# MORPHOSYNTAX OF PUMA, A TIBETO-BURMAN LANGUAGE OF NEPAL

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Thesis submitted for the degree of PhD in Linguistics
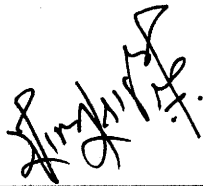
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# Abstract

Puma is an endangered Tibeto-Burman language of the Kiranti subgroup spoken by approximately 4,000 people in eastern Nepal. This dissertation investigates the phonology and morphosyntax of Puma. Data are presented and analysed from a cross-linguistic typological perspective where possible. The analysis is based mainly on annotated texts from a substantial corpus of spoken Puma, and from informally collected data and direct elicitation to supplement the corpus.

Puma is a polysynthetic and complex pronominalised language where words can consist of a series of morphemes. Verbal agreement, where verbs agree with subjects and objects, is very complex, and differs strikingly from the case-marking system used with independent noun phrases. Case-marking of nouns and pronouns is split between nominative-accusative and ergative-absolutive-dative. Intransitive subjects also exhibit characteristics of a split-S pattern: some intransitive subjects display grammatical properties similar to those of transitive objects, while others do not.

In contrast to Dryer's (1986, 2007) typology of primary object type and direct object type languages, Puma is neither a fully primary object nor a fully direct object language. Transitive verbs can be detransitivised with a *kha-* prefix or with *zero*, which is typologically more common (Bickel et al. 2007). For *kha-*detransitivisation the affected entity must be human; this is typologically unusual, but characteristic of the Kiranti subgroup.

The syntactic pivot for both inter-clausal and intra-clausal syntax is 'subject', comprising the single argument of intransitive verbs and the agent-like argument of transitive verbs. Interestingly, the morphology does not treat these in a consistent way but the syntax does. Verbs fall into classes that show distinct syntactic behaviours in different constructions. Compound verbs, which are an areal feature of South Asian languages (Masica 1976), comprise verbal, nominal and lexical types. Different nominalisation and relativisation strategies exist for S human and non-human, A and P arguments. The dissertation aims to provide a comprehensive description of Puma and includes hundreds of examples drawn from the corpus, plus Appendices of sample verb paradigms and texts, and names of contributors.

# Acknowledgements

First of all, I owe a huge debt of gratitude to Peter Austin, my supervisor. From the beginning (early stage) he has been a source of insightful advice and encouragement, with an amazing knowledge both of theoretical linguistics and of cross-linguistic data from the world's languages. He has been patient with my lack of progress, organisation, and understanding. The particular genius of Peter Austin for me was the amount of effort and care for encouraging me to make better progress and be on track. Thank you so much, Peter for having faith on me.

I am quite happy with other members of my committee, Irina Nikolaeva and Peter Sells. It has been great to have specialists on Australian languages, Japanese, Korean, and Russian who were willing to read and comment on various chapters. During the first year, when Peter Austin was on sabbatical, Peter Sells inherited me and proceeded to firmly guide me through the process of writing a dissertation. Peter Sells was unique to recognise the essence of what I was trying to achieve, and sort out my jumbled thoughts into an organised pattern. Working with Peter Sells was an invaluable moment for this dissertation. Huge thanks are due to Irina Nikolaeva. I was also able to make many improvements because of auditing her syntax class and thorough discussions with her.

I owe a particular debt of gratitude to many Puma people who contributed

*I dedicate this dissertation to my family:*



Late grandma, Balika Sharma (Gautam)

Late dad, Shiva P. Sharma (Gautam)

Mum, Jasoda Gautam

Uncle, Khem R. Sharma

Wife, Laxmi Paudel

&

Daughter, Deepti Gautam

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# Conventions

All examples from Puma in this dissertation are given in a 3-line format:

(i)  Puma forms with morpheme boundaries marked by - and clitic boundaries marked by = (transcription)

(ii)  morpheme-by-morpheme glosses in English

(iii)  free translation into English by the author based on the Nepali free translation provided by the consultants plus analysis of the Puma forms. Following the free translation text examples are given in a reference to the Puma corpus:

| *pʌʌŋ=na* | *piʈho* | *hol=kina=ni* | *metd-i-itd-i=ni* |
|-----------|---------|---------------|-------------------|
| CONN=PTCL | flour   | mix=CONN=REP  | do-3P-give-3P=REP |

'And she made it mixing flour for someone.' (myth_phuraulo:043)

Example (myh_phulauro: 043) refers to line 43 of the text 'phulauro'. The corpus is lodged with ELAR at SOAS. All examples from Puma and other languages for cross-linguistic reference are printed in *italics*. Examples that are not provided with a text reference are elicited. Examples numbering, including Tables and Figures start from the beginning to the end of the Chapter. SMALL CAPS are used to indicate abbreviations. When Puma words are discussed in the main body of the text they are printed in *italics* followed by the English gloss in inverted commas e.g. *somtukd* 'love'.

Nepali words and loans from Nepali are transliterated from the Devanāgarī script using the standard Devanāgarī symbols where possible.

# Abbreviations

The following abbreviations are used, based on the Leipzig Glossing Rules, Bickel et al. 2004 (http://www.eva.mpg.de/lingua/resources/glossing-rules.php) with the addition of some new and alternation of some in this dissertation:

| | |
|---|---|
| 1 | 1st person |
| 2 | 2nd person |
| 3 | 3rd person |
| A | agent-like argument of transitive verb |
| ABL | ablative |
| ABRV | abbreviation |
| ABS | absolutive |
| ACC | accusative |

| | |
|---|---|
| ACT.PTCP | active participle |
| ADD | additive focus |
| ALL | allative |
| ANTIP | antipassive |
| AUX | auxiliary |
| BEN | benefactive |
| CAUS | causative |
| CLF | classifier |
| CONF | confirmative |
| COM$_1$ | comitative (*-oŋ*) |
| COM$_2$ | comitative (*pʌ*-LOC) |
| COMPL | completive |
| COND | conditional |
| CONN | connective |
| CONT | continuative |
| COPAR | comparative |
| CVB | converb |
| DAT | dative |
| DEF | definite |
| DEM | demonstrative |
| DIST | distal |
| DL | dual |
| DOWN | down |
| ERG | ergative |
| EMPH | emphatic |
| EXCL | exclusive |
| EXIST | existential |
| EXPS | experiencer |
| FEM | feminine |
| FILLER | filler |
| FOC | focus |
| F/S | for the sake of |
| FS | false start |
| FUT | future |
| G | goal-like argument of ditransitive verb |

| | |
|---|---|
| GEN | genitive |
| GEN.LOC | general locative |
| GENR | generation |
| HABIT | habitual |
| IMP | imperative |
| INCL | inclusive |
| INDF | indefinite |
| INDSV | indecisive |
| INF | infinitive |
| INSTR | instrumental |
| INSTR.NMLZ | instrument nominaliser |
| IO | indirect object |
| IPFV | imperfective |
| LEVEL | level; across |
| LOC | locative |
| MASC | masculine |
| MIR | mirative |
| MOV | movement |
| NEP | Nepali |
| NEG | negative |
| N.INSTR.NMLZ | non-instrument nominaliser |
| NEUTRAL | neutral; general |
| NML | nominal |
| NMLZ | nominaliser/ nominalisation |
| N.NATIV | noun nativiser |
| NOM | nominative |
| NPST | non-past |
| NP | noun phrase |
| NS | non-singular |
| OBJ | object |
| P | patient-like argument of transitive verb |
| PL | plural |
| PP | postposition |
| POL | polite |
| POSS | possessive |
| PERF | perfective |

| | |
|---|---|
| PROG | progressive |
| PROH | prohibitive |
| PROX | proximal/ proximate |
| PST | past |
| PTCL | particle |
| PTCP | participle |
| PURP | purposive |
| Q | question particle/marker |
| R | recipient-like argument of ditransitive verb |
| RECP | reciprocal |
| REFL | reflexive |
| S | single argument of intransitive verb |
| SEQ | sequential |
| SG | singular |
| SIML | simultaneous |
| SKT | Sanskrit |
| SUB | subject |
| SUPER | superlative |
| T | theme-like argument of ditransitive verb |
| TAG | tag |
| TEL | telic |
| TEK | teknonomy |
| TOP | topic |
| UP | up |
| V1 | verb 1 |
| V2 | verb 2 |
| V.NATIV | verb nativiser |
| VOC | vocative |
| * | ungrammatical form |
| ? | uncertain gloss |
| S/A | single forms marking intransitive subject (S) and transitive subject (A) |
| S/P | single forms marking intransitive subject (S) and transitive object (P) |

Note that for the person-marking affixes we use the convention of X > Y to mean X as transitive subject (A) acting upon Y as transitive object (P), e.g. 1SG > 2 means first person singular transitive subject acting upon second person transitive object.

# Chapter 1

# Introduction

## *1.1    Background information*

Nepal, a South Asian Himalayan nation, is one of the most highly diverse countries in the world. Situated in the mountains of the central Himalayan range, an ancient and highly complex contact zone of peoples and languages, it is characterised by its great linguistic diversity with ethnic richness and cultural plurality (CPDP[1] 2004). As the majority of the more than one hundred languages are found in the eastern part of the country, it is the home of several language groups, most of them classified as the members of the Kiranti subgroup within the Tibeto-Burman family (see Section 1.4).

Kiranti languages are characterised by their polysynthetic morphology traditionally known as 'complex pronominalisation' in the Tibeto-Burman literature, e.g. incorporation of personal pronouns into the verbal chain, which is not only highly unusual for Tibeto-Burman and for the broader Eurasian context as well (Bickel 2002; Tolsma 2006).

The term *'Rai'* is a collective ethnonym for linguistically heterogeneous groups of people speaking different Kiranti languages but sharing almost the same culture, e.g., Puma, Bantawa, Camling, Belhare, Dumi, Chintang, Kulung, Thulung, Sangpang etc. (Opgenort 2004: 1–2).  The Rai people of eastern Nepal have numerous sub-groups with distinct languages and varied cultural traditions (Gaenszle 2007; Ebert 1994).

All Rai people are Kiranti but all Kiranti are not Rai, such as Limbu, Yakkha and Sunuwar. Most indigenous languages in Nepal are not only minority languages but also endangered. Some of them are seriously endangered and a few are moribund, they will not survive within one or two generations, if steps are not taken in time to document and preserve them.

The rest of this chapter is structured as follows: Section 1.2 presents a language situation of Nepal. Sections 1.3 to 1.5 describe the Kiranti people and languages,

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[1] The Chintang and Puma Documentation Project (CPDP), funded by the Volkswagen Foundation, DoBeS Programme, Grant No. II/79 092 (2004-2008) was carried out by the Department of Linguistics, University of Leipzig, Germany in conjunction with the Central Department of Linguistics, Tribhuvan University, Nepal for the linguistic and ethnographic documentation of two endangered Kiranti languages of Nepal, Chintang and Puma (http://www.spw.uzh.ch/cpdp/index.html).

genetic affiliations of Puma and Puma linguistic areas, respectively. Section 1.6 gives cultural background, including a mythical story of the mythical hero *Hekchakupa*. While Section 1.7 describes clans of Puma, Section 1.8 provides the annual ritual cycle which is interrelated to the annual agriculture cycle which is discussed in Section 1.9. Sections 1.10 deals with the animal husbandry.

