Beyer (1992:259) also notes that the nominalizer *-pa* functions that the entire proposition functions as a nominalizer.

nominalizer suffix *-ma* (section 3.4), it is not easy to explain the relationship between *-pa* and *-ma* in merely differentiating the gender. As mentioned in DeLancey (2002), Gyalsumdo also makes a difference between masculine and feminine nouns marked by the suffix *-pa* and *-ma* respectively. A few pairs of words are available which terminate in these suffixes to differentiate gender, eg. *ghjalpu* ‘king’, *ghjalmu* ‘king’; *robu* ‘bonded friend (m)’, *romu* ‘bonded friend (F)’; *dʒhapho* ‘rooster’, *dʒhamo* ‘hen’; *khapho* ‘dog’, *khimo* ‘bitch’; *kepu* ‘adulthood’ (of male), *kemu* ‘adulthood’ (of female).

3.3 Nominalizer *-tse*

The object nouns are derived by the suffix *-tse*. The suffix is also attested in Kyirong Tibetan. The nouns derived from it are the ‘objects’ related to the verb. For example, the noun *setse* ‘foodstuff’ is derived from *se* ‘eat’. We obtain the ‘object nouns’ by making use of this suffix.

(4)	<i>se</i>	‘eat’	<i>setse</i>	‘foodstuff’
	<i>thuj</i>	‘drink’	<i>thujtse</i>	‘drink’
	<i>tse</i>	‘play’	<i>tsetse</i>	‘doll’
	<i>ghyn</i>	‘wear’	<i>ghyntse</i>	‘clothing’
	<i>nalpa</i>	‘lie down’	<i>nalpse</i>	‘quilt’

Although we find some nouns by making use of this process, the process is rather restricted in a few words.

3.4 Nominalizer *-ma*

There are some nouns derived from the suffix *-ma*. The resulting nouns are object nouns, or agentive nouns. The nominalizing suffix is attached to verbs. A couple of examples follow.

(5)	<i>kul</i>	‘to steal’	<i>kúma</i>	‘thief’
	<i>dʒho</i>	‘to sweep’	<i>dʒhjama</i>	‘broom’

Although there might be other nouns which might be derived by making use of this suffix, we have limited examples to illustrate this.

4 Clausal nominalization

We discussed the suffixes which are attached to nouns and verbs to derive nouns in section (3). Now, we turn to some clauses in which these nominalizers appear to mark the clauses.

4.1 Clauses marked with *-pa*

The suffix *-pa* is multifunctional in Gyalsumdo. We have looked at the cases in which this suffix is used to derive lexical nouns from other categories in section (3.2). Before looking at how it appears in marking the clause, let’s also look at different functions of the suffix *-pa* in Gyalsumdo. It is relevant to note that the suffix *-pa* appears in the finite clause to mark the past tense conjunct form (cf. Dhakal 2015) in contrast to disjunct form *-suŋ*. Secondly, the suffix appear with the verbs preceding the copular clauses to denote the perfect aspect as shown in (6-7).

(6)	<i>ŋà-ki</i>	<i>ljaka</i>	<i>dzhe-pa</i>	<i>re</i>
	I-ERG	work	do-PRF	COP
	‘I have done the work.’			

(7)	<i>lakpa-ki</i>	<i>taŋa</i>	<i>sa-pa</i>	<i>re</i>
	Lakpa-ERG	money	earn-PRF	COP
	‘Lakpa has earned money.’			

It is therefore natural that when the nominalizer *-pa* turns the clause into a noun, it also carries the perfective meaning.

(8)	<i>taŋ</i>	<i>ŋà-ki</i>	<i>ʃuku-la</i>	<i>phera</i>
	yesterday	I-ERG	child-ACC	scolding
	<i>láj-pa</i>	<i>jákbu</i>	<i>dzhuŋ-suŋ</i>	
	make-NMLZgood		do-PST.DJ	
	‘It was good that I scolded the child yesterday.’			

(9)	<i>kho-ki</i>	<i>qolma-ki</i>	<i>ara</i>
	he-ERG	Dolma-ERG	liquor
	<i>kol-pa</i>	<i>tjòŋ-suŋ</i>	
	boil-NMLZ	see-PST.DJ	
	‘He is watching Dolma boiled alcohol.’		

(10)	<i>kho-ki</i>	<i>kho-la</i>	<i>taŋa</i>	<i>ter-pa</i>
	he-ERG	he-DAT	money	give-NMLZ
	<i>ŋà-ki</i>	<i>tjòŋ-suŋ</i>		
	I-ERG	see-PST.DJ		
	‘I saw that he gave her money.’			

We see that the complement taking verb *tjòŋ*- ‘see’ is used in (8). By contrast, the complement clauses in which the embedded clause is marked with *-ke* carries the imperfective or future meaning (15-18).

The complement clause marked with the nominalizer *-pa* carries the meaning of perfect action. This is also found in Kyirong Tibetan (Huber 2003:6), and Lhasa Tibetan as well as well

(cf. DeLancey 2003b:276). The nominalizer also appears as a verbal periphrasis in other languages as well (cf. Lahaussolis 2003: 39).

The perfect converb *-ba/-pa* marks the non-finite clauses known as 'converb clauses' (cf. Genetti et al. 2008: 26). The converb clause marked with *-pa/-ba* yields the completed action before another action takes place. The converb clause marked with the nominalizer is common in different languages (cf. Genetti et al. 2008:26 among other). Examples from Gyalsumdo follow.

(11) to ma-se-pa-la ṅà fuṅ-pa
rice NEG-eat-PRF-LOC I go-PST.CJ
'I went without taking food.'

(12) ljaka ma-tʃe-pa-la kho bhi-suṅ
work NEG-eat-PRF-LOC he go-PST.CJ
'He went (after) without doing his work.'

(13) ṅà-ki ʃaṅa ghəru tor-pa ni
I-GEN money where lose-PRF PART
'I wonder where my money was lost.'

The converb clause marked with the nominalizer *-pa* also takes the locative suffix *-la* in Gyalsumdo. This further confirms that the construction looks 'noun-like'. It is to be noted that the sequential converb is *-ti/-di* and simultaneous converb is *-kja* in Gyalsumdo. As in other constructions, the suffix *-pa* also retains the perfective meaning in this case.

4.2 Clause marked with *-ke*

Both the complement and the purposive clauses are marked with the nominalizer *-ke* in Gyalsumdo. Gyalsumdo also makes use of the nominalizer *-ke* in relative clause (section 5.4). The genitive marker is *-ki* in Gyalsumdo. These two suffixes, which differ in surface manifestation these days, might share the same etyma long back. Huber (2003:3) notes that the nominalizer *-kē* in Kyirong Tibetan can be traced to the suffix *mkhan* in classical Tibetan. When we compare this with the Kyirong Tibetan, the Gyalsumdo nominalizer further loses the nasality and results simply as *-ke*. As noted in Noonan (1997), the nominalizer also appears in the citation forms of the verbs. So, let's consider some citation forms of verbs in (14).

(14) *seke* 'to eat'
thuṅke 'to drink'
tseke 'to play'
ghyṅtse 'to wear (v.)'
jalke 'to sleep'

We showed that the verbal suffix *-kəe*, or *-ke* are used in other places, such as non-past conjunct forms (15-16).

(15) khe mənəṅ-la nām jòṅ-ke
you Manang-LOC when come-PRES.CJ
'When do you come to Manang?'

(16) ṅà tsi tsəlbu ghəru sja-kəe
I this basket where keep-NPST.CJ
'Where shall I keep this basket?'

Like the non-past tense, the complement clause marked with the complementizer *-ke* shows that action takes place in the future. In other words, it can be contrasted with the nominalizer *-pa* which shows the perfective action.

We also find the same nominalizers marking the end of them. The complement clauses end with complement taking predicates.

(17) ṅà-ki kho bhəpsjor-ke tjoṅ-suṅ
I-ERG he fall-NMLZ see-PST.DJ
'I saw him/her fall down.'

(18) dhi mi-ki ara taṅ-ke lap-ti
this man-ERG liquor leave-NMLZ
tʃhoetəm dʒhe-suṅ
say-SEQ promise do-PST.CJ
'The man promised to go give up drinking liquor.'

We see that the complement clause is marked with the suffix *-ke* in Gyalsumdo in (17-18).

In addition to the complement clause discussed here, the adverbial clause (the purpose clause in particular) is formed with the marker *-ke*. In this case, the entire clause is nominalized, and the clause is case-marked with the locative marker *-la*.²

² The purposive marker in Kyirong Tibetan is also formed by the nominalizer plus the dative marker (Huber 2002:224).

- (19) kho rika-la siŋ dho-ke-la bhi-suŋ
 he forest-LOC wood cut-PURP-LOC go-PST.DJ
 'He went in to the forest to cut wood.'
- (20) ŋà apa thu-ke-la
 I father meet-PURP-LOC
 jàmpu-la sum-pa
 Kathmandu-LOC go-PST.CJ
 'I went to Kathmandu to meet my father.'

The purposive clause is also formed only with the bare verb stem followed by the finite verb in the main clause (cf. Dhakal 2015).

5 Relative clauses

The most common kinds of noun-modifying clauses are prenominal relative clauses in Gyalsumdo. In Tibeto-Burman languages, the relativization is a 'subspecies of nominalization' (DeLancey 2002:56). The relative clause is nominalized in these languages. There are a number of strategies in relative clause formation in Gyalsumdo. DeLancey (1999:230) discusses that central Tibetan languages show interesting features regarding relativization:

Central Tibetan shows a complex system which is elaborated in two different dimensions, which are both typologically quite unusual, and of considerable theoretical significance. In one dimension, we find a set of four different nominalizers used in the relative construction, reflecting the case role (both underlying and surface) of argument in the clause which is coreferential with the head noun, and to some extent also the aspectual reference of the relative clause.

As discussed in DeLancey (1999, 2002), nominalizers also appear in the relative clause formation in central Tibetan varieties. Now we will turn to three main kinds of relative clause construction strategies in Gyalsudmo.

5.1 Nominalizer *-pa*

Like Tibetan varieties, such as central Tibetan (DeLancey 2003a,b), Dongwang Tibetan (Bartee 2007), Kyirong Tibetan (Huber 2002:228), classical Tibetan (Beyer 1992:302), Gyalsumdo makes use of the nominalizer *-pa/-ba* in relative clause (prenominal relative clause). The lexical nouns derived by the suffix (section 3.2) are similar to the clauses marked by the suffix *-pa*. The relative clause which modifies the head noun is marked with the suffix *-pa*. Unlike in the

classical Tibetan, it does not take a case (genitive case clitic)³. Note that the *-pa* in relative clause refers to the action taken place before.

- (21) khe lep-ba sa
 you arrive-NMLZ place
 'The place where you arrived (reached)'
- (22) bhidza ke-ba ama
 child give.birth.to-NMLZ woman
 'The woman who gave birth to a baby'

We see that the nominalizer *-pa* occurring with the clauses which occur in pre-nominal position (21-22). The clause marked with *-pa* modifies *sa* 'place' in (18). Thus, it is obvious that the nominalizer *-pa* is used in relative-clause construction. Here are some more examples.

- (23) khaŋ luk-pa
 house dismantle-NMLZ
 'The dismantled house'
- (24) lam tor-pa
 goat lose-NMLZ
 'The lost goat'

The nominalizer *-pa* is also used while telling time. In this case, the nominalizer occurs with the numeral, as with *fipa* 'four' in (23).

- (25) tʃhutse ʃi-pa dʒhuŋ du
 clock four-NMLZ become COP
 'It is four o'clock now.'

The *-pa* be is used for perfective relative clause is also noted in DeLancey (1999:234).

5.2 Stem reduplication plus *-pa*

The relative clause is distinct, and the choice of a certain nominalizer is determined by the semantic role of the head noun in Lhasa Tibetan (cf. DeLancey 2002: 61). The choice of the nominalizer is not that much complex in Gyalsumdo, but the formation of the relative clause is distinct if the head noun is a patient. The patient nominalization is formed by reduplicating

³ Despite the fact that the nominalized clauses take the genitive marker in a number of Bodic languages, it is not found in Gyalsumdo. DeLancey (2002: 57) explains that the hosting of genitive case clitic by the nominalized clause makes the clause more subordinate within the noun phrase.

the verb stem and/or the nominalizer *-pa* as in (26-28).

- (26) kho-ki ke-ke bhomo-ko
 he-ERG give.birth-give.birth child-DEF
 jàmpu-la jò
 Kathmandu-LOCCOP
 'The child she gave birth to is in Kathmandu.'
- (27) ηà-ki tʃa-tʃa-ba bherka
 I-ERG break-break-NMLZ walking.stick
 'The walking stick which I broke'
- (28) dhi ηà-ki dhi-dhi-ba hiki
 this I-ERG write-write-NMLZ letter
 'The letter which I wrote'

The stem reduplication is common in other neighbouring Tibetan languages of the region, such as Tsum, spoken in Gorkha.

5.3 Nominalizer *-sa*

The nominalizing suffix *-sa* is very productive and is used to derive locative nouns. The same nominalizer is used to modify a noun⁴. However, the relative clause marked with *-sa* does not take the case marker (genitive marker) in Gyalsumdo. This nominalizer is also attested in Kyirong Tibetan (Huber 2002:230), and Tshangla (cf. Andvick 2010: 247), and other Tibetan languages, such as Lhasa Tibetan, (DeLancey 2003a), Classical Tibetan (DeLancey 2003b), Dongwang Tibetan (Bartee 2007), Kyirong Tibetan (Huber 2003) among others.

- (29) ηà dhe-sa khaŋpa
 I sit-NMLZ house
 'The house where I stayed'
- (30) khe dhe-sa khaŋpa
 you sit-NMLZ house
 'The house where you stayed'

5.4 Nominalizer *-ke*

It is used for a number of different roles, such as goals, locations, sources, and recipients. The verbal suffix *-ke* appears in conjunct/disjunct agreement pattern in finite clauses (15-16). The relativization is made with the relativizer *-ke* in many cases. It is used in the relative clause in

which the relative clause is not perfect. Thus, the aspectual differences between *-pa* and *-ke* is meaningful in Gyalsumdo. It is also found in Kyirong Tibetan (Huber 2002:227)⁵. Here are some examples with different case roles of the nominalizer *-ke*.

- (31) khurpu kher-ke mi
 load carry-NMLZ man
 'The man who will carry the load'
- (32) ηà apa ter-ke-ki təbu jò
 I father give-NMLZ-GEN horse COP
 'I have a horse given to me by my father.'

Sometimes the use of *-pa* is found even in the imperfective verbs and thus *-pa* and *-ke* seem to be used interchangeably (33).

- (33) kho-ki dölma-ki ara
 he-ERG Dolma-ERG liquor
 kol-pa tjöŋ-du
 boil-NMLZ see-COP
 'He is watching Dolma boiling alcohol.'

A number of adjectives end in *-mu*, and *-bu* and it is not sure whether they have any relevance to nominalization.

- (34) tʃhumpu 'big'
 bholpu 'soft'
 tokpu 'narrow'
 mikəmpu 'thin' (man)

Some other adjectives are derived by the suffix *-ma* and *-mu*. Examples follow.

- (35) tʃaŋama 'clean'
 tsema 'small'
 təma 'short'

6 Conclusion

Gyalsumdo makes use of a number of nominalizing suffixes to derive lexical nouns, and it makes use of some suffixes (viz. *-pa*, *-sa*, *-ke*) to mark different kinds of clauses. Although central Bodish languages have the nominalizer marked with the genitive case marker (DeLancey 1999:233), it is not attested in Gyalsumdo in most

⁴ The nominalizer *-sa* occurs as place where proposition showing the source or locus occurs (Beyer 1992:300).

⁵ The choice of the nominalizer based on the aspect is also evidenced in Lhasa Tibetan (cf. DeLancey 2003b:284).

of the cases. The adjectives mainly end in *-pu* or *-ma* in Gyalsumdo which might have relation with the nominalizers but do not have identical form synchronically.

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DIAGNOSING A CONTACT HISTORY FOR TSUM

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Tsum, a language of the Nepal-Tibet borderlands in upper Gorkha, has been classified as a Central Tibetan language, closely related to Kyirong. The lexicon and nominal morphology (both forms and functions) of the language support this classification. We argue that, based on evidence from tonal phonology and verbal morphology, that there is a conflicting signal in the data. Given the known ease with which lexical material can be borrowed, we argue that the evidence of the verbal agreement system, and the complicated (and contradictory) tone system should be taken as more indicative of the language's origins. We suggest that the search for a single origin is not meaningful, and that the Tsum data strongly suggests that the phenomenon of the mixed language is more frequent than has been generally described, and that the Himalayas, with its long history of social mixing and blending, has a large concentration of such languages, many of which will prove to be the last reflections of since submerged linguistic ecologies that predate the dispersal and dominance of Tibeto-Burman and Indo-Aryan in the region, just as the modern isolates Kusunda and Burushaski more directly reflect such earlier language areas and genealogies.

Keywords: contact, mixing, ecology, dispersal

1 Language contact and language family affiliation

Language contact is often invoked to 'explain' those features of a language that cannot be easily ascribed to material that the language inherited from a prior ancestor, allowing for changes that accrued along the way. We advance the idea that 'language inheritance' is not, in fact, a simple statement, and that a language can be best affiliated in more than one direction. We suggest that different parts of the Tsum language have different origins, and that Tsum can be accurately described as a mixed language, the result of early contact, with an ultimately non-Tibetan origin. The question remains as to which languages have

a prior relationship with Tsum, through genealogical affiliation or a period of social and linguistic contact.

2 Tsum

Tsum is a Tibetan language of upper Gorkha, spoken in the Tsum valley, at the very border of Nepal and Tibet in the greater Manaslu region¹. The valley is connected by a valley joining the main Budhi Gandaki valley, and thence Gorkha to the south, which is accessible year round, and via three high altitude passes that allow seasonal access to Tibet. It is generally classified as firmly embedded within Central Tibetan, as 'Tibeto-Burman, Bodic, Bodish, Central Tibetan, Kyirong-Kagate' (also see Bradley 1997). That classification presumes a relationship that relies on the existence of a common ancestor (as established through comparative linguistics). To be a 'Central Tibetan, Kyirong-Kagate' language implies that the relationship is such that the languages present shared retentions that cannot be attributed to chance or contact; to be descended from a common ancestor involves 'regular uninterrupted intergenerational language transmission'. Since 'regular' has not been defined other than circularly, it is hard to assess this formulation, but the essence of the quote is that the community has a shared social history with other languages that it is related to, and the use of that statement is that that social history is reflected in the language. For instance, at a simple level looking at the lexicon, we can see from the data in Table 1 that there is clear evidence for the Tibetan varieties of Lhasa, Kyirong, Tsum and

¹ The Tsum language is not listed as a different language in the national census 2011 (CBS 2012) in Nepal but it has been included in Ethnologue (2012). The Government of Nepal has listed the Tsumpas as 'Siyars' in the list of its nationalities. There have been only some previous works available in the Tsum language, viz. Dhakal and Donohou (2015), Liu (2015), and Donohou and Dhakal (2016). Some words are listed and compared in Webster (1997).

Sherpa, as well as the Bumthang language of northern Bhutan and the Tamang language of eastern Nepal, form a group, based on the numerals examined, a group that excludes Nepali (and other Indo-Aryan languages). Further, within the Tibeto-Burman group (and based purely on the inspection of the six numerals in Table 1), we would probably judge that Bumthang is more closely related to the Tibetan languages than is Tamang, and that the Tibetan varieties are more closely related to each other than to Bumthang (despite Bumthang being much closer, geographically, to Lhasa than any of the Nepalese languages in the table). Nonetheless, the closely related languages are not identical; while the numerals 1 – 5 are identical in each of Lhasa Tibetan, Kyirong Tibetan, Tsum and Sherpa, we can see variation in the numeral ‘seven’, in terms of vowel height, roundedness, and voicing of the initial stop. If we accept that the data in Table 1 can be used to argue for a language (subgrouping) relationship, then we must also accept that some degree of variation is acceptable even at a very low level. (Further, we note the replacement of Proto-Tibeto-Burman *g-nis ‘seven’ with *b-dun as one of the lexical definitions of the Tibetan group, and the unrelatedness of the Bumthang numeral *zɔn* ‘two’ to the other lexemes in the Table, Tibeto-Burman or otherwise.)

Table 1: A selected comparison of numerals

	One	Two	Three	Four	Five	Seven
Lhasa	tɕik	ɲi	sum	ɕi	ɲa	tyn
Kyirong	tɕik	ɲi	sum	ɕi	ɲa	tɔen
Tsum	tɕik	ɲi	sum	ɕi	ɲa	tun
Sherpa	tɕik	ɲi	sum	ɕi	ɲa	din
Bumthang	thek	zɔn	sum	ble	jaɲa	nis
Tamang	kii	ɲii	som	pli	ɲa	ɲis
Nepali	ek	dwi	tin	tsar	pāts	sat

Examining other lexemes, and a different selection of Tibetan languages, similarly reveals phonetic differences between the languages in some words (such as ‘fingernail’ and ‘tooth’), but not in others (such as ‘arm’ and ‘leg’). The phonetic variation in ‘skin’ is greater than seen in ‘fingernail’ and ‘tooth’, but even with this variation we must admit that there are two cognate sets, one involving *pakpa*, *paba*, *pako* and

pabu, and one involving *gawa* and *kowa*. While the variation between *pakpa* and *paba* is greater than that between *so* and *sa*, it is still plausible variation, while *pakpa* is too different from *kowa* to be explained by phonetically plausible sound changes. Similarly, in the case of ‘face’ there are three cognate sets, one attested in Lhasa, Kyirong and Yolmo, another only (in this sample) in Tsum, and one more in Nubri. Importantly, there is no obvious explanation for the appearance of the different cognate sets; this, too, is part of the level of accepted variation within even a small group of closely related languages.

Table 2: A selected comparison of the lexicon

	Lhasa	Kyirong	Tsum	Yohlmo	Nubri
‘arm’	lakpa	lakpa	lakpa	lakpa	lakpa
‘finger-nail’	simu	semu	semo	semu	senmu
‘leg’	kaɲba	kaɲba	kaɲba	kaɲba	kaɲba
‘face’	toɲba	toɲba	dʒɛ	toɲba	toɲba
‘tooth’	sɔ	so	sa	so	so
‘skin’	pakpa	kowa	gawa	paba, pako	pabu

In other cases we can identify the source of the variation. Given the variation seen in the food items in Table 3, the terms for ‘chilli’ in all the languages but Lhasa Tibetan can trivially be assessed as originating in Nepali, in the words *khursani* ‘chilli’ and *marica* ‘pepper’.

Table 3: A comparison of other selected elements in the lexicon

	‘chilli’	‘potato’	‘mango’
Lhasa	sipen	ʃɔko	am
Kyirong	k ^h orsani	he	amgor
Tsum	kortsan	kjeza	ãp
Yolmo	martsu	he	ãp
Nubri	kortsan	doa	ãp

The terms for ‘mango’ all show either *ãp* (from Nepali) or *am* (from Hindi), again showing evidence of a prior loan relationship. With ‘potato’, however, we again have lexemes with no obvious external source; he is attested in a number of languages of Gorkha, but without a clear external source. Given the widespread distribution of the lexeme in the region, at least some of the languages must have acquired them through

means other than ‘regular uninterrupted intergenerational language transmission’.

Given that we have established that evidence for contact between two languages (including loan words) is also evidence for a prior social relationship between the communities that speak (or spoke) those languages, we have to consider what shared lexical cognates (or, perhaps, plausible cognates) represent, and how we should interpret loan words. Rather than describe the loan words as distractions from the process of understanding the ‘true’ genealogy of a language, we should examine suspected loan words as evidence of a type of historical social relationship different from that attested in shared cognates that are not loans.

3 A methodology for assessing language contact: phonology

The methodological question we face when we move beyond the lexicon is how to decide which language traits are evidence for which kinds of prior social relationship. While not as simple as it can be when examining lexical items (such as ‘chilli’ and ‘mango’ in Table 3), we can develop a procedure for determining suspicious typological traits, and thus plausibly suspecting a prior social relationship other than ‘regular uninterrupted intergenerational language transmission’.

Table 4: Typological traits associated with Central Tibetan

Phonology	CVC syllables (simple) tonal contrasts two or three VOT contrasts in stops front rounded vowels?
<i>and not:</i>	implosives, complex clusters, etc.
Morphosyntax	SOV clausal order ergative case marking (related to the genitive?) aspect/evidentiality/egophoricity inflection
<i>and not:</i>	agreement, tense, grammatical gender, etc.

For instance, when considering the Central Tibetan subgroup, we expect to find a number of

traits, and extreme deviation from this will be suspicious. The traits listed in Table 4 are discussed below.

Many of the traits that are typical of Central Tibetan are also typical of Tsum. The maximal syllable size in Tsum is CVC, the stops show a three-way VOT contrast in stops (identical to Kyirong Tibetan, its northern neighbour), and the language has a seven vowel system, *i e a o uy ø*, including two front rounded vowels. While, however, Tsum does possess a tone system, it is not one that we would expect of a Central Tibetan language. Further, the tone system of Tsum is not internally coherent. Table 5 shows the contrasts found on monosyllables in Tsum; there are eight contrastive pitch contours (Liu 2015). We might predict (if tone is assigned to the word) that there would be eight contrasts on disyllables; we might predict (if tone is assigned to the syllable) that there would be 64 (8 x 8) contrastive patterns; alternatively, due to phonological restrictions or sandhi changes reducing contrasts, there might be some number of contrasts across the two syllables which is less than 64 and greater than (or equal to) 8. In fact, words of more than one syllable have exactly two contrasts, LH and HH.

Table 5: Monosyllabic pitch contour contrasts






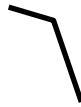


High	lower High	Mid	Low
			
[55]	[44]	[33]	[21]

Table 5: continues...

Falling	late Falling	Rising	late Rising
			
[51]	[541]	[244]	[224]

The difference between the behaviour of tone in monosyllabic and polysyllabic words is suggestive of some complex series of phonological developments. Returning just to the

fact that there are eight contrasting tones, we can show that this alone can be enough to make us suspect a prior contact event.

We can examine the number of contrasting tones in a sample of 31 (tonal) Tibetan languages, drawn from descriptions of languages in India, China, Nepal and Bhutan. Some languages are described as having only two contrastive tones, some with three or four, and a few with more than that. The average number of tones in these languages is 3.4, with a standard deviation of 1.4. This means that it is not surprising to find between 2.0 and 4.8 tones; up to 6.2 contrastive tones falls within two standard deviations of the mean, and three standard deviations takes the total up to 7.6.

Table 6: Contrastive tones in the tonal Tibetan languages

Languages	No.	Contrastive tones
Brokpa, Denjongkha, Dolpo, Drokpa, LamjungYohlmo, Lhasa Tibetan, Lhomi, Mustang, Sherpa, Syuwa, Yohlmo	11	2
Dongwang, Kyirong Tibetan, Spiti	3	3
Batang, Dege, Dingri, Dzongkha, Gagatang Tibetan, Gyalsumdo, HaaZongkha, Humla, Jirel, Mugom, Purik, Sherpa_Hile, Shigatse	14	4
Chöcangacakha	1	5
Nubri	1	6
Tsum	1	8
Average		3.4
Standard Deviation		±1.4

The point is that we can evaluate the level of *unusualness* of a tone system, calibrated to this subgroup of Tibeto-Burman; up to four tones is not unusual, and requires no more explanation than the rest of the subgroup. We might say that up to six tones is within the realm of possibility; but having more than 6.2 tones is expected in only 2.2% of the sample; having eight or more tones, more than three standard deviations from the mean, is expected in only 0.1% of the sample. Given that the sample is 31 languages, we expect only 0.031 languages to have this number of contrastive tones, assuming the population we are examining is normally distributed. The presence

of a language such as Tsum in this sample, that far from the mean, indicates that we are *not* dealing with normally distributed data, and suggests that we should treat the tonal system of Tsum as not representing normal developments from within Tibetan.

Qualitatively, we can also find clues as to where the contact might have come from that led to the complexities on the Tsum tone system. The fact that there are two rising tones in Tsum, and also two falling tones, indicates that tone specification in Tsum is more complex than a simple sequence of H and L melodies. Another language of the region that also has complex tone specification is Kuke, the language of the Kutang region midway between Tsum and (upper) Nubri. Table 7 shows the contrast present in Kuke; a high fall, a mid fall, a low fall, and a rise-fall complex melody.

Table 7: Kuke tone contrasts

	H-fall	M-fall	L-fall	R-fall
Kuke	53	42	31	231

While the Kuke data is suggestive, it is not on its own convincing. In the following section we will examine morphosyntactic data that also indicates a prior relationship with Kuke, as indicated by the linguistic data, which is too far beyond what might be predicted from a comparison with other Central Tibetan languages.

4 Morphosyntax

As with the phonological data just examined, there are some (indeed, many) morphosyntactic traits in Tsum that are completely in keeping with expectations for a Central Tibetan language. The language has an SOV clausal order, the case-marking system is completely as expected from a Central Tibetan language (as are the phonological forms of those case-markers). The verbs, however, show inflection that goes beyond what is predicted from other Central Tibetan languages. Many descriptions of the inflectional system of these languages refers to the (controversial) notion of ‘conjunct/disjunct’, as illustrated in Table 8. Here the copular verbs that can be used with different persons, in different clause types, are shown (in orthographic form). In declarative sentences there is a contrast between the ‘first person’ form, *yin*, and the form used elsewhere,

red. Importantly, and this is what distinguishes the Tibetan system as an egophoric system rather than an agreement system, is the use of the erstwhile ‘first person’ form, *yin*, to mark a second person when the sentence is interrogative. Variations of this system, in which the *yin* form can be termed the ‘conjunct’ form, and the *red* form the ‘disjunct’, are found across the Central Tibetan languages, and others.

Table 8: Copulas in Lhasa Tibetan

	Declarative	Interrogative
1 st person	<i>yin</i>	<i>red</i>
2 nd person	<i>red</i>	<i>yin</i>
3 rd person	<i>red</i>	<i>red</i>

The inflectional system of Tsum is very different from this. The sentence in (1) shows an example of the inflection. While the pronouns and their case marking do not represent anything unusual, and while the verb root is widely attested across Tibetan (and Bodish), the suffix *-tsuŋ* is not expected. It is, in fact, part of the paradigm shown in Table 9. The form of the suffix can be predicted if we know the person of the subject, and the person of the object. If the subject is first person, then the suffix is either *-pa* or *-po* (depending on tense). (The appearance of *-pa* as a suffix is not surprising, emerging as it does in many Tibeto-Burman languages in a number of functional roles. The *-so* suffix might be related to *-soŋ*, an aspect marker in other Tibetan varieties.) If the object is third person and the subject is not first person, then the suffix will be *-so*. Importantly, if the object is first person, then the suffix will be *-tsuŋ*, a suffix of different shape, and not analyzable synchronically.

- (1) *khon-kja-i ŋa-la thong-tsuŋ.*
 3-PL-ERG 1SG-DA see-PST.3>1
 ‘They saw me.’

Table 9: Verbal agreement in Tsum

		Object person		
		1	2	3
Subject person	1		<i>-pa/-po</i>	<i>-pa/-po</i>
	2	<i>-tsuŋ</i>		<i>-so</i>
	3	<i>-tsuŋ</i>	<i>-so</i>	<i>-so</i>

When we examine the verbal agreement system of Kuke, we notice several points of commonality with Tsum. Firstly, the forms used with first

person subjects is similar drawn from elsewhere (*na* is a copular verb in Kuke). Secondly, the arrange of the paradigm, in terms of where the different forms appear. Finally, the forms used for a first person object are phonologically atypical (disyllabic, rather than monosyllabic). We can analyse the *-uŋ* as marking a non-1st person subject, though it quite likely originated in a cliticised form of the first person singular pronoun (*ŋ* in Kuke), since it is clearly regular across the entire verbal paradigm. In Tsum, on the other hand, the *-tsuŋ* suffix is not regularly part of any etymological set.

Table 10: Verbal agreement in Kuke

		Object person		
		1	2	3
Subject person	1		<i>-na</i>	<i>-na</i>
	2	<i>-aruŋ</i>		<i>-tuŋ</i>
	3	<i>-aruŋ</i>	<i>-tuŋ</i>	<i>-tuŋ</i>

An explanation of the Tsum inflectional system relies on us observing the inflectional system of Kuke. Kuke is not a Tibetan language; it does share a number of material culture lexemes with Tsum and other Tibetan languages, just as it does share a number of vegetable food lexemes with Nepali; in both cases, these are most likely relatively recent loans because of their semantic domains and because they show sound ‘correspondences’ by identity with the donor languages. Since the languages do not share the features they do due to shared inheritance, the formal and functional correspondences between Kuke and Tsum, in light of their geographic proximity, there must have been a ‘language contact’ scenario of some sort at some time in the past of Tsum. Since it is shared with Kuke, we are implying that the ancestors of the speakers of Kuke and Tsum do, to some extent at least, have a shared social history.

5 Interpretation

We have seen that different parts of the grammar of the language tell different stories about the history of the language. If we accept that individual lexical items are subject to easy borrowing, then the overwhelmingly Tibetan nature of the lexicon, as suggested in earlier Tables presented in this article, does not provide

firm evidence for Tsum as having ultimately Tibetan origins. Even without the lexicon, though, there is ample evidence for a Central Tibetan origin of the Tsum language. The nominal morphology, and the segmental phonology, both point to a Central Tibetan source. The Central Tibetan perspective on the position of the different components of the language is summarised in Table 12, which also offers a non-Tibetan perspective (specifically, a perspective that follows from the comparison with Kuke, the nearby language of the Manaslu region).

Table 11: Different data leads to different conclusions






	not Tibetan	Tibetan
Phonology (segmental)		
Phonology (tonal)		
Morphology (nominal)		
Morphology (verbal)		
Lexicon		

Table 12: Two perspectives on the Tsum data

	...Central Tibetan:	...Manaslu area:
Lexical inventory	conservative	radically relexified
Segmental phonology	conservative	unusual
Tonal phonology	highly atypical	somewhat atypical
Nominal morphology	conservative	highly atypical
Verbal morphology	highly atypical	conservative

Depending on the perspective, different components of data will be thought of as conservative (that is, within the ‘normal’ range of expected variation) or else heavily contact affected. Our question is whether we can ‘weight’ certain typological traits against others in terms of borrowing. Having established that lexical items are not reliable witnesses, we have to assess phonological vs. morphological evidence, and we find that this is not helpful; the split in both the phonological and the morphological fields makes

this high-level division unhelpful. Examining the two phonological categories, we must assess the tonal phonology as more stable than segmental phonology. Individual segments are relatively easily dispersed as words are borrowed, but prosodic systems are more resistant to borrowing (Donohue 1997, 2012). The phonological evidence, then, leans slightly towards a Manaslu, and not Tibetan, origin of Tsum. The morphological categories split between nominal and verbal; previous work (eg., McConvell and Meakins 2005) suggests that verbal morphological systems are less prone to borrowing than nominal ones. All of this suggests that the original Tsum linguistic system is a ‘Manaslu’ one, and not a Tibetan one. After its original genesis the language subsequently underwent massive relexification from Tibetan, including the acquisition of the segmental contrasts associated with Tibetan words, and the nominal morphology associated with the use of those (nominal) words. Through this the original tone system was not lost, and the verbal inflection was reformed, but not restructured. It is clear that no one social history unambiguously explains the modern Tsum language, which must be regarded as a mixed language. It follows that no one ‘affiliation’ should be assumed for the language; one of its parents was a ‘Manaslu’ area language, and the other, more visible, parent was a Central Tibetan language. Any attempt to arrive at a single, unique genealogical classification does so only at the cost of forcing a simple explanation to a complex question.

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MERONOMIC HIERARCHIES OF 'BODY PART TERMS' IN NEPALI

Vidyarati Joshi

This paper presents a description of the nominal expressions for parts of the human body in Nepali. It attempts to organise the lexemes and create lexical hierarchies of 'body part terms'. Furthermore, it also discusses body parts as metaphors. The lexical semantic approach is adopted to analyze the data for this paper.

Keywords: lexical semantics, meronomic hierarchy, metaphors.

1 Introduction

Language is an instrument for conveying meaning. The specific field of linguistics that studies meanings is semantics. Words would not exist without their meanings. The various types of semantic relation which hold between lexical units are sense relations.

The semantic properties of a lexical item are fully reflected in appropriate aspects of the relations it contrasts with actual and potential contexts. This paper therefore seeks to derive information about a word's meaning from its relation with actual and potential linguistic contexts. Each lexical unit consists of an indefinite number of contextual relations but at the same time constitutes a unified whole (Cruse, 1986).

The semantic relation between a lexical item denoting a part and that denoting the corresponding whole may be termed as meronymy (sometimes called partonomy), in which the relation of dominance is holonymy, and the relation of difference is co-meronymy (Cruse 2011). To explain it in simple way, it is the semantic relation that holds between a part and the whole. A well formed part-whole hierarchy should consist of elements of the same general type. X is a meronym of Y if and only if Y has Xs/ an X and an X is a part of a Y.

A hand has fingers.

A finger is a part of a hand.

In order to establish body parts, it is looked at by two different ways: The first is to establish whether a particular term is part-of the body (Cruse, 1986). The second is to use the possessive construction, that is; if the hand or ear is possessed-by the body (Brown, 1976).

The division of the human body may serve as a prototype for all part-whole hierarchies, so this paper studies the meronomic hierarchies of human body part terms in Nepali. The paper extends itself discussing different meanings expressed in the language using body part terms. Tables are drawn to show the expressed meanings followed by discussions on the metaphorical usage of human body part terms in Nepali.

The Nepali language¹ is commonly written in devanagari script, but for analysis IPA is used in this paper.

2 Parts of the body in Nepali

This section discusses the inventory of body part terms in Nepali. Nepali body part terms are in the class of nouns. *ʃarir*, *dzju*, *dzjan* are few of the words meaning 'body' and *ʃarir* and *bʰag* are the words meaning 'parts' in Nepali. An expression is taken to refer to a part of the body if native speakers report that it fits into the following frame, as shown in example (1):

¹ Nepali is an Indo-Aryan language belonging to the Eastern Pahari group, spoken in Nepal and many parts of India, Bhutan, Brunei, United States by more than 13, 875, 700 people (Ethnologue), and is also known as Gorkhali, Khaskura. It is one among the 22 official languages of India and has official language status in the state of Sikkim and West Bengal's Darjeeling district. Nepali population is also significantly distributed in Assam, Uttar Pradesh, Arunachal Pradesh, Uttaranchal, and Himachal Pradesh occupying the rank within first five major languages of the states respectively.

- (1) *dziu-ko* *अङ्ग* *ho*
 body-GEN part is
 ‘... is a part of the body’

Dividing a body puts a lot of thought as how to separate the parts for a discussion. This paper attempts to discuss body part terms by dividing the paper into three sub-sections. The idea is to make the discussion and analysis a little more clear.

When body is thought to be divided the first thing comes to mind is *tau*ko ‘head’, and then comes *dziu* ‘trunk’ and *hat*^h *pak*^h *ura* ‘limbs’. But this paper attempts to include the internal parts of the human body as parts of the human body, therefore, the inventory of terms is presented in the following three sub-sections, covering: head and its parts, external parts of the body, and internal parts of the body.

The lexical items which express the body part terms in Nepali are listed in appendix provided at the end of this paper. A hierarchical structure of a few terms is shown to make the part-whole relation clearer. The terms are then shown in a list as it occurs in different phrases to express different meanings showing the metaphorical uses of the body part terms.

2.1 Head and its parts

This section deals with the human head and its parts. The word for ‘head’ is *tau*ko. There are even words such as *sir* and *sif* representing ‘head’ in Nepali, but ‘head’ as *tau*ko is taken for analysis here because most of the expressions out of *sir* and *sif* refer only to the top portion of the head signifying respect, and hence, usually used in a more formal, polite or poetic speech.

A head has hair, ears and a face in it, and a face has eyes, nose, mouth, forehead, chin etc. in it. Therefore hair, ears, face are the parts of the head and the eyes, nose etc. are the parts of the face. *nidhar* ‘forehead’ is one of the parts of face which connects face to the head on the above, right after the *nidhar* the hairline on the head starts. On the sides, *gala* ‘cheek’ connects the face to the head where the ear is attached, right after which the (side) hairline on the back of the head starts.

ak^h *u* ‘eyes’ is another part of the face and it helps people to see. *ak*^h *u* has *put*ali ‘iris’ and *nani* ‘pupil’, which are the parts of the eye, so the iris and the pupil of the eye may sound more correct if said they are the part of an eye than saying part of a face or more so saying part of the body. In between the pair of eyes is located the *nak* ‘nose’ which helps us with the sense of smelling. *muk*^h is the term for ‘mouth’ and it may also be used to term ‘face’, as the phrase *muk*^h *d*^h *unu* ‘to wash face’ is very commonly used.

anuhar, *mu*har, *tseh*ra are the few words which refer to ‘face’ in Nepali. Here, *anuhar* is the word for face which is taken for analysis, as its usage is more frequent than the rest of the words in day to day speech in Nepali.

A few examples are shown in the meronomic hierarchical tree diagram, which is followed by the different meaning expressions in the language framed in Table 1. Figure 1 shows a meronomic hierarchical structure of *tau*ko ‘head’ and its parts, showing *tau*ko ‘head’ has *ka*pal ‘hair’, *ka*n ‘ears’ and *anu*har ‘face’.

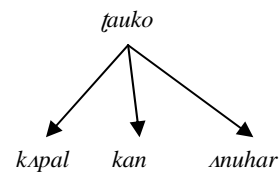


Figure 1: Meronomic hierarchy of *tau*ko ‘head’

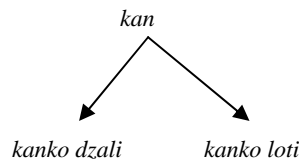


Figure 2: Meronomic hierarchy of *ka*n ‘ear’

Figure 2 extends Figure 1 and shows the meronomic hierarchy of *ka*n ‘ear’, likewise Figure 3, 4 and 5 follows showing the meronomic hierarchy of *anu*har ‘face’, *ak*^h *u* ‘eye’ and *nid*^h *ar* ‘forehead’ respectively.

Whether a part is particularly part of that particular whole or not is examined by example (2), showing a sentence structure which asks if eye, nose, mouth etc. are a part of the face, which is answered with a sentence, example (3), confirming that eyes, nose etc. are the part of a face.

- (2) *ke ãk^ha nak muk^h nid^har*
 what eye nose mouth forehead
anuhar-ko b^hag ho?
 face-GEN part is?
 'Is _____ a part of the face?'

It is possible if the sentence (2) is answered with (3).

- (3) *ho ãk^ha nak muk^h nid^har*
 yes eye nose mouth forehead
ityadi anuhar-ko b^hag ho
 etc. face-GEN part be
 'Yes, eyes, nose, moth etc. are part of the face'

Figure 3 shows, *anuhar* 'face' has *ãk^ha* 'eyes', *nak* 'nose', *muk^h* 'mouth', *nid^har* 'forehead' etc., which again have its own parts too. For example eyes have *putali* 'iris' and *nani* 'pupil' which as well is shown in Figure 4.

The face has eyes, nose etc. also suggests that eyes, mouth etc. are the parts of the face, that is, the parts (eyes, mouth etc.) are attached to its whole (face).

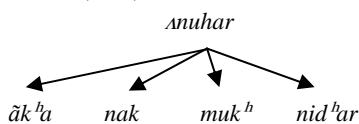


Figure 3: Meronomic hierarchy of *anuhar* 'face'

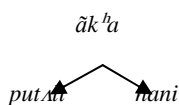


Figure 4: Meronomic hierarchy of *ãk^ha* 'eye'

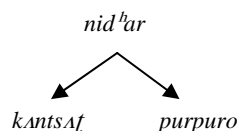


Figure 5: Meronomic hierarchy of *nid^har* 'forehead'

Observing Figure 4, is it correct to say that an iris is a part of the face? The classes denoted by the elements of a meronymy - toes, fingers, legs, heads etc. are not hierarchically related; that is to say, the hierarchical structuring of a meronymy does not originate in a hierarchy of classes. It is rather the way the individual parts of each individual whole are related which generates the hierarchical structuring that forms the basis of a meronymy (Cruse, 1986). So an iris rather is a part of an eye than being a part of the face, likewise an eardrum and an earlobe are parts of an ear that being parts of the face as shown in Figure 2.

Table 1: Meanings expressed

Nepali expression	Literal meaning	Expressed meaning
<i>muk^h lagnu</i>	to stick to the mouth	to argue
<i>nak kaṛṇu</i>	to cut the nose	to disgrace
<i>ãk^ha nacaunu</i>	to make the eyes dance	Searching for someone/something, bored
<i>kan nadinu</i>	not to give ears	Not to listen

Table 1 lists few of the examples which show the terms for the parts of the face and the meaning expressions through them. Here it is seen how even one of the part of the face may have a lot of expressions, showing the metaphorical usage of head and its parts.

muk^h means 'face' and also means 'mouth', but here it is taken as mouth, so if it is said *dui mukhe* which means 'double mouth', expressing a person to be a 'liar or a hypocrite', which also is expressed the same way if it is *dui jibre* literally meaning 'two tongued' as one of the function of

the mouth is to talk which actually is one of the function of the tongue. Another example *muk^h muk^he lagnu* as shown in Table 1, expresses the meaning ‘to argue’, which if literally translated would show as ‘to stick to the mouth’.

The nose expresses both disgrace and pride. For instance *nakΛfi* if literally translated comes to mean as ‘the one with a cut nose’ but actually expresses the meaning ‘the one who disgraced’. But if it is *nak p^hulnu* which literally means ‘the nose to swell’, will actually express the meaning as ‘to be proud’.

The function of the eyes is to see, but it does get a little playful too. For instance, *āk^ha dz^himkjaunu* is actually ‘to wink’ but that is done for either a secret sharing, lying or to take someone in confidence, and eyes are winked in a playful manner as well. Whereas, *āk^ha tsΛmkjaunu* which literally means ‘to glitter/shine the eyes’ expressing the ‘flirty’ nature of the person doing so.

Ears have the function to hear, but if you have to keep hearing or keep listening to something it may get irritating, which is expressed through the expression *kan k^hanu*, literally translated as ‘to eat the ears’ but means ‘to irritate’. Our ears may hear a sharp noise sometimes without actually the noise being produced, that noise may even play if someone hits or slaps you hard, the expression *kan badznegΛri* literally translated as ‘until the ears play’ is an example of ‘hit/slap hard’, the similar expression *kan rΛnkine* literally translated as ‘the ears to heat’ is also an example of ‘hit/slap hard’.

The expression *kΛnsiri tatnu* literally means the temples to heat up which expresses the meaning ‘to get angry’, whereas if it is said *nidhar tatnu* literally meaning the forehead to heat up means ‘the high temperature’ as in fever.

2.2 External parts

This section studies the external parts of human body. *Λarir*, *dziu*, *dzjan* are the words meaning ‘body’ in Nepali. *dziu* ‘body’ if taken for analysis,

it should be noted that *dziu* also means ‘trunk of the body’ (which is exclusive of head and the limbs), so, word for ‘body’ and ‘trunk’ may be represented by the same lexeme *dziu*.

Meronomic hierarchy for external parts of the human body is shown in Figure 6, which is followed by the different meaning expressions in the language framed in Table 2.

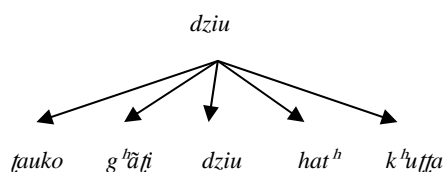


Figure 6: Meronomic hierarchy of *dziu* ‘body’

Figure 6 shows that *dziu* ‘body’ has *Λauko* ‘head’, *g^hāfi* ‘neck’, *dziu* ‘trunk’, *hat^h* ‘hands’, *k^huŋa* ‘legs’ etc., which are the external parts of the whole (*dziu* ‘body’). The body has head, neck, hands etc. suggests that hands, legs, neck, head etc. are the parts of the body. Therefore, these different parts are attached to its whole, that is, the body. These external parts of the body again have their own external parts as well, as seen in Figure 7, 8 and 9 respectively.

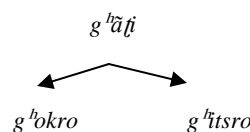


Figure 7: Meronomic hierarchy of *g^hāfi* ‘neck’

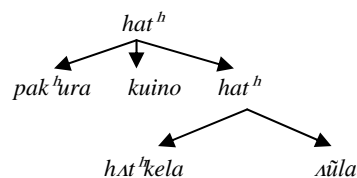


Figure 8: Meronomic hierarchy of *hat^h* ‘hand’

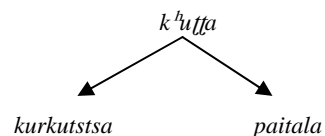


Figure 9: Meronomic hierarchy of *k^huŋa* ‘leg’

Some apparently accidental gaps are found, such as the part of the hand to which the fingers are attached, and of which the palm and the back are the parts. These are relatively rare.

In some cases we find automeronymy, that is, when part and immediate whole have the same name (but distinct senses) (Cruse 2011). A good example of this is to be found in the human body meronymy. The term *dziu* ‘body’ is used for both the whole ensemble, and as a close equivalent to *dziu* ‘trunk’ (which is, in fact, perhaps the more usual term). The other example is *hat^h* ‘hand’ which includes *pak^hura* ‘arm’, *kuino* ‘elbow’ and *hat^h* ‘hand’, and *hat^h* ‘hand’ which has its parts like *hat^hkela* ‘palm’ and *ai^hla* ‘fingers’ as shown in Figure 8.

Table 2 lists a few of the examples in Nepali showing different meaning expressions using the external parts of the body, showing the metaphorical usage. These examples show how even one of the external part of the body may have lot to express.

Table 2: Meanings expressed

Nepali expression	Literal meaning	Expressed meaning
<i>ts^hati t^hoki</i>	Hammering the chest	To show confidence, pride
<i>hat halnu</i>	To put hand	To meddle, to help
<i>k^hu^hta dz^hknu</i>	To take the legs out	To come out of
<i>na^h ra masu</i>	nail and flesh	Intimate relation

The Nepali word for hand or, more correctly, the forearm is *hat^h* and the term formerly frequently and now occasionally used to denote a measure of length representing the distance between the finger tips to the elbow. But let us not leave it at that but rather *hat^h laganu* means ‘to commence/begin’, *hat^h dzo^hmu* if literally taken, suggests of bringing the two hands together in a way to greet ‘namaskar’, which expresses

namaskar along with being thankful or to ask sorry. Similarly, another common expression in Nepali: *malai ris u^hjo ki hat^h cilai halts^h* meaning ‘if provoked I itch for a fight’. The expression *hat^h* means ‘turn’ while playing cards. In both the latter cases hands may be essential for the implied purpose but the intended meanings are entirely different: fight and turn. In Hindi we may be familiar with the term *kanun ke hat^h lambe hote hē* which literally translates to ‘the hands of justice are long’ and means ‘justice will be done’ but in Nepali it is just the opposite: only the thieves have long hands and it is told, “*tjo sa^hla bātsera basnu, t^hasko hat lamo ts^h!*” (Be wary of him, he is a thief!). The expression such as *mero hat pareko ts^h* means ‘has come to my possession’.

2.3 Internal parts

This section studies the Nepali terms for the internal body parts. Meronomic hierarchical tree structures will help understand the meronymy of the internal parts of human body, which is followed by the different meaning expressions in the language, showing the metaphorical usage of the internal body parts framed in Table 3.

dziu ‘body’ has its internal parts such as *p^hokso* ‘lungs’, *kaledzo* ‘liver’, *mu^h* ‘heart’, *b^hū^h* ‘stomach’ *andra* ‘intestine’, *na^hsa* ‘nerves’, *pitta* ‘bile’, *k^happa^h* ‘skull’, *hal^hqi* ‘bone’ etc., few of which are shown in Figure 10, which gives a meronomic hierarchy of *dziu* ‘body’ showing the internal parts of human body.

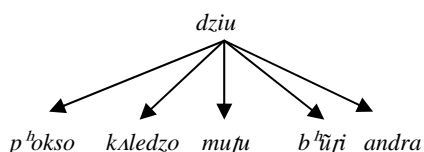


Figure 10: Meronomic hierarchy of *dziu* ‘body’

Figure 11 shows a meronomic hierarchy of *muk^h* ‘mouth’ showing the internal parts of the mouth. A mouth has *dāt* ‘teeth’, *dzibro* ‘tongue’, *talū*

‘hard palate’, *gidza* ‘gum’, *kilkile* ‘uvula’ within it, which is seen in Figure 11.

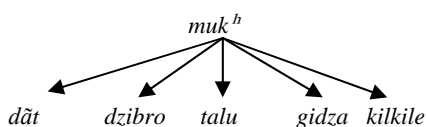


Figure 11: Meronomic hierarchy of *muk^h* ‘mouth’

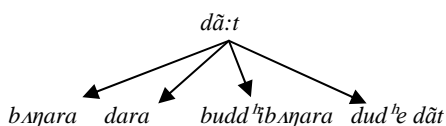


Figure 12: Taxonomic hierarchy of *dāt* ‘teeth’

Figure 12 tries to see if *dāt* ‘teeth’ has different parts. *bāṅjara* ‘molar’, *dara* ‘extra tooth’, *budd^hbāṅjara* ‘wisdom tooth’, *dud^he dāt* ‘milk teeth’ are actually the names for the different types of teeth, hence, it becomes a taxonomic hierarchical structure and not a meronomic hierarchy, which is the focus of this paper. Therefore, Figure 12 does not suffice for the requirement of ‘some part being a part of a whole’.

Figure 13 and Figure 14 is an attempt to see if the internal parts of the body also have their own internal parts. However, *k^happAR* ‘skull’ is a cover for *gidi* ‘brain’, so *k^happAR* ‘skull’ has *gidi* ‘brain’ in it, but *k^happAR* if taken individually does not necessarily has to have brain at all times, for a skull is just the head part of a human skeleton. *hAqḍi* ‘bone’ has *masi* ‘bone-marrow’ in it but to say if *masi* is part of *hAqḍi* is a little doubtful.

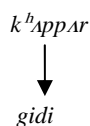


Figure 13: Meronomic hierarchy of *k^happAR* ‘skull’?



Figure 14: Meronomic hierarchy of *hAqḍi* ‘bone’?

So, when asked about Figure 13 and Figure 14, the speakers of Nepali do not consider it to be correct. Though *masi* is inside *hAqḍi* but is not a part of it, so is *gidi* which is protected by a *k^happAR* and not a part of *k^happAR*. Hence, internal parts of human body do not seem to have as many levels in the hierarchy as seen in sub-section 1.1.1 and 1.1.2 respectively.

Nevertheless, parts may be divided into parts, for instance, *dzibro* ‘tongue’ may have its tip of the tongue, but again that is specified by a word for *ṭuppo* ‘tip’ and used as *dzibroko ṭuppo* ‘tip of the tongue’ and not some specific name for it, because in Nepali many things are differentiated on the basis of *ṭuppo* ‘tip’ and *p^hed* ‘bottom’.

Table 3: Meanings expressed

Nepali term	Literal meaning	Expressed meaning
<i>gidi gidi hāṣnu</i>	brain brain laugh	to be very happy
<i>g^hāṅi suknu</i>	dry throat	to be thirsty
<i>bāṅjara dz^hARne</i>	until the molar falls	box hard
<i>andra suknu</i>	dry intestine	to be very hungry
<i>dzibro ṭoknu</i>	to bite the tongue	to die

Table 3 lists a few of the examples in Nepali expressing different meanings using the internal parts of the body. The above expressions are a few examples showing the meanings expressed by the different internal parts of the body. Along with the usage of brain’s expression ‘to be very happy’ as shown in Table 3, the brain is also used in an expression *gidi gidi duk^hnu* literally translated as ‘brain to ache’ referring to ‘severe headache’ or ‘frustrated’.

The lexemes, throat and intestine, as shown in the Table 3, when attached to dry or dried expresses the meaning of thirst and hunger.

One of the functions of the tongue for Nepalese it to talk, so *dzibro* ‘tongue’ is productive when it comes to expressing meaning; if a person is expressed to be a liar or a hypocrite, the expression *dui dzibre* (double tongued) means one

to be so. And *dzibro foknu* which literally means 'to bite tongue' is used to express 'death'.

3 Conclusion

The inventory of Nepali terms for parts of the body described in this paper demonstrates several types of semantic relationship that pertain between Nepali terms for parts of the body, along with ways of identifying and expressing them in the lexical domain of body partonomy, while unified by its definition with reference to the human body, shows considerable variation in internal structure.

Some accidental gaps are found. In some cases automeronymy is found, that is, when part and immediate whole have the same name (but distinct senses). The classes denoted by the elements of a meronymy - toes, fingers, legs, heads etc. are not hierarchically related; that is to say, the hierarchical structuring of a meronymy does not originate in a hierarchy of classes. It is rather the way the individual parts of each individual whole are related which generates the hierarchical structuring that forms the basis of a meronymy (Cruse, 1986).

It is beyond the scope of the present context to establish the full set of relationships between all the body part terms, but an outline is provided for the kinds of structures available for doing so in Nepali. The semantic relations which pertain between terms for different parts of the body not only include part/whole relations, but also relations of connectedness, and general association.