The life cycle and its rites such as birth, marriage and death is described in Section 1.11. Section 1.12 discusses information on fieldwork and data in which the methodology used for this research, contributions from the Puma people, language of elicitation, including the role of vernacular and national languages, and the Chintang and Puma Documentation Project (CPDP) are described. Sections 1.13 and 1.14 present fieldwork remarks and socio-linguistic remarks. Section 1.15 describes motivation for the study and research questions and finally, Section 1.16 gives an overview of the dissertation.

## *1.2    Language situation in Nepal*

The Nepali language written in the Devanāgarī script, is the 'language of the nation of Nepal' and is the 'official language' (ICN 2007: 5). Nepali is widely spoken as a mother tongue and as a *lingua franca* throughout the country. It was recently made one of the official languages of India because of its widespread use in Sikkim, Darjeeling, and West Bengal. It is also widely spoken in the southern part of Bhutan (Hutt 1988: 27). The great biological diversity of present-day Nepal is matched by its ethnic, cultural and linguistic diversity.

Yadava (2003) reports that comprising an area of 1,47,181 square kilometres with a length of 885 kilometres from east to west and a breadth of 193 kilometres from north to south, the topography of Nepal is rich and varied. The national census of (2012) reports 123 languages are spoken in Nepal, which belong to four language families (Indo-European, Tibeto-Burman, Austro-Asiatic and Dravidian). This is impressively large number for a country with a small landmass like Nepal. The Indo-Aryan group of the Indo-European language family is the largest in terms of speaker numbers in Nepal, with around 80% of the total population (Yadava 2003: 141).

The Tibeto-Burman group within the Sino-Tibetan family of languages is represented by 57 languages in Nepal, the largest number of distinct mother tongues of any linguistic grouping, but with noticeably fewer speakers than the Indo-Aryan group.

Two other language families, each represented by a couple of languages along the southern belt of the country, are also found in Nepal: the Munda languages of the Austro-Asiatic family (Santhālī and Khariyā) and the Dravidian languages (Kurux and Jhāngaḍ). Moreover Kusuṇḍa, previously thought to be extinct, is a linguistic isolate spoken in Nepal and its genetic affiliation is to be determined (Watters 2005).

It is quite interesting that a single indigenous people can speak several languages in Nepal, for example, the Rai-Kiranti are considered to constitute a single ethnic group, but they speak around 30 mutually unintelligible languages such as Puma, Bantawa, Belhare, Mewahang, Camling, Chulung, Thulung, Kulung, Sampang, Dumi and Athphare. However, several indigenous peoples speak what is seen to be a single language, such as Newar where Newar people follow a variety of cultural practices[2]. It is often said that Rai-Kiranti are ethnically the same but linguistically different, while Newars are linguistically the same but ethnically different.

As is clear from the facts outlined above, Nepal is not only home to more language families than all of Europe combined, but also has more distinct and individual languages in one country than the whole of the European community (Turin 2007: 5). Grimes (1996) also estimates 125 distinct languages and dialects spoken in Nepal. SIL (2012) records 124 languages spoken there.

The Linguistic survey of Nepal (LinSuN) (2009-2016) began in 2009. This survey will include a qualitative study of the domains of language use and the attitudes people have about their languages. An accurate and authentic identification of Nepalese languages and their dialects is also needed to implement the socially inclusive provisions made in the Interim Constitution of Nepal (2007) such as equal status to all mother tongues and people's fundamental rights to preserve and promote them through their uses in primary education, media, and local administration.

During the more than one hundred years of autocracy by a dynasty of prime ministers, the Rana (1846-1951), mobility inside the country was highly restricted and very few foreigners were allowed to visit the country, preventing Christian missionaries from proselytising (cf. CPDP 2004). With the end of the Rana dynasty, the country opened up in 1951 and since then there have been rapid and profound changes,

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[2] Adapted from http://www.supportnepal.org/minority.html.

especially after the success of a democracy movement in 1990, which resulted in a new constitution and the re-establishment of multi-party democracy in the country.

While the ethnic groups of Nepal and their languages have been studied by foreign and home scholars alike for over a century, it is only in the last decade that ethnic and linguistic sensitivities have risen to national consciousness[3]. Many ethnic communities have raised their voices for ethnic and linguistic rights. Since the promulgation of the constitution in 1990, the concerned minorities have expressed their linguistic identity more consciously. In the past, there was a strict policy of 'one-nation, one-language', which tended to suppress ethnic and linguistic diversity; now the general conditions and attitudes of the state are more positive to take steps for documentation and preservation. In consequence, many of Nepal's indigenous mother tongues, particularly those belonging to the Tibeto-Burman language family and Indo-European family as well which were either previously poorly documented or are in danger of disappearing, are being studied and described by the Linguistic Survey of Nepal (LinSuN) with the initiation of Central Department of Linguistics, Tribhuvan University, Kathmandu.

Until Nepal became a republic in May 2008, it had been ruled by monarchs for most of its modern history. Nepal is officially known as the Federal Democratic Republic of Nepal, as of 2011, the world's second most recent nation to become a republic. Though recent political developments have seriously delayed the process of promulgation of a new constitution, it is assumed there have been some changes in the state's policy towards the minorities.

The map in Figure 1 (© SIL International 2013, redistribution prohibited without written permission of SIL International) represents the languages of Nepal.

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[3] Adapted from LinSuN draft proposal (2008) submitted to National Planning Commission, Kathmandu.

**Figure 1:** Languages of Nepal
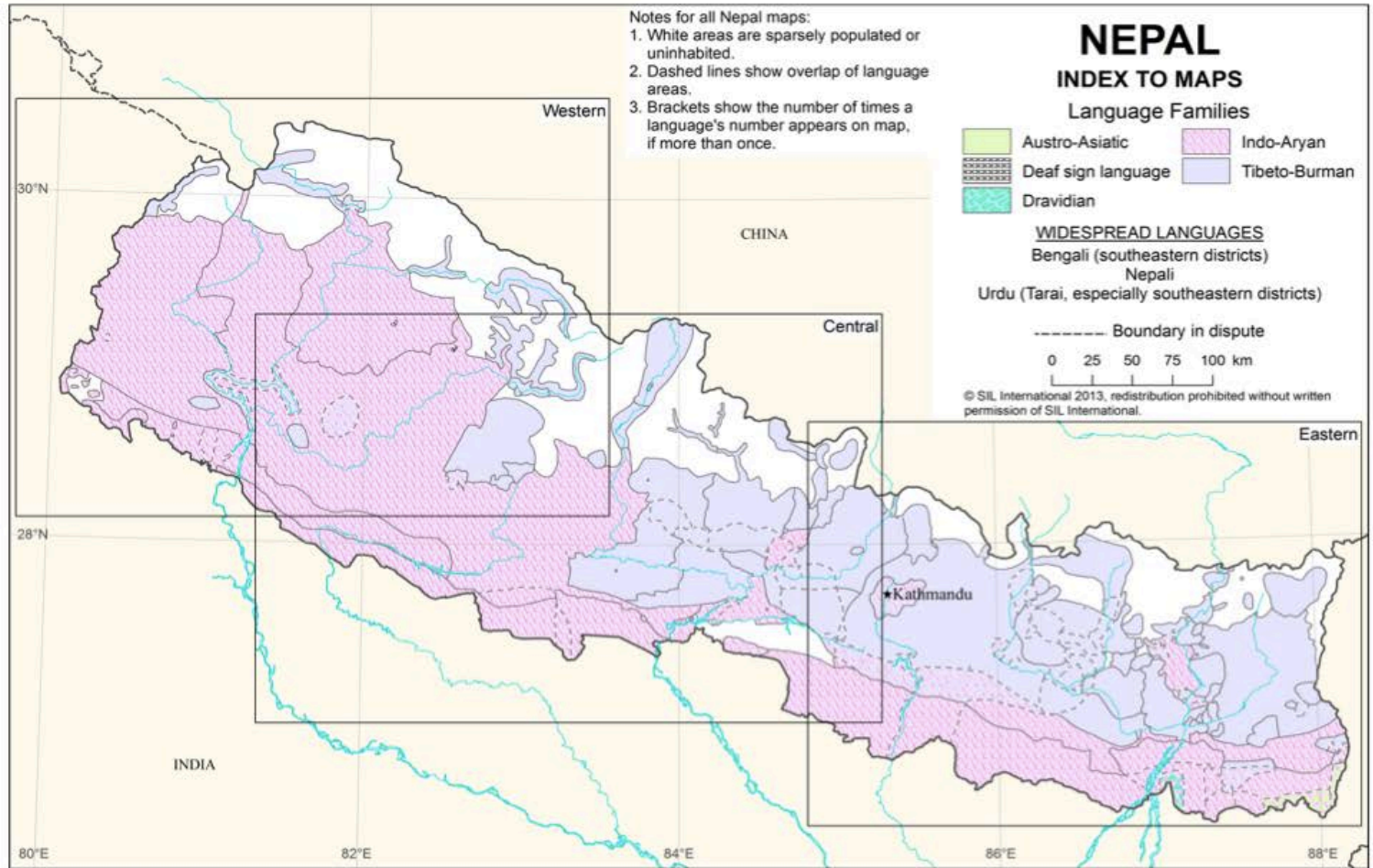
### 1.2.1    The study of Kiranti languages

The history of the study of Kiranti languages is not very old. The Kiranti languages were first investigated by the British administrator Brian H. Hodgson in 1857. Hodgson, the former British Resident in Nepal made great contributions on Bahing and Hayu, and also compiled word lists for other Kiranti languages such as Bantawa, Camling, Dumi, Dungmali, Khaling, Kulung, Lohorung, Mewahang, Thulung, Wambule, Yakkha etc. (Opgenort 2005). His pioneering work has remained the only accessible source on the Kiranti languages for a long time (Opgenort 2004). Sten Konow, using notes on the materials collected by Hodgson, prepared short descriptions on different Kiranti languages about 50 years later (Grierson 1909: 340).

After a long interval of about 100 years, in the late 1960s and early 1970s, Christian missionaries of the Summer Institute of Linguistics (SIL) (cf. Hale, Hari & Schoettelndreyer 1972) presented systematic accounts of Kiranti languages. At about the same time anthropologist Nicholas Allen published his first comprehensive grammar of a Kiranti language, namely Thulung (Allen 1975). In the years (1981-1984) the Kiranti area was systematically surveyed for the first time by the Linguistic Survey of Nepal, a research project funded by the German Research Council (*Deutsche Forschungsgemeinschaft*) directed by Werner Winter. Not all of the survey results are yet published, but Hanßon (1991) provides brief findings of the survey about the Rai people, ethnicity and linguistic grouping.

Hanßon (1991) notes that Puma is one of the languages newly found in that survey. However, the survey work has many flaws that have been critically assessed by van Driem (2001: 623) (cf. Bickel 2003), but it published a two-volume of survey that contains much geographical detail. Ebert (1994) re-analyses earlier data of the survey and relates these analyses to current issues in general linguistics.