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Appendix: Body part terms in Nepali

Nepali term	Translation	Literal meaning
muk ^h /Anuhar	face	face
nid ^h ar	forehead	forehead
kAntsAṭ	temple	temple
āk ^h a	eye	eye
pārela	eyelash	eyelash
putali	iris	iris
nani	pupil	pupil
āk ^h akopora	eyelid	eyelid
nak	nose	nose
pwal	nostril	nostril
pora	nostril flange	nostril flange
muk ^h	mouth	mouth
ōṭ ^h	lip	lip
tsiūḍo	chin	chin
gala	cheek	cheek
kan	ear	ear
kanko loti	ear lobe	ear's lobe
kanko dzali	ear drums	ear's drums
kApal	hair	hair
rāu	body hair	body hair
dzunḡa	moustache	moustache
daṛi	beard	beard
purpuro	forehead	fore part of the forehead
āk ^h ib ^h uī	eyebrow	earth of the eye
tsjapu		area between chin & the neck
dzulph ⁱ	sideburns	sideburns
external terms	Translation	Literal meaning
dziu	body	body
kApal	hair	hair on the head
ṭauko	head	head
talū		crown of the head
g ^h āṭi	neck	neck
g ^h okro	neck	front part of the neck
g ^h icro	neck	back part of the neck
g ^h utst ^s uk	nape	
ts ^h ati	chest	
stān	breast	
munṭa	nipple	the thin attachment(stem)

kum / kã:d ^h	shoulder	
hat ^h	hand	
kak ^h i	underarm / armpit	
kuina	elbow	
naṭi	wrist	
pʌndza	claw	
ʌũla	finger	fingers
nʌŋ	nail	
ts ^h ala	skin	
q ^h aṭ	back	
naiṭo	naval	
kʌmmʌr	waist	
b ^h ũṭi	stomach	
kʌndʒo	buttocks	
kap		back of the knee
b ^h utla	pubic hair	hair on the underarms and on the genitals
k ^h uṭṭa	leg	
tigra	thigh	
g ^h ũṭa	knee	
piṭʌũla	calf	
nʌliḥʌdḍi		the bone in the front, between the knee ball and the ankle
goliḡãṭ ^h o	ankle joint knuckle	
kurkutstsa	heel	
paitala	feet	
boso	fats	body fats
masu	flesh	
gãṭ	goitre	
ṭuppi		tip of the head
internal terms	Translation	Literal meaning

budd ^h ibʌṅara	wisdom tooth	wisdom tooth
kilkile	uvula	
kanegudzi	ear wax	
dāt	tooth	
bʌṅara	molar	
dara		the extra tooth on top/below of an existing tooth
dzibro	tongue	
talu	hard palate	hard palate region
gidza	gum	
gidi	brain	
k ^h ʌppʌr	skull	
kʌledzo	liver	
p ^h okso	lungs	
hriḍʌj / muṭu	heart	
mrigʌula	kidney	
andra	intestine	
pʌtsʌuni/satpʌtre	pancreas	
kʌrʌŋ	ribs	
pittʌ	gall	
kʌnt ^h ʌ	throat	
gãṭ	goitre	
masi	marrow	
natro		veins inside the nose
dãṭi		the bone holding the nose
nʌli ḥʌdḍi		the bone in the front, between the knee ball and the ankle
dud ^h e dā:t		milk tooth
ḥʌdḍi	bone	
riṭ ^h ko ḥʌdḍi	spinal cord	back bone

ADVERBIAL CLAUSES IN DHIMAL

Karnakhar Khatiwada

This article discusses the adverbial clauses in Dhimal, one of the TB languages spoken in Nepal. The adverbial subordinate clauses in Dhimal are either marked by the subordinating morphemes attached to the verb of the dependent clause or by the presence of the non-finite verb forms. Temporal adverbial clauses in Dhimal include precedence, subsequence and simultaneous.

Keywords: Adverbial clauses, subordination, precedence, iteration, succession.

1 Outline

This paper discusses the adverbial clauses in Dhimal. It consists of three sections. In section 1, we deal with different types of finite and non-finite subordinate clauses in Dhimal. Section 2 looks at the participial clauses in Dhimal. Section 3 presents the summary of this paper.

2 Adverbial subordinate clauses

Adverbial subordinate clauses can be viewed from two perspectives. From the "narrower perspective", we look at the various types of adverbial clauses according to "their semantic link to the adjacent main clause". In contrast, viewed from the broader perspective, "adverbial clauses perform an important communicative function, helping establish discourse coherence at the chain, paragraph or episode level (Givón 2011: 357)." In this paper, we mainly focus on the types of adverbial clauses and their semantic links to the main clause.¹

Dhimal employs two devices for making subordinate clauses. They are subordinating morphemes and non-finite verb forms. A non-finite verb form is one which is not used in independent clauses. In languages with subject-verb agreement, the non-finite form lacks one or

more agreement categories. Different types of subordinate clauses in Dhimal in terms of syntactic and semantic properties are discussed as follows:

2.1 Temporal adverbial clauses

Temporal adverbial clauses specify the temporal relation of an adverbial clause to its main clause (Givón 2001b: 330). The local link between a temporal adverbial clause and its adjacent main clause involves the temporal relation between two events/states. Whaley (1997: 251) states that the adverbial structures can function to provide information about the relative temporal ordering of two events, and the tense of the adverbial construction is only determinable by its relation to the main clause. It carries no independent marking for tense. Local temporal links of adverbial clauses may be distinguished as follows:

a. Precedence

In temporal precedence, the time of the state/event encoded in the subordinate clause precedes the time of the main clause. Temporal precedence in Dhimal is encoded by the sequential form of the verb *khaj* 'see' realized as *khantej* followed by a temporal adverbial *lampha* 'before' (1 and 2):

- (1) *ka um tsaka k^hantej lampha*
ka um tsa-ka [k^haj-tej lamp^ha]
1SG rice eat-NMLZ see-SEQ before
wa faneka fi^gafi
wa fi^gane-ka fi-^ga-fi
3SG go-NMLZ be-IPFV-PST
'He had gone before I ate rice.'
- (2) *um miŋka k^hantej lamphaŋ*
um miŋ-ka [k^haj-tej lamp^ha-aŋ]
rice ripen-NMLZ see-SEQ before-EMPH
dzi fiã tsa fi
dzi fiã tsa-fi
bird eat-PST
'The bird ate up the rice before it ripened.'

¹ Most of the examples in this paper are taken from the corpus based on the naturally occurring texts. The abbreviations following the examples indicate the speaker, genre type, the dialect and reference of the examples within the texts. The examples without such information are elicited ones.

In examples (1 and 2), we see that the temporal precedence in Dhimal is expressed by the sequential verbal form followed by the time adverbial *lamp^hu* 'before'.

b. Subsequence

In subsequence, the time of the state/event encoded in the subordinate clause follows the time of the state/event in the main clause. Longacre (2007: 380) defines the succession as an underlying *and then* relation. Temporal subsequence in Dhimal is encoded by the sequential form of the verb or nominalized verb followed by time adverbial *n^huso* 'after' as in, (3 and 4):

- (3) *bifū dzetɛj n^huso*
 bifū dzetɛj-ɛj n^huso
 marriage become-SEQ after
tsamindi sa fiānifī
 tsamindi sa fiānɛ-fi
 daughter home go-PST
 'After getting married, the daughter went to (her husband's) home.'

- (4) *ka loka n^huso wa um tsa fi*
 ka lo-ka n^huso wa um tsa-fi
 1SG come-NMLZ after 3SG rice eat-PST
 'He ate rice, after I came (lit. I came after he ate rice).'

In example (3), we see that the temporal succession in Dhimal is expressed by the sequential verbal complex followed by the time adverbial *n^huso* 'after'. Alternately, the position of the sequential verbal complex may be occupied by the nominalized verb, as in (4). However, the nominalizing strategy seems to be the periphrastic way to encode the subsequent events.

c. Simultaneity

The time of the state/event encoded in the subordinate clause is simultaneous to the time of the main clause. Longacre (2007: 379) refers to the simultaneity as an overlap and states that the overlap encodes underlying *meanwhile* and *at the same time* relations. They are coterminous in that two actions are considered to start and stop at roughly the same time. Temporal simultaneity in

Dhimal is mainly encoded by the temporal simultaneity marking suffix *-lau*, as in (5-6):

- (5) *imblai su mi lolau te*
 imblai su-mi lo-lau te
 3PL three-HCLF come-SIM TOP
dz^hAgmAg dzeŋg^hak^he doʔk^he
 dz^hAgmAg dzeŋ-g^ha-k^he doʔ-k^he
 flash.out be-IPFV-PRS say-PRS
 'When three of them came, it flashed out bright.'
 (TBDFSW_124)

- (6) *fiate fiānelau wasefiɛj dusug^hu*
 fiate hane-lau wa-sefiɛj dusu-g^ha
 market go-SIM 3SG-DAT meet-PST.1SG
 'I met him while going to the market.'

The morpheme *-lau* in the examples (5-6), encodes the temporal sense in general.² When one needs to encode the exact simultaneity, the verb in the dependent clause remains in iterative form, and is followed by the simultaneous suffix *-lau* attached to the verb *pa* 'do', as in (7):

- (7) *ka um tsakataŋ palau wa lofi*
 ka um tsa-ka-ta-aŋ pa-lau
 1SG rice eat-NMLZ-LOC-EMPH do-SIM
 wa lo-fi
 3SG come-PST
 'He came when I was eating rice.'

In example (7), the iterative form of the main verb followed by the verb *pa* marked with the temporal suffix encodes the semantics of the exact simultaneity.

Furthermore, the temporal morpheme *-lau* is followed by a lexeme *bela* 'time', mostly realized as *-belau*, in naturally occurring texts, as in (8):

- (8) *delib^hari dzeŋlabelau sutkeri*
 delib^hari [dzeŋ-labelau] sutkeri dzeŋ-li
 delivery be-SIM delivery be-INF
tomlabelau fiādi ta puruŋ g^husertɛj
 tom-labelau fiādi-ta puriŋ g^huser-ɛj
 be.about-SIM pot-LOC head thrust-SEQ

². In Tamang, temporal simultaneity is expressed by the suffix *-ma* 'while' (Mazaudon 2003: 306).

dzeŋli goika doʔka siʃtʌm fi doʔfi
 dzeŋ-li goi-ka doʔ-ka siʃtʌm fi doʔ-fi
 be-INF must-NMLZ say-NMLZ system be say-PST
 '(They) said that there is a system of thrusting the head
 (of the woman delivering a child) while she is about to
 give birth to a child.' (TBDFSW_614)

In examples (8), the temporal morpheme *-labelau* occurs in *dzeŋlabelau* 'while being' and *tomlabelau* 'while to be about to' to encode analogous simultaneous temporal senses.

Temporal simultaneity is also expressed by the iterative construction, as in (9):

- (9) *biskut tsakataŋ aro tsi*
 biskut tsa-ka-ta-aŋ aro tsi
 biscuit eat-NMLZ-LOC-EMPH and water
amkataŋ kid^hin^hemi bat
 am-ka-ta-aŋ kid^hin^hemi bat
 drink-NMLZ-LOC-EMPH 2DU talk
marekataŋ fiŋ^hak^hniŋ
 mare-ka-ta-aŋ fi-g^ha-k^he-niŋ
 do-NMLZ-LOC-EMPH sit-IPFV-PRS-DU
 'Eating biscuit, drinking water and gossiping, we
 sat over there.'

In example (9), the iterative constructions *tsakataŋ*, *amkataŋ* and *bat marekataŋ* are applied to express the simultaneous adverbial semantics.

d. Terminal boundary

Terminal boundary in Dhimial encodes the temporal situation where the time expressed in the subordinate clause encodes the time reference analogous to the time encoded in the main clause. Givón (2001b: 330) exemplifies this situation with an English example 'till she left, he worked steady'. In such situation, the time points in both clauses coincide in some way, as in (10):

- (10) *wa fiika b^hAr ka kam pag^ha*
 wa fi-ka b^hAr ka kam pa-g^ha
 3SG sit-NMLZ until 1SG work do-PST.1SG
 'I worked until he sat (over here).'

In example (10), the adverbial *fiikab^hAr* encodes the terminal boundary of the two events.

Another strategy employed to encode the temporal boundary in Dhimial is adding the adverbializer suffix *-pa*, followed by emphatic marker *-aŋ* to the verb stem, as in (11):

- (11) *wa fiipaŋ ka kam pag^ha*
 wa fi-pa-aŋ ka kam pa-g^ha
 3SG be-ADVLZ-EMPH 1SG work do-PST.1SG
 'I worked until he sat.'

In example (11) the adverbial *fiipa* followed by the emphatic morpheme encodes the temporal boundary of the two events/states.

This structure is analogous to the *undzel/indzel* structure in Nepali which is applied to code the temporal boundary.

e. Point coincidence

The point coincidence adverbial clause encodes the semantics that two events/states occurred almost at the same time; however, there is a narrow interval between the two. Givón (2001b: 330) exemplifies point coincidence with an English example 'when he opened the door, she shot him.' In Dhimial, this situation is encoded as the temporal suffix followed by *-sa* 'after' and locative marker *-ta* further followed by emphatic marker *-aŋ*, as in (12):

- (12) *kalau fiñilau-sa-aŋ-ta-aŋ*
 kalau fiñe-lau-sa-aŋ-ta-aŋ
 then go-SIM-after-EMPH-LOC-EMPH
atuika g^hara b^heti-fi
 e-loŋ atuika g^hara b^heti-fi
 one-CLF small hole get-PST
 'As soon as they went they got a small hole.'
 (LBDFSW_24)

In example (12), there is quite narrow margin between the preceding action encoded in the adverbial clause and the subsequent action encoded in the main clause.

Point coincidence may be encoded with the implicational morpheme *-na* followed by *-sa* 'after'. To emphasize immediacy of the two events/states, emphatic marker follows the time morpheme, as in (13):

- (13) *kasefiɛŋ tiŋnasəŋ wa k^haʔfi*
 ka-sefiɛŋ tiŋ-na-sa-aŋ wa k^haʔ-fi
 1SG-DAT see-IMPL-after-EMPH 3SG run-PST
 'He ran away as soon as he saw me.'

In example (13), point coincidence is encoded with the suffixal combination of implicational-temporal-emphatic morphemes.

This structure resembles the adverbial marked with *-nasat^h* 'as soon as' in Nepali.³

f. Iterativity

Iterativity in Dhimal is expressed by the nominalized verb followed by the locative marker. Suffixation of the emphatic marker *-aŋ* to the locative marker is almost obligatory in such constructions. Iterativity is applied to both stative and action verbs, as in (14-15):

- (14) *insaŋ fiŋkataŋ fiŋkataŋ*
 insa-ŋ fi-ka-ta-ŋ
 like.that-EMPH sit-NMLZ-LOC-EMPH
- fiŋkataŋ dzʌbʌ barʌ bʌdze rat*
 fi-ka-ta-ŋ dzʌbʌ barʌ bʌdze
 sit-NMLZ-LOC-EMPH when twelve hour
- dzeŋg^hak^he te olefi aŋ*
 rat dzeŋ-g^ha-k^he te ole-fi aŋ
 night be-IPFV-PRS TOP emerge-PST REP
 '(They sat over there for long and when it was twelve at midnight (they) emerged out (it is said).'
 (TBDFSW_93)

- (15) *fiŋekataŋ fiŋekataŋ*
 [fiŋe-ka-ta-aŋ] fiŋe-ka-ta-ŋ
 go-NMLZ-LOC-EMPH go-NMLZ-LOC-EMPH
- fiŋekataŋ odoi dz^har ali*
 fiŋe-ka-ta-ŋ] odoi dz^har ali
 go-NMLZ-LOC-EMPH that jungle side
- t^hukaʔlabelau doʔfi aŋ*
 t^hukaʔ-labelau doʔ-fi aŋ
 reach-TEMP say-PST REP
 Now going continuously when (they) reached to
 the side of the forest (he) said.' (TBDFSW_506)

In example (14), the stative verb *fi* 'sit' is encoded with the iterative adverbial morphology, whereas in (15) the motion verb *fiŋe* 'go' is encoded with the same. The iterative verbs may be expressed a number of times based on the emphasis given to the state/event by the story teller, as in (16):

- (16) *ela fiŋekataŋ fiŋekataŋ*
 ela fiŋe-ka-ta-aŋ fiŋe-ka-ta-ŋ
 now go-NMLZ-LOC-EMPH go-NMLZ-LOC-EMPH
- fiŋekataŋ odoi dz^har*
 fiŋe-ka-ta-ŋ odoi dz^har
 go-NMLZ-LOC-EMPH that jungle
- ali t^hukaʔlabelau doʔfi aŋ*
 ali t^hukaʔ-labelau doʔ-fi aŋ
 side reach-TEMP say-PST REP
 'Now going continuously, when (they) reached to
 the side of the forest (he) said.' (TBDFSW_494)

In example (16), the iterative verb *fiŋekataŋ* is repeated three times.

2.2 Conditional clauses

The conditional adverbial clauses may be divided into two main types. They are: irrealis conditionals and counter-fact conditionals (Givón 2001b: 330-31). Thompson et al. (2007: 255) states that the semantic distinction between types of conditional which is signaled by most of the languages is the distinction between reality conditionals and unreality conditionals. Reality conditionals are those which refer to 'real' present, 'habitual/generic', or past situations.

Thompson et al. (2007: 255) further defines the term unreality conditionals as it is used for conditionals which refer to 'unreal' situations. There are two types of unreal situations. Those in which we imagine what might be or what might have been, and those in which we predict what will be. We can label these two types of unreality imaginative and predictive respectively.

a. Irrealis conditionals

Givón (2001b: 331) states that irrealis conditional clauses fall under the scope of non-fact modality, i.e., having no truth value. In fact, their truth value depends on the truth value of the associated main

³In Dolakha Newar (Genetti 2007: 461) the morpheme *-sat* is employed to encode the immediate/temporal (as soon as) sense.

clause, which most typically is also under irrealis scope and thus has no truth value either (2001b: 331).

Typically, irrealis conditionals have an implied futurity; with the main clause itself marked by future, modal or some other irrealis operator.

Dhimal irrealis conditional adverbial clauses, invariably, index the morpheme *-nu* following the bare form of the verb form of the subordinate clause whereas the main clause is marked by the future tense marker *-aŋ~ã*, as in (17-18):

- (17) *dzar bantsenu dzifãdzuileŋ*
 [dzar bantse-nu] dzifã-dzuileŋ
 jungle survive-COND bird-lizard
- aro gupusgelai bantsjawa*
 aro gupus-gelai bantse-aŋ-wa
 and animal-PL survive-FUT-DED
 'If the forest is safe the birds and animals may survive.'
- (18) *kasefieŋ se ŋnu maŋapap lagjana na*
 ka-sefieŋ [seŋ-nu] maŋa pap
 1SG-DAT kill-COND big sin
 lagi-aŋ-na na
 feel-FUT-2 PART
 'If you kill me you will commit a great sin, you know!' (TBDFSW_504)

In examples (17-18), the bare verb has indexed the conditional suffix *-nu* in the subordinate clauses and the finite verb of the main clause is marked by the future tense marker *-aŋ*. Participant reference for the second person follows the tense marker in example (18).

The verb in conditional clause may also be finite. In this case, conditional linker *panu* follows the finite verb of the conditional clauses, as in (19):

- (19) *naŋko tsamindi kaŋko dop^ha*
 naŋ-ko tsamindi kaŋ-ko dop^ha
 2SG.OBL-GEN daughter 1SG.OBL-GEN with
- biŋu papina panu nasefieŋ*
 biŋu pa-pi-na pa-nu na-sefieŋ
 marriage do-AND-2 do-COND 2SG-DAT

laŋpjanij ma papina
 laŋ-pi-aŋ-nij ma-pa-pi-na
 leave-give-FUT-1SG→2 NEG-do- AND-2

panu nasefieŋ tso:teŋ seŋtanij
 pa-nu na-sefieŋ tso:-teŋ seŋt-aŋ-nij
 do-COND 2SG-DAT bite-SEQ kill-FUT-1SG→2
 'If you are ready to get your daughter married with me I'll leave you alive otherwise I'll bite you to death.'
 (LBDFSW_09)

In example (19), the conditional clause is encoded by the conditional linker *panu* following the main verb.

Interestingly, the conditional marker is also found to be attached to the nominal root to encode the conditional meaning,⁴ as in (20):

- (20) *morda nu te ka biŋu paŋka*
 morda-nu te ka biŋu pa-aŋ-ka
 male-COND TOP 1SG marriage do-FUT-1SG
- istri nu te ka param*
 istri-nu te ka param
 female-COND TOP 1SG friend
- taswaŋka pateŋ doŋi aŋ*
 taŋ-su-aŋ-ka pa-teŋ doŋ-fi
 keep-COL-FUT-1SG do-SEQ say-PST
 'If you are male, I will marry you (and) if you are female, I will maintain bonded friendship (with) you.' (MMD2MWW_207)

In example (20), the noun *morda* 'male' is followed by the conditional marker *-nu* to encode the conditional sense.

b. Hypothetical conditional

The irrealis conditional and hypothetical conditional differ in that the main verb in the later takes hypothetical marker *-fie* whereas the conditional marker *-nu* is attached to the verb *pa* 'do' grammaticalized as a subordinator. This is a

⁴King (2009: 227) explains that the Dhimal may exhibit a clause marked with *-nu* to introduce a referent or topic into the discourse, which can be commented on its subsequent propositions. Referring to Haiman (1978) and Longacre and Thompson (1985), King states that the development of conditionals into topic markers is a recurrent process in many languages.

sort of periphrastic way to encode the irrealis conditional, as in (21):

- (21) *ede dzamal bara^{fi}e pa^{nu}*
 ede dzamal bara^{fi}e pa^{nu}
 this child be.grown-HYP do-COND
kid^hin^hemiko te pura
 kid^hin^hemi-ko te pura
 1.DU-GEN TOP complete
kal dzena^ŋ do^ʔk^he a^ŋ
 kal dzeŋ-aŋ do^ʔ-k^he aŋ
 death be-FUT say-PRS REP
 'If this child will grow big it will be the cause for our death.' (TBDFSW_311)

In example (21), the hypothetical conditional proposition is encoded by the hypothetical morpheme *-fi* affixed to the main verb and the conditional morpheme *-nu* attached to the verb *pa* 'do'. Hypothetical conditional proposition encodes less probability of the state/event encoded in the subordinate clause to be true. The irrealis time encoded in the main clause is not affected by the adverbial situation.

c. Counter-fact conditionals

Unlike irrealis conditionals, whose truth value is pending, counter-fact conditionals fall under the firmer, negative epistemic scope of non-fact. This condition type involves proposition that could, would or should have been true if other propositions were also true. But since the other propositions turned out to be false, the conditionally marked proposition is also false (Givón 2001b: 332).

The counter-fact conditional in Dhimal is encoded with the suffix *-d^ha*, followed by the future tense marker *-a^ŋ~ã* in the main clause. The subordinate clause is marked by *-nu* as in the irrealis conditional. Following are the examples:

- (22) *kasefi^ŋ bu^ŋ fi^ŋpa^{nu}*
 ka-sefi^ŋ bu^ŋ fi^ŋ-pa-nu
 1SG-DAT also listen-CAUS-COND
kabu^ŋ fi^{anid}^hã ni
 ka bu^ŋ fi^{ane}-d^hã ni
 1SG also go-CFC PART
 'If you had made me listen, I would also have gone.'

- (23) *na bu^ŋ idoi t^hame^{ta} fi^{nu}*
 na bu^ŋ idoi t^hame-ta fi-nu
 2SG also this plac-LOC be-COND
remka dzend^ha^ŋ
 rem-ka dzeŋ-d^ha-aŋ
 be.good.NMLZ become-CFC-FUT
 'If you also had been in this place it would have been better.'

In examples (22), *fi^{anid}^hã* 'I would have gone' and *dzend^ha^ŋ* in (23) 'it would have been' express the counter-fact conditional situation in Dhimal.

d. Negative conditional

Many languages have a morpheme to signal a negative condition (Thompson et al. 2007: 260). In Dhimal, negative conditional is simply signaled by the negative prefix attached to the conditional verb, as in (24):

- (24) *masa^ʔnu kai^{pi}ãka*
 ma-sa^ʔ-nu kai-pi-aŋ-ka
 NEG-believe-COND call-AND-FUT-1SG
 'If you do not believe, I'll call (him).'

In example (24), the negative condition is simply marked by the negative morpheme prefixed to the conditional verb.

In cases where conditional as well as main proposition are negative, both the verbs are negated by the same process, as in (25):

- (25) *i^ŋko p^huru p^huru ma^{pa}nu te*
 i^ŋko p^huru p^huru ma-pa-nu te
 that p^huru p^huru NEG-do-COND TOP
magid^ha^ŋ wa la
 ma-gi-d^ha-aŋ wa la
 NEG-know-CFC-FUT DED MIR
 'If (the horse) had not produced the hissing sound, (they) might not have noticed.' (TBDFSW_428)

In example (25), both the conditional clause and the finite (main) clauses are negated by the same prefix *ma-* in Dhimal.

2.3 Cause and reason adverbial clauses

In structuring discourse, it is often desirable to indicate the causes or motivations behind the

occurrence of some event. The causal proposition in Dhimal is marked by the complex subordinators such as *faiipali panu* 'because' and *odoi b^hasiñ* 'therefore', as in (26, 27):

- (26) *kaseñeñ musar k^heti ramro lagi-ka fi*
 ka-señeñ musar k^heti ramro lagi-ka fi
 1SG-DAT mushroom farming good feel-NMLZ be

faiipali panu musar k^hetiko bisajata
 [faiipali pa-nu] musar k^heti-ko
 why do-COND mushroom farming-GEN

tsafĩ ka atutuipa krisi
 bisajA-ta tsafĩ ka atutui-pa krisi
 subject-LOC IND 1SG a.little-ADV LZ agro

prabid^hikgalaiso d^hrka fiñg^ha
 prabid^hik-gelai-so d^hir-ka fiñg^ha
 technician-PL-ABL learn-NMLZ be-PST.1SG
 'I have realized that mushroom farming is good
 because I have learnt a little bit about the
 mushroom farming from the agro-technicians.'
 (KRDMPW_09-10)

- (27) ...*odoi b^hasiñ ela musar k^hetiso tsafĩ b^hado*
 [odoi b^hasi-ñ] ela musar k^heti-so
 that for-EMPH now mushroom farming-ABL
kaseñeñ ramro tiñka fiñg^ha
 tsafĩ ka-señeñ ramro tiñ-ka fiñg^ha
 IND 1SG-DAT good see-NMLZ be-PST.1SG
 'Because of that I have seen the mushroom
 planting profitable.' (KRDMPW_41)

In example (26) the causal proposition in Dhimal is marked by the complex subordinator *faiipali panu* 'because'. In (27) the complex subordinator *odoi b^hasiñ* 'therefore' encodes similar situation.

In Dhimal, the subordinate clause indicating the cause of the main clause is sometimes juxtaposed to the main clause without any subordinating morpheme, as in (28):

- (28) *nani sjañ k^hadza pani fiabe*
 nani si-añ k^hadza pani fiabe
 today die-FUT snack water GF
k^hadza te fi tsi mant^hu

k^hadza te fi tsi mant^hu
 snacks TOP be water NEG-EXT
 'We may die today (because) as for snacks we have
 it, but we do not have water.' (TBDFSW_20)

In example (28), the reason of the interlocutors' possible death is that they did not have water to drink, even though they had snakes to eat. Moreover, the cause may be encoded in the converb clause, as in (29):

- (29) *wa istuñ kam pateñ paisa kamaik^he*
 wa istuñ kam pa-teñ paisa kamaik^he
 3SG much work do-SEQ money earn-PRS
 'S/he earns a lot of money because s/he works
 hard.'

In example (29), the reason for earning enough money is expressed with the help of sequential converb.

2.4 Concessive adverbial clauses

Concessive adverbial clauses supply the unexpected or less-likely event or state which involve a presupposed contrast or counter-expectancy whereas the main clause supplies the unexpected or less likely event or state (Givón 2001b: 336). Concessive clauses reflect a contrast of some sort between the main and subordinate clauses (Whaley 1997: 254). In Dhimal, the concessive clause is formed with the negative temporal verb followed by the emphatic particle *buñ* 'also', as in (30):

- (30) *tai mi por^he li ma niñ lau*
 tai-mi por^he-li [ma-niñ-lau
 self-HCLF study-INF NEG-get-SIM
buñ kañko tsantsamindi
 buñ] kañ-ko tsan-tsamindi
 also 1SG.OBL-GEN son-daughter
por^he doñ k^he ni
 por^he-doñ-k^he ni
 study-PROG-PRS PART
 'Even though I did not get the chance to study, my
 kids are studying, anyway.'

In example (30), the concessive clause is formed with the negative temporal verb followed by the emphatic particle *buñ* 'also'.

The concessive adverbial conjunct *fiunu* followed by the topicalizer *te* is also employed to form concessive clause in Dhimal, as in (31):

- (31) *fiunu te sata buŋ iŋko*
 [fiunu te] sa-ta bu-ŋ iŋko
 though TOP house-LOC also-EMPH that
- radzkumarko te be fiŋg^hak^he doʔk^he*
 radzkumar-ko te be fi-g^ha-k^he doʔ-k^he
 prince-GEN TOP wife be-IPFV-PRS say-PRS
 'Even if the prince had a wife in his home (it is said).....' (TBDFSW_132)

In examples (31), concessive condition is expressed through the conjunct *fiunu* followed by the topicalizer *te*. Formally, this conjunct resembles *fiuna ta* 'even though' in Nepali.

2.5 Purpose adverbial clauses

Purpose clauses signal the purpose of the agent for acting as they did in the event coded by the main clause. The subject of the purpose clause is mostly co-referential with that of the main clause (Givón 2001b: 337). Purpose clauses express a motivating event which must be unrealized at the time of the main event.

The purpose clauses in Dhimal are coded by the infinitival *-li* attached to the verb stem in the dependent clause, as in (32):

- (32) *iŋko ofjãfiŋ seʔli kosis paŋi la*
 iŋko ofjã-fiŋ seʔ-li kosis pa-fi la
 that horse-DAT kill-INF effort do-PST MIR
 '(They) might have tried to kill the horse.'
 (TBDFSW_471)

In examples (32), we see that the infinitival *-li* is employed to encode the purposive relation of the subordinate clause to the main clause.

The infinitive marker is optionally followed by the genitive postposition *-ko*, which is further followed by the postposition *-b^hasi* 'for'. Thompson, Longacre and Hwang (2007: 251) note that the case markers 'to' or 'for' are used for purpose clauses in a number of languages. Example in (33) illustrates the point.

- (33) *kaŋko tsanfiŋ seʔli*
 kaŋ-ko tsan-fiŋ [seʔ-li
 1SG.OBL-GEN son-DAT kill-INF
b^hasi fai mapafi
 b^hasi] fai ma-pa-fi
 for what NEG-do-PST
 'What did they not do to kill my son?'
 (TBDFSW_611)

In example (33), the infinitive marker followed by the genitive postposition *-ko* and further followed by the postposition *-b^hasi* 'for' encodes the purpose clause.