In more recent times, Rai languages have attracted many linguists. Up till now, monographic grammars, grammatical sketches, comprehensive grammatical analyses, and dissertations have been written on Bahing (Hodgson 1857), Khaling (Toba 1979), Limbu (Weidert & Subba 1985; van Driem 1987; Tumbahang 2007), Bantawa (Rai 1985; Doornenbal 2009), Hayu (Michailovsky 1981, 1988), Dumi (van Driem 1993), Athpare (Ebert 1997a), Camling (Ebert 1997b; Rai 2003), Belhare (Bickel 1996), Yamphu (Rutgers 1998), Kulung (Tolsma 1999, 2006), Wambule (Opgenort 2002, 2004), Jero (Opgenort 2005), Sunuwar (Rapacha 2005; Dörte Borchers 2008), and

Chintang (Paudyal 2012). The major works that have been done so far in Puma include (Bickel et al. 2005; Sharma et al. 2005; Stutz 2005; Bickel et al. 2007; Schackow 2008; Jänen 2009; Rai et al. 2009; Schackow et al. 2012; Sharma 2012; 2013a; 2013b). In addition, there are also MA theses (Rai 2003; Rai 2009; Rai 2009), peer reviewed article (Gaenszle et al. 2011) and some presentations (Rai 2006, 2007; Rai 2006, 2007a, 2007b; Sharma 2004, 2005, 2007, 2009a, 2009b).

### 1.2.2  The linguistic demography of Rai-Kiranti languages

*Kirant Rai Yayokkha* in 2001 surveyed the Kiranti speaking areas, and reports that 26 Kiranti languages are spoken there. The Kiranti subgroup comprises some 30 languages (Ebert 1994), but Hanβon (1991) and Grimes (2000) estimate closer to 40. Table 1 presents the linguistic demography that is adapted from Central Bureau of Statistics (2001) of the Federal Democratic Republic of Nepal.

**Table 1:** Linguistic demography of Rai-Kiranti languages

| Rai-Kiranti  languages | Speakers |
|---|---|
| Bantawa | 371,056 |
| Camling | 44,096 |
| Kulung | 18,686 |
| Thulung | 14,034 |
| Sangpang | 10, 810 |
| Khaling | 9,288 |
| Dumi | 5,271 |
| Umbule | 4,471 |
| **Puma** | **4,310** |
| Nachiring | 3,553 |
| Bahing | 2,765 |
| Koyu | 2,641 |
| Yamphule | 1,722 |
| Chiling | 1,314 |
| Lohurung | 1,027 |
| Mewahang | 904 |
| Tilung | 310 |
| Jerung | 271 |
| Dungmali | 221 |
| Lingkhim | 97 |
| Sam | 23 |
| Chintang | 8 |
| Total: | 497,055 |

## 1.3    The Kiranti people and languages

The term 'Kiranti' denotes both a geographical and linguistic meaning to the Tibeto-Burman peoples native to eastern Nepal, specifically the Limbu and Rai groups (Opgenort 2004: 1–2). Thus, it refers to both 'people' and 'language'. Kirant is the name of the eastern part of Nepal, geographically mountainous and hilly region. It is subdivided into three distinct regions: Pallo Kirant, Majh Kirant and Wallo Kirant (van Driem 2001). The languages spoken in this region are known as Kiranti languages.

Linguistically, Kiranti is one of the subgroups of the Tibeto-Burman languages of Nepal. As a linguistic concept, Kiranti is one of the branches of Tibeto-Burman corresponding to Benedict's Bahing-Vayu nucleus (Benedict 1972: 4–11). It comprises languages like Limbu, Yakkha, and Rai as collective language groups. Most Kiranti languages have first person inclusive and exclusive pronouns and mark duality in the nominal and verbal morphology. Verbal agreement systems in Kiranti languages are very complex as both A and P arguments are inflected in agreement for transitive verbs (see Section 3:8).

Kiranti is one of the important ethnic groups in Nepal. They served and are still serving the British and Indian Army. They earned a reputation for bravery and courage in the battlefield as many of them were awarded the Victoria Cross for fighting in the First and Second World War. The Kiranti languages are further divided into smaller groups of languages that show more resemblance with each other than with other groups of the Kiranti languages.

Puma's close relationship with the languages Bantawa and Camling has been recognised from survey research. Hanßon (1991: 78) argues that Puma shares the highest degree of lexical agreement with Camling whereas most grammatical features are shared with Bantawa in the south of the confluence of the Sunkoshī and Dudhkoshī rivers. This close relationship of Puma with Bantawa and Camling is obvious and they are classified as Central Kiranti in all classifications. van Driem (2001: 710) notes that the Puma area is sandwiched in between Bantawa territory to the east and Camling territory to the west.

The map in Figure 2 (© SIL International 2013, redistribution prohibited without written permission of SIL International) shows the different languages from the four language families that are spoken in the eastern part of Nepal.

**Figure 2:** Languages of eastern part of Nepal



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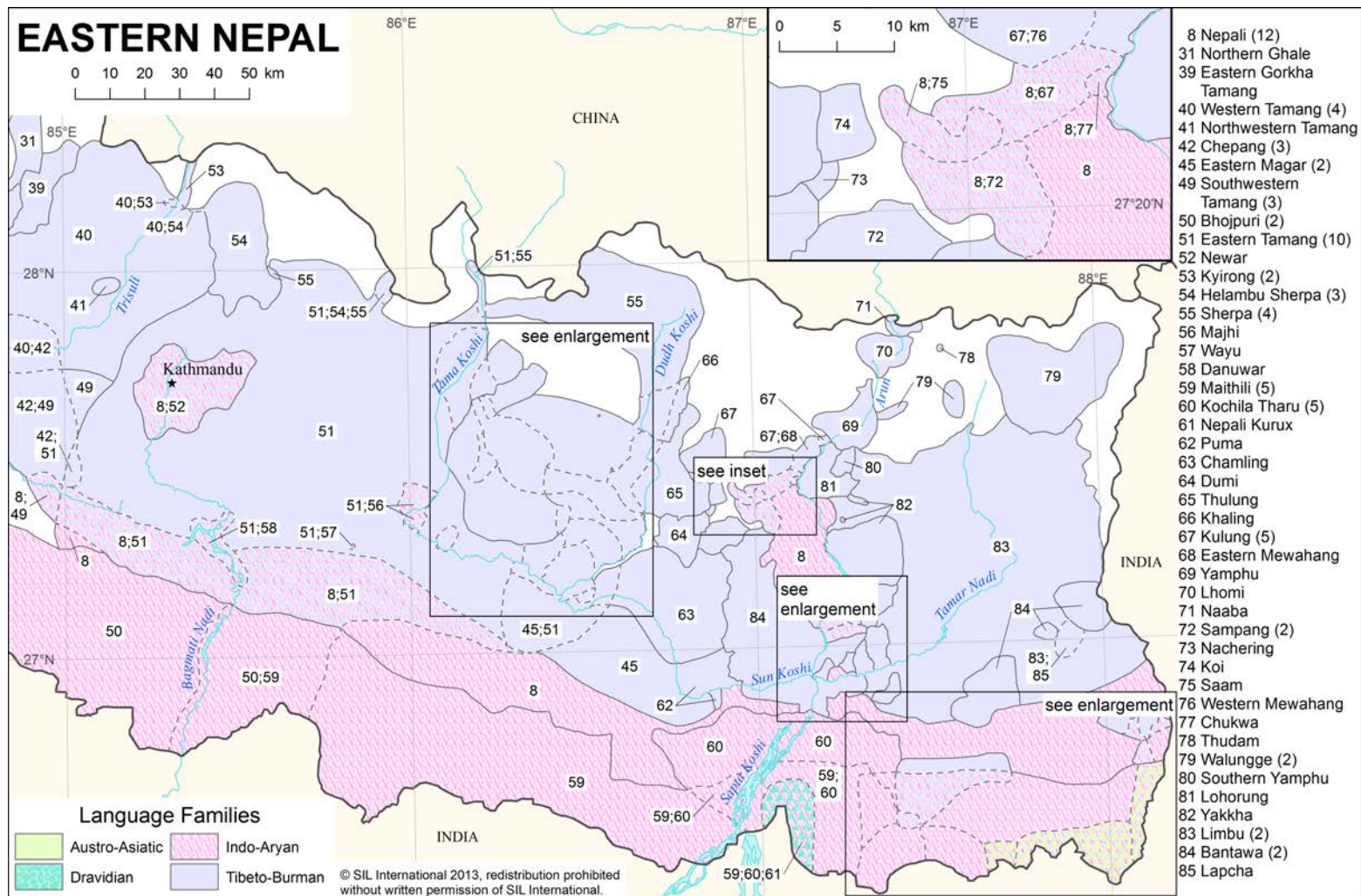
### 1.3.1  The Puma people

The Puma people are one of small ethnic groups of Nepal most affected by migration, modernisation and modification. They have their own language, rich cultural heritage and tradition. Despite the recent advances in modern science and technology as well as wider use of Nepali language as a *lingua franca*, they have retrained their distinct identities in a remarkable way, particularly in rural areas where they have maintained their language and kept their tradition with originality.

The same term 'Puma' refers both to the people and the language they speak. The Puma people are friendly, helpful and very open living in the rural areas of southern-eastern part of Khotang district. The majority of the emigrants are found in Belṭār, Basahā and Maḍibās of Udayapur distirict. Moreover, many Pumas also live in urban areas like Kathmandu, Dharan, and Itahari. There has also been an increase in their number of Pumas who have settled more or less permanently aboard such as UK, USA, Hong Kong and Europe.

The Puma people practise sedentary agriculture and animal husbandry (see also Section 1.9). They are educationally, politically and economicaly highly marginalised. *Boksa* 'pork' is their preferred meat, while eating *suŋsa* 'goat meat' is forbidden for some Puma people. In the past, they were not allowed to touch goats either. But now goat husbandry is becoming a source of income (see Section 1.10).

Drinking alcohol is a common practice among all Rai-Kiranti people, and as such they are quite different from the higher caste Hindus in Nepal, who did not drink any alcohol in the past but now some of them do and who eat castrated goat (Tolsma 2006).

Not only lower castes living in Puma villages such as *Kāmī*, blacksmiths and *Damai*, tailors, but also higher castes such as *Kshertī*, have largely adopted the Puma way of life in as much as they drink alcohol and eat pork.

According to the CPDP, most Puma people older than forty years still have some knowledge of the Puma language, but language competence varies considerably from family to family.

**Figure 3:** The author with the Puma people at Dharān



### 1.3.2 Population demography

Central Bureau of Statistics of Nepal (CBS 2001) reports about 4,000 people speak Puma, which is 0.02 percent of the total population of Nepal. However this figure seems too conservative. Puma people living in the core areas claim that there should be at least 10,000 Puma people and among them there should be more than 6,000 Puma native speakers (Sharma 2004; Sharma et al. 2005). The total population of Puma by mother tongue speaking district wise is presented in Table 2.

**Table 2:** Distribution of Puma (CBS 2001)

| Country | Mother Tongue by Districts | | |
|---|---|---|---|
| Development Region *District* | Total Population | Male | Female |
| **Nepal (Total)** | **4310** | **2115** | **2195** |
| Eastern | 4307 | 2112 | 2195 |
| *Jhāpā* | 34 | 17 | 17 |
| *Sunsarī* | 1 | 0 | 1 |
| *Dhankuṭā* | 1 | 1 | 0 |
| ***Khoṭāng*** | ***3762*** | ***1852*** | ***1910*** |
| *Udaypur* | 502 | 239 | 263 |
| *Saptarī* | 7 | 3 | 4 |
| Central | 3 | 3 | 0 |
| *Kāṭhmāṇḍu* | 3 | 3 | 0 |

### 1.3.3   The Puma language

The Puma language is a Rai-Kiranti language spoken in Khotang district of the eastern part of Nepal. It is one of the endangered Kiranti languages. Puma people call their mother tongue *rokuŋla* or *rokoŋla*, in which *la* denotes 'language' and *rokuŋ* denotes 'jungle' (cf. Sharma 2004). The *Ethnologue* (Lewis, Simons & Fenning 2013) has an entry for Puma under 'Kiranti', with the ISO 639-3 code *pum*. Puma was not mentioned until the 1980s; it was one of the discoveries of the Linguistic Survey of Nepal.