Very often the benefactive marker *b^hasi* 'for' is replaced by a Nepali loan morpheme *-lagi* 'for' for the same purpose, as in (34):

- (34) *aba nasefiŋ bantsepaliko*
 aba na-sefiŋ [bantse-pa-li-ko
 father 2SG-DAT survive-CAUS-INF-GEN
lagi ka puŋjã dop^ha
 lagi] ka puŋjã dop^ha
 for 1SG snake with
biŋu paŋka doʔfi
 biŋu pa-aŋ-ka doʔ-fi
 marriage do-FUT-1SG say-PST
 '(Dear) father, I'm ready to marry with the snake in order to save your life.' (LBDFSW_19)

In examples (34), the purpose adverbial clauses are marked by the infinitive verb followed by the genitive and benefactive postpositions in sequence.

2.6 Participial adverbial clauses

Participial adverbial clauses are tightly integrated with their main verb. They tend to have the same subject as their main clause. In terms of temporal coherence, participial adverbial clauses tend to exhibit rigid tense-aspect-modal restrictions vis-à-vis their main clause (Givón 2001b: 341). Participial Adverbial clauses in Dhimal are of two types: Sequential and simultaneous. Since the simultaneous type is already discussed in (1.1c), we discuss the sequential participial clause here:

Sequential subordinate clause in Dhimal is marked by the morpheme *-teŋ* suffixed to one or more non-final verbs (King 2009: 217). This

morpheme indicates a temporal sequence in clause chains. Sequential clauses indicate the time the event occurred of before the time of the main verb, as in (35):

- (35) *eloŋ fiabeta mandal banaiten*
 e-loŋ mandal [banai-ten]
 one-CLF beam make-SEQ
t^hameta taʔten dziŋten b^harta
 t^hame-ta [taʔ-ten] [dziŋ-ten] b^har-ta
 place-LOC keep-SEQ fasten-SEQ carrier-LOC
taʔten sita tsumafi
 [taʔ-ten] si-ta tsuma-fi
 keep-SEQ house-LOC bring-PST
 'Having made a wooden beam and having kept and fastened (him) in the carrier, (they) brought him to the house. (GMDWH_65)

In example (35), *banaiten* 'having made', *taʔten* 'having kept' and *dziŋten* 'having fastened' are sequential non-finite verbs that indicate something happened before the main verb in the past tense *tsuma-fi* 'brought.' In this case the sequential clauses have the past tense reading.

Similarly, the sequential clause may have a future reading when the main clause is encoded in irrealis, as in (36):

- (36) *odai desta tsumputen*
 odoi des-ta tsuma-pu-ten
 that country-LOC bring-AND-SEQ
seʔten lo doʔk^he aŋ
 seʔ-ten lo doʔk^he aŋ
 kill-SEQ come.IMP say-PRS REP
 'Take it to that country and come after having killed it.' (TBDFSW_480)

In example (36), someone (a king) is ordering his servant to take (a horse) to another country (village) and return having killed it there.

The sequential morpheme *-ten* may co-occur with the morpheme *sa* 'after' followed by the emphatic morpheme *-aŋ*, which means the time frame of the main verb as beginning directly upon the completion of the sequential clause (King 2009: 221), as in (37):

- (37) *wa kasefiŋ sotsiteŋsaŋ manta*
 wa ka-sefiŋ [sotsi-ten-sa-aŋ] man-ta
 3SG 1SG-DAT think-SEQ-after-EMPH mind-LOC
taʔteŋsaŋ tsumaka narjata ladaiteŋ
 [taʔ-ten-sa-aŋ] tsuma-ka narja-ta
 keep-SEQ-after-EMPH bring-NMLZ elephant-LOC
 'Having thought of and liked me, he brought me carrying on an elephant.' (TBDFSW_607)

Sequential marker may also be found in stative-resultative clause while indexed with the stative verbs, as in (38):

- (38) *kalau k^haŋlau te wa aŋ fi la*
 kalau k^haŋ-lau te wa aŋ fi la
 then look-SIM TOP 3SG EMPH be MIR
d^hokata jomten dwarta
 d^hoka-ta [jom-ten] dwar-ta
 door-LOC sit-SEQ door-LOC
 'While (he) sees, she is sitting there in the door.'
 (TBDFSW_581)

In examples (38), the stative verbs like *jom* 'sit' and *dzim* 'sleep' followed by the sequential morpheme indicate the perfective stative-resultative relation instead of the sequence of events, respectively.

3 Summary

In this article, we examined the adverbial clauses in Dhimal. The adverbial subordinate clauses in Dhimal are either marked by the subordinating morphemes attached to the verb of the dependent clause or by the special non-finite verb forms. Temporal adverbial clauses in Dhimal include precedence, subsequence, simultaneous and temporal relation with terminal boundary, point coincidence and iterativity. Dhimal conditional clauses are reality conditional (hypothetical) and counter-fact conditional. Reality conditional situation is marked only in the dependent clause whereas the counter-fact situation is encoded in the dependent clause as well as in the main clause. Dhimal also exhibits cause and reason, concessive and purpose adverbial clauses. Participial adverbial clauses in Dhimal encode the sequential and simultaneous temporal senses. The sequential adverbial clause indicates a temporal sequence in clause chains.

Abbreviations

1	first person	IND	indicative
2	second person	INF	infinitive
3	third person	IPFV	imperfective
ABL	ablative	LOC	locative
ADV LZ	adverbializer	MIR	mirative
AND	andative	NEG	negative
CAUS	causative	NMLZ	nominalizer
CLF	classifier	OBL	oblique
COL	collective	PART	particle
COND	conditional	PL	plural
DAT	dative	PROG	progressive
DED	deductive	PRS	present
DU	dual	PST	past
EMPH	emphatic	PURP	purposive
EXT	existential	RECP	reciprocal
FUT	future	REP	reportative
GEN	genitive	SEQ	sequential
GF	gap filler	SG	singular
HCLF	human classifier	SIM	Simultaneous
HYP	hypothetical	TEMP	temporal
IMPL	implicational	TOP	topic

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GRAMMATICAL MOOD IN KISAN

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The paper focuses on the morpho-syntactic behavior of lexical and auxiliary modals through distributional and semantic evidences in Kisan language which is derived from Kurukh; a North Dravidian language family. Any potential change in the affixal incorporation for modal meaning is linked to person, number, gender and honor.

Keywords: morpho-syntactic, Dravidian, mood, affix

1 Introduction

The concept of Mood is defined within the framework of morphological mood and is expressed in verbal inflection and semantic criteria. So I have attempted to highlight the mood as a grammaticalized category of the verb with modal function. Bybee & Fleischman (1995) look at mood which is expressed inflectionally through verb morphology as indicative, subjunctive, optative, imperative, conditional etc. These verbal paradigms vary from one language to another with respect to number as well as to the semantic distinctions. Affixes expressing different moods in Kisan appear along with verbal complex while referring future meaning. Its co-occurrence with both temporal and aspectual suffixes is a usual phenomenon. Modal meaning in Kisan can be expressed by various grammatical moods and lexical items. Existing descriptions of Kisan have not classified /-r-/ in future tense. My analysis of the language claims it to be a circumfixal marker of modality. In Kisan, there are four types of mood such as the Indicative, Imperative, Optative/Subjunctive and Conditional moods.

2 Kisan

The existence of Kisan as the distinct speech variety was recorded in 1961 census. According to 1991 census, there were 160,704 speakers in Odisha out of total 162,088 in India spread over essentially in the following two districts: Sambalpur and Sundergarh. The total number of

Kisan speakers has dropped to 141,088 in 2001¹. Kisan tribe is associated with Kurukh-Oraon tribe and so there exists possible linguistic similarities between Kisan and Kurukh to some extent. In 1961 census, Kisan was separated from Oraon. In Linguistic Survey of India, Konow (1906) along with other linguists disassociates Kisan from Kurukh-Oraon. Speakers of Kisan tribe believe their language to be unique delinking its association with Kurukh-Oraon.

Genealogical description of North Dravidian language shows that Kisan (ISO639-3: xis) which is an agglutinating language with a substantial amount of information encoded in the verb is derived from Kurukh (ISO639-3:kru). Under the provisions of independent India's 1950 constitution, Kisan is listed as scheduled tribe in Odisha. EGIDS level for this language in India is 5 (Developing). The language is viewed as being in vigorous use, with literature in a standardized form being used by some though this is not yet widespread or sustainable.

Table 1: Kisan as Language and Mother Tongue (1991, 2001 Census)

State	1991			2001		
	Speakers	Male	Female	Total	Male	Female
Odisha	160,704	80,345	80,359	139,428	69,523	69,905

The report of 2001 census shows a moderate decrease of the speakers having Kisan as their mother tongue; however, ground zero report of people who speak and understand Kisan would be a great matter of concern. People have embraced Indo-Aryan languages like Hindi and Oriya and totally neglected the conservation of their mother tongue. Thus, actual number of speakers of Kisan is drastically on the decline due to lack of motivation to conserve and converse in Kisan.

3 The indicative mood

The Indicative Mood is linked with asserting facts and there is no distinct morphological marking.

¹http://censusindia.gov.in/Census_Data_2001/Census_Data_Online/Language/Statement1.htm

The mood is expressed through the temporal forms of the verb. Greenberg (1966) views the indicative mood as neutral mood. The languages of the world have different ways of indicating statements expressed by the various speakers which they believe to be true. Most of the sentences under indicative mood are in declarative in nature. Kisan verbs, in declarative sentences, usually do not bear any overt morphological formal marking for indicative mood such as:

(1) *bāḡ-s* *pairi* *ka-ø-d-as*
 father-3MS.NOM morning go-MOD.PRES.3MS
 'Father goes in the morning.'

(2) *nīn* *pairi* *ka-ø-d-ay*
 you-2NS.NOM morning go-MOD.PRES.2MS
 'You go in the morning.'

The examples in (1 & 2) do not reflect mood overtly in the verb morphology /*ka-ø-d-as*/ 'goes', /*ka-ø-d-ay*/ 'go' respectively; however, they assert the truth values of these propositions. There is no special morphologically marking for indicative mood in Kisan, especially for declarative sentences.

4 The imperative mood

The imperative is commonly defined as the form of the verb used in issuing direct commands or orders (Bybee 1985) and requests. The imperative clauses do not involve overt subject of the predicate. Direct commands are restricted to a second person subject. Kisan codes person agreement in the verbal inflection. Most languages, according to both Bybee (1985) and Palmer (2001) have a form which is typically used for the expression of commands which is often unmarked² and sometimes even reduced to the bare verbal stem as evident in Kisan. This is traditionally labeled as imperative. This also includes suggestions apart from commands.

(3) *iya* *bar-a*
 here come-IMP
 'Come here.'

²This is a common feature of a high percentage of the world's languages as per Bybee's (1985) conclusion which is drawn on the basis of her extensive language corpus.

(4) *asma* *mōh-a*
 bread-ACC eat-IMP
 'Eat the bread.'

The examples in (3 & 4) invariably mark the imperative with morphological inflection /-a/ suffixed to the base verb. The morphological inflectional /-a/ apart from imperative mood indicates respect on the part of speaker. In order to form commands in Kisan, imperatives are usually constructed with base verb forms such as:

(5) *iya* *ba:r*
 here come-IMP
 'Come here.'

The verb morphology in (5) uses the base verb form /*ba:r*/ 'come' with lengthened vowel in mono syllable to express command in Kisan, however, there are some base verb forms which require inflectional marker /-a/ for commands as well as request with explicit difference in tone.

4.1 Formal imperatives

While addressing someone in Kisan especially elders with respect, people usually add /-e/ to a verb stem.

(6) *iya* *ɔndr-a-e*
 here bring-IMP.HON
 'Bring here.'

(7) *husan* *lek^h-a-e*
 there write-IMP.HON
 'Write there.'

In both the examples (6 & 7), the implicit subjects correspond to 2nd person.

4.2 Gender Specific Imperatives

Imperatives morphologically carry different inflections for masculine and feminine such as /-a/ (8) for masculine and /-u/ (9) for feminine gender in Kisan.

(8) *ammū* *ɔndr-a*
 water-ACC bring-IMP.2M
 'Bring water (to male).'

- (9) *ammũ* *ɔndr-u*
 water-ACC bring-IMP.2F
 ‘Bring water (to female).’
- (10) *ammũ* *ɔndr-u-ke*
 water-ACC bring-IMP.2F
 ‘Bring water (female to female).’

The inflection marker /-ke/ in (10) refers to familiar person and sometimes it would imply lack of respect for feminine gender. It is usually used between two female speakers. There is a parallel morphological marker /-le/ in imperatives for masculine gender. Thus, example in (10) can be paraphrased such as in example (11):

- (11) *ammũ* *ɔndr-a-le*
 water-ACC bring-IMP.2M
 ‘Bring water.’

So, along with the morphological change in suffix /-le/, there is a change from the affix /-u/ to /-a/ for masculine gender.

4.3 Exhortation

- (12) *bane-kori* *kal-ke*
 well go-IMP
 ‘Wish you all the best for your journey.’
- (13) *parixe^ha* *bane ci-ke*
 exam good give-IMP
 ‘Best of luck for your exam.’

The imperative mood for exhortation marked in (12 & 13) is /-ke/. This is common for both masculine and feminine gender and singular and plural as well. While wishing people with honor, Kisan speakers usually add the morpheme /-ke/ to the bare form of the verb. When it comes to wish people with less respect, we use /-a/ as the imperative mood marker as shown in example (14).

- (14) *bane-kori* *kal-a*
 well go-IMP
 ‘Wish you all the best for your journey.’

5 The subjunctive mood

In Indo-European languages, the subjunctive is used to express wishes or desires (Palmer 2001).

Subjunctive mood refers to a form of verb which discusses about imaginary or hypothetical events and situations. It is intended to represent an action as a desire, hope, possibility, probability, condition, presumption etc. In Kisan, these can be morphologically and semantically expressed in past and non-past tenses.

- (15) *hus* *erpa* *kirr-ɔ-s*
 he-3MS.NOM home-DAT return-SUB.3MS
 ‘He can return home.’
- (16) *al-ar* *harbu* *k-ɔ-r*
 people- forest go-SUB.3PI
 3PI.NOM
 ‘People may go to forest.’
- (17) *al-ar* *mitin-ge* *ba-ɔ-r*
 people- meeting- come-SUB.3PI
 3PI.NOM for
 ‘People may come for meeting.’

The examples (15, 16 & 17) indicate a single subjunctive marker /-ɔ/ for all these sentences. English which uses modal expressions *may*, *will* and *can* to express different meaning, whereas, in Kisan, the semanticity of subjunctive marker /-ɔ/ plays a significant role. This morphological marker refers to *capability*, *permission*, and *certainty* of an action that will occur in the future. The correct interpretation of an utterance with morphological marker /-ɔ/ relies on both speaker and hearer in addition to existing context.

5.1 Potential and presumptive

Dravidian language like Kisan shows in examples (18 & 19) that morphological marker /-r-/ in the verb morphology can invariably be used for English modal expression *might*. The morphological marker /-r-/ is circumfixed between aspectual /-ki/ or /-ka/ and temporal /-ɔ/ markers to create subjunctive mood in the utterance.

- (18) *hus* *ker-ka-r-ɔ-s*
 he- go-PERF.SUB.3MS
 3MS.NOM
 ‘He might have gone.’
- (19) *kukae-d* *aŋs-ki-r-ɔ-d*
 she-3FS.NOM reach-PERF.SUB.3FS
 ‘She might have reached.’

It expresses about the uncertainty of the occurrence of actions such as /*ker-ka-r-ɔ-s*/ ‘might have gone’ and /*an̩s-ki-r-ɔ-d*/ ‘might have reached’. This is primarily used to refer to a remote possibility of an action to take place.

(20) *hus paṭʰa m̩j-ka-r-ɔ-s*
 he-3MS.NOM study-ACC go-PERF.SUB.3MS
 ‘He could/would have finished his studies.’

(21) *hud moh-a oṅg-ki-r-ɔ-d*
 she-3FS.NOM eat-INF V2.PERF.SUB.3FS
 ‘She could have eaten.’

(22) *hud e:k-a pol-ki-r-ɔ-d*
 she-3FS.NOM walk-INF V2.PERF.SUB.3FS
 ‘She could not have walked.’

The occurrence of subjunctive moods like *would* and *could*, usually happens with the past reference. There is a flexibility in the use of *could* or *would* in Kisan when it refers to past event. There are some special verbs which are restricted to subjunctive mood such as /*oṅg-ki-r-ɔ-d*/ ‘could have’ in (21) and /*pol-ki-r-ɔ-d*/ ‘could not have’ (22). These embedded verbs in the clauses, play the role of vector verb³ in sentences. The subjunctive mood is sometimes indicated by a special verb form along with a modal auxiliary.

(23) *inna bar-na kattʰa*
 Today come-INF SUB
 ‘(S/he) should come today.’

(24) *parixcʰa lekʰ-na kattʰa*
 exam-ACC write-INF SUB
 ‘(S/he) should write the exam.’

(25) *hus nalkʰu nan-ɔ-s-ne*
 he-3MS.NOM work-ACC do-FUT.MS.SUB
 ‘He should work.’

The example /*nan-ɔ-s-ne*/ ‘should do’ in (25), uses the morpheme /-ne/ to mark the subjunctive mood with a meaning of ‘*should*’. The morpheme /-ne/ is mostly used in conditional mood. The

morpho-syntactic construction in (23 & 24) is invariably same. The morphological inflection for person, number and gender on the verb is absent. We notice that sentences in (23 & 24) usually carry dative case for the agents. The subjunctive marker /*kattʰa*/ ‘should or ought’ also takes care of the temporal reference of these sentences. Both these examples have the expression of the past reference. The subjunctive marker /*kattʰa*/ ‘should’, is generally used for advice and expectation.

5.2 Optative

It conveys volition in a sentence. It is generally manifested syntactically and not morphologically; however, in Kisan, the manifestation of optative mood is morpho-syntactic in nature. A language does not restrict the subjects of commands and if restricted it would be imperative mood. For examples in Kisan:

(26) *gucca ka-d-at*
 VOL go-PRES.1PI
 ‘Let us go.’

(27) *ka:la ci-y-a*
 go VOL.3MS/PI
 ‘Let him/them go.’

The subject reference in (26 & 27) is to 1st person plural and 3rd person singular and plural respectively. On the contrary, the unmarked subjects in imperatives are restricted to 2nd person only. This is interesting to notice optative mood in Kisan which is morphologically marked differently for 1st person and 3rd person.

5.3 Conditional mood

This is expressed in Kisan by adding a subordinating particle in a sentence. The morphemes like /*hale*/ ‘if’ and /*je*/ ‘that’, provide conditional mood to expression.

(28) *bar-ɔ-s hale en*
 come-FUT.3MS CON I-1MS.NOM
k-ɔ-n-ne
 go-FUT.1MS.CONT
 ‘I will go if (he) will come.’

³ The Vector verb (V2) is de-lexicalized, grammaticalized or bleached form in a compound verb construction.

- (29) pa:ɽ-ɔ-d hale rima-d
 sing-FUT.3FS CON Rima-3FS.NOM
 nāl-ɔ-d-ne
 dance-FUT.3MS.CONT
 'Rima will dance if (she) will sing.'

In the above examples (28 & 29), we notice that conditional sentences normally consist of an /hale/ 'if' clause, which states a condition and a result clause, which states the result of that condition. The mood of a verb in the clause which has /hale/ 'if', depends on the likelihood of the condition. This would be incomplete without the addition of affix /-ne/ which is used for contingent to the verb morphology. Thus, we can say that the /hale/ 'if' clause is followed by contingent mood affix /-ne/ to generate a conditional mood.

6 Conclusion

The indicative mood morphologically is identical with indefinite aspect as they both use /ø/ for marking. Interrogatives are included in indicative mood as they resemble semantically to indicatives. Question is morphologically marked by a separate linguistic constituent /ka/. The imperative mood is marked by various morphemes depending upon person, number, gender and honor. The mood marker /-a/ is used to refer to masculine, and feminine plurals only in the present tense. The morpheme /-u/ is for feminine gender in the present tense. The imperative mood for feminine gender in the future tense, is marked by /-ke/. There is another morpheme /-ae/ attached to the bare form of the verbs to show respect. This is especially used by an adult to address the elders.

The subjunctive mood includes the sub-categories like optative, potential, conditional and presumptive. The optative mood is marked overtly by /-n/, /-a/ and the linguistic unit /katt^hɑ/. The potential mood is realized by the morpheme /b^hael/ which usually occurs at the end of a sentence. The conditional mood requires the presence of counterfactual marker /hale/ 'if' which is mostly followed by contingent marker /-ne/ to the verb morphology.

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MOOD IN THARU: A COMPARATIVE PERSPECTIVE

Krishna Prasad Paudyal

This paper presents the grammatical structures used to express different moods in Chitoniya and Dangaura Tharu which belong to the Indo-Aryan language family. Both of these languages exhibit distinct morphological structures to express immediate and delayed imperatives and to characterize different moods like imperative, optative, conditional, hortative and desiderative.

Keywords: imperative, conditional, optative, hortative, desiderative.

1 Introduction

Chitoniya and Dangaura Tharu are two varieties of the Tharu languages. Chitoniya Tharu is spoken by the Tharus living in Chitwan and eastern part of Nawalparasi districts, whereas Dangaura Tharu is spoken by the same ethnic group living in Rupandehi, Kapilvastu, Dang, Banke, Bardiya, Surkhet, Kailali, and Kanchanpur districts of Nepal. Both of these languages belong to the Indo-Aryan language family following the SOV constituent order. Although The Population and Housing Census 2011 (CBS 2012:4, 144) does not make any distinction among the speakers of Tharu languages and enrolls all the Tharu speakers under the umbrella term, the Tharu, the district profile of Chitwan and Nawalparasi districts report that Chitoniya Tharu is spoken by 1,10,337 (58,913 in Chitwan and 51,424 in Nawalparasi) (CBS Chitwan 2071:30, CBS Chitwan & DDC Nawalparasi 2071:34). As Dangaura Tharu speaking area is much larger, it is spoken by a considerably larger population. According to Ethnologue 2012, Dangaura Tharu is spoken by 500000 people in Nepal and 674000 in total (Epele et al. 2012:89). This paper presents a comparative study of the morphological structures of the verbs expressing different moods in Chitoniya and Dangaura Tharu and identifies the similarities and differences existing in these Tharu languages. The nomenclature, Chitoniya and Dangaura Tharu, stands for both the Tharus residing in the concerned areas and the languages they speak.

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2 Mood

Mood, for Palmer (1986:21), is a "morphological category of verb like tense and aspect". Bybee and Fleischman (1995:2) define it as "a formally grammaticalized category of the verb which has a modal function", and is expressed "in distinct sets of verbal paradigms, i.e. indicative, subjunctive, optative, imperative, and conditional, etc." According to Dixon (2010:96), mood is a property of a sentence and deals with the speech acts of three recurrent types: declarative, imperative, and interrogative. Thus, mood is an inherent verbal category like tense and aspect, and is expressed mostly through inflections. The morphological variations in the verbs expressing different moods in Chitoniya and Dangaura Tharu languages are discussed in this section.

2.1 Imperative mood

Morphologically, the imperative mood, in both of these languages, is primarily embodied in different verbal suffixes. In both of these languages, the imperative suffixes are determined by the number and honorific status of the addressee and the temporal immediacy of the action to be carried out. There is a variation on the basis of the root ending sounds as well. In Chitoniya Tharu the root ending sound influences the imperatives, whereas the imperative markers are irrespective of the sound in the final position of the verb root in Dangaura Tharu. As Masica (1991:476) has explored in many of the Indo-Aryan languages, both of these Tharu varieties have two sets of verbal suffixes that distinctly indicate whether the command or request is to be carried out at the moment of speaking or later in future. On the basis of the temporal immediacy, the imperatives in both of these Tharu varieties have been classified into two types: Immediate imperatives—to be carried out at the moment of speaking, and Non-immediate imperatives—to be carried out later following Watters (2002:309-10). The morphological structures of the immediate and non-immediate imperatives in both of these languages are analyzed in this section.

2.1.1 Immediate imperative

The immediate imperative addresses the current problem and elicits an immediate response (Watters 2002:309). We find similarity in forming immediate imperatives in both of these languages from consonant ending verb stems in non-honorific singular cases. In both of these languages such imperatives are characterized with a zero marker, as illustrated in the examples (1a-b).

- (1) a. *lo mor bap tuĩ b^helahi mor naũ d^hAr yabe*
 lo mor bap tuĩ b^he-1 -hi
 PRT 1SG.GEN father 2SG become-PST-2SG
 mor naũ d^hAr-ø yabe
 1SG.GEN name put-IMP now
 'Okay, you are my father, now name me.'
 (Chitoniya) (JF.BM-78.439)
- b. *nai pAtohiya tAĩ jAssik kAlase col*(Dangaura)
 nai pAtohiya tAĩ jAssik
 NEG daughter-in-law 2SG.NH anyhow
 kAlase col
 if walk-ø
 'No, daughter-in-law, you go back home anyhow.' (FR_YRC.105)

Although these are the extracts from two different narratives in two different varieties, the imperatives follow the same system of zero marking. In both of these examples, the imperatives *d^hAr -ø*'put-IMP' (1a) and *col -ø*'walk-IMP' (1b) are formed by using a zero imperative marker from the verbs *d^hAr*-'put'and *col*'walk' respectively. The use of a zero marker is attested only in non-honorific singular case, as in these examples *tuĩ* and *tAĩ*'2SG NH' are non-honorific singular addressees.

In Chitoniya Tharu we also have a non-honorific imperative marker *-A* which is used to soften the harshness of the command and express affection, which is not attested in Dangaura Tharu. In the examples (2a-b), we see how the tone of a command is softened by using this marker.

- (2) a. *lo tA yau nab^hA*
 lo tA ya-u nab^h-A
 PRT PRT come-IMP climb down-IMP
 'Okay, come, climb down.'

(WB.BNM-56.080)

- b. *nab^hA tA nab^hA*
 nab^h-A tA nab^h-A
 climb down-IMP PRT climb down-IMP
 'Climb down, climb down.'
 (WB.BNM-56.084)

Both of these examples are extracted from the same context of a narrative in which the wild buffaloes are asking a small boy, who is afraid of the wild buffaloes and is hiding himself in the tree, to come down. They use an affectionate tone so that the boy's fear would be reduced and he would climb down the tree. The use of the imperative marker *-A* has softened the harshness of the command in these examples.

In honorific cases, the formation of imperatives differs considerably in both of these languages. Chitoniya Tharu, irrespective of the sound in the final position of the verb stem, exhibits an imperative marker *-hũ* which is directly affixed to the verb stem to form an honorific imperative (3a). But Dangaura Tharu characterizes two different markers in two different honorific levels: *-i* in honorific (3b), *-o* in mid-honorific (3c) and non-honorific plural cases (3d) as demonstrated in the examples below.

- (3) a. *yi tin gAgra rupaya koḍke lehũ*
 yi tin gAgra rupaya koḍ-ke le -hũ
 this three pitcher rupees dig-SEQ take-IMP
 'Okay, please dig up and take these three pots of rupees.' (Chitoniya)(JF.BM-78.648)
- b. *ApnA apAn kam ApnAhi kAri* (Dangaura)
 ApnA apAn kam
 2SG.HON REFL work
 ApnA-hi kAri -i
 2SG.HON -EMPH do-IMP.HON
 'You please do your work yourself.'
 (ELCTD_ PG.464)
- c. *tA bAlakA lano kAikA* (Dangaura)
 tA bAla-kA lan-o kAh-kA
 PRT call-SEQ bring-IMP say -SEQ
 'Okay, call him here.' (FR_MRC.234)
- d. *tur^hA p^he apAn kam ApnAhi kAro nA!*
 tur^hA p^he apAn kam
 2PL.MH also REFL work

apna-hi kaR -o na !
 2SG.HON-EMPH do-IMP PRT
 'You also do your work yourselves.'
 (Dangaura) (ELCTD_ PG.467)

The example (3a) shows how the imperative marker *-hũ* is affixed to the verb stem *le* 'take' to form an imperative *lehũ* 'take- IMP' in Chitoniya Tharu. However, the example (3b), (3c) and (3d) illustrate how the suffixes *-i*, and *-o* are affixed to the verb stems *kaR* 'do', *lan* 'bring' and *kaR* 'do' respectively in Dangaura Tharu to show different levels of honorificity. As the addressee of the example (3b) is *apna* '2SG.HON', and that of (3c) is understood as *tũ* '2SG.MH' and that of (3d) is *tur^ha* '2PL.NH', the imperatives are characterized with different markers.

A noticeable point in Dangaura Tharu is that it has mid-honorific level which is not attested in Chitoniya Tharu. However, Chitoniya Tharu exhibits a special honorific level (SH) which is used to address only the strangers, ritual friends and maternal relatives. It has a special pronoun *raure* which takes a special suffix, *-iyu* in every tense, aspect and mood as the agreement marker.¹ The example (4a) clarifies the situation.

- (4) a. *yaju j^hin .t^hAgbiyu*
 yaju j^hin .t^hAg-b-iyu
 today PROH cheat-FUT-2SG.SH
 'Do not cheat today.' (HJ.BNM-56.073)

The speaker of this extract is a jackal who maintains ritual friendship with a hen with a vested interest. The jackal asks the hen where it will be during the night; later when he reaches there, he does not find the hen. Next day, when they meet again and the hen tells the jackal where it will be that day, the jackal utters this command. As it is addressed to the ritual friend, he uses the special honorific form *.t^hAgbiyu* 'cheat -FUT - 2SG.SH'.

So far we have discussed the formation of immediate imperatives in different levels of

honorificity from consonant ending verb stems. The formation of imperatives from vowel ending stems differs considerably in both of these languages. A great difference is noticed in the formation of imperatives from *a*-ending verb stems. In Chitoniya Tharu, the *-a* at the final position generally undergoes a morphophonemic change, and is turned into *-o* in non-honorific cases. In the examples (5a-b), we notice how the *-a* at the final position of the verbs *k^ha* and *ja* has transformed into *-o* in *jo* 'go -IMP' (5a) and *k^ho* 'eat -IMP' (5b).

- (5) a. *jo tuĩ paĩḍawa ka laḡ^hina raḡasi*
 ja-o tuĩ paĩḍawa-ka laḡ^hina raḡ-si
 go-IMP 2SG road-GEN near remain-IMP
 'You go and remain on the side of the road.'
 (JF.BM-78.420)
- b. *lo k^ho taBa muĩ baNadebaSu*
 lo k^ha-ot laBa muĩ baNa-de-b-su
 PRT eat-IMP then 1SG make-give-FUT-1SG
 'Okay, eat then, I will make one.'
 (JF.BM-78.130)

We cannot rule out this formula as 'the *-a* at the final position of a verb stem changes into *-o* in imperatives' because it is not applicable to the verb *ya* 'come'. The verb *ya* 'come' requires an imperative marker *-u* in singular non-honorific case, as in (6a-b).

- (6) a. *are baBuwa yau ta re*
 are baBuwa ya-u ta re
 VOC baby come-IMP PRT PRT
 'Hey baby, come (here).' (JF.BM-78.375)
- b. *are j^hin yau*
 are j^hin ya-u
 VOC PROH come-IMP
 'Hey, don't come.' (JF.BM-78.191)

However, Dangaura Tharu does not exhibit any of these patterns in the formation of imperatives in non-honorific level. Instead, it simply embodies a zero imperative marker to *a*-ending verb stems. The examples in (7a-b) demonstrate the case.

- (7) a. *.taĩ aju ja ki aju ja pa^tae*
 .taĩ aju ja-ø ki
 2SG.NH today go-IMP that

¹See Paudyal (2014:113) for details about the use of this pronoun.

aju ja-ø pAt^ha-e
 today go-IMP send-PURP
 'You go to send (her back to her parents'
 home) today.' (FR_YRC.038)

b. *tAī ihyā a*

tAī ihyā a-ø
 2SG.NH here come-IMP
 'You come here (Non-Hon.)' (ELCTD_
 PG.080)

The imperatives *ja* 'go-IMP' and *a* 'come-IMP' in (7a-b) clearly demonstrate that Dangaura Tharu characterizes immediate imperatives in non-honorific level by embodying a zero marker.

As far as the vowel stems ending with *-i* and *-e* are concerned, both of these languages attest a zero marker to characterize imperative mood in non-honorific cases. The examples in (8a-b) clarify the situation.

(8) a. *kaske kahū de yaku?* (Chitoniya)

kaskekAh-ū de-øyaku
 howsay -HORTgive-IMPmore
 'How could (they) ask for more?'
 (JF.BM-78.0953)

b. *lina ñinse mañin mañja budd^hi deho*

a-na ñin-se mañ-haNa mañja
 come-INF day-ABL 1SG-DAT good
 budd^hi ñe-ho
 intellect give-IMP
 'Please give good intellect in the days to
 come.' (Dangaura) (TNY_YRC.046.051)

Chitoniya Tharu also exhibits another immediate imperative marker *-hi* affixed to the verb stems irrespective to the numbers and root ending sound. This marker also is not attested in Dangaura Tharu. The use of this marker is illustrated in the examples (9a-b).

(9) a. *hAine pure dehi jāc*

hAine pure de-hi jāc
 NEG all give-IMP examination
 'No, appear in all examinations.'
 (PLS.JRC-70.129)

b. *tuī yekAr c^hāhA lehi*

tuī yekAr c^hāhA le -hi
 2SG this.GEN shadow take -IMP

'You rest in my shade (lit. in the shade of
 this).' (JF.BM-78.311)

For honorific expressions, especially to the strangers, Chitoniya Tharu uses periphrastic expressions as well. Such expressions consist of a participial form plus *jao*, where the *jao* carries the sense of imperative, as in (10).

(10) *e musap^hir yailjao eg^hari p^hAdke lAdke*

e musap^hir ya-il-jao ek-g^hari
 VOC passenger come-PTCP-IMP one-moment
 p^hAdka-e lAdke
 speak-PURP ECHO
 'Hey passenger, please come for a moment to
 have talks.' (JF.BM-78.539)

Thus, we have noticed that Chitoniya Tharu exhibits much more complex immediate imperative system than Dangaura Tharu. It has zero marker, *-u*, *-hi*, in non-honorific singular, *-o* in non-honorific plural, and *-hū* in honorific level. Besides, it attests special honorific marker- *iyu* which indicates that the addressee is either a stranger, or a ritual friend, or a maternal relative. However, Dangaura Tharu only exhibits zero morpheme in non-honorific, *-o* in mid-honorific and non-honorific plural, and *-i* in honorific levels.

2.1.2 Non-immediate imperative

Both of these Tharu languages attest distinct imperative markers for the command or request to be carried out later, in future. The most common suffixes expressing delayed imperatives in Chitoniya Tharu are *-si* and *-ihe*, which are interchangeably used, for a singular non-honorific addressee (11a-b), and *-hA* for plural non-honorific one, as in (11c).

(11) a. *morAke yi k^hod^hAlima d^hukadihe*

mor-ke yi k^hod^hAli-ma
 1SG.OBL-DAT this nest-LOC
 d^huka-de-ihe
 keep-give-FUT.IMP
 'Please, keep me in this nest.'
 (HJ.BNM-56.033)

b. *lo tuī yi desi bmae u desi bmae*

lo tuī yi de-si bAne-e
 PRT 2SG this give-IMP make-INF

u de-si bana-e
 that give-IMP make-INF
 'Well, you make this, you make that.'
 (JF.BM-78.0070)

c. *d^husahare musahare jatara*
 d^husahar-e musahar-e jatara
 Dhusahar-EMPH Musahar-EMPH as many
jamme jaiha calaha
 jamme ja-ha cal-ha
 all go-IMP walk-IMP
 'All the Dhusahars and Musahars come (to the meeting).'

But the delayed imperatives in Dangaura Tharu are characterized by the suffixes *-is* in case of non-honorific addressees and *-ho* with mid-honorific ones, as in (12a-b) respectively.

(12) a. *mwar g^horwa jabsam k^haii*
 Mwar g^horwa jAb-sam k^hai-i
 1SG.GEN horse when-till eat-FUT.3SG
.tAbsAM.tAĩ jin worais
 .tab-sam tAĩ jin wora-is
 then-till 2SG.NH PROH finish-IMP.NH
 'As long as my horse will eat, you do not finish.' (FR_MRC.081)

b. *mahin bisaina t^hau dek^hadeho*
 mAĩ-hana bisai-na t^hau dek^h-a-de-ho
 1SG-DAT rest-INF place see-CAUS-give-IMP.MH
 'Please show me a resting place.'
 (CJ_DLC.019)

The imperative in (13a) is *worais* 'finish-IMP' as the addressee is *.tAĩ* '2SG.NH'. But the addressee in (13b) is understood to be *tũ* '2SG.MH' to which the imperative *dek^hadeho* 'see -CAUS -give -IMP.MH' agrees.

In both of these languages the non-immediate imperatives in honorific cases are characterized in the finite form of the verb in the future tense, though the inflectional suffixes in these languages differ.

(13) a. *balaim kalase libi.ta mwar sahayog karbi*
 bAla-m kaLase a-b-i .ta
 call-FUT.1SGif come-FUT-2H PRT

mwar sahayog kar-b-i
 1SG.GEN help do-FUT-2H
 'If I call you, please come and help me.'
 (Dangaura) (FR_MRC.134)

b. *yandine sajh^hamar g^har yabshu na!*
 yAndine sajh^hamar g^har
 tomorrow evening 1PL.GEN house
 ya-b-hũ na
 come-FUT-IMP PRT
 'Please come to my house in the evening tomorrow.'
 (Chitoniya)

We notice that in (13a-b), the imperative mood is embodied with the future tense which is a unique feature in NIA.²The imperative markers characterizing the immediate and delayed imperatives in both Tharu languages are summarized in table 1.1 below.

Table: 1.1 Imperative Markers in Tharu

Honorificity level	Imperative markers							
	Chitoniya Tharu				Dangaura Tharu			
	Immediate		Non-immediate		Immediate		Non-immediate	
	Sg	Pl	Sg	Pl	Sg	Pl	Sg	Pl
Honorific	-hũ	-hũ	-b-hũ	-b-hũ	-i	-i	-bi	-bi
Mid-Hon.	-	-	-	-	-o	-o	-ho	-ho
Non-Honorific	-Ø	-hũ	-si	-si	-ø	-o	-is	-ho
	u,		-ihe	-ihe				
	o,							
	hi,							

2.2 Prohibitive mood

Prohibitive mood expresses a negative command. The imperative constructions in both of these languages require a different prohibitive marker. However, the prohibitive markers used in both of these languages are very similar, *j^hin* in Chitoniya and *jin* in Dangaura Tharu. As in imperative mood, the prohibitives can also be immediate and non-immediate, and the inflectional suffixes are as

²Masica (1991:279) points out that in NIA languages "a verbal expression may have Tense or Mood (or neither) but not both."

in imperative constructions. The prohibitive marker is the same irrespective of the temporal aspect, as in (14a-b).

- (14) a. *wokARake j^hin kAtAsi j^hin d^hAsi* (Chitoniya)
 wokAR-ke j^hin kAt-si j^hin d^hAR-si
 he.OBL-DAT PROH cut-IMP PROH kill-IMP
 'Neither bite, nor kill him.' (JF.BM-78.421)
- b. *nahī sasurAWA jin suto* (Dangaura)
 nahī SASURAWA jin sūt-o
 NEG father-in-law PROH sleep-IMP
 'No, father-in-law, do not sleep.'
 (FR_YRC.116)

As we notice in these examples, the prohibitive marker always precedes the imperative form of the verb in both of these languages.

2.3 Hortative mood

According to Genetti (2007:341), the hortative constructions are "used to exhort a group of people including the speaker, to action". The hortative makes the hearer to "go ahead and do X casting off any inhibitions that might prevent him/her" (Watters 2002:309). The hortative mood in Chitoniya Tharu is characterized in the form of *-hū* or *-ū*, whereas Dangaura Tharu attests simply *-ū* for the purpose. The examples in (15a-b) and (16a-b) illustrate the case.

- (15) a. *ek du bat p^hAdkAhū* (Chitoniya)
 ek du bat p^hAdka-hū
 one two talk speak-HORT
 'Let's have one or two talks.'
 (JF.BM-78.287)
- b. *lo buti wokAR naūse pARAb rAhadehū.*
 lo buti wokAR naū-se
 PRT PRT 3SG.GEN name-ABL
 pARAb rAh-de-hū
 festival remain-give-HORT
 'Well, let's celebrate a festival after his name.'
 (Chitoniya) (JF.BM-78.779)
- (16) a. *tūhinA ab twar lAihAR pAt^hai aū kAikANA kAhAl*
 tū-hANA ab twar lAihAR
 2SG.MH-DAT now 2SG.GEN parental home
 pAt^ha-i a-ū
 send-NMLZ come-HORT

kAh-kANA kAh-l
 say-SEQ say-PST.3SG.NH
 'Let me send you back to your parents' home'
 said the father.' (Dangaura) (FR_YRC.045)

- b. *mai ka sAhAyog karū.tuhihA?* (Dangaura)
 mai ka sAhAyog kAR -ū tū -hANA
 1SG what help do-HORT 2SG.MH-DAT
 'What shall I do for you?' (FR_MRC.150)

The verbs *p^hAdkAhū* 'speak -HORT' and *rAhadehū* 'remain -give -HORT' in the examples (15a-b), which are extracted from the same narrative in Chitoniya Tharu, the hortative marker is *-hū* and invite the addressee to participate in the action. However, in the Dangaura Tharu examples (16a-b), the hortative marker is *-ū* and the verbs *aū* 'come -HORT' and *karū* 'do -HORT' express the intention of the speaker only.

2.4 Desiderative mood

The desiderative mood expresses the desire of the speaker to do the action denoted by the verb in the desiderative form. To express the desire of the speaker, both of these Tharu languages have their distinct markers. Chitoniya Tharu attests a desiderative suffix *-si* as exemplified in (17a-b), whereas Dangaura Tharu characterizes this mood with the markers *-is*, or *-As*, as illustrated in (18a-b).

- (17) a. *Are dao Are dao mor mutAsi lAgAyI*
 Are dao Are dao mor
 VOC mother VOC mother 1SG.GEN
 mut -si lag -yi
 urine-DESID feel-PROG
 'Hey mother, hey mother, I want to urinate.'
 (Chitoniya) (HJ.BNM-56.090)
- b. *eguḍa kAhAyI mor pAdAsi lAgAyI hAU*
 ek-guḍa kAh-yi mor
 one-NCLF say-PROG 1SG.GEN
 pad-si lag-yi ho
 fart-DESID feel-PROG PRT
 'One was saying, I want to fart.'
 (Chitoniya) (HJ.BNM-56.092)
- (18) a. *mwar baṭ sunḍeṭ^hA kAikANA mahin p^her bAtois*
 lAg^hu
 mwar baṭ sun-ḍe-ṭ^h-A kAh-k^hANA
 1SG.GEN talk hear-give-PRS-3PL.NH say-SEQ

mʌi-hʌʌ p^her bʌtʌ-is lʌg-t^h-a
 1SG-DAT also say-DESID feel-PRS-3SG.NH
 'Thinking that you are listening to me, I also
 like to tell the story.' (Dangaura)
 (SR_PRC.007)

- b. ʌpʌ.tʌ dɛrʌkʌ b^hʌgʌs kʌrʌt^hi?
 ʌpʌ .tʌ dɛrʌ-kʌ b^hʌg-ʌs
 2SG.HON PRT be afraid-SEQ run away-DESID
 kʌrʌt^h-i
 do-PRS-1PL
 'You seem to be willing to run away being
 afraid of something.' (Dangaura)
 (CJ_DLC.016)

A noticeable point is that Chitoniya Tharu has a single desiderative suffix *-si*, but Dangaura Tharu attests two desiderative suffixes *-is* or *-ʌs* which are not interchangeable. The determinant is the root ending sound of the verb. Vowel-ending verbs use *-is*, whereas the consonant-ending verbs prefer *-ʌs*. The example in (18a) contains a vowel-ending verb *bʌtʌ* 'tell', whereas the one in (18b) contains a consonant-ending verb *b^hʌg* 'run away'.

2.5 Conditional mood

In both of these Tharu languages four types of conditions are attested: the present condition, the past condition, the future condition, and the unreal or hypothetical condition. Except the hypothetical condition in Chitoniya Tharu, all the conditions are lexical conditions in the sense that the condition is expressed with conditional particle or conjunction. The conditional mood in Chitoniya Tharu is marked by the conditional conjunction *jʌũ* 'if' and the conditional particle *tʌ* 'then'. But in Dangaura Tharu it is characterized by the conditional conjunction *kʌlʌsɛ* 'if' and the particle *tʌ* 'then'. As there is no morphological condition except the unreal condition in Chitoniya Tharu, the verbs in the protasis and apodosis are in the tense required by the context. Here are some examples of conditions in both of these languages.

- (19) a. eɡuɖʌ dʌrʌwʌ girbiyʌ jʌũ tʌ
 ek-guɖʌ dʌrʌwʌ gir-b-iyʌ jʌũ tʌ
 one-NCLF branch fall-FUT-3SG if PRT
 muĩ nahĩ mʌrjɛbʌhĩ?

muĩ nahĩ mʌr-ʌ-b-hĩ
 1SG NEG die-go-FUT-1SG
 'If a branch falls, won't I die at once?'
 (Chitoniya) (JF.BM-78.312)

- b. .tʌĩ nʌi jʌi^h-yʌ kʌlʌsɛ hʌmʌrʌ lʌndɛbi nʌi
 .tʌĩ nʌi jʌi-t^h-yʌ kʌlʌsɛ
 2SG.NH NEG go-PRS-2SG.NH if
 hʌmʌrʌ lʌn-dɛ-b-i nʌi
 1PL bring-give-FUT-1PL NEG
 'Okay, if you are not going, we will bring for
 you.'
 (Dangaura) (FR_MRC.031)

As the temporal context of these examples is future, the verbs in the protasis and apodosis of both the examples are in future tense. Chitoniya Tharu maintains the use of the conditional particle *tʌ* 'then' (20a), whereas Dangaura Tharu attests only the conditional conjunction *kʌlʌsɛ* 'if' (20b). A future conditional sentence can also consist of a command or request in the apodosis. In such cases, the verb in the protasis is in future tense and the verb in the apodosis is in the imperative mood, as in (20a).

- (20) a. bʌg^hʌwʌ yɛbihe jʌũ tʌ tu ihe bʌsuli bʌjosi
 bʌg^hʌwʌyʌ-b-ihe jʌũ tʌ tu
 tigercome-FUT-3SG if then 2SG
 yɛ-e bʌsuli bʌjʌ-si
 this-EMPH flute play-IMP
 'If the tiger comes, you play this flute.'
 (Chitoniya) (WB.BNM-56.098)
- b. bʌlʌim kʌlʌsɛ ʌibi.tʌ mʌwʌr sʌhʌyog kʌrbi
 bʌlʌ-m kʌlʌsɛ a-b-i .tʌ
 call-FUT.1SG if come-FUT-2H PRT
 mʌwʌr sʌhʌyog kʌr-b-i
 1SG.GEN help do-FUT-2H
 'If I call you, please come and help me.'
 (Dangaura) (FR_MRC.134)

In both of these examples, the protasis is in future tense and the apodosis consists of a command (20a) or request (20b). The use of the conditional particle *tʌ* 'then' in (20b) indicates that the particle in Dangaura Tharu is optional. In Dangaura Tharu it is the particle that can be optionally dropped, but in Chitoniya Tharu, the conditional conjunction itself can be dropped, as in the example (21a).

- (21) *nA jaũ tA gAriyobiya ki kaT^hi kaibiya*
 nA ja-ũ tA gAriya-b-iyA ki
 NEG go-HORT PRT scold-FUT-3SG or
 kaT^hi kaT-b-iyA
 what do-FUT-3SG
 'If I do not go, (she) may scold me or do what
 (I don't know).' (JF.BM-78.0378)

The borrowing of Nepali conditional conjunction *yedi* 'if' is attested in Dangaura Tharu (22) but we do not find it in the Chitoniya Tharu corpus.

- (22) *yedi woraibya kaLase mai sarap dem*
 yedi wora-b-ya kaLase mai sarap de-m
 if finish-FUT-2SG.NH if 1SG curse give-1SG.FUT
 'If you are finished, I will curse you.' (Dangaura)
 (FR_MRC.082)

In our discussion so far, we have noticed that conditional mood in both of these Tharu languages is characterized in the form of the conditional conjunctions, *jaũ* in Chitoniya and *kaLase* in Dangaura Tharu, and the tense in protasis and apodosis is determined by the contextual environment. However, we do have a distinct conditional marker - *t* to express the hypothetical and the past conditions in Chitoniya Tharu. This conditional morpheme -*t* is affixed to the verb stems in both the clauses- protasis and apodosis. The examples in (23a-b) clarify the situation.

- (23) a. *g^hArAWama rAhAtiya tA dek^hiyA.*
 g^hArAWa-ma rAh-t-iyA tA
 house-LOC remain-COND-3SG PRT
 dek^h-t-iyA
 see-COND-3SG
 'If she were at home, she would see.'
 (JF.BM-78.0216)
- b. *tAk^hAni kaHAtAhi tA mu tAk^hAnihĩ yandetAhi*
 tAk^hAni kaH-t-hi tA mu
 then say-COND-2SG PRT 1SG
 tAk^hAni-hĩ yan-de-t-hĩ
 then-EMPH bring-give-COND-1SG
 'If you had told me earlier, I would have brought one then.' (JF.BM-78.130)

3 Conclusion

Chitoniya and Dangaura Tharu varieties, thus, have distinct features for different modal expressions. Although both of these varieties

follow the same constituent order, and attest immediate and delayed imperative systems based on the immediacy of the action to be carried out, they have distinct morphological features for expressing different moods. This study has come to a conclusion that both of these varieties exhibit all the types of modal expressions. However, Chitoniya Tharu is much more complex than Dangaura Tharu. The former attests five imperative morphemes in non-honourific singular form, whereas the latter exhibits only one structure that is zero morpheme for the purpose. Chitoniya Tharu displays a conditional particle *jaũ* 'if' but Dangaura Tharu attests *kaLase*. Similarly, Chitoniya Tharu exhibits a distinct conditional morpheme -*t* in hypothetical and past conditions, whereas Dangaura Tharu does not exhibit any specific morpheme for the purpose. Instead, the conditions are characterized by the tense markers used in both the clauses, protasis and apodosis, based on the meaning to be conveyed.

Abbreviations

~	Nasalization	1	First person
2	Second person	3	Third person
ABL	Ablative	ACC	Accusative
COMP	Completive	COND	Conditional
DAT	Dative	DESID	Desiderative
EMPH	Emphatic	FUT	Future
Hon	Honorific	HORT	Hortative
GEN	Genitive	IMP	Imperative
INF	Infinitive	LOC	Locative
MH	Mid honorific	NEG	Negative
NH	Non-honorific	NCLF	Numeral classifier
OBL	Oblique	PROH	Prohibitive
PRT	Particle	PL	Plural
PRF	Perfect	PRS	Present
PROG	Progressive	PST	Past
PTCP	Participial	REFL	Reflexive
SEQ	Sequential	SG	Singular
VOC	Vocative		

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MECHANISMS FOR CUMULATION OF EXPONENTS

Tikaram Poudel

This study investigates the exponents expressing the terms—present and past, transitive and intransitive, singular and plural, first and non-first— realizing the categories of tense, transitivity, number and person respectively in Santali (Munda), Urawn (Dravidian), Newar (Tibeto-Burman), Sanskrit (Indo-Aryan) and language isolate Kusunda to understand the mechanisms of cumulation and separation.

Keywords: exponent, cumulation, separative phonological fusion

1 Introduction

In describing morphological systems of natural languages, we refer to (i) morphological categories (ii) the terms and (iii) the exponents. The categories form paradigmatic systems such as tense and number; the terms realize these categories such as past, present and future for the category tense and singular and plural for the category number respectively; and exponents are phonological manifestation of terms such as *-s*, *-z*, *-iz*, etc. realizing the terms of the category of number in English. An exponent is said to be cumulative if it corresponds to two or more distinct grammatical categories (Mathews 1972: 65). For example, the Latin exponent *t*, a single phonological unit that cannot be further segmented, in words such as *fertur* 'he is being carried' represents both the 3rd person as opposed to first and second person, and singular as opposed to plural.

On the other hand, when an exponent stands for single semantic level i.e., a single grammatical category, the exponent is said to be separative. Plank (1999) illustrates this distinction from Old English and Turkish examples. The word for 'field' in Old English and Turkish are *feld* and *tarla* respectively. Both Old English and Turkish inflect for number and case.

(1) Old English	(2) Turkish
feld-a	tarla-lar-i
field-PL.ACC	field-PL-ACC

In Old English, the single morpheme *-a* stands for plural number as well as for accusative case. Hence, the Old English *-a* is an example of cumulative morphology. On the other hand, Turkish requires two separate morphemes for plural number and accusative case i.e., the morphemes *-lar* and *-i* in this case. Hence, the Turkish example is the case of separative morphology.

Separative morphology is said to be more dominant feature of agglutinative languages such as Mizo or Manipuri, Tibeto-Burman languages of North East India. In these languages, the exponents of morphological categories – such as person and number in verbal inflection– are separately expressed when they co-occur. Consider the following examples from Mizo.

(3) Mizo	
ka-kal	ka-n-kal
1SG-go	1-PL-go
'I go.'	'We go.'

Since the origin of morphological typology, it has been assumed that flexion develops from agglutination (or isolating) and phonological fusion is the sole agent responsible for transforming separative exponents into cumulative ones. Indo-European languages are often cited as example of this process. Proto-Indo-European was an isolating language like modern Chinese (Shields 1992). By the time the classical IE languages such as Vedic Sanskrit and Latin, they developed flexional morphology. Phonological fusion is said to be prime agent to transform isolating Proto-IE into flecional by the time languages like Vedic Sanskrit, Latin, Greek, etc. evolved.

In this paper we are interested in mechanisms that cause exponents to be cumulative and mechanisms that resist cumulation and remain separative. Cumulation morphology often results from the phonological fusion of two adjacent exponents. But the phonological fusion is not only the factor that leads to the cumulative morphology.

2 Cumulation of Tense and Transitivity Exponents in Santali

A particular exponent expressing particular terms realizing particular pairs or triplets of categories in the inflection of a lexeme i.e., a noun or a verb of a language can be cumulative or separative. However, being cumulative or separative of an exponent is a property of not entire language, nor of entire subsets of inflectional systems. Santali has cumulative exponents for past tense and transitivity but present tense and transitivity are expressed separatively. One of the reasons for the cumulation of past tense and transitivity is that past tense leads to high transitivity (Tsunoda, 1985) because of its high affectedness feature of patient argument. On the other hand, in present tense affectedness of the patient argument is not relevant; as a result, transitivity does make sense. This shows that languages employ different mechanisms that are language specific for cumulation and separation of exponents. The Santali tense and transitivity cumulative exponents are given in Table 1.

Table 1: Santali tense and transitivity cumulation (From Poudel, 2015)

	Transitive	Intransitive
Past	<i>-ked</i>	<i>-en</i>
Present Perfect	<i>-akad</i>	<i>-akan</i>
Past perfect	<i>-led</i>	<i>-len</i>

The exponents *-ked* and *-en* mark past tense in a transitive and in an intransitive clause respectively. The exponent *-ked* cumulates past tense as opposed to present tense and transitive as opposed to intransitive. Similarly, the exponent *-en* cumulates past tense as opposed to present tense and intransitive as opposed to transitive.

(4) Past tense and transitive

uni bāplā rit-e pāram-ked-ā
3SG wedding ritual-3SG.SBJ complete-PST:TR-IND
'...he completed the wedding ritual.'

(5) Past tense and intransitive

bārit deviraman
marriage_procession Deviraman
aḍāk-sur-ku seṭer-en-ā
house-near-3PL.SBJ reach-PST:ITR-IND
'The wedding procession reached near the house of Deviraman.'

Present tense is unmarked, irrespective of transitivity status:

(6) Present tense and transitivity

māraāñ mantri puḷe
prime minister bridge-3SG.SB
Jūhāu sāgun-ā
inauguration do-IND
'The prime minister inaugurates the bridge.'

(7) Present tense and intransitivity

esel si-y-ā-i
Esel plough-y-IND-3SG.SBJ
Esel ploughs.

With the applicative suffix *-a*, the past tense transitive suffix *-ked* gets fused to *-d*, consequently this exponent expresses past tense as opposed to present tense and transitive as opposed to intransitive.

(8) kisāḍ guti dākā

master slave rice
em-a-d-i-y-ā-i
give-APP-PST:TR-3SG.OBJ-y-IND-3SG.SBJ
'The master gave food to the slave.'

(9) uni iṅ duk-e

3SG 1SG suffering-3SG.SBJ
em-a-ṅ-ā
give-APP-1SG.OBJ-IND
'He gives me trouble.'

To say that *-ked*, *-en* and *-d* are cumulative means there is no way of dividing up the phonological form of these morphological exponents, so that the parts of these exponents could be seen to systematically express the contrasting respective terms of the separate categories.

3 Cumulation of Pronominal Cross-Referencing Exponents on Verbs in Urwan/Kurux

Unlike tense and transitivity cumulation of Austro-Asiatic Santali, Urawn (Jhangar/Dhangar), a Dravidian language of Nepal, shows cumulative morphology in its agreement exponents. In Urawn (Jhangar/Dhangar), the subject agrees with the verb in person, number and gender. There is a contrast between singular and plural in all persons. The first person plural, further, contrasts between inclusive and exclusive. Both the singular and plural second person

subjects contrast between masculine and feminine gender. There is a contrast between human masculine and the other third person singular. Table 2 summarizes the agreement markers in Urawn (Jhangar/Dhangar).

Table 2: Urawn (Jhangar/Dhangar) agreement markers (Data from (Hahn, 1911, Gordon, 1976 and Yadava, 2002)

Persons		Independent pronouns	Verbal exponents	
1	Singular	<i>ēn</i>	<i>-an</i>	
	Plural	Inclusive	<i>ēm</i>	
		Exclusive	<i>nām</i>	<i>-am</i>
2	Singular	Masculine	<i>nīn</i>	<i>-ay</i>
		Feminine		<i>-ar</i>
	Plural	Masculine	<i>nīm</i>	<i>-i</i>
		Feminine		<i>-ay</i>
3	Singular	Masculine	<i>ās</i>	<i>-as</i>
		Feminine/ non human	<i>ād</i>	<i>-a</i>
	Plural		<i>ār</i>	<i>-ar</i>

Let's take the exponent *-at* (10) that is said to be expressing first person plural exclusive. The exponent *-at* is cumulative as it expresses the term first as opposed to second and third of the category person, the term plural as opposed to singular of the category number and the term inclusive as opposed to exclusive of the category inclusion. It also cumulates the term indicative as opposed to interrogative or imperative of the category mood.

- (10) First person plural (inclusive)
 em mandi ond-k-at
 1PL.INCL rice eat-PST-1PL.INCL
 'We (inclusive) ate rice.'

Urwan/Kurux expresses the terms —past and present of the category tense with a separative exponent i.e., *-k* for past and *-d* for present respectively.

- (11) Present tense with separative exponent
 ēn es-d-an
 1SG break-PRES-1SG
 'I break.'

- (12) Past tense with separative exponent
 ēn es-k-an
 1SG break-PST-1SG
 'I broke.'