Hanßon (1991: 78) mentions that Puma is one of the languages newly found in the Linguistic Survey of Nepal field research. He gives further description about the language that the verbal agreement patterns in Puma appear to have preserved several archaic elements that seem to be found nowhere else in Central Kiranti.

### *1.4   Genetic affiliation*

Genetically, Puma can be grouped under the southern branch of the central group of Kiranti languages, as it shares innovations with Camling, such as voicing of preglottalised initials and merger of the back and front rhotics (Sharma et al. 2005: 1–2). It should be noted that not enough is known yet to have a full understanding about the groupings within the Kiranti languages, and the exact genetic affiliation of most languages within the family is still a matter of dispute.

The past and present of the Himalayas is characterised by massive population dynamics and mutual influences for a long time. Therefore, comparison with geographically close languages from the Indo-Aryan, Munda and Dravidian and Sino-Tibetan families should also be considered to get a fuller understanding of the picture (Ebert 2003: 546). The genetic affiliation of Kiranti (based on Michailovsky 1994; van Driem 2001; Opgenort 2004; Bickel 2011a) is presented in Figure 4.

This division is based on shared phonological innovations in the initial plosives and has not been seriously contested. Bradley (1997: 16) offers a rather unspecific tree that sums up eight branches of the Kiranti group. Opgenort (2005) has refined Michailovsky's analysis, using an innovative method of combining lexical isoglosses, i.e. counting etyma that are shared between languages, with phonological isoglosses, i.e. counting shared phonological innovations (cf. Doornenbal 2009).

**Figure 4:** Genetic affiliation of Kiranti languages

**Tibeto-Burman**

**Kiranti**　　　　　　　　　　　　　　　　others

**Western**　　**Midwestern**　　**Central-Eastern**
(*ʔc → c)　　(*ʔp,*ʔt→ b, d)　　(*voiced→voiceless; ʔk,*ʔc→kh,ch)

**Caurasiya**　**Northwestern**　　**Upper Dudhkoshī**　**Central**　　　　　　　**Greater Eastern**
(*ch→s)　　Bahing　　　　Khaling　　　　(*ʔp,*ʔt→b,d)　　　　(*ʔp,*ʔt→ph,th)
Jero　　　　Hayu　　　　Dumi
Wambule　　Sunwar

**Khambu**　　　**Southern**　　**UpperArun**　　**Eastern**
(*ʀ→g, hr)　　　　　　　　　(PE *ph, *th→Ø)　('Yakkha-Limbu')
Kulung　　　　　?Dungmali　　Yamphu
Nachiring　　　Camling　　　Lohorung　**Greater Yakha**　**Limbu**
Sampang　　　Bantawa　　　Meawahang　Yakkha　　　(ch→s; ʀ,r→y)
Sam　　　　　**Puma**　　　　　　　　　　　　　　Chintang
　　　　　　　　　　　　　　　　　　　　　　　　Athpare
　　　　　　　　　　　　　　　　　　　　　　　　Belhare

## 1.5    *Puma linguistic areas*

The Puma people reside mainly in the valley of the Ruwākholā, a western tributary to the Buwākholā which flows into the Sunkoshī (or Dudhkoshī) River a little further to the south. The core Puma speaking area is limited to five Village Development Committees (VDCs) of Khoṭāng district (Latitude, 27.0167 and Longitude, 86.8500). These are: Diplung, Mauwāboṭe, Devīsthān, Pauwāserā and Cisāpānī.

There are also Puma who have moved into some settlements to the south of the Dudhkoshī such as Belṭār, Māḍibās, Siddīpur, Basahā and Caudanḍī Village Development Committees in Udayapur district, where they also speak their language. Thus, the Puma linguistic area extends to the southern foothills of the Himalayas close to the Saptakoshī river confluence.

Based on first-hand information and frequent field visits, the heartland of the Puma speaking areas can be identified as Diplung, Mauwāboṭe and Pauwāserā VDCs. It is best retained as a mother tongue in Mauwāboṭe, south-west of the Ruwākholā, whereas it is most in decline along the trail on the north-eastern side of the valley, through Devīsthān VDC up to Cisāpanī.

Besides Khoṭāng and Udaypur, Puma also live in other districts of Nepal like Pā̃cthar, Ilām, Jhāpā, Sankhuwāsabhā, Morang, Bhojpur and Kāṭhmāṇḍu. The Puma people living outside Khoṭāng and Udaypur generally have not retained their language and speak Nepali (Sharma 2005). The map in Figure 5 (http://www.digitalhimalaya.com/collections/maps/nepalmaps/), accessed on 27 March 2014) shows the topographical map of Khoṭāng district with Diplung, Mauwāboṭe, Devīsthān, Pauwāserā and Cisāpānī VDCs in the southeast.

**Figure 5:** Topographical map of Khoṭāṅg district with the Puma speaking VDCs
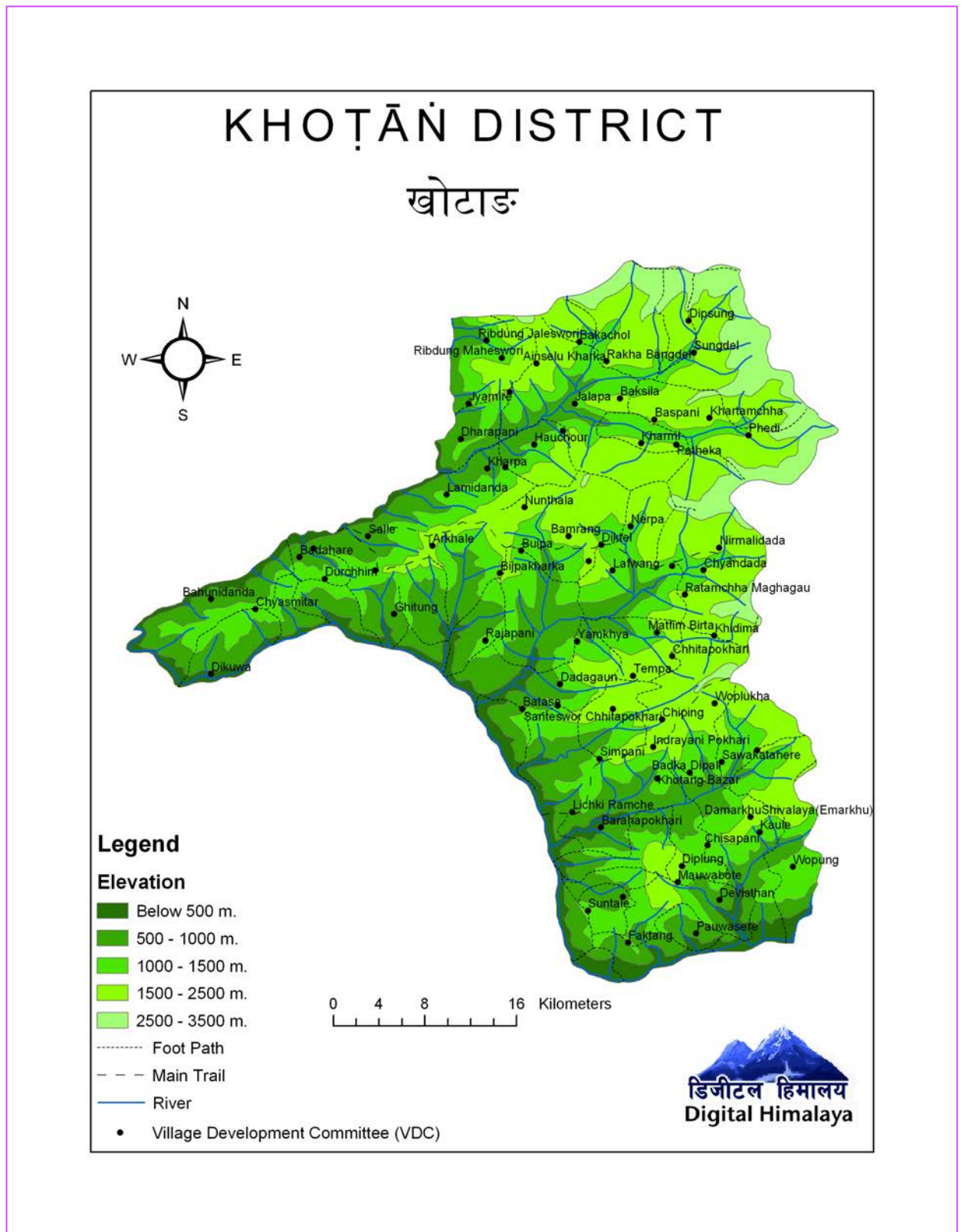
## 1.6    Cultural background

The Puma language and culture are comparatively more conservative than other *Rai* groups. They have preserved cultural practices and language that have disappeared in other Rai communities. For example, certain genres of ritual speech, such as *hopmacham*, a kind of song which is sung in many Kiranti rituals (mainly in marriage) praising the forces of creation like the earth and man, are extinct in Bantawa and Camling, the two largest Rai Kiranti languages, while it is still well-known and sung in the Puma community. Like many Rai-Kiranti people, Puma celebrate *ũbhaulī* 'the rising time' (around early August) and *ũdhaulī* 'the descending time'(around early February) (cf. Gaenszle 2007) and worship 'nature' twice a year, once before planting  during the rising time and once before harvesting during the descending time. The major festivals that Puma celebrate and worship are *samkha* (ancestor worship; spring festival), *khʌliphenma* (worship of ancestral beings to keep them satisfied and make them look benevolently on their descendants), *caṇḍī pūrṇimā* (cultural dance) (see Section 1.8).

### 1.6.1  Mythology

Mythological stories told by the Puma with respect to the origin of the world and their ancestors are part of a common Rai mythology, also found among the Bantawa and Camling. Gaenszle (1991), quoted in (Tolsma 2006), describes how Kiranti mythology is interwoven with the kinship system. According to one Puma legend (myth_sristi), there was no *bakkha* 'earth' at the beginning, but only a single aqueous orb. Then, the stones *chetlungma* and *maklungma* were created. After the stones had become visible, with the help of termites the water-hunter and serpent queen were created. After the creation of the earth and insects, the gods thought of creating human beings. At the beginning, they created a human made of iron and tried to call it, but the human could not produce a single word. The gods attempted to make a golden human, but this creature also failed to speak. In the end, the gods created a human made of a mixture of bird's dung and ashes, which was able to speak, and in this way humans were created. Premdhoj Rai (p.c.) says that the proof that humans are made of dung and ashes is given by the bad smell emitted by rubbing one's body.

Another myth is narrated by Shree Kumar Rai (ELDP: hekchakupa_04), where it is said that there were parents who were called *Patesung*. They had three children: *Tongwama*, *Khiwama* and *Hekchakupa*. Soon the children became orphans, and they had to struggle in order to survive. *Tongwama* and *Khiwama* were elder and younger

sisters, and *Hekchakupa* was the youngest brother. Thus, the sisters raised their brother, and used to weave to make clothes for themselves.