4 Cumulation of tense and conjunct/disjunct in Newar¹

Further, in Newar, the tense and conjunct/ disjunct markers get cumulated. The contrasts in the inflectional morphology are summarized as follows:

Table 3: Newar tense and conjunct/disjunct cumulation

	PAST	NON-PAST
CONJUNCT	<i>-ā</i>	<i>-e</i>
DISJUNCT	<i>-a</i>	<i>-i</i>

The conjunct and disjunct exponents have distinct structural and semantic distribution in Newar. Conjunct suffixes occur in declarative finite clauses if the first person subject is interpreted as intentional actor, in interrogative the subject is in second person and in reported speech the subjects, of the matrix and the subordinate clauses, are co-referential. Disjunct suffixes occur in all other finite environments elsewhere.

5 Cumulation of person, number and case in Kusunda

Kusunda, a language isolate of Nepal, has five personal pronouns (Watters, Yadava, Pokharel, & Prasain, 2006). The third person singular and plural are expressed by the same form *gina*. Numerals or quantifiers always precede the plural form.

Table 4: Kusunda Personal Pronouns and Possessive forms

Person	Independent Pronouns		Possessive forms	
	Singular	Plural	Singular	Plural
1	<i>tsi</i>	<i>tok</i>	<i>tsi-</i>	<i>tig-i</i>
2	<i>nu</i>	<i>nok</i>	<i>ni-</i>	<i>nig-i</i>
3	<i>gina</i>		<i>gina-yi-</i>	<i>gina-yi-</i>

The possessive forms of these Kusunda pronouns are expressed with both cumulative and separative exponents. Kusunda genitive suffix is *-i/ -e*

¹ The Newar data are from Poudel (2009).

(allomorphs *-yi* ~ *-ye* following vowels). The phoneme /y/ in allomorphs *-yi* ~ *-ye* following vowels is inserted because Kusunda does not permit vowel sequence. Further, the choice between the two genitive markers *-i/ -e* is not yet understood but we know that with pronouns *-i*, not *-e*, is the genitive suffix. The first and second person singular possessors are marked with prefixes attached to the possessed nouns. These prefixes are the cumulated forms of person, number and genitive as shown in Table 4.

On the other hand, the first and second person plural possessors are expressed with separative morphology. But the suffixation of genitive *-i* changes the phonological shape of the pronouns. With the third person pronoun the possessive morphology is separative, not the cumulative. Unlike the first and second person the suffixation of the genitive marker *-yi* does not change the phonological shape of the third person pronoun.

When this genitive suffix *-i* combines with the personal pronouns to form the possessive pronouns, it affects the phonological shapes of the root of the first and second person personal pronouns with the phonological process of vowel harmony. But the phonological process of vowel harmony does not affect the phonological shape of the third person. One possible reason is that the first and second person pronouns are monosyllabic but the third person pronoun is disyllabic.

(13) Possessive pronouns

<i>tsi-yi</i> ‘mine’	<i>tsi-</i>	‘my’ < *tsi
<i>tig-i</i> ‘ours’	<i>tig-i</i>	‘our’ < *tok
<i>ni-yi</i> ‘yours’	<i>ni-</i>	‘your.SG’ < *nu
<i>nig-i</i> ‘yours (PL)’	<i>nig-i</i>	‘your.PL’ < *nok
<i>gina-yi</i> ‘his/hers/ theirs’	<i>gina yi</i>	‘his/hers/theirs’ < *gina

The phonological shape of the root and the morphemes determine the cumulative or separative morphology. The Kusunda first and second person singular pronouns are monosyllabic with open syllables. As Kusunda does not permit the word final vowel sequence, the genitive *-yi* merges with the final vowel of the root. On the other hand, the first and second person plural pronouns are monosyllabic with closed syllable structure. When the genitive suffix is added, the

stem becomes a bi-syllabic word in which the final consonant of the root functions as the onset of the second syllable leading to separative morphology. In the meantime the suffixation of the genitive marker, which is a high front vowel, harmonizes the vowel of the root into the high front vowel, too. The third person pronoun is already a bi-syllabic word and this restricts the process of vowel harmony when the genitive is suffixed. Instead the phoneme /y/ is inserted to prevent the vowel sequence.

6 Cumulation of person-number exponents in Sanskrit

The cumulative and separative status of Sanskrit person number exponent is interesting. The long recorded history of this language makes it possible to understand the mechanisms that underwent in different stages of its development. Let’s begin the examination of this phenomenon with the following data:

Table 5: First person agreement markers

Person		SG	DU	PL
1	Pre-classical	<i>-a</i>	<i>-*vas-i</i>	<i>-mas-i</i>
	Classical	<i>-m-i</i>	<i>-vas</i>	<i>-mas</i>
	Post-classical	<i>-m-i</i>	<i>-vas</i>	<i>-ma</i>
2		<i>-s-i</i>	<i>-thas</i>	<i>-tha</i>
3		<i>-t-i</i>	<i>-tas</i>	<i>-ant-i</i>

(Bopp 1856, Burrow 1955:307)

The suffix *-i* indicates present tense. This present tense marker got cumulated with the person number in the Pre-classical first person, however, it was recovered in the later periods and the process continued in the second and third person as well. With the dual and plural, there was a reverse process i.e., the present tense marker was fused with the person and number exponents except in the case of third person plural.

The first person plural agreement marker *-mas* developed from the plural suffix *-sma*. Such phonological changes are common in Indo-European languages. In Zend this form was *-hma* and in the agreement marker it became *-mha* (Clark 1862: 162). Similar explanation holds for the Latin forms *fer-o*: ‘I carry’ and *fer-i-mus* ‘we carry’ and the future form *fera-m* ‘I will carry’. This agreement marker *-mas* was reanalyzed as 1st person PLUS plural, which developed into the

form of the exponent for the term plural of the category number. However, in later periods the *-m* element of *-mas* was reanalyzed as first person and *-as* element as plural because of homophonous Sanskrit nominative plural marker *-as* i.e., *rājan* 'king' is *rājan*, its nominative singular is *rājā* and the nominative plural is *rājan-as*. As the segment *m* of *-mas* was reanalyzed as first person, it replaced the earlier *-a*. Therefore, the phonological similarity between this *-m* and the *ma-* form of first person oblique forms is just a coincidence.

When the form *a-* that corresponded to proximate deictic began to be used as pronoun, it began to refer to first person PLUS singular number, i.e., cumulated. In the pre-Classical period, the non-singular agreement markers were cumulative as the forms *-vas* for dual and *-mas* for plural cannot be segmented for distinct person and number categories. But in Classical period the plural marker *-mas* was reanalyzed. In its reanalyzed form, the element *-m* was attributed for first person and the element *-as* for plural category. Hence, in this stage the plural form expressed the categories of person and number separately. In the post-Classical period the final *-s* was dropped and the form *-ma* expressed both the categories of person and number. This phonological erosion led to the cumulation or earlier separative exponents. On the other hand, the dual form *-vas* remained cumulative throughout the recorded history of Sanskrit.

The second person singular agreement marker in Sanskrit is *-s*. Bopp (1856: 199) argues that this marker developed from the earlier *sv-* form for second person singular pronoun. It is to be noted that all Indo-Europeanists believed throughout 19th and 20th centuries that the person-number agreement markers developed from corresponding independent pronouns. Bopp's hypothesis is not valid because no such forms for second person independent pronouns in IE languages have been preserved. Instead, almost all the Indo-European languages have second person singular pronouns phonologically related *tv-* and agreement markers to *-s*. For the second person plural agreement marker *-tha*, of whose the origin is not certain, I assume its earlier form *-thas* similar to first

person plural *-mas*. This marker reduced to *-tha* from *-thas* because it was reanalyzed along with the first person, which changed from *-masi* to *-mas* and further *-ma*. Such an explanation was available in literature, but never got acceptance in main stream literature on Indo-European linguistics. Recently, Whaley (1997: 137f.), invoking the authority of August Schleicher in this regards writes: "the process whereby agglutinative languages become fusional is probably [!] due to reduction. In this case, the frequent co-occurrence of two adjacent morphemes lends itself to reanalyzing the combination as a single unit. Once this occurs, the unit may fuse together phonological and semantic features of the erstwhile morphemes."

The Sanskrit second person agreement markers were separative and cumulative in different stages of history in the early stage it was separative when *-as* of the *-thas* was interpreted as the plural marker. But in the later stages it turned to be cumulative when the *-s* element of *-thas* was dropped in analogy with the first person plural as in Classical Sanskrit it was shortened to *-ma*.

The third person plural agreement suffix *-ant* has nothing to do with the corresponding pronoun. This suffix was quite productive in Sanskrit i.e., in adjectives as *mahant-* 'great', *rusant-* 'bright', in pronominal adjectives as *iyant-* 'so much' *kiyant-* 'how much', and in participles as *adant-* 'eating', *tudant-* 'pushing' (Burrow 1956: 145). Burrow further notes that this suffix *-ant* was also used to mean abstract-collective nouns (1956: 146). This particular sense was further extended to the 3rd person plural agreement marker.

7 Conclusions

Cumulation of exponents is often attributed to flecational languages (Matthew 1991:179). However, the findings of this study suggest that cumulation and separation of exponents do not have direct reference to the morphological typology flecational and agglutination. An agglutinative language like Santali cumulates exponents for the terms past and transitive of the category tense and transitivity (4). This form gets further cumulated from *-ked* to *-d* when it co-occurs with the applicative marker *-ā* (8). On the

other hand, a flecional language like Sanskrit moves to and fro from separation to cumulation in different stages of its development.

One of the preconditions for the cumulation of exponents is their adjacent co-occurrence and semantic inter-relationship. Since the tense and transitivity, person and number exponents on verbs co-occur, they are more likely to be cumulated. It is to be noted that simply occurring adjacently always does not lead to cumulation as in the case with Mizo (3). Phonological fusion is one of the prime mechanisms for morphological cumulation from separation. The agency of phonological fusion, sooner or later, inevitably transforms morphological separation into cumulation. Nonetheless, there are several conditions that must be met for fusion to be able to obscure and especially to fully obliterate morpheme boundaries and thereby bring about cumulation. The exponents that are to be fused need to be frequently or obligatorily co-occur.

Language specific characteristics also play important role in cumulating exponents or resisting cumulation. For example in Sanskrit the reanalysis in terms of reanalysis of syntagmatic and paradigmatic contrasts and vowel harmony in Kusunda are the sole agents of cumulation or resisting cumulation i.e., separative.

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FINITE STATE APPROACH TO NEPALI ADVERBS

Balaram Prasain

This article attempts to analyze the Nepali adverbs from computational perspective. Nepali adverbs are grouped into various semantic groups and finite state transducer for each group is created and finally all the transducers are combined together to create a single transducer which can be used as analyzer and generator for Nepali adverbs.

Keywords: finite state, computational, transducer, derivation

1 Introduction

Adverbs in Nepali indicate manner, place, time and intensity. They do not inflect for anything but appear with postpositions in writing (Adhikari 2062VS). They are not the obligatory elements in the sentence. However, they are classified into various groups based on their semantics for our purpose based on 'Two-level morphology' developed by Koskeniemmi (1983) in particular. And for the implementing of analyzed data and creating a computational model, the Xerox Finite State Tool developed by Beesley and Karttunen (2003) has been employed.

2 Types of Adverbs

a. Temporal adverbs

Temporal adverbs are those adverbs which indicate time with respect to the action performed as आज *ajA* 'today' in (1). Table 1 lists some temporal adverbs.

- (1) राम आज स्कुल गयो।
 ram ajA skul gA-yo
 Ram today school go.PST-3SG.MASC
 'Today, Ram went to school.'

Table 1: Temporal Adverbs

Tags		Gloss
+ADV+TEMP	अहिले <i>Ahile</i>	now
+ADV+TEMP	आज <i>ajA</i>	today
+ADV+TEMP	अबेर <i>AberA</i>	late
+ADV+TEMP	सोमबार <i>somAbar</i>	Monday
+ADV+TEMP	हिउँद <i>hiüd</i>	winter

Since temporal adverbs do not inflect, the finite-state transducer demonstrated in Figure 1 is capable of analyzing and generating them.

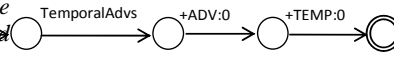


Figure 1: A finite state transducer for temporal adverbs

b. Spatial adverbs

Spatial adverbs are those adverbs which indicate place or location in the space where the action has taken place as नजिकै *nAjik-Ai* 'near-EMPH' in (2). Table 2 lists some of the spatial adverbs.

- (2) मेरो घर नजिकै मन्दिर छ।
 mero ghar nAjik-Ai mandir cha
 1SG.GEN house near-EMPH temple be.NP.3SG.MASC
 'There is a temple near my house.'

Table 2: Spatial adverbs

Tags		Gloss
+ADV+SPAC	तल <i>tAlA</i>	below
+ADV+SPAC	यहाँ <i>yAhã</i>	here
+ADV+SPAC	पछाडि <i>pachAđi</i>	behind
+ADV+SPAC	भित्र <i>bhitrA</i>	inside
+ADV+SPAC	नजिक <i>nAjik</i>	near

The finite state transducer illustrated in Figure 2 encodes the adverbs listed in Table 2 and it can analyze and generate them.

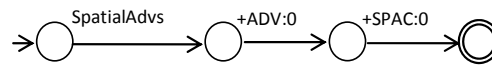


Figure 2: A finite state transducer for spatial adverbs

c. Amount adverbs

Amount adverbs are those words which indicate the amount of the head nouns it modifies as धेरै *dherAi* 'more' in (3). Table 3 lists some of the amount adverbs.

- (3) रामसँग धेरै पैसा छ।
 ram-sãgA dherAi pAisa cha
 Ram-COM more money be.NP.3SG.MASC
 'Ram has a lot of money.'

Table 3: Amount adverbs

Tags		Gloss
+ADV+AMOUNT	धेरै dherai	more
+ADV+AMOUNT	थोरै thorai	less
+ADV+AMOUNT	अलिक alik	little
+ADV+AMOUNT	त्यति tyati	that much
+ADV+AMOUNT	कति kati	how much

Since amount adverbs do not inflect, the finite-state transducer is simple and it is demonstrated in Figure 3 and it is capable of analyzing and generating them.

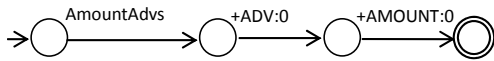


Figure 3: A finite state transducer for amount adverbs

d. Manner adverbs

Manner adverbs are those adverbs which indicate the ways or modes how the action has taken place as *बिस्तारो bistaro* 'slowly' in (4). Table 4 lists the some of the manner adverbs.

(4) सीता बिस्तारो पढ्छे ।
 sita bistaro padh-che
 Sita.FEM slowly read-NP.3SG.FEM
 'Sita reads slowly.'

Table 4: Manner Adverbs

Tags		Gloss
+ADV+MANNER	सुस्तरी sustari	slowly
+ADV+MANNER	कसरी kAsari	how
+ADV+MANNER	सुटुक्क sutukka	quietly
+ADV+MANNER	छिटो chito	quickly
+ADV+MANNER	यसरी yAsari	this way

The finite state transducer demonstrated in Figure 4 encodes the manner adverbs listed in Table 4 and it can analyze and generate them.

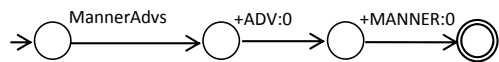


Figure 4 A finite state transducer for manner adverbs

e. Frequency adverbs

Frequency adverbs are those words which indicate the frequency of the action that is performed or

takes place as *कहिलेकाही kahilekahī* 'sometimes' in (5). Table 5 lists some of the frequency adverbs.

(5) हामी कहिलेकाही बजार जान्छौं ।
 fiami kahilekahī bAjar ja-n-chau
 IPL sometimes market go-NP.3PL
 'We sometimes go to market.'

Table 5: Frequency Adverbs

Tags		Gloss
+ADV+FREQ	कहिलेकाही kahilekahī	sometimes
+ADV+FREQ	सधैं sadhai	always
+ADV+FREQ	बारम्बार barAmbar	frequently
+ADV+FREQ	प्रायः prayA	often
+ADV+FREQ	निरन्तर nirantar	continuously

The finite-state transducer is simple since frequency adverbs do not inflect. It is demonstrated in Figure 5 and it is capable of analyzing and generating them.

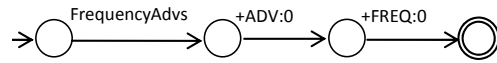


Figure 5: A finite state transducer for frequency adverbs

f. Reason adverbs

Reason adverbs are those which provide the reasons as *त्यसकारण tyAskaRaN* 'therefore' in (6). Table 6 lists some of the reason adverbs.

(6) त्यसकारण म माथि दुवै ठाउँको प्रभाव छ ।
 tyAskaRaN mA mathi duwai
 therefore 1SG above both
 thau-ko prab^haba cha
 place- GEN influence be-NP.3SG.MASC
 'Therefore, I have the influences of both places.'

Table 6: Reason adverbs

Tags		Gloss
+ADV+REASON	त्यसकारण tyAskaRaN	therefore
+ADV+REASON	फलस्वरूप phAlAswaRuP	as a result
+ADV+REASON	तसर्थ tAsar ^h A	thus

The reason adverbs listed in Table 6 are compiled into a finite state transducer as demonstrated in Figure 6 and it can analyze and generate them.

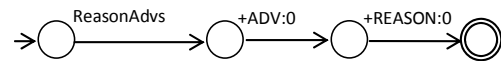


Figure 6: A finite state transducer for reason adverbs

g. Sentential adverbs

Sentential adverbs are those which modify the entire sentence as सायद *sayada* 'probably' in (7). Table 7 lists some of the sentential adverbs.

- (7) सायद यति धेरै खुशीलाई मनमै अटाउन असमर्थ भएँ।
 sayada yati dherai khusi-lai
 probably this more happy-DAT
 man-mai lajau-na asamarth bhā-ē
 heart-LOC.EMPH keep-INF unable be-P.1SG
 'Probably, (I) could not keep this much happiness within the heart.'

Table 7: Sentential adverbs

Tags		Gloss
+ADV+SENT	सायद sayad	probably
+ADV+SENT	अवश्य awasya	surely
+ADV+SENT	सामान्यतः samanyata	generally
+ADV+SENT	यद्यपि yadyapi	however
+ADV+SENT	सौचै sāccai	truly

The finite state transducer illustrated in Figure 7 encodes the sentential adverbs listed in Table 7 and it is capable of analyzing and generating them.

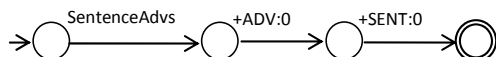


Figure 7: A finite state transducer for sentential adverbs

The individual finite-state transducers of the adverbs can be unioned together into a finite state transducer that can handle all the adverbs, that means, it can analyze and generate them.

3 Combined finite state transducer

Finite state transducers from Figure 1 to Figure 7 are combined into single finite state transducer as presented in Figure 8. This finite state transducer is bidirectional, i.e. it can analyze and generate all the adverbs.

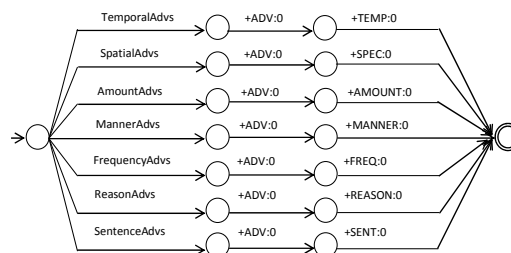


Figure 8: A combined finite state transducer for adverbs

4 Implementation

The adverbs described, analyzed and classified in (2) are implemented in a lexc file according to formalism in Beesley and Karttunen (2003). While creating the combined finite state transducer of Figure 8, the following Multichar Symbols are used (Prasain, 2012). These Multichar Symbols indicate the adverb category and sub-categorization of adverbs according to their types.

Multichar_Symbols +ADV +TEMP +SPAC
 +AMOUNT +MANNER +FREQ +REASON
 +SENT

LEXICON Root

!!! Temporal adverbs

अहिले AdvT;

हिजो AdvT;

!!! Spatial Adverbs

तल AdvS;

त्यहाँ AdvS;

!!! Amount adverbs

धेरै AdvAm;

अझ AdvAm;

!!! Manner adverbs

सुस्तरी AdvMa;

फटाफट AdvMa;

!!! Frequency adverbs

वारम्बार AdvFr;

निरन्तर AdvFr;

!!! Reason adverbs

त्यसकारण AdvRe;

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तसर्थ AdvRe;

!!! Sentential adverbs

सौँचै AdvSe;

स्वाभावतः AdvSe;

```
LEXICON AdvT
+ADV+TEMP:0 #;
LEXICON AdvS
+ADV+SPAC:0 #;
LEXICON AdvAm
+ADV+AMOUNT:0#;
LEXICON AdvMa
+ADV+MANNER:0#;
LEXICON AdvFr
+ADV+FREQ:0 #;
LEXICON AdvRe
+ADV+REASON:0 #;
LEXICON AdvSe
+ADV+SENT:0 #;
END
```

```
read lexc <adverbs.txt
define adverbs;
save stack adjectives.fst
```

5 Summary

Nepali adverbs are analyzed and grouped into seven semantic classes. For each group separate finite state transducer is created and combined all of them into a single finite state transducer using Xerox finite state tool. The finite state transducer created is bidirectional that means it can be used as analyzer and generator for Nepali adverbs.

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NOMINALIZATION IN DUMI

Netra Mani Dumirai

This paper focuses on the morpho-syntactic status of the nominalization in Dumi. Both lexical and clausal nominalizations are productive in this language. The nominalized clauses function as a noun phrase in broader syntactic structures, viz., verbal complement constructions, attributive phrases, nominal complement constructions, relative clauses, adverbial clauses in the language.

Keywords: Dumi language, morphosyntax, nominalization, derivational, clauses

1 Background

Dumi is one of the Kirati languages of the Rai group that belongs to the Himalayish sub-group within the Tibeto-Burman group of Sino-Tibetan language family (Eppel et al. 2012: 45). Dumi refers to the ethnic Kirati people as well as the language they speak. Hanßon (1991: 35) states that Dumi is one of the least described and pre-literate Kirati languages of Nepal, which is considered to be closer to the neighbouring two languages: Khaling and Koyu (Koyee). Although the Dumi language is mainly spoken in Makpa, Jalapa, Baksila, Sapteshwor and Kharmi VDCs in the northern Khotang district, it is also spoken in some other places of Sunsari, Morang, Jhapa districts and Kathmandu valley as well, by the migrated Dumi speakers (Rai and Paudel, 2008: 17), (Rai and Thokar, 2014: 5).

Dumi belongs to the western Kirati group under the Eastern Himalayish branch of the Tibeto-Burman languages of Nepal (Hanßon 1991: 112). The latest CBS (2011) reports Dumi people reside in 20 districts and 7,638 (i.e. 0.03% of the total population 2,64,94,504) Dumi speakers in Nepal. However, the distribution of Dumi speakers recorded in the Census 2011 is hardly convincing and needs more exploration. Hanßon (1991: 34) notes that there are main four varieties in Dumi: surrounding the confluence (i.e., the Sapteshwor area), south of the Tap River (i.e., the Jalapa area), in the Baksila ridge (i.e., the Baksila area) and in the north of Rawa River (i.e., the isolated Makpa area).

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According to Payne (2006: 36), the term 'nominalization' is derived from the word 'nominal' which comes from the Latin word for 'name' or 'noun', so to 'nominalize' something means to make it into a noun. He further describes that 'the operations that allow a verb to function as a noun are called nominalizations', which can be described with a simple relation (i.e., simply the common formula) (Payne, 1997: 223):

Lahaussais (2003) notes that the occurrence of morphosyntactic properties of nominalization in Sino-Tibetan language is a pattern whose scope was first described by Matisoff for Lahu (Matisoff 1972), and has been described as characteristic of Sino-Tibetan nominalization (Bickel 1999).

$$V \rightarrow [V]_N \text{ or, simply } V \rightarrow N$$

Similarly, Diana (2014) quotes Bickel (1999) that nominalization is a versatile strategy in Sino-Tibetan languages, and its functions reach well beyond the classical uses of nominalization, which has given rise to the term 'Standard Sino-Tibetan Nominalization'.

This paper presents an outline of the morphosyntax of nominalizations in Dumi. van Driem (1993: 190) remarks that addition of the nominalizer suffix <-m> to a simplex converts that simplex or the clause of which that simplex is the verb into a nominal constituent, which can serve either as a nominal head or, adnominally, as a modifier. Nominalization in Dumi occurs at both the morphological and clausal (i.e., syntactic) levels. The derivational (i.e., morphological) nominalization is derived from a verb root.

Nominalization, as one of the productive derivational morphosyntactic strategies refers not only to the process of deriving a noun, but also deriving a member of super class nominals that includes words with adjectival and adverbial function (Dixon 1980: 272). In the same vein, Givón (2001) quotes Hopper and Thompson (1984) that nominalization is best described in terms of the syntactic adjustments from the finite verbal-clause proto-type to the nominal prototype.

This paper is organized into five sections. The background concept is mentioned in the first section. In section 2, we deal with the nominalization and its distribution in Dumí. Section 3 discusses the clausal nominalization. In the second-last section 4, we examine the verb-phrase nominalization, and finally, section 5 summarizes the findings of the paper.

2 Nominalization and its distribution

Givón (2001: 24) notes that nominalization is the process via which a finite verbal clause, either a complete clause or a subject-less verb phrase, is converted into a noun phrase. Comrie and Thomson (2008: 334) state that nominalization is a derivational process that derives nouns from roots or stems belonging to some other category. Watters (2006: 199) states that nominalization is one of the productive tools in morphological process and is also a multi-functional instrument. Likewise, an affix which triggers such a change is referred to as nominalizer.

Nominalization is a prominent feature of T-B languages, and so as in Dumí. The different nominalization processes attested in this language are analyzed in this section. In Dumí, there are several affixes that are used to derive action nouns from action verbs and state nouns from stative verbs or adjectives.

The seven nominalizing suffixes found in Dumí are: *-na*, *-si*, *-do*, *-sa*, *-dam*, *-k^hom* and *-m*. Among them, each nominalizer is characterized by specific distributional (or behavioral) properties in the language.

2.1 The nominalizer *-m*

The nominalizer *-m* may be affixed to the root of the verb followed by the perfective marker *-po*, non-past tense marker *-t* and locative marker *-bi* in Dumí.

2.1.1 Perfective marker *-po* followed by the nominalizer *-m*

The perfective marker *-po* is suffixed to the root of the verb followed by the nominalizer *-m* as illustrated in (1).

- (1) *tulpom silpu biri*
 tul-po-m silpu bir-i
 tame-PRFT-NMLZ bird fly away-PST
 ‘The tamed bird flew away.’

In example (1), the nominal *tulpom* ‘the tamed’ is formed by suffixing the perfective marker *-po* to the verb root *tul* ‘tame’ followed by the nominalizer *-m* in Dumí.

2.1.2 Person marker *-i/-u/-o* followed by the nominalizer *-m*

In Dumí, nouns can be derived by employing the nominalizer *-m* to the verb root preceding the past tense marker *-i/-o/-u* as illustrated in (2).

- (2) *uma hudim rarú*
 um-a hud-i-m rarú
 3SG-ERG bring-3SG.PST-NMLZ seed
 ‘the seed that he brought’

In example (2), the nominal *hudim* ‘that he brought’ is formed by suffixing the third person singular marker *-i* to the root of the verb *hut* (**d*) ‘bring’ followed by the nominalizer *-m* in Dumí.

2.1.3 Non-past tense marker *-t* followed by the person marker *-a/-o/-u* and the nominalizer *-m*

In Dumí, nouns can be derived by employing the nominalizer *-m* to the verb root preceding the non-past tense marker *-t* followed by the person marker *-a/-o/-u* as illustrated in (3).

- (3) *uma putam p^hjaksum*
 um-a pu-t-a-m p^hjaksum
 3SG-ERG weave-NPST-3SG-NMLZ bag
 ‘the bag that she weaves’

In example (3), the nominal *putam* ‘that she weaves’ is formed by suffixing the non-past tense marker *-t* followed by the third person marker *-a* to the verb root *put* ‘weave’ followed by the nominalizer *-m* in Dumí.

2.1.4 Locative marker *-bi* followed by the nominalizer *-m*

The locative marker *-bi* is suffixed to the noun followed by the nominalizer *-m* as illustrated in (4).

k^hirsi-na dok-t-i
 visit-NMLZ get-NPST-1PL.INCL
 ‘We get a chance for a visit if we are alive.’

In example (9), the root of the verb *k^hirsi* ‘visit’ is suffixed by the nominalizer *-na* to form the noun *k^hirsina* ‘a visit’ in Dumi.

2.7 Nominalizer *-sa*

The nominalizer *-sa* is suffixed to the root of the verb as illustrated in (10).

(10) a. *huksa k^hlibaa akaktinA*
 huk-sa k^hliba-a
 bark-NMLZ dog-ERG
 a-kak-t-i-nA
 3SG-bite-NPST-1PL.INCL-NEG
 ‘A barking dog seldom bites.’

b. *reksa lip^hua k^hanot^he kokta*
 rek-sa lip^hu-a
 sharp-NMLZ dog-ERG
 k^hanot^he kok-t-a
 nicely cut-NPST-3SG
 ‘A sharp knife cuts nicely.’

In examples (10a,b), the nominals *huksa* ‘barking’ in (10a) and *reksa* ‘sharp’ in (10b) are formed by suffixing the nominalizer *-sa* to the verb root *huk* ‘bark’ and *rek* ‘sharpen’ respectively, in Dumi.

Furthermore, the nominalizer *-sa* may be affixed to the root of the verb followed by and without being followed by the dative marker *-lai* as illustrated in (11).