According to the texts (folk_tale_01, hekchakupa_01, hekchakupa_02, hekchakupa_03, hekchakupa_04, and hekchakupa_05), one day *Tongwama* and *Khiwama* were working on their loom. *Hekchakupa* was very hungry, and took one fistful of uncooked rice to his eldest sister *Tongwama* and asked her to prepare a meal for him. She asked him to take it to the other sister *Khiwama* because she was busy. However, *Khiwama* in turn asked him to take it to *Tongwama* as she was also busy. Again, he took it to this sister. As *Tongwama* was preparing the meal, *Hekchakupa* was playing and laughing to himself, dancing around the fireplace. Suddenly he leant on a burning piece of wood and knocked over the cooking pot. *Hekchakupa* was so sad and started to cry, until eventually he cried himself to sleep. Then after having finished their loom-work, *Tongwama* and *Khiwama* entered the house and found *Hekchakupa* asleep. They could not wake him up, and thought that their brother must be dead. The girls covered him with banana leaves. When they started to trample on the pile and heard a stalk break, they thought that their younger brother's ribs had broken. Next they put one banana, one sickle and one piece of ginger under his pillow, and fled to *Bhoṭ* (Tibet) and *Madhes* (Terai), having changed into birds. After having had a full sleep, *Hekchakupa* woke up and looked hither and thither, but he did not see his sisters. Then, he started to cry again. While crying, he looked at his pillow and found a banana, a sickle and ginger. He ate the banana when he got hungry. One day *Hekchakupa* found a seed of a banana and planted it. When he was eating a ripen banana, *Cʌkrʌngdhipma*, a witch, found him and took him to her house to kill and eat. The witch had a daughter named *Congdhongcongma*. *Cʌkrʌngdhipma* asked her daughter to kill and cook the lice of *Hekchakupa* (a indirect way of asking her daughter to kill *Hekchakupa*) and to hang his roasted heart and liver on the door. *Cʌkrʌngdhipma* went to invite her brothers.

*Congdhongcongma* started to look for lice on *Hetchkupa*, but she did not find them. She asked him how he did not have any filth or lice on his head. *Hekchakupa* told her that his mother poured about half a litre boiling oil on his head by having him in an upside-down position on a mortar. He had neither lice nor filth in his hair. *Congdhongcongma* requested him to do the same. *Hekchakupa* boiled oil and poured it on *Congdhongcongma*'s head. Then, she died and *Hekchakupa* put on her clothes. He hung the heart and liver on the door and cooked the remaining parts. *Cʌkrʌngdhipma*

came with her brother, dancing around the house. She chewed *Congdhongcongma*'s heart and liver hanging by the door. *Hekchakupa* greeted *Cʌkrʌngdhipma*'s brothers, having taken the elder brother as younger and vice-versa. He served a meal. *Cʌkrʌngdhipma* and her brothers ate *Congdhongcongma*'s meat too much, and they got intoxicated by it and fell asleep. *Hekchakupa* climbed on the roof and started to shout 'the witch is a child-eater!' Then, *Cʌkrʌngdhipma* chased him. While she was chasing him, they got to *Hekchakupa*'s mother's parents' home. They served rice husks and nettle curry to the witch, and rice and chicken curry to *Hekchakupa*. Next day *Cʌkrʌngdhipma* was given a bundle of a tiger, bear, and hornets and was asked to unpack her bundle in a dense forest. *Hekchakupa*, their nephew, was given a bundle of domesticated animals, grain and money, and was asked to unpack his bundle on a plain area. Then the two of them took to the road.

*Cʌkrʌngdhipma* unpacked the bundle after she brought it into a dense forest. As she unpacked the bundle, the contents bit and stung her, and she died. *Hekchakupa* unpacked his bundle after reaching a plain that he liked. The cattle, grain, and money came out. He started to look after his crops and cattle. He saved his grain and wealth. After having saved money, he brought a wife. He invited his sisters *Tongwama* and *Khiwama*. But, they were ashamed to accept the invitation. According to the version of the legend told by Shree Kumar Rai (ELDP: hekchakupa_04), *Hekchakupa* and his wife sent several animals to look for the sisters. They sent a flea, which was killed after it had bitten *Tongwama* and *Khiwama*. Then they sent a *ṭangṭupmi*, a kind of bird that frequents rivers, which did not come back either. They sent a red cock. When *Tongwama* and *Khiwama* heard the cock crowing about *Hekchakupa*'s prosperity, the two sisters became afraid and chased the cock in order to catch it. As they kept chasing the cock, they reached *Hekchakupa*'s decorated house. The sisters ran off in shame. After *Hekchakupa* put *mahada*, a kind of sour fruit, salt, rice and roasted pork on a winnowing basket, they ate, and then dropped their feathers, one each into the winnowing basket as a *saŋcep itma cʌlʌnʌ*, a token of gift. The ceremonies performed by *Hekchakupa,* his wife, and his two sisters *Tongwama* and *Khiwama* in the mythical past are nowadays repeated by the Puma during their religious ceremonies in honour of the ancestors, whom they ask for happiness, peace, health, prosperity and good fortune. In this way, today it is believed that Kiranti people are the offspring of the mythical hero *Hekchakupa*.

## 1.7    Clans

According to the oral tradition of the Puma, after the creation of human beings, their ancestor had two sons, *Dʌbʌlung* and *Palun*. *Dʌbʌlung* was elder brother and *Palun* was younger brother. They were separated. The elder brother *Dʌbʌlung* lived in *Sobhe*, *Satmara* in Diplung and younger brother *Palun* lived in *Bukula*, Palun village. As a result, Puma society is divided into two lineages; one descending from *Dʌbʌlung*, and the other from the offspring of *Palun*. *Dʌbʌlung* had seven sons and *Palun* had five sons. However, one clan *Henyongcha* was in excess when the ancestors distributed the clans. Shree Kumār Rāī says that *Henyongcha* was also *Dʌbʌlung*'s son from his second wife. Similarly, it is said that *Palun* also had another son. Overall, Puma has fourteen clans. *Henyongcha* perform their ritual themselves and they ask only ancestors of their own clan, while the other seven clans invite all ancestors of the seven clans during their ritual ceremonies in honour of the ancestors for prosperity, strength, and good health. In addition, while honouring their ancestors, *Dʌbʌlung* call '*Dʌbʌlung/Diplung Bobbi*', *Palun* call '*Ruthum Bobbi*', and *Henyongcha* call '*saksalung-tʌngalung bobbi*' at Pauwasera. Though Puma society is divided into two lineages, all Puma have the same *samet*, *namdhungpa* for males and *namdhungma* for females. This *samet* is needed in the life cycle rites and ceremonies such as naming, marriage and death.

According to Kamal Bahādur Rāī in his recorded text DA_satpacha, some clans such as *Garaja*, *Hadira*, *Limmachit* and *Thumrahang* of *Dʌbʌlung*, have names *hangsami*, *sibilisip*, *citaci* and *lopali*, respectively, in *mundum,* the ritual language. While reciting the oral ritual texts, general clans are not called. The *mundum* names of the clans are used during recitation of ritual texts by shaman at wedding ceremonies to welcome and honour ancestors. The clan names recorded in Figure 6 are based on the text (DA_satpacha), and (Rai 2007; Rai & Rai 2007). The clans below with a shaded area do not have sub-clans, while the clans without a shaded area have further sub-clans. The clan *Henyongcha* is presented with different colour to show it is distinct from the other seven clans, according to the mythology. The four clans of *Dʌbʌlung*, namely *Limmachit*, *Hangthangga*, *Dumanglung*, and *Henyongcha* do not have sub-clans, while the other four clans, namely *Garaja*, *Hadira*, *Thumrahang*, and *Yonduhang* have three, five, three, and two sub-clans, respectively. On the other hand, only *Mithahang* of *Palun* has three sub-clans, while other clans such as *Tongmalung*, *Metlongthong*, *Wabihong*, *Khahong*, and *Khirihang* do not have any sub-clans.

**Figure 6:** Clans



49
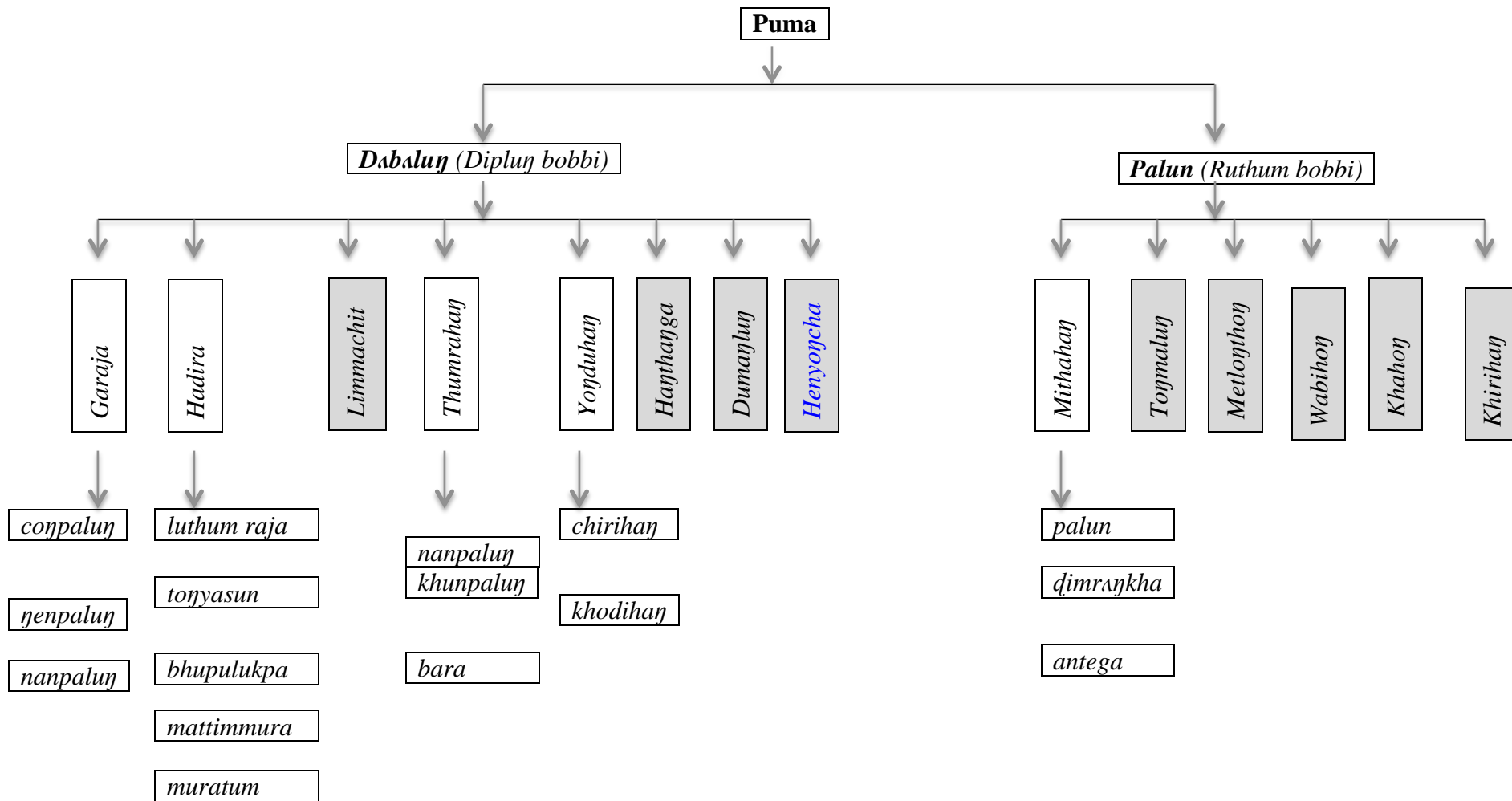
## 1.8    The annual ritual cycle

The Puma have an extensive number of rituals which can be categorised as annual rituals, life cycle rituals (see Section 1.11), and special kinds of rituals. Like many Kiranti groups such as Mewahang (Gaenszle 2007), the annual ritual cycle among the Puma is also strongly influenced by acquaintance with the Hindu cycle, and farmers generally follow the Nepali calendar when planning agricultural activities. According to Gaborieau (1982), cited in (Gaenszle 2007: 113), the calendar of the Hindu castes in Nepal is formally divided into two halves, the time between the winter solstice and the summer solstice, when the sun's course moves to the north (SKT. *uttarāyaṇa*), and the other six months, when the sun's course moves southward (SKT. *daksināyaṇa*). Gaenszle (2007) notes that among the Rai there are some striking structural parallels to the concepts proposed by Gaborieau, but one has to be careful to distinguish the differences. According to Shree Kumar Rai (p.c.), the Puma annual ritual cycle is divided in two halves: *ŭbhaulī* (NEP., 'the Rising Time') which starts in the month of *Māgh* (January/February) on *srī pancamī* (NEP) and *ŭdhaulī* (NEP, 'the Descending Time) which begins in the month of *Shrāwaṇ* (July/August) on the day of *nāg pancamī* (NEP.) (cf. Gaenszle 2007: 113–114) and they generally follow the Nepali calendar. These two halves are linked to the agricultural cycle as well. Further, Gaenszle (2007) argues that the division appears to have a more pronounced and articulate meaning among the Kiranti group.

Like the other Kiranti groups such as Mewahang (Gaenszle 2007), the view of the annual cycle as an upward and downward movement in both ritual and agriculture prevails among the Puma. The annual rituals are performed to pay respect and honour to the ancestors and to ask for prosperity for the new farming cycle. According to Shree Kumar Rai (p.c.), in Puma the first ritual to be performed is the *phagu* and no other rituals can be performed until it has been completed. Each household performs the *phagu* once a year in the month of *Baisākh* (April/May). The Puma traditionally celebrate *samkha, mʌnggen* and *goṭh puja* at least twice a year, once during the Rising Time and once during the Descending Time. The ritual *samkha* is celebrated once in *Baisākh* (April/May) or *Jeshṭha* (May/June) and once in *Āshwin* (September/October). The *mʌnggen* should be performed once between *Baisākh* and *Āshāḍh* (June/July), and once in *Mangsir* (November/December) or *Māgh* (January/February). Similarly, *goṭh pūjā* is celebrated once in *Mangsir* or *Māgh* by sprinkling water to a pullet (cock) and

once in *Baisākh* or *Jeshṭha* by sacrificing the same cock which has been sprinkled upon in *Mangsir*.

The *ũdhaulī* 'the Descending Time' *nāg pancamī*, begins the fifth day of the bright half of *Shrāwaṇ* (July/August). Gaenszle (2007: 116) notes that as among the Hindus, *Shrāwaṇ* is known as the Black Month (Nep. *kālo mahinā*) during which the gods disappear underground and therefore cannot be worshipped. Like many neighbouring Kiranti groups such as Wambule (Opgenort 2004), ritual ceremonies are preferably scheduled in what the Puma consider to be auspicious months. Perhaps inauspicious months are the fourth month, *Shrāwaṇ* (July/August), the seventh month, *Kārtik* (October/November), the ninth month, *Paush* (December/January), and the twelfth month, *Caitra* (March/April) because no rituals are scheduled in these months, even in case of need (see Table 3). The *ũdhaulī* season begins with the *nuwānggī* ceremony, the harvest ritual which should be performed in the fifth month *Bhādra* (August/September) or sometimes in *Āshwin* (September/October). The name of the ceremony is a loan from Nepali *nwāgī/ nwāī* 'the first rice harvested dipped in curds and sugar' (cf. Opgenort 2004: 26). As soon as there is a new harvest of rice, the *nuwānggī* season begins, where the ancestors, deities and spirits are honoured by offering them a portion of the new fruits/harvest. According to Shree Kumar Rai (p.c.), the *nuwānggī* is an obligatory ritual for the priests, *ŋapoŋ* and the people who have only planted rice. Unless the *nuwānggī* is performed, people are prohibited to eat new rice and ginger. If they do, it is traditionally believed that mishaps, such as physical and mental illness will be caused by ancestors that have been upset. So, psychologically and physically people will be in trouble (infertility of harvest, bad harvest, misfortune etc.). The autumn season is also a mix between harvest and ancestral rituals, which overlaps with the major national festivals such as *Dashain* and *Tihār* (cf. Gaenszle 2007).

By the beginning of eighth month *Mangsir* (November/December), generally the *lewa pūjā*, the other harvest ritual, which is also known as 'the soul raising of millet', is performed. However, it can be performed in the tenth month *Māgh* (January/February), if people do not have time to celebrate in *Mangsir*. Generally all the harvest rituals must be finished by *Mangsir* because the following month *Paush* (December/January) is considered an inauspicious month and the new season begins in the month of *Māgh* (January/February).

In Puma there are also special ancestral rituals, such as *khʌli*, *monghim*, *hongma*

*pūjā*, which are neither harvest nor annual rituals. One of the biggest rituals of Puma is *khʌli*. It is a sacred ceremony which should be performed in the months between *Baisākh* to *Ashāḍh* or *Mangsir* to *Māgh* but not in *Paush*. The ritual *khʌli* is celebrated for the ancestors and deities of a particular family to ensure the happiness and prosperity of the family after the marriage of a family member or to seek strength, protection and fortune for the family either after the death of a relative or an incurable illness, accident and mortal fright of a house head. It is the ritual which should be performed in both auspicious and inauspicious ceremonies. Hence, the ritual *khʌli* is primarily performed in three occasions: after the marriage of son or daughter, after the death of a relative, and after serious sickness of a house head (Shree Kumar Rai, p.c.).

As has been presented in the section 1.7 on clans, the Puma people are divided into two groups according to their clans. The exact date and the month of annual and harvest rituals varies between *Dʌbʌluŋ* to *Palun*. The description of ritual ceremonies presented here is primarily based on *Dʌbʌluŋ*. However, the ways to perform the rituals are alike. According to Shree Kumar Rai (p.c.), the only distinction they make is that people of *Palun* clan begin their rituals fifteen to twenty days later than the people of the *Dʌbʌluŋ* clan do.

In Puma both the Rising time and the Descending time are marked by rituals (*phagu*, *samkha*, *mʌnggen*) for the ancestors and deities, which last roughly three months in the month of *phagu*, and two months in the rest of each season. The ceremonies such as *samkha*, *mʌnggen* and *goṭh pūjā* are homologous rituals, one for each of the two seasons (the Rising time and the Descending time). All this reflects the Kiranti notion of time as half-year seasons which are closely linked to the cycles of nature and agriculture. Most of the rituals in Puma are related to planting and harvesting. In the ritual rites oral texts is chanted by *ŋapoŋ*, a priest, or a shaman or elder. Tolsma (2006: 7) states that the ritual language is used in the same way as Sanskrit is used in contemporary Hindu rituals.

## 1.9    *The annual agriculture cycle*

In the Puma community, agriculture is the main economic activity. The Nepali new year begins with the month *Baisākh* (April/May). The first full moon of *Baisākh* marks the beginning of the ritual *phagu*, which is also known as *caṇḍī*, the most important Kiranti ritual (Opgenort 2004; Gaenszle 2007; Dörte Borchers 2008), falls roughly in the

middle of the Rising Time. The *phagu* ritual is celebrated for a week. About one or two months before *phagu*, corn is sown. Soon after *phagu*, the labour-intensive time of the year begins with sowing and planting grains and vegetables. Two crops are obtained annually from irrigated fields, while only one crop is grown on non-irrigated fields. Except for a few fields at Mauwāboṭe, Ward numbers 6, 7 and 9, the fields in the Puma areas are not fertile. Corn and millet are the main summer crop in all Puma areas such as Diplung, Pauwāserā, Mauwāboṭe, Devīsthān and Cisāpānī and usually cultivated in those fields where mustard, wheat and buckwheat are the winter crops. In the forest fields villagers cultivate mainly turmeric, ginger and beans (NEP. *boḍī*).

There are two varieties of rice and millet: the fast-growing and the slow-growing. According to Gaenszle et al. (2008), the fast-growing rice (e.g., *taulī* and *ragadhan*) is planted in *Caitra* (March/April) and is harvested in *Āshāḍh* (June/July), while the slow-growing rice (e.g., *bhaday*, *ate*, *cucce*) is planted in *Āshāḍh* (June/July) and is harvested in *Mangsir* (November/December). The varieties *ate* and *cucce* are the most popular among the Puma because these are suitable for their climate and land. Similarly, the fast-growing millet is planted in *Jesṭha* (May/June) and is harvested in *Āshwin* (September/October), while the slow-growing millet is planted in *Āshāḍh* (June/July) and is harvested in *Mangsir* (November/December). The varieties of millet such as *serema*, *aŋdaluŋ*, *dipsali*, *salioŋ*, *puŋyuŋwaca*, *laŋtenkuca*, and *paŋtenkuca* are quite popular in the Puma community (Gaenszle et al. 2008). After *phagu*, rice and millet are sown and planted. In *Āshāḍh* (June/July), soybeans are sown. Corn is harvested in *Shrāwaṇ* (July/August). Buckwheat is sown in the month of *Bhādra* (August/September). Mustard and potato are sown in *Āshwin* (Septemebr/October) and wheat is sown in *Kārtik* (October/November). *Mangsir* (November/December) is the month of harvesting of many crops such as buckwheat, soybeans, beans, rice and millet. There are no major agricultural activities in winter after *Mangsir*, except that in *Paush* (December/January), ginger and turmeric are harvested.

Oranges are a major fruit crop in Cisāpānī and Diplung. It is harvested between *Mangsir* (November/December) and *Paush* (December/January). In addition, fruits such as mangoes, guavas, bananas, lemons are also cultivated. Large quantities of oranges are produced and they become a main source of income during this period. The other

major source of income comprises tomatoes, ginger, garlic and *sinkaulī*[4]. In Pauwāserā and Mauwāboṭe large quantities of tomatoes are grown, while little is cultivated in other Puma areas. Similarly, the other vegetables that are grown in the Puma areas include spinach, onion, peas, cauliflower, cabbage and chayote[5].

According to the local villagers, following the harvest, fields are ploughed for the preparation of the next crops. If necessary and based upon the nature of crops, fields are manured before ploughing. Usually the irrigated fields are prepared and manured in the autumn, while non-irrigated and low quality fields are enhanced with manure in the spring as well. The ploughing is performed only by men, while the planting, the harvesting and the threshing is performed by both men and women, but the harvesting and the threshing is primarily by men and the planting is by women, however winnowing is performed only by women, using bamboo fans. Agricultural activities are undertaken by household members, sometimes supplemented by hired labour. Like other Nepalese groups, the Puma practice reciprocal exchange labour (cf. Vinding 1998: 96–98). Although the Puma produce many of the goods needed by the household, none is self-sufficient and all households have to buy goods and labour. The households, which do not produce sufficient grain to meet their requirements, must buy at the market. In addition to rice and animal products, the Puma buy salt, sugar, cooking oil, kerosene, tea, lentils, soap, cigarettes, matches, kitchen utensils, batteries, torchlights, sweets, biscuits, noodles, milk powder, beaten rice, clothes, footwear and medicine.