(11) a. *p^hksalai asia wo k^hritta ka*
 p^hi-k-sa-lai asi-a
 beg-M.EXTDR-NMLZ-DAT who-ERG
 wo k^hrit-ta ka
 PRT respect-IMPRFT EMPH
 ‘Nobody respects the beggar.’

b. *t^hi tuŋsa wari k^hanuksa mono*
 t^hi tuŋ-sa wari
 local beer drink-NMLZ habit
 k^hanuksa mono
 nice not
 ‘Habit of drinking local beer is not so good.’

In examples (11a,b), the verb root *p^hi* ‘beg’ in (11a) is suffixed by the nominalizer *-sa* followed by the dative marker *-lai* and the verb root *tuŋ* ‘drink’ in (11b) is suffixed by the nominalizer *-sa* without being followed by the dative marker *-lai*.

The perfective marker *-po* is affixed to the root of the verb followed by the nominalizer *-m* as illustrated in (12).

(12) a. *k^hur surpom kaŋku*
 k^hur sur-po-m kaŋku
 hand wash-PRFV-NMLZ water
 ‘the water that was used for washing hands’

b. *k^hilAmbi tam k^hArpom d^za*
 k^hilAm-bi k^hAr-po-m d^za
 ghee-LOC fry-PRFV-NMLZ rice
 ‘This is the rice that was fried in ghee.’

In examples (12a, b), the perfective marker *-po* is affixed to the verb roots *sur* ‘wash’ in (12a), and *k^hAr* ‘fry’ in (12b) are followed by the nominalizer *-m*.

The nominalizer *-m* (preceded by the perfective marker *-po*) and *-na* are also characterized by semantic properties. Thus, the nominalizers *-m* and *-na* may be semantically further classified modally and aspectually. Modally, they may be classified into irrealis *-na* and realis *-m* and aspectually into imperfective *-na* and perfective *-m*.

Figure 1 presents the classification of nominalizing suffixes in terms of the semantic concepts of tense-aspect and modality in Dumi.

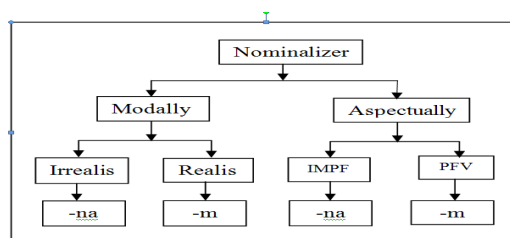


Figure 1: Classification of nominalizers

There are other nominalizers that derive a noun as illustrated in (13).

- (13) a. *mamla kaɫna t^{sh}ukta*
mam-la kaɫ-na t^{sh}ukta
 there-ABL chase-NMLZ must
 ‘It must be chased from there.’
- b. *sina lidim bu*
si-na lid-i-m bu
 bear fruit-NMLZ stop-PST-NMLZ tree
 ‘The tree that stopped bearing fruit.’

In examples (13a,b), the verb roots of *kaɫ* ‘chase’ in (13a) and *si* ‘bear fruit’ in (13b) are marked by the nominalizer *-na* may be interpreted as being in irrealis modality and in imperfective aspect.

Table 1 presents the distributional properties of the common nominalizers (i.e., *-m*, *-si*, *-sa*, *-do*, *-dam*, *-na*, *-k^hom*) in Dumi.

Table 1: Distributional properties of the nominalizers

	Distributional properties	Nominalizers						
		<i>m</i>	<i>si</i>	<i>sa</i>	<i>na</i>	<i>dam</i>	<i>do</i>	<i>k^hom</i>
1	Suffixing to the root of the verb	x	√	√	√	√	√	x
2	Suffixing to the perfective marker <i>-po</i> following the root of the verb	√	x	x	x	x	x	x
3	Suffixing to the locative marker <i>-bi</i> following the noun	√	x	x	x	x	x	√
4	Followed by the dative marker <i>-lai</i>	√	√	√	√	√	√	√
5	Following the noun	x	x	x	x	x	x	√

3 Clausal nominalization

Genetti (2010: 414) notes that in clausal nominalization, a nominalized grammatical clause functions as a noun phrase. Dumi extensively employs nominalized clauses in broader syntactic structures which include attributive phrases, nominal-complement constructions, relative

constructions, adverbial clauses, verbal-complement clauses, free-standing independent clauses and verb-phrase nominalization clauses or finite nominalized clauses. We discuss each of them as follows:

3.1 Attributive phrases

Just like the common features of the Tibeto-Burman languages, Dumi employs attributive phrases in which the root of the verb is affixed by the nominalizing suffix *-sa* as illustrated in (14).

- (14) *kwambi selewa-sak^hruwa guksa minu*
kwam-bi selewa-sak^hruwa
 mouth-LOC smooth voice

gu-(k)-sa minu
 be-M.EXTDR-NMLZ person
 ‘the person who speaks smoothly’

In example (14), the copular verb *gu* ‘have’ followed by the morpheme extender *-k* is suffixed by the marker *-sa*. The phrases with these nominalized forms modify the head noun attributively.

3.2 Nominal-complement constructions

In the nominal complement construction, the nominalizer *-m* is affixed to the verb root preceded by the past tense marker *-i/-u/-o*. In Dumi, such constructions function as a noun phrase complement of the verb as illustrated in (15).

- (15) *k^hliba t^{am}um ŋika um k^hak^hajuju t^{sh}uku*
k^hliba t^{am}-u-m ŋi-ka
 dog lose-3SG.PST-NMLZ hear-after

um k^hak^hajuju t^{sh}uk-u
 3SG upset be-3SG.PST
 ‘That the dog got lost made him upset.’

In example (15), the nominalizer *-m* is affixed to the verb root *t^{am}* ‘get lost’ preceded by the past tense marker *-u*.

3.3 Relative constructions

A relative clause is syntactically a nominalized clause functioning as a nominal modifier of the head noun. Dumi employs only the nominalizers *-m* and *-sa* to form relative constructions. The nominalizer *-m* may be preceded by the perfective marker *-po* and the locative marker *-bi*. Similarly, the nominalizer *-sa* may be followed by the dative marker *-lai*. Such constructions may show the aspectual distinction between perfective and imperfective as illustrated in (16).

- (16) *asnAmka t^{sh}wara d^zAisim d^hamro*
 asnAmka t^{sh}wara
 yesterday goat

d^zAis-i-m d^hamro
 graze-3SG.PST-NMLZ cliff
 'the cliff where the goat grazed yesterday'

In example (16), the nominalized marker *-m* suffixed to the verb root *d^zAis* 'graze' is coded as the perfective aspect in Dumi.

3.4 Verbal-complement clauses

Nominalized clauses also function as the complement of the verb as illustrated in (17).

- (17) *mAjo owa kori baksa mA*
 mAjo o-wa
 at that time 1SG.poss-younger sister

koriba-k-sa mA-Ø
 crawl-M.EXTDR-NMLZ COP-MIR
 'My younger sister was at the age of crawling.'

In example (17), the verb *koriba* 'crawl' is marked by the nominalizer *-sa* which forms the verbal complement clauses in Dumi.

3.5 Adverbial clauses

Reason adverbial clauses are made up of the root of the verb affixed by the nominalizer *-m*. Such nominalized verbs are followed by the ergative marker *-a*. Syntactically, they function as a noun phrase as illustrated in (18).

- (18) *hu jema duwa manirna*
 hu je-m-a
 rain fall-NMLZ-ERG

- duwa ma-nir-i*-na*
 work NEG-complete-PST-NEG
 'The work was not complete as it rained.'

In example (18), the verb root *je* 'fall' is marked by the nominalizer *-m* followed by the ergative marker *-a*. These nominalized forms are realized syntactically as noun phrases but function as reason adverbial clauses.

Dumi also employs the root of the verb affixed by the nominalizer *-na* as the purpose adverbial clause as illustrated in (19).

- (19) *sumu sena p^ha:ri dattam*
 sumu se-na p^ha:ri
 pheasant kill-NMLZ trap

dAt-ta-m
 install-3SG.NPST-NMLZ
 'He installs the trap in order to kill the peasant.'

In example (19), the root of the verb *se* 'kill' is affixed by the nominalizer *-na*. The noun phrase so formed functions as a purpose adverbial clause.

3.6 Free-standing independent clauses

Free-standing independent clauses are a type of nominalized clause that employs a final copula sentence. In such clauses, only the nominalizer *-m* is affixed to the root of the verb as illustrated in (20).

- (20) *um t^{sh}umum gota*
 um t^{sh}um-u-m gota
 3SG dance-3SG.PST-NMLZ COP.NPST
 'He has danced.'

In example (20), the root of the verb *t^{sh}Λ(*u)m* 'dance' followed by the past tense marker *-u* is marked by the nominalizer *-m* <realis, perfective> to form the noun *t^{sh}umum* 'danced' with the copula *gota* 'be' placed sentence finally.

4 Verb-phrase nominalization

Verb-phrase nominalization structurally resembles a nominalized clause (Givón, 1980). In Dumi, nominalizer is marked by the suffix *-na* to form the verb-phrase as illustrated in (21).

- (21) a. *mo dokti mam ŋa dʒuna ita*
 mo dok-t-i mam
 what see-NPST-1PL.INCL that
 ŋa dʒu-na ita
 EMPH eat-NMLZ NOT
 ‘It is not good eating whatever we find.’
- b. *asilai kʰojo dʒenlanna kʰanuksa*
mono
 asi-lai kʰojo
 anyone-DAT ever
 dʒen-lan-na kʰanuksa mono
 call-AMBL-NMLZ good NOT
 ‘It is not good calling anyone.’

In examples (21a,b), the roots of the verb *dʒu* ‘eat’ in (21a) and *dʒen* ‘call’ in (21b) are marked by the nominalizer *-na* to form the respective verb-phrases *dʒuna* ‘eating’ and *dʒenlanna* ‘calling’ in Dumii.

5 Summary

Dumii has multiple nominalization strategies using seven affixes *-na*, *-si*, *-do*, *-sa*, *-dam*, *-kʰom* and *-m*. In this paper, we discussed the nominalizations as a productive morphosyntactic process and relative constructions as well in this language. First, we analyzed the morphological, syntactic and functional dimensions of nominalization. Like other Tibeto-Burman languages of the Himalayan region, Dumii makes use of derivational (i.e., lexical) and clausal nominalization at the morphological and syntactic level of grammar. We noticed derivational nominalization that appears to be complex and productive in Dumii.

It extensively employs nominalized clauses in broader syntactic structures: attributive phrases, nominal-complement constructions, relative clauses, verbal complement clauses, adverbial clauses, free-standing independent clauses and verb-phrase nominalization. Based on this background, like other Sino-Tibetan languages, we can say that nominalization is a core feature of

Dumii syntax. The nominalizers have a wide range of functions, from nominal modification/relativization and complement clauses to marking independent clauses.

Abbreviations

∅	null
1	First person
2	Second person
3	Third person
AMBL	ambulative
CBS	Central Bureau of Statistics
COND	conditional
CONJ	conjunction
COP	copula
DAT	dative
DUR	durative
EMPH	emphatic
ERG	ergative
EXCL	exclusive
GEN	genitive
HON	honorificity
IMP	imperative
IMPRFT	imperfective
INCL	inclusive
LOC	locative
M.EXTDR	morpheme extender
MIR	mirativity
NEG	negative
NMLZ	nominalizer
NPST	non-past
PL	plural
PRFT	perfective
PST	past
SG	singular

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PARTICIPANT REFERENCING IN BHUJEL AND MAGAR KAIKE: A TYPOLOGICAL PERSPECTIVE

Dan Raj Regmi and Ambika Regmi

Bhujel indexes persons and direct-inverse relation exclusively controlled by participants' hierarchy. Magar Kaike marks the reference of participants exclusively governed by conjunct-disjunct distinction. These two different referencing patterns of participants may render insightful implications for analyzing typology of participant referencing in other unstudied Himalayish and Bodish languages.

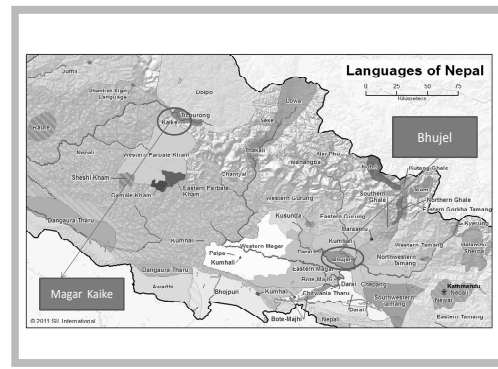
Keywords: direct-inverse, conjunct-disjunct, inclusivity, volitionality, locus of knowledge

1 Introduction

This paper examines the participant referencing in Bhujel and Magar Kaike from a typological perspective. Bhujel is an endangered Tibeto-Burman language of Himalayish group spoken by 21,715 (i.e. 18.30%) of the 1,18,650 ethnic Bhujel (CBS, 2012). It is mainly spoken in some villages of Tanahun, Gorkha, Chitwan and Nawalparasi districts of Nepal (Regmi and Regmi, 2011). Magar Kaike is a seriously endangered Tibeto-Burman language of the Bodish group (Eppel et al., 2012). It is mainly spoken by 794 (i.e., 39.7 %) of the 2000 ethnic Magar Kaike in the four villages, namely, Sahartara, Tupatara, Tarakot and Belawa/Lingdu within Sahartara Village Development Committee of Dolpa District, Midwestern Development Region of Nepal (CBS, 2002; Regmi, 2013a).

Bhujel indexes person, number, inclusivity and direct-inverse relations in the verbs. The indexation of person and direct-inverse relation is controlled by participants' hierarchy. Magar Kaike, a Bodish language, neither codes number nor person in the verbs. However, it indexes the reference of participants, which is exclusively governed by conjunct-disjunct distinction. Bhujel and Magar Kaike display two different types of referencing patterns of participants. Both referencing patterns are complex. Such complexities render insightful implications for analyzing typology of participant referencing in

other unstudied Himalayish and Bodish languages.



Map 1: Bhujel and Magar Kaike speaking areas

There are some descriptions about the nature of participant referencing in Bhujel (Regmi, 2012) and Magar Kaike (Regmi, 2013b). However, no attempt has been made to analyze the participant referencing in these two languages from a typological perspective and discuss its typological implications for analyzing the participant referencing in other unstudied Himalayish and Bodish languages, especially, of Nepal. This paper attempts to answer mainly three questions:

- What strategies do Bhujel and Magar Kaike employ to index the reference of the participants in the clauses?
- What are the governing factors for the participant referencing in Bhujel and Magar Kaike?
- What are the typological implications of this study for analyzing the participant referencing in other unstudied Himalayish and Bodish languages, especially, of Nepal?

This paper is organized into five sections. In section 2, we briefly provide some major typological features of the languages. Section 3 discusses the participant referencing and their governing factors in the languages. In section 4, we deal with the implications of the study for

analyzing participant referencing in other Himalayish and Bodish languages of Nepal. Section 5 presents the summary of the paper.

2 Language typology

Bhujel is an Indospheric Tibeto-Burman language whereas Magar Kaike is a Sinospheric language. Because of its long contact with Indic languages, mainly Nepali, Bhujel exhibits many contact induced Indospheric features (Regmi, 2013c) in contrast to Magar Kaike in the domains of phonology and morphosyntax.

Bhujel is an atonal language whereas Magar Kaike is a tonal language. Both lack contrast in length. They also lack dental vs. retroflex contrasts. They do not exhibit phonemic glottal stop. Both present breathy counterparts. Gender is not grammatical in both languages. Bhujel registers three categories of number: singular, dual, plural and two native numeral classifiers. However, in Magar Kaike, number is also not a grammatical category of nouns. Both are consistently ergative SOV languages. Nominalization is more productive in Magar Kaike. Bhujel makes use of both free and bound personal pronouns. Bhujel show inclusive/exclusive distinction only in the bound forms. Magar Kaike has only free pronouns. In both languages, adjectives are mainly derived from the verbs. Unlike Magar Kaike, Bhujel exhibits two past tenses in terms of the remoteness of time: past and remote past. Dative subject constructions are present in both languages.

They exhibit two types of complex verb agreement pattern. In Bhujel, person marking is exclusively based on hierarchical ranking of the participants in the clause. Somewhat contrary to universal expectations, Bhujel exhibits 'direct' marking. It neutralizes both direct marking and tense in a negative construction. Magar Kaike, on the other hand, makes a distinction between conjunct and disjunct while marking the reference of the participants.

3 Participant referencing and their governing factors

Participant referencing in Bhujel and Magar Kaike is governed by different factors. Bhujel

indexes person, number and inclusivity in the complex of the verbs as in (1a). Unlike Bhujel, Magar Kaike, a Bodish language, neither codes number, nor person, nor inclusivity of the subjects in the complex of the verbs as in (1b).

- (1) a. *ɲici kim altenaŋcə*
 ɲici kim al-te-na-ŋ-cə
 1DU house go-INCL-NPST-1/2-DU
 'We (two) go home.'
- b. *nai yim doŋpa*
 na-i yim doŋ-pa
 2SG-ERG house build-PFV.CJ
 'You built a house.'

In Bhujel, the pronominal participants are referenced in the complex of the verbs. This reference is controlled exclusively by hierarchical ranking of the participants -1/2→3 (i.e., the first person or second person acting on the third person object/patient) as in (2a-d).

- (2) a. [1→3] *ɲai dyokay dāk^halaŋ*
 ɲa-i dyo-kay beat-PST-DIR-1/2
 1SG-ERG 3SG-DAT dāk^h-al-u-ŋ
 'I beat him/her.'
- b. [3→1] *dyokəy ɲakay dāk^halaŋ*
 dyo-kəy ɲa-kay dāk^h-ala-ŋ
 3SG-ERG 1SG-DAT beat-PST-1/2
 'S/he beat me.'
- c. [2→3] *ɲaŋi dyokay dāk^htetaluŋ*
 ɲaŋ-i dyo-kay dāk^h-te-tal-u-ŋ
 2SG-ERG 3SG-DAT beat-2-(2)PST-DIR-1/2
 'You beat her/him.'
- d. [3→2] *dyokəy ɲaŋkay dāk^halaŋ*
 dyo-kəy ɲaŋ-kay dāk^h-ala-ŋ
 3SG-ERG 2SG-DAT beat-PST-1/2
 'S/he beat you.'

Table 1 presents a synopsis of person indexing (including inclusive and second person marking) in Bhujel. [Σ stands for verb stem]

Table 1: Person indexing (including inclusive and second person marking) in Bhujel

		UNDERGOER		
		1SG/1NSG EXCL/ 1NSG INCL	2SG/2PL /2DU	3SG/3DU /3PL
ACTOR	1SG		Σ - η	Σ - η
	1PL EXCL		Σ - η -	Σ - η -
	1DU. EXCL		Σ - η -	Σ - η -
	1PL INCL		Σ -t η - η	Σ -t η - η
	1DU INCL		Σ -t η - η	Σ -t η - η
	2SG	Σ -te- η		Σ -te- η
	2DU	Σ -te- η		Σ -te- η
	2PL	Σ -te- η		Σ -te- η
	3SG	Σ - η	Σ - η	Σ
	3DU	Σ - η	Σ - η	Σ
3PL	Σ - η	Σ - η	Σ	

Bhujel, apart from such complex pronominal indexing, marks the direct-inverse relationship of the participants in the clauses. In Bhujel, the direct relations, i.e., 1→2, 1→3, and 2→3, are marked by the suffix *-u* in the complex of the verb apart from person and number suffixes¹. The direct-inverse indexation, in exclusively transitive relations, is controlled by hierarchical ranking of the participants -1/2→3 (i.e., the first person or second person acting on the third person object/patient) as in (3a-c).

- (3) a. [1→2] *ŋai ŋaŋkay dāk^haluŋ*
 ŋa-i ŋaŋ-kay dāk^h-al-u-ŋ
 1SG-ERG 2SG-DAT beat-PST-DIR-1/2
 'I beat you.'
- b. [1→3] *ŋikəy dyokay dāk^haluŋi*
 ŋi-kəy dyo-kay dāk^h-al-u-ŋ-i
 1PL-ERG 3SG-DAT beat-PST-DIR-1/2-PL
 'We beat him/her.'

¹ The inverse relations, i.e., 2→1, 3→1, or 3→2, are not marked. Nor is 3→3 coded by suffix *-u*.

- c. [2→3] *ŋaŋi dyokay dāk^htetaluŋ*
 ŋaŋ-i dyo-kay dāk^h-te-tal-u-ŋ
 2SG-ERG 3SG-DAT beat-2-(2)PST-DIR-1/2
 'You beat her/him.'

In Bhujel, however, verb agreement is, sometimes controlled by subject/agent participant and sometimes by object/patient participant but not by both (Watters and Regmi 2008) as in 4(a-c).

- (4) a. *ŋai dyokay dāk^haluŋ*
 ŋa-i dyo-kay dāk^h-al-u-ŋ
 1SG-ERG 3SG-DAT beat-PST-DIR-1/2
 'I beat him/her.'
- b. *dyokəy ŋakay dāk^halan*
 dyo-kəy ŋa-kay dāk^h-ala-ŋ
 3SG-ERG 2SG-DAT beat-PST-1/2
 'S/he beat me.'
- c. *ŋai ŋaŋkay dāk^haluŋ*
 ŋa-i ŋaŋ-kay dāk^h-al-u-ŋ
 1SG-ERG 2SG-DAT beat-PST-DIR-1/2
 'I beat you.'

In example (4a), the subject/agent participant is indexed by *-ŋ* in the verb complex whereas in example (4b), it is patient, the second person singular, which is indexed in the verb. In example (4c), by the principle of participant's hierarchy, it is the subject/agent, first person singular, which has been marked by *-ŋ* in the verb. It is obvious that Bhujel does not index both the subject/agent object/patient participants in the verb complex at a time.

Kaike, a Bodish language, presents another type of complex verb agreement pattern. There are two types of participant references referred to as conjunct and disjunct (Watters, 2006). Conjunct is governed by the semantic properties of the subjects like volitionality, locus of knowledge and co-referentiality whereas disjunct lacks them. In addition, such properties are construction specific. Table 2 summarizes the distinction between conjunct and disjunct verb agreement pattern along with the governing semantic factors in Magar Kaike.

Table 2: Conjunct and disjunct verb agreement pattern in Magar Kaike

CONSTRUCTION	GOVERNING FACTORS	CONJUNCT	DISJUNCT
DECLARATIVE	VOLITIONALITY	√	X
	NON-VOLITIONALITY	X	√
INTERROGATIVE	LOCUS OF KNOWLEDGE	√	X
	NON-LOCUS OF KNOWLEDGE	X	√
COMPLEMENT	COREFERENTIALITY	√	X
	NON-COREFERENTIALITY	X	√

In a declarative construction (both transitive and intransitive), a volitional agent participant is marked differently from (as in 5a) a non-volitional one (as in 5b).

- (5) a. *ŋəi yim doŋpa* (Watters, 2006)
 ŋə-i yim doŋ-pa
 1SG-ERG house build-PFV.CJ
 'I built a house.'
- b. *ŋəi rəsi t^huŋbo*
 ŋə-i rəsi t^huŋ-bo
 1SG-ERG alcohol drink-PFV.DJ
 'I drank alcohol (unintentionally).'

In an interrogative construction, the second person subject, as it is the locus of knowledge, is marked as conjunct (as in 6a) and the first and third person subjects as disjunct (as in 6b-c)².

- (6) a. *nai yim doŋpao*
 na-i yim doŋ-pa-o
 2SG-ERG house build-PFV.CJ-Q
 'Did you build the house?'
- b. *ŋəi yim doŋboyo*
 ŋə-i yim doŋ-bo-yo
 1SG-ERG house build-PFV.DJ-Q
 'Did I build a house?'
- c. *nui yim doŋboyo*
 nu-i yim doŋ-bo-yo
 3SG-ERG house build-PFV.DJ-Q
 'Did s/he build the house?'

² All these examples are from Watters (2006).

In a complement construction, the coreferential subjects are marked differently (as in 7a) from those non-coreferential subjects (as in 7b).

- (7) a. *nui woipa rəwəbo*
 nu-i woi-pa rəwə-bo
 3SG-ERG go-PFV.CJ say-PFV.DJ
 'He_i said that he_i went.'
- b. *nui woibo rəwəbo*
 nu-i woi-bo rəwə-bo
 3SG-ERG go-PFV.DJ say-PFV.DJ
 'He_i said that he_j went.'

Table 3 presents a summary of participant referencing in Bhujel and Magar Kaike.

Table 3: Summary of participant referencing in Bhujel and Magar Kaike

	Participant indexing	Bhujel	Magar Kaike
1.	Gender	x	x
2.	Person	√	√
3.	Number	√	x
4.	Inclusivity	√	x
5.	Direct-inverse	√	x
6.	Conjunct-disjunct	x	√

4 Typological implications

Driem van (1993) presents a comprehensive analysis of the Proto-Tibeto-Burman verbal agreement system. Normally, eastern Himalayish languages like Bantawa, Chamling, Koyee, Dumi are characterized as having a complex participant referencing. They generally index person, number, inclusivity and the third person object in the verbs. Kham, a Central Himalayish language, indexes obligatorily persons (1st, 2nd, and 3rd) with singular, dual and plural for all core participants (Watters, 2002:83). Among the Himalayish languages, it is Bhujel which displays the indexation of person, number, inclusivity and direct-inverse in the verb. Normally, Bodish languages like Ghale, Gurung and Tamang exhibit a rather simplified participant referencing in the verbs. However, Kaike, crossing over the common typological features of the group, presents very complex participant referencing. In different constructions, the verbs are marked either for conjunct or disjunct state of the participants. Such system also exists in Kathmandu Newar (Hargreaves, 2003) and

Khwopa Newar (Regmi, 2012), a Himalayish language. Direct-inverse is not yet been attested in other languages. As there is a constant contact of Himalayish and Bodish group of languages for centuries in Nepal, conjunct-disjunct and direct-inverse distinctions have to be looked for as the reference of complexity while analyzing the participant referencing in both Bodish and Himalayish languages.

5 Summary

Bhujel and Magar Kaike represent two extreme types of complex participant referencing in Himalayish and Bodish languages of Nepal. Indeed, Magar Kaike has a unique system of marking speech act participants that treat 1st vs. 2nd/3rd person distinctions in statements and 2nd vs. 1st/3rd person distinction in questions. The complexity shown by these two languages may be evident across Tibeto-Burman language groups as conjunct-disjunct is already attested in Newar, a Himalayish language. The genetic relationship of Tibeto-Burman languages especially at the lower levels is not still clear. It may be argued that the typological study of the participant references in other Himalayish and Bodish languages with reference to complexity attested in Bhujel and Magar Kaike may help to clarify both the genetic and typological relationships among these languages.

Abbreviations

1/2	first/second person	CJ	conjunct
DAT	dative	DIR	direct relation
DJ	disjunct	DU	dual
ERG	ergative	INCL	inclusive
NPST	non-past	PFV	perfective
PST	pst	SG	singular
Q	question		

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HUMAN COGNITIVE ABILITIES AND SAFEGUARDING LINGUISTIC DIVERSITY

Anvita Abbi

Linguists estimate that over 2000 languages and their varieties are spoken in the South Asian region. These belong to at least seven major language families: In India alone, there are Indo-Aryan (IA) with 574 languages, Tibeto-Burman (TB) with 226 languages, Dravidian (D) with 153 languages, Austro-Asiatic (AA), with 65 languages, and the small, but extremely vulnerable language families of Great Andamanese (2 languages), Austronesian (2 languages) 'Angan' the Onge-Jarawa) and Tai-Kadai (6 languages). In terms of population strength, using the data from the 2001 Census of India – which reports population by language family but does not name all its languages -- Indo-Aryan speakers comprise 76.87%, Dravidian speakers, 20.82%, Austro-Asiatic speakers, 1.1%, and Tibeto-Burman speakers constitute just 1% of the total population. There are around 1.5 million signers in India who have to be taken into cognizance when assessing the linguistic diversity. Let us review some of the South Asian nations and their situation of language endangerment.

As of today, India houses more than 3000 mother tongues (whether classified or not), 336 languages (reported and spoken by more than 10,000 speakers) and 22 Scheduled languages. The classified mother tongues are estimated to be 1576 including 156 languages spoken by less than 10,000 (2001 Census). The enumeration of languages is not easy. It is messy primarily because the way the term 'mother tongue' has been defined in various Census and the way people in general, change their language loyalty.

1 Different definitions of mother tongue

- 'Language spoken in childhood by the person's mother to the person' (1881).
- Language ordinarily spoken in the household at each person's parents' (1891).
- 'Language ordinarily used in the house' (1901-1921).

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- 'Language first spoken from the cradle' (1931-1951).
- 'Language spoken in childhood' (1961).
- 'Language spoken in the childhood by the person's mother to the person' (1971).
- 'Language ordinarily used' (1981).
- 'Language spoken in the childhood by the person's mother to the person' (1991).

It is also messy because the names of different languages returned in the Census give linguistic ethnicities and spatial identities. Hence, these are not languages

- Muslim Pahari, Ahiri Hindi, Rajputi, Islami, Teli, Haridasi, Reddy Bhasha, Bilaspuria, Bidesiya, Amrican, Pahari, Bihari, and Rajasthani

Nonetheless there is no denying that the country represents more than 800 unwritten languages spoken by small communities.

The variation across 6000 odd languages of the world indicates that there are fundamental differences in how languages work, with long historico-cultural roots that explain the many divergences.

2 Language erosion

Despite this diversity there is the holocaust of language endangerment looming large on our society. Language extinction is not new but the speed at which the languages are becoming extinct is alarming. A conservative estimate is that approximately 50% of the languages will become extinct by the end of this century. Every fortnight a language dies on this planet. This figure is scary as no other species on this planet is extinguishing at this rate.