The relatedness of annual ritual and agricultural cycles is presented in Table 3 where the signs used for the agricultural activities stand as given below. The signs used here are an updated and revised version of Gaenszle et al. (2008).

→ = preparation (ploughing, manuring, irrigating)

^ = sowing

# = planting

 = harvesting

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[4] *Sinkaulī* (*tejpattā*) refers to the aromatic dried leaves of the bay tree which are used in cooking for their distinctive flavour and fragrance, particularly in tea and curry.
[5] Botanical name is *sechium edule*.

**Table 3:** Annual ritual and agriculture cycle

| | Months | Māgh (Jan/Feb) | Phālgun (Feb/Mar | Caitra (Mar/Apr | Baisākh (Apr/May) | Jeṣṭha (May/Jun | Āshāḍh (Jun/Jul | Shrāwaṇ (Jul/Aug | Bhādra (Aug/Sep | Āshwin (Sep/Oct | Kārtik (Oct/Nov | Mangsir (Nov/Dec | Paush (Dec/Jan |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **R I T U A L   C Y C L E** | Puma | begin *ŭbhaulī* (the Rising Time) | | | | | | begin *ŭdhaulī* (the Descending Time) | | | | | |
| | | *goṭh puja* | | | *phagu* | | | | *nuwaŋgi* | | | *lewa pūjā* | |
| | | | | | *samkha* | | | | *samkha* | | | *goṭh pūjā* | |
| | | | | | *mʌŋgen* | | | | | | | | |
| | | | | | *goṭh pūjā* | | | | | | | | |
| | | *khʌliphenma* | | | *khʌliphenma* | | | | | | | *khʌliphenma* | |
| | National | *Srī Pancamī* | *Holī* | *Caite Dashain* | *Caṇḍī Pūrnimā* | | | *Nāg Pancamī* | *Tīj* | *Dashain* | *Tihār* | *Dhanḍī Pūrnimā* | |
| | | | | | | | | *Janai Pūrnimā* | | | | | |
| **A G R I T U R E   C Y C L E** | Rice1 | | ^ | # | | | 🍎 | | | | | | |
| | Rice2 | | | | | ^ | # | | | | | 🍎 | |
| | Millet1 | | | | ^ | # | | | | 🍎 | | | |
| | Millet2 | | | | | ^ | # | | | | | 🍎 | |
| | Maize | ^ | # | | | | | 🍎 | | | | | |
| | Wheat | | | 🍎 | | | | | | → | ^ | | |
| | Buckwheat | | | | | | | | → | ^ | 🍎 | | |
| | Ginger | | | → | # | | | | | | | 🍎 | |
| | Turmeric | | | → | # | | | | | | | 🍎 | |
| | Potato | 🍎 | | | | | | | | # | | | |
| | Mustard | 🍎 | | | | | | | | # | | | |
| | Orange | | | | | | | | | | | 🍎 | 🍎 |
| | Bean | | | | ^ | | | | | | | 🍎 | |
| | SEASONS | WINTER | SPRING | | | SUMMER (MONSOON) | | | AUTUMN | | | WINTER | |

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## 1.10  Animal husbandry

Animal husbandry also plays a significant role in the subsistence economy of the Puma. Cattle and goats are an integral part of the subsistence economy, while fowls are an integral part of the rituals, as many rituals need hens and cocks for sacrifice. In addition to reproductive purposes, buffaloes and cows are kept for milk and dung production. Oxen are kept for ploughing and later they are sold for transport and traction. Pigs and sows are also kept mainly for meat and a mother pig must be sacrificed in some rituals such as *khʌliphenma*. After an animal has been slaughtered the meat is dried and later used either for making curry or mixing with vegetables.

Cattle are also a source of some cash income. Goats and chickens are one of the main sources of cash income in Puma areas. Diplung and Pauwāserā are the major goat rearing villages.

## 1.11  The life cycle and its rites

### 1.11.1  Birth

When women become pregnant, Puma say that they feel like vomiting and they prefer to eat sour food. As pregnancy advances, women are not allowed to work too hard – particularly carrying or lifting heavy loads. During a wife's pregnancy period, couples should not have sex and should avoid killing animals because it is believed that the foetus might be damaged during intercourse and harmed if its parents commit sins.

When it is believed a baby is ready to be born, a house should be cleansed by sprinkling it with local liquor. A household may call a midwife because most Puma women give birth at home, and do not have easy access to the health posts or hospitals. Sometimes a close female relative such as a mother-in-law or a neighbour with prior experience assists during delivery. Since they have little knowledge of how to deal with complications, pregnant women occasionally die during childbirth. As pregnant women usually keep doing their daily chores, they occasionally give birth while working in the fields or walking on the way. Generally males are not allowed in the delivery room and there are no restrictions with respect to where the birth of a baby must take place.

As in another Kiranti groups, the Wambule (Opgenort 2004: 45), in Puma when a baby is born, performance of field labour such as ploughing, sowing and planting is not allowed. After delivery the mother and her baby are considered impure (NEP. *sutak*), and

are purified at a naming ceremony by slaughtering a rooster; this takes place on the third day after the birth. A ritually polluted mother is not allowed to touch the centre fireplace of the house until after the purification (naming) ceremony. According to Manbahadur Rai in the recoded text (birth_death), the mother is not allowed to touch water and food until twenty-two days after the birth because it is believed that elder people should not eat meals cooked by a woman who has recently given birth. This custom is still in practice among the Puma. The period of birth until purification is considered inauspicious and other ritual rites such as marriage are not allowed.

### 1.11.2 Marriage

The Puma are ideally endogamous. They should marry only within their own ethnic group. Clan membership is essential for marriage practices because members within the same clan or sub-clans (such as *Hadira*, *Garaja*) are not allowed to marry. Marriage is usually initiated either by the bridegroom or his parents. It may also be instigated by his relatives if they have identified an eligible girl whom they would like their kinsman to marry. It is also possible for a girl's parents to take the initiative from if they identify a suitable boy for their daughter. Usually in the West many people select a spouse with whom they share common interests. This factor plays no role among the Puma. However, nowadays, some young boys and girls have started to initiate marriages by telling their lover that they would like to marry.

Marriage in Puma society is of two types, namely arranged marriage (*dotmapa biha*, NEP. *māgī bihā*) and marriage by theft (*khumapa biha*, NEP. *corī bihā*). Marriage by theft is the traditional way, but later arranged marriage became popular. Less frequent are marriages that involve stealing the wife of another man (NEP. *jārī bihā*), and marriages by capture (abduction) (NEP. *gandharva bihā*). Marriage by capture is initiated by the boy with or without his parents' consent. Opgenort (2004: 48) notes that marriage by abduction takes place after there has been a fight between the boy's and girl's families during which both parties grab at the girl and the winner is the one who in the end manages to capture the girl. These two uncommon types are performed without ceremonies.

### (a) Arranged marriage

Arranged marriage, known as 'begging' (*dotmapa biha*), is initiated either by the boy's family or by relatives. In contrast to marriage by theft, the boy cannot proceed without

informing his parents and obtaining their approval. The term *dotmapa biha* may be composed by the instrument nominalisation *-ma=pa* on the verb *dot* 'beg' plus *biha* which is a loan from Nepali. Rarely do the boy's parents go to the house of the girl themselves. Rather they send a couple of *koŋpi* 'negotiator of a wedding', who are usually the boy's maternal uncle and a relative who is older than the boy. According to Shibadhan Rāī and Kalpanā Rāī in the recorded texts (magibiha) and (DA_bihe), respectively, the negotiators present a vessel of liquor known as *wabup wasup* and a one rupee coin to the girl's family and request their permission to speak. The girl's father accepts the liquor and the coin, and the *koŋpi* present a formal marriage proposal by saying: 'We are sent by so and so (name). Our son (name) from the clan (name) has reached the age of marriage. Your daughter (name) has grown up. We need a bride. Our son (name) would like to marry your daughter (name). Our son is like this, having such and such qualifications, social and family status. We have therefore come to your house to ask for your daughter.'

Through the mediation of the negotiators, the girl's parents, brothers and sisters try to determine how the parents are, what their family status is, what the job of boy and his father is, how much they earn, what qualifications boy has, and whether the boy is the right suitor for the girl. If the marriage is agreed upon, the presents are accepted. If not, the gifts will be returned through the *koŋpi*. When the girl's kinsfolk agree to the marriage, several negotiators such as *letpa koŋpi* (negotiators between the boy's and girl's family), *pheŋma koŋpi* (negotiators of the girl's family), and *khidi* (assistants of *letpa koŋpi*) (cf. ms. Puma marriage, CPDP) are sent to discuss the details of the marriage.

**(b) Marriage by theft**

Marriage by theft, known as *khumapa biha* (NEP. *corī bihā*) is initiated by the boy. This type of marriage is also known as *bhāgī bihā* or elopement. The girl is said to be stolen by the boy. However, this type of marriage usually involves love. That is why sometimes it is called love marriage as well. A couple are considered husband and wife if they elope and spend nights together. Usually they decide to run off to the house of one of the boy's relatives without informing their parents and obtaining their approval because the couple fears that their parents may reject their relationship. However, elopement sometimes takes place with the knowledge and encouragement of the girl's

parents, either because their daughter is pregnant and they fear that her lover's family may oppose the marriage, or in order to save the expense of a proper marriage if they are from lower class family (cf. Vinding 1998: 232). To inform the girl's family about the elopement, the boy's relatives, usually his maternal uncle and another older relative go to the house of the girl's parents as negotiators. The negotiators also carry presents such as *wasup* 'liquor' and a coin. The presents are accepted only if the marriage is accepted. If not, the presents are refused and the girl must come back home (cf. Opgenort 2004: 49). In the case of a *corī bihā*, *kuṭuni* is a main negotiator to persuade a girl into marriage (cf. ms. Puma marriage, CPDP).

The marriage ceremony is identical for a *dotmapa biha* and *khumapa biha*. The main role is played by the *koŋpi* and *kutuni* 'negotiators' who are from each party. The marriage ceremony starts when the bridegroom and *dakmi*, (NEP. *jantī*) 'a marriage procession' go to the parental home of the bride, where the bride's kinsfolk and friends are waiting. The bridegroom and *jantī* are welcomed by the bride's family who apply a mark (NEP. *ṭīkā*) to their forehead. After a meal, a bronze bowl is taken for rituals in the bride's kitchen. According to Shreedhan Rai, as recorded in the text *magibiha,* four coins and a vessel of liquor is given to the bride's parents, and a cock is also sacrificed. The bride's family formally accepts the offer of marriage given by the bridegroom's family. The bride and groom exchange blessings (*ṭīkā*) and flower garlands (NEP. *mālā*). Later, the bride is brought into the main room, dressed in a red sari and wearing jewelry presented by the groom. The groom applies some red vermilion powder (NEP. *sindur*) in the parting of his bride's hair.

Before the newlyweds take leave, the groom's party sings and dances in praise of the bride's family. The bride and the bridegroom are carried out by the girl's brothers. Black umbrellas are used to protect the bride and the bridegroom from evil. Then the bride says farewell to her own family.

On the way to the groom's house the marriage procession sings and dances. At the groom's house the newly-weds are received by his parents. Texts of the oral tradition are chanted, while the bride is entering the groom's house. They are escorted into the main room where his relatives have gathered. The groom's parents present their son and daughter-in-law. In this way, once the bride has entered the groom's house, she becomes formally part of that household. Generally within a week, the newly married

couple visits the bride's parents and family.

### 1.11.3 Death

On the day when a person dies, kinsfolk and close relatives of the dead person gather to bid farewell and perform several ceremonies. The Puma have a custom of taking and burying their dead, preferably on the very day that the death occurs or very soon thereafter. Graveyards are generally located at a short distance from the village in the jungle. Fellow villagers and relatives are not allowed to perform any field labour such as ploughing, planting, sowing and harvesting because it is believed that crops would be damaged. Besides the members of the household, the close relatives of the dead person such as children and siblings and their spouses should be present. The attendance of daughter's and sister's husbands is considered important as they play a key role in the funeral rites.

Here I present a general description of the death ceremony told by Manbahadur Rai in the text birth_death. Before taking the corpse to the cemetery, coins are placed on the face, mouth and forehead. The legs and hands are knocked down by bringing *mānā* and *pāthī*[6] because it is believed that the deceased should not take any good things with him/her. The body is covered with a white cloth. Lying on its back and face up, the corpse is tied to two long bamboo poles and several bamboo rungs which are placed at right angles to the long poles (cf. Opgenort 2004: 51). This is carried by two males, usually the offspring of the deceased. The funeral procession consists of males who belong to the family or the daughter's or sister's family, close relatives and neighbours, and friends. Then the funeral procession starts. It is preceded by a person who carries *chatala*, a bag of white cloth which contains uncooked rice, fried unhusked rice, coins, and three black lentils. It is followed by persons who are carrying three pieces of burning firewood and a person who carries a bamboo vessel filled with pure water and yeast in an upside-down position. However, Manbahadur Rai argues that it varies a little among the Puma according to different hamlets and villages. The dead person is taken to the graveyard feet first.

After reaching the graveyard, the dead body is sprinkled with the pure local liquor and texts of the oral tradition are chanted by the *ŋapoŋ* 'a ritual specialist' saying: 'You all gods and goddess whoever live here, you should leave from today. Though you are

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[6] *Mānā* and *pāthī* are measures of capacity which are loans from Nepali.

older residents, you should leave here because now a new resident is coming.' After having sprinkled the dead body, the mourners start to dig a rectangular hole to fit in a way that the body is placed with his/her head pointing towards the west because when the sun rises men have to perform field labour (cf. Opgenort 2004: 52). The sons of the deceased shave off their hair and cover their heads with a white cloth.

According to Manbahadur Rai, the Puma make a box and bury their dead in it in graves to make sure wild animals will not have access on it. The box is cleansed and swept and then the corpse is placed inside the grave lying on its back with the arms alongside the body; the box is then covered by stones. After having covered it, the cloth over the face and the stones are removed saying: 'You are becoming a stranger from today, go and take yourself from here.' Then all the mourners look at the face to pay their last respects. At last, the face is covered again by stones saying: 'We are offering you stones and soil. May not your heart hurt! The very important persons like *rājā māhārājā*, king and emperor died in this way. The people like horse-riders, elephant-riders, air-passengers also died in the same way.' After saying 'man is mortal, and we need to persuade our heart,' the body is buried and covered with several layers of stones and soil, making a raised mound.

The mound is fenced by stones. The bamboo poles used to carry the corpse are broken into three pieces and left at the feet side on the grave. Similarly, *chatala* is placed at the side of the head, while the bags filled with rice and coins are left at the side of the feet. Then, the grave is protected by making a one-sided shed with the help of three bamboo poles and thatch. After finishing making roof, the soul is expected to leave just before the grave is covered completely. To take out the soul, two ladders are made of bamboo strips. One ladder is placed down in an upside-down position for the dead body. The other ladder which is in a right-side up position is for living beings and is taken out at last. After this it is thrown away, and the handles of spades are taken out and left by the grave. It is believed that the funeral procession's soul goes downward while they bury the dead body. So, their living soul should be taken out by ringing these spades. Then, the priest and the relatives start to return to the village. After walking a little bit ahead, thorns are placed and pressed with stones to stop the dead soul in each of five steps in three places which the mourners cross by stepping over them. After having returned to the village, they gather at the house of deceased and are offered food and drink. Family members and other relatives abstain from certain food for specific

days, which depends on the kind of death and whether it is good or bad.

Like the neighbouring people, the Wambule (Opgenort 2004: 51), the Puma make a distinction between auspicious and inauspicious deaths. Auspicious or good deaths include normal death due to old age and minor illness or heart attacks. Inauspicious or bad deaths involve accidents, falling, drowning, murder, and incurable wounds that are caused by accidents. If the death is believed good, the mourners abstain for five days and if the death is believed bad, they abstain for just three days. However, the funeral rites last until the ninth day after the death. During this period of ritual impurity (NEP. *juṭho*), the sons of the deceased cover their heads with a white cloth. They are not allowed to eat meat and salt. A ceremony of purification (NEP. *suddāi*) is performed on the ninth day after the death. After the death of a family member, *khʌliphenma*, a ritual ceremony must be performed very soon thereafter (maximum up to two months).

## *1.12    Fieldwork and data*

The analysis in this dissertation is based on data collected during my third field trip (October to December 2012), second field trip August 2010 to April 2011, and the corpus data collected while I was working on the DoBeS (*Dokumentation Bedrohter Sprachen*/ Documentation of Endangered Languages) funded Chintang and Puma Documentation Project (CPDP) (2004-2008). During the five years of that project, more than 250 complete verb paradigms were collected and about 7,100 lexical entries in the dictionary. The transcribed text corpus contains about 146, 799 words, while the glossed and annotated texts include 94,538 words.

**Figure 7:** Nigālbās, Diplung Village Development Committee



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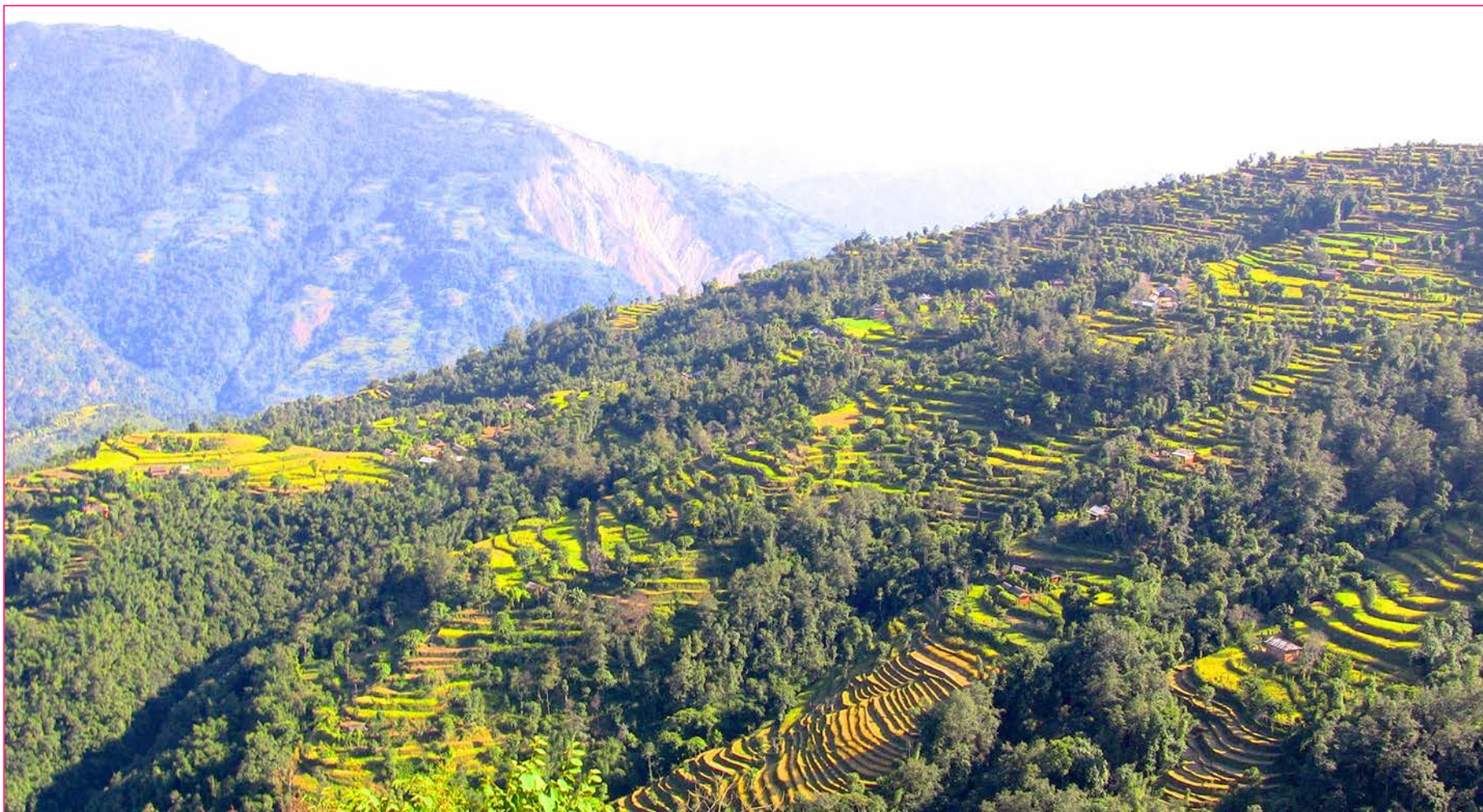
### 1.12.1 Data collection method

This study is a field and corpus-based linguistic description. Consequently, recording and transcribing of texts and elicitation with native speakers is the heart of the corpus. The collected materials (data) are interpreted and analysed using documentary linguistic methods (Himmelmann 1998, 2006).

(a)   The recording of texts

The recording of speech from different genres forms the core of material collected during linguistic fieldwork. The text collection, its transcription and translation, and glossing are important tools for understanding and learning the language.

(b)   Direct elicitation

In this method native speakers are asked for translations of sentences using the contact language, Nepali, and sometimes even English to collect material for verbal paradigms, TAM (time, aspect and modality: Dahl's (1985) TAM questionnaires) and compound verbs. Eliciting verb paradigms is a really tedious, repetitious and challenging job. Both recording of text and direct elicitation are essential tools, which have their own variety of uses. Since none of them are sufficient for all linguistic analysis, both of them should not be overlooked (Mithun 2001; Lüpke 2010).

### 1.12.2 Contributors

Depending on the involvement in my research and the amount of contribution they provide to my data, in my dissertation, I use the terms 'contributor(s)', 'transcriber(s)' and 'research assistant(s)' in reference to Puma (see Sharma 2012a). Their roles are:

(1)   (a)   contributors

native speakers who help me by speaking something (story, myth, song, descriptive account, ritual etc.) in the Puma language.

(b)   transcribers

native speakers who help me by transcribing the texts and translating them into Nepali, and occasionally eliciting data.

(c)   research assistants

native speakers who help me by negotiating in the community with the contributors, recording, transcribing, and translating  and eliciting data.

(d)   researcher

the author who negotiates with the research assistants, transcribers, and contributors as well as recording, transcribing, checking transcriptions and

Nepali translations, and translating into English.

The names of Puma people who contributed to the corpus used in this study are provided in Appendix C, along with their age, gender, education, and address. Three people in particular were of great assistance in the painstaking