Languages are treasure trove on literature, philosophy, and world-view. Hence, loss of a language is the biggest intellectual catastrophe. Disappearance of an individual language constitutes a monumental loss of scientific

information, cultural knowledge, historic account of human migration and language evolution. Language facilitates us enormous power of expression which offers profound understanding of the world, life, and scientific knowledge. It is a marker of identity, an affinity to our folks, a balm in loneliness, and above all, a spiritual relevance. I remember senior Great Andamanese woman *Boa Sr.*, the last speaker of Bo language speaking to birds because she thought they understood her language. She could share her loneliness only with birds.

The situation of Tibeto-Burman languages especially in Nepal is rather worrisome. According to Genetti 'endangerment of TB languages (2011) on the basis of the two best sources of information on endangerment are *Ethnologue* (Lewis 2009) and a chapter by George van Driem in the *Encyclopedia of the World's Endangered Languages* (Moseley (ed.) 2007), indicates that in aggregate the two sources provide a sobering picture: more than 90% of the language varieties discussed are classified at some level of endangerment (i.e. between "unsafe" and "moribund") in one or both lists. More than 40% are classified as "endangered", more than 20% are classified as "severely endangered", and more than 6% are considered moribund, i.e. now being spoken by only a handful of elderly speakers. The endangerment statistics reflect an ongoing trend of speakers shifting to regional, national, or international languages for some or all domains of language use. Nearly extinct languages are Lingkhim, Chhintang, Chukwa, Raute, and Rai are on their way to extinction. An interesting counter-example to the latter trend is provided by Bhutan, where the government promotes the preservation of minority languages as part of the cultural heritage of the country, and children successfully acquire a minority language, the national language Dzongkha, and English (van Driem 2007: 311).¹

¹ On the other hand, English has now become a threat to Dzongkha, which van Driem classifies as potentially endangered (2007: 327).

Ironically it is the bulk of the tribal languages that are endangered in South Asia. Majority of Indian language users, if not all South Asian language users, are multilingual, giving varied dimensions to the linguistic diversity.

Linguistic diversity, the greatest man-made treasure, is at stake, ironically at the hands of those who created it. Biologists have proved that strongest ecosystems are those which are most diverse, and specifically, there is an inextricable relation between linguistic and ecological diversity.

3 Ecological destruction and erosion of human cognitive abilities

There are 9 (nine) different words in Maya for the colour blue. This was to denote six species of butterflies in the forest. In the comprehensive Porrua Spanish-Maya Dictionary, just three Spanish translations appeared, leaving six butterflies that can be seen only by the Maya; proving beyond doubt that when a language dies, six butterflies disappear from the consciousness of the earth.

Anthropologist - Earl Shorris (Harpers 2000) I identified (Abbi 2012) in Great Andamanese language 346 different words for flora that included plants, flowers, leaves, trees etc., 157 species of fish, each with a distinct name, 97 species of birds, 47 different reptiles, 97 invertebrates and insects, 12 kinds of bamboos [many more were there but no longer could be identified because of loss of jungles]---all gone with the vanquished language now.

As we are worried about the accelerating endangerment of rare flora and fauna and diminishing polar ice-caps we must and should be worrying about the ever diminishing linguistic diversity and loss of ancient, old, small languages. "The ultimate reasons for their decline are many, but the most immediate reason is a simple stark truth: language as a tool of everyday communication is not being passed from one generation to another" (Moseley 2007: 'General Introduction').

Remember every time a language dies, we have less evidence for understanding patterns in the structure and function of human language, human prehistory and the maintenance of the world's diverse ecosystems. Conservation biology needs to be paralleled by conservation linguistics.

3.1 Can development kill?

In the name of development projects, when tribes are dislocated or when tribes are deprived of their original habitat, diverse ecology becomes poor and this poverty can be seen in the languages in the form of deprivation of expressions, loss of words, and erosion of grammatical structure. The net result is on the cognitive abilities that become restricted and limited.

Our recent research on Tribes of Nilgiri informed us of very disappointing but not unexpected results of loss of words in the Mulu Kurumba language because of destruction of ecological environments. The language provides distinct names for 9 edible and 4 non edible mushrooms, all getting lost because of deforestation and 'developmental projects'.

Diversity of fish catching devices in Son Beel in Assam², each bearing different local names is getting lost in the language. 197 fish species, 26 fishing gears have been recorded in one area. 38 species of naturally grown bamboo, 14 species of cane, 19 species of tortoise, 293 species of orchids Gradual ecological destruction is deleting words from the language and subsequently from the memory of the humans. The speed at which developmental projects have taken place in South Asia warrants a research of its impact on the surviving languages.

Languages provide vocabulary capable of describing the diversity existing in the environment. This cannot be easily or adequately described by any replacement language. Replacement of an old language by a new one is like reinventing the wheel. It may take another hundreds of years to inscribe indigenous

² Son Beel is famous for its fishery and it is one of the main producers of fish for all the districts in southern Assam. Vanishing habitat threatens words in languages (Assamese, Bishnupriya, Meitei) used in the district.

knowledge about the eco-diversity all over again in the replaced language, which was already stored in the old language and got lost.

Dislocation of the community from one place to another also leads to loss of words in a language. Color terms in indigenous languages with names for basic color terms and varieties of shades of color terms are remarkable example to see how the displacement of a community affects non perception of shades of colors as well as loss of the capability of referring to a variety. For example city dwellers of Hindi speaking community have neither the relevance nor they remember what is */dhani haraa/* 'light green' or 'green like rice grass', or 'greenish'; */katthai bhuraa/* 'brown like catechu or */sindoori laal/* 'red as vermillion' or */champaai safed/* 'white as the Champa flower', as these items, i.e., referents are taken away from their daily lives and thus, the loss of perception of the minute distinctiveness in color shades.

The symbiotic relationship that exists between language and the ecological environment is inextricable and thus adverse effect on one results in devastating effects on another.

4 Cognitive abilities and grammar

The crucial fact for understanding the place of language in human cognition is its diversity. The diversity of language points to the general importance of cultural and technological adaptation in our species. Diversity helps us to adapt varying and conflicting environments and is a key for survival.

4.1 Uniformity kills

As languages are succinct witnesses of the diverse and varying ways in which the human cognitive faculties perceive the world, their grammars and dictionaries are rich sources of information about the unique world-views of the speakers of these languages. For example, *raupuch* in Present Great Andamanese (Abbi 2012) is the word used for 'the one who loses her/his sibling'. None of the languages that I know has such a concept and its associated word.

Languages not only manifest various ecological and archaeological signatures of the communities

that maintain close ties to their environments, but are also important repositories of our shared human history and civilization. The species-specific language learning ability, although, is genetically coded, the development of the language is a bio-cultural hybrid (Evans and Levinson 2009), a product of intensive gene-culture coevolution. It is this co-evolutionary nature of human language and the system that underlies it that provides us with evidential proofs that it is not only constituted of rules but also manifests ways and means by which the speaker perceives the world and develops the cognitive abilities. Grammar represents rules and systematics of the conceptualization of the world by a society with reference to the 'self'.

One of the most important tasks that a grammar and lexicons of any language accomplishes is the establishment of the identity of its speakers through its intricate and complex rules of the language in use. The constructs of a grammar thus, establishes the existence of the 'self' since each distinct grammar represents the cognitive abilities of the speaker and a distinct world-view.

4.2 Two distinct grammars

To begin with, I would like to draw your attention to the fact that there are many societies that show sensitivity to gender distinction by establishing different grammars. There are two distinct grammars of Kurux or Oraon (Abbi 2001), the Dravidian language spoken in Nepal, Jharkhand and other regions of East Central India. These are represented by two distinct verbal endings and plural formation of nouns in women's and men's speech. Women -to- women and men-to-men speech differ substantially in their grammatical patterns leading to the establishment of two distinct identities one for men and another one for women. Male: *paccor* : Female *pacco:mukkae* 'old women'; Male: *nalur* : Female *nalu:alae* 'male dancers'.

4.3 The self and the invisible interlocutor (Magahi)

Intricate and complex pattern of verb agreement in Magahi, the language spoken in parts of Nepal

and Bihar in India, ironically considered a variety of Hindi, indicates the identities of the interlocutors, their status in the society and above all, the attitude of the speaker about the invisible referent, all in one--by mere verb agreement/endings.

- (1) a. *ohnii aaj iskuul jaldi cal gel hal-au*
they today school early walk go be.PAST 3.NH
'Today they had gone to school early.'
- b. *ohnii aaj iskuul jaldi cal gel hal-thu/hal-thun*
they today school early walk go be.PAST-3.H
'Today they had gone to school early.'
- (Nilu: Magahi Ph.D.)

4.4 Grammar captures fine cognitive distinctiveness in the manner of an action or a state: A case of expressive morphology of the NE languages

Unusual feature of the languages of the Northeast both Austroasiatic and Tibeto-Burman is that the action undertaken by the subject is emoted in a large number of expressive morphology, viz. arbitrary sound symbols, each with a distinct meaning (Abbi 1991). I recorded 52 ways of 'crying' in Khasi (Abbi 1977³, 1991) (a Mon-Khmer language of the Austroasiatic family spoken in Meghalaya), 57 ways of 'walking' and an equal number in Tangkhul Naga, a Tibeto-Burman language (Abbi and Victor 1997). The examples indicate many ways the self can indulge in an action. Expressive morphology found in these languages manifest various fine cognitive distinctions that a speaker makes in enacting an action thus represent different modes of the 'self'.

This is an amazing wealth in the area of cognition. A few examples given below from the Austroasiatic language Khasi spoken in the Meghalaya hills will be convincing.

In Khasi /*iaid*/ means 'walk', however there are fifty seven ways the walk can be perceived by the native speakers. Hence /*iaid dar dar*/ 'walk briskly'; /*iaid hir hir*/ 'go longingly'; /*iaid don don*/ 'walk like a bird or a child'; /*iaid dot dot*/ 'move like an old person' etc. In Tangkhul Naga,

³ Field notes

a Tibeto-Burman language of the Nagaland there are equal number of expressives for the word 'to walk'. Hence, /kazat/ means 'walk' which can collocate with many manner adverbs of expressive morphology. For instance, /shing shing kazat/ 'walk with heavy footsteps in a direct manner without looking sideways or stopping'; /thung thung kazat/ 'walk heedlessly with anger or worry'; /cam cam kazat/ 'walk blindly and slowly like a very old person'; /hay hay kazat/ 'walk with a limp'; /rut rut kazat/ 'walk carefully and silently or stealthily' etc. (Abbi and Victor 1997:) Language structures represent the cognitive world of the speakers and the loss or erosion of languages deprives them of comprehending their world, environment and culture.

4.5 Five senses of perception (*Panchendriya*) (Abbi 1991)

The sense to 'hear', 'smell', 'touch', 'see', and 'taste' are all get represented in expressive morphology in all South Asian languages. Any danger to indigenous languages endangers the capability of expressing the cardinal sense of perception.

4.6 Chaos in Nepali expressed by expressive morphology

Nepali denotes the minute differences in chaotic order that the language speakers perceive. Thus:

khəl bəl 'hurly burly', 'commotion'
khəl-aa-bɛla 'riot' 'uproar'
khotəl khətəl 'topsy turvy'
ət pət 'disorderliness'

Tai-Khamti, a language from the Tai-Kadai group has examples like Bangla where expressives, among others, are collocationally restricted, i.e., Bangla *tʃke tʃke lal* 'deep red', and Tai Khamti *syen⁴ -sok²-sok²* 'very beautiful' or *suŋ¹ -wen²-wen²* 'very tall'. In Mizo, sense of sound and sense of touch are represented as *klek klek* 'noise of natural phenomenon' and *olep olep* 'sticky' respectively.

4.7 Great Andamanese body division markers and its association with all the grammatical categories

Great Andamanese constitutes the sixth language family of India (Abbi 2006, 2008).

Present Great Andamanese (PGA) is an endangered and moribund language which is spoken by the Great Andamanese tribes who were hunter and gather till the middle of the 20th century. Their language has retained structures which appear to be relics of prehistoric human language/s. The Great Andamanese conceptualize their world through the interdependencies of inalienable seven body divisions or classes, each represented by a bound morpheme or a marker (Abbi 2010, 2013). The semantics of the body division markers pervade the lexical and grammatical system of the language in such a way that almost all content words in the language are obligatorily preceded by body division class markers (details given below). The system is unique as no language known so far attests such features. As the Great Andamanese tribes are remnants of the first migration out of Africa (Thangaraj, K., et al 2005) and have lived in isolation till the middle of the 19th Century (Kashyap et al 2003), the structures found in the language give us evidences about the possible grammar used by the early humans.

Since Great Andamanese (Abbi 2013) conceptualize their world through their body, the anthropocentric principle that governs the Great Andamanese lies in their system of dividing human body into seven parts each symbolized by a monosyllabic bound morpheme known as body class markers, such as *a-*, *ut-*, *ong-*, *er-*, *o-*, *e-*, and *ra-*⁴. Each of these markers is symbolized as a proclitic⁵ in the grammar of the language and combines with other morphemes to make a full word. These other morphemes belong to the categories of content words such as nouns, verbs, adjectives and adverbs. The body division class markers are attached to all classes of content words. Thus, all content words in PGA can easily

⁴ Intra-community variation has been ignored to keep the data simple and easy to read.

⁵ Symbolized by sign '=' throughout the text.

be divided into bound and free, the former necessarily imbued with the semantics of 'inherency' and 'dependency'. This is a unique and important feature of the language: that all parts of speech occur as dependent and non-dependent pairs, the former being obligatorily marked.

Table 1: Seven basic zones in the partonomy of body⁶

Class	Partonomy of human body	Body class markers
1	mouth and its semantic extension	<i>a=</i>
2	major external body parts	<i>er=</i>
3	extreme ends of the body like toes and fingernails	<i>ong=</i>
4	bodily products and part-whole relationship	<i>ut=</i>
5	organs inside the body	<i>e=</i>
6	parts designating round shape/sexual organs	<i>ra=</i>
7.	parts for legs and related terms	<i>o=</i>

When a Great Andamanese has to describe the external beauty of a person or thing, s/he attaches *er=* to the word for 'beautiful' (*er=bungoi*), but if s/he wants to describe internal beauty, s/he uses *e=(e=bungoi)*. The same two proclitics derive nouns such as *er=cho* 'someone's head' and *e=tei* 'someone's blood', verbs such as *er=ban* 'hold' and *e=binge* 'think', and adverbs such as *er=bettosho* 'adjacent to, near' and *e=khil* 'in the middle'. All these retain the basic semantics of the body division markers. I will give only a small sample of this system in a tabulated form here but readers can refer to Abbi 2011 for details.

5 Endangered languages have clues to solve the puzzle of language evolution

Linguists have attempted to establish positive correlation between endangerment and rare, i.e., rare structures found in a language or a language family, the ones which may defy language universals (Wohlgemuth, Jan & Michael Cysouw 1995 and Wunderlich, Dieter 2004). PGA for one testifies this. The antiquity of the Great Andamanese language family is reflected in the world-view of the speakers that manifest in the grammar of these languages. The evolution of

prehistoric language and its structure is compelled by the consciousness of human body. The perspective that human beings are the central governs the structure of the modules of grammar. Although this phenomenon is documented in some of the extinct languages also (Man 1923; Portman 1887), the PGA also corroborates the existence of such rare structures.

I will now like to share with you the plight of the small language speakers who are silenced by the dominating language speakers by being denied their rights to social justice, education, land, and water. All this is done in the garb of 'mainstreaming' them.

6 Uphold human rights and empower the speakers of small languages

Small language speakers are denied social justice by not having their language in any literacy program and education system. By exclusion they are denied freedom to use their voices. Our tribes, especially the nomads have been alienated in our education system because neither the language nor the content used in the text books is relevant to them. Their social uplift is associated with mainstreaming them which is nothing but robbing them of their fundamental rights to land, jungle and language. It perpetually not only violates human right to education but also creates poverty and further helps in widening the gaps between the speakers of the dominant language and dominated language.

The political and current social scenario has resulted in failure to transmit languages across generations. That is, inter-generation transfer is decreasing day by day because of 'perceived futility' of retaining mother tongues or home language. This may be considered internal forces of language loss. Clubbed with this, is the lack of institutional support, the external forces. We know too well that internal forces, however, have their source in the external ones. Both arrest the growth and survival of languages. Language loss is often not voluntary; it frequently involves violations of human rights, with oppression or repression of speakers of minority/small languages. It is gross injustice when people are forced to give up their languages either by external subjugation or by internal forces which

⁶ Abbi, Anvita. 2011.

themselves cannot be delineated from the former. How can one visualize a judicial system of a country to deliver justice to the community whose voice is not heard because it is silenced by organized behaviour of its protectors?

Frequently, accompanying this loss of culture and self-worth is a deep sense of political alienation that limits human potential as well as the space for delivery for political and citizenship rights.

7 Oral tradition

In an oral society such threats are not envisaged because there is no question of institutional support or lack of support. Language or languages are learnt and used according to interpersonal relations and to fulfil various daily requirements. The communication network of oral tradition is worth a research area.

There are more unwritten languages in South Asia than the written ones. A large number of them are preserved and sustained in oral forms. The oral and tribal literature emote current socio-political thought processes of the societies. It is this literature which never becomes old as it is contemporary and current, and is constantly evolving. It is the oral tradition that has helped us inform on disaster management, on human civilization and human coexistence. Oral tradition of South Asia is robust as it has survived many thousands of years serving as the sole vehicle of transfer of information on culture, philosophy, human relations, social history and evolving civilization. Orality results in cumulative expansion of knowledge.

Cognitive abilities code into clusters, patterns and fractal structures formed in neural networks by ordering and reordering synapsis between neurons early in life mostly through spoken language and sensory environments. These clusters, patterns and fractal structures are also essential seeds for pattern recognition and memory. Memory and cognition has synergetic relationship.

7.1 Loss of Oral tradition and breaking down the fabric of continuity

There is no denying that promoting literacy and education is the foremost tasks of the Govt. however, we should not ignore the fact that

illiteracy does not kill. Illiteracy should not be equated with ignorance, lack of knowledge, or with stupidity. As D.P. Pattanayak (2014) once said, 'literacy means crossing the boundary of the mother tongue which leads to endangerment of the mother tongue. He further says 'Illiteracy is not a disease'. Literacy unfortunately, had been an instrument of oppression in our country. I recall Anand Coomarswamy (1947) who wrote that "for proletariat literacy is a practical and cultural necessity". He observed that destruction of culture due to destruction of orality is "lethal" precisely because it is the destruction of memories that is involved. To quote him "imposing our literature (written) upon a 'cultured but illiterate people is to destroy their culture in the name of our own." (page 21).

8 Threats of globalization

I will like to enumerate various threats looming large over undue to globalization.

- The process of homogenization has led to killing of small languages, and the immense knowledge contained in them.
- Economic progress through globalization comes at the cost of a gross neglect of the sustainability principle. Equilibrium of demand and supply generates the point of economic progress and satisfaction. Our self-sustained societies, be the forest dwellers, or mountain habitats are such societies which live in opulence, as their supplies exceeds their demands. These are the biggest retainers of their languages if untouched by the drive of 'educating' them or systematically 'mainstreaming them'.

9 What should we do to retain the fabric of diversity of languages?

There are several ways one can retain and maintain linguistic diversity. Some of the ways that we as South Asians can engage ourselves to obtain the goal of retaining this diversity are the following. I am not going to explicate these in detail as the time is short and also because I have penned these down earlier in some of my articles.

1. Revival of nearly lost languages. There are several examples across the globe where

languages have been revived, e.g., Hebrew, Irish/Gaelic, Welsh, Basque, Catalan, Cornish etc.

2. Introduce it in schools from the day one. This is how many of the almost-lost languages were revived. Instead of introducing the dominant State language from the primary class, one should go for multilingual education in phases- approach where teaching in mother tongue precedes teaching in other tongues. (See below section 11)
3. Language documentation in oral and written forms.
4. Traditional knowledge should be documented and used in schools in the indigenous languages.
5. Give scripts to as many languages as possible and preferably the script of the state language so as to avoid unnecessary pressure. We gave Devanagari script to Great Andamanese.
6. Make use of electronic technology, Radio, TV programs, websites and other social media etc., thereby increasing the prestige, wealth and social uplifting.
7. Get the youth interested in the revival and survival task. They should be considered the real torch bearers of this movement.

10 Multilingual education from the day one

The defective education policy of a country which is not all inclusive of its linguistic diversity and the one that propagates dominant-language medium education prevents access to education, because of the linguistic, pedagogical and psychological barriers it creates. It perpetually not only violates human right to education but also creates poverty and further helps in widening the gaps between the speakers of the dominant language and dominated language.

“Without binding educational linguistic human rights, especially a right to mainly mother tongue-medium (MTM) education in state schools, with good teaching of a dominant language as a second language, given by competent bilingual teachers, most indigenous peoples and minorities have to accept subtractive education through the medium of a dominant/majority language. They learn a dominant language at the cost of the mother

tongue which is displaced, and later often replaced by the dominant language. Subtractive teaching subtracts from the child's linguistic repertoire, instead of adding to it.”

(Report from the United Nations Permanent Forum on Indigenous Issues)

The report asserts that that right to education is not respected unless they become bilingual and bicultural through schooling.

11 Conclusion

We agree with Amartya Sen, that poverty is not only about economic conditions and growth; expansion of human capabilities is a more basic locus of poverty and more basic objective of development. Dominant-language medium education for indigenous children curtails the development of their capabilities and perpetuates poverty. We would like to add that orality should be maintained and the traditional environmental-knowledge in the unwritten languages should be extracted and disseminated to the rest of the world.

Language loss is a loss of experiences of life-sustaining knowledge-base. South Asian countries should help language communities to use their linguistic rights as part of the fundamental rights in its functioning of democratic, socialistic and cultural society.

Multilingual education not only promotes tolerance for other's speech, it equips and empowers the learners to comprehend the world better. Giving minor languages or small languages their due status in the judicial system, we ensure to give voices to the mutes, we ensure the marginalized to safeguard their rights, and we ensure equality and mitigation of various kinds of hierarchies which is eroding the current society. Giving avenues to expand human capabilities one helps to eradicate poverty.

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APPENDIX

Table 1: Semantics of body division class markers and bound form classes

Class	Body division classes	Body class markers	Verbs	Adjectives	Adverbs
1	mouth and its semantic extension	a=	mouth-related activity, origin, e.g. <i>a=jire</i> 'abuse', <i>a=kop^ho</i> 'sprout'	mouth-related, quality of a person, e.g. <i>a=mu</i> 'dumb', <i>a=tutlup</i> 'greedy'	deictic meaning of front or back, anteriority of an action, e.g. <i>a=karap</i> 'behind', <i>a=kaulu</i> 'prior to'
2	major external body parts	er=	activity in which the front part of the body is involved, e.g. <i>er=luk</i> 'weigh'	attribute of size, external beauty, e.g. <i>er=bungoi</i> 'beautiful',	deictic meaning of adjacency or front, uncontrollable actions/emotions, e.g. <i>er-betto:sho</i> 'adjacent to/near X', <i>er=achil</i> 'surprised'
3	extreme ends of the body like toe and fingernails	ong=	hand-related activity, action to do with extremities of body, e.g. <i>ong=cho</i> 'stitch', <i>un=tujuro</i> 'trembling of hands'	attributes related to limbs, e.g. <i>ong=karacay</i> 'lame', 'handicapped', <i>ong=toplo</i> 'alone'	manner: 'hurriedly', e.g. <i>ong=kocil</i> 'fast', 'hurriedly'
4	bodily products and part-whole relationship	ut=	directional, away from the ego, or experiential verbs, e.g. <i>ut=cone</i> 'leave', <i>ut=the-the-bom</i> 'be hungry'	quality of an X after a part is taken out of it, e.g. <i>ut=lile</i> 'decay', <i>ut=lokho</i> 'bare'	emerging out of something, deictic meaning of 'towards X', 'up', e.g. <i>ot=le</i> , 'seaward' <i>ot=bo</i> 'backwards'
5	organs inside the body	e=	internalized action, when the effect of an action can be seen on the object, or experienced, e.g. <i>e=leco</i> 'suck', <i>e=rino</i> 'tear'	inherent attribute e.g. <i>e=sare</i> 'salty', <i>e=ben</i> 'soft'	deictic meaning of internal space or manner: 'slowly', e.g. <i>e=k^hil</i> 'in the middle', <i>e=kotra</i> 'inside', <i>e=lile</i> 'slowly'
6	parts designating round shape and sides	ra=	action that involves side or middle portion of the body, e.g. <i>ra=delo</i> 'be pregnant'	attribute of size, 'time' and belly-related, e.g. <i>ra=phetkheto</i> 'big bellied', <i>ra=kata</i> 'stout/dwarf'	deixis of immediate vertical or horizontal space, e.g. <i>ra=balo</i> 'behind X', <i>ra=tal</i> 'right under X'
7	parts for leg and related terms	o=	action which more often than not, results in roundish object or in a definite result, e.g. <i>o=corno</i> 'make nest', <i>o=beo</i> 'sting'	external attribute of shape and texture, e.g. <i>o=balong</i> 'round', <i>o=phelanya</i> 'slippery'	temporal deixis, e.g. <i>o=to</i> 'day break', <i>o=kara</i> 'sunset'

PRESIDENTIAL SPEECH

Bhim Lal Gautam

Prof. Dr. Parshar Koirala, Chairman, University Grants Commission; Prof. Anvita Abbi, Padmashree and a selling name in language documentation and revitalization in the contemporary world, Prof. Tirtha Raj Khaniya, Vice Chancellor, Tribhuvan University; Professor Dr. Kul Prasad Koirala, Vice Chancellor, Nepal Sanskrit University; Professor Dr. Dan Raj Regmi, Head, Central Department of Linguistics and Chair 21st Himalayan Languages Symposium; Prof. Dr. George vanDreem; Guests on the dais; senior linguists; presenters and delegates from home & abroad; ladies and gentlemen.

I owe my sincere thanks to Prof. Dr. Parashar Koirala, Chairman UGC Nepal for gracing & inaugurating this historical gathering of 36th Annual Conference of LSN and 21st Himalayan Languages Symposium.

Nepal is a unique blend of various linguistic, cultural and ethnic diversity. This diversity nurtured linguistic culture among various persons and institutes in Nepal since long. One of the experimented examples of this practice is LSN gatherings since 1979, despite all the difficulties and circumstances.

Last year, we were here talking about the changing situation of shifting language ideologies in globalized world. I still remember we were challenged by the odd/even traffic system in Kathmandu valley because of SAARC summit in Nepal. This year we have lost various important cultural heritages of Nepal because of the devastating earthquake of 25th April and 12 May 2015. Many ethnic and linguistic communities have been collapsed because of this unpredicted disaster like *Ghale* and *Gurung* in Gorkha and *Thami* in Dolakha. We were trying to rise and shine forgetting all these tragedies with the release

of the New constitution of Federal Republic Nepal in Kartik 3, 2072 BS.

Since then we have been suffering with some internal and external socio-political complexities. We are not politicians but we understand this situation where millions of innocent people have been victimized in the land of Buddha, Ram and Janaki. I hope that this difficult situation will be over soon and everything will be normal as usual.

This year we are able to organize jointly with Central Department of Linguistics, TU, the product and dream of Linguistic society of Nepal since its inception in 1979. We have received more than 200 abstracts and prepared 156 papers to present from 27 different countries of all the continents are now limited to 123 papers in diverse topics and areas like phonetics to syntax, documentation to revitalization, Language policy to language contact and cultural linguistics because of aforementioned reason. Our delegates and speakers have cancelled their flights and booking at the last hour because of uncertainty.'

However, we are here again with some new promises and resolutions. The New Constitution of Nepal (2072) has clearly maintained the language and linguistic rights better than previous practices. LSN has organized an interaction program about the draft constitution and submitted its report and suggestions to the chairman of Constitutional Assembly. We welcome the provision of language commission in the new constitution but still warn and observe its implement in the future.'

Himalayan languages Symposium has been organized 3rd time in Nepal with linguistic Society's Annual Conferences. This is an indication of the joint culture of language festival throughout the world. We hope this culture will be

continued and strengthen in the days ahead. The linguistic activities have been going on shifting from old generations to young generations in LSN and Central Department of Linguistics, TU simultaneously. I feel proud to remember those bygone days of difficulties of our earlier generations who laid strong foundation for establishing and developing Linguistic Society of Nepal and Central Department Linguistics at Tribhuvan University.

The establishment of LSN Best Paper Award for Nepali and SAARC young linguists is another possibility for developing linguistic and cultural harmony in Nepal and south Asia. We always welcome such creative motivations so that we will be able to preserve and revitalize our languages and cultures.

I feel pleasure to mention a few names and institutions to make this historic event successful. I, on behalf of LSN, would like to express my sincere gratitude to University Grants Commission, Ganeshman Memorial College, Nepal Academy, Tribhuvan University, Vice Chancellor's Office, Jagat Mandir Higher Secondary School, Loyalty Academy, Madan Bhandari Memorial College, Image Printers and Parikar Catering, Center for Economic Development and Administration, and many more to mention here.

The team of editorial board, while producing the regular issue of *Nepalese Linguistics* volume deserves special thanks for this meticulous effort. I am very much obliged to the executive members of LSN and all the colleagues and staff of Central Department of Linguistics who have worked hard and spent their valuable time in voluntary basis. We hope, with the honest implementation of constitution, the government of Nepal will recognize the contribution of LSN and allocate some budget annually.

Thank You!

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¹ MN= LSN membership number

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Abbreviations used in this list:

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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		

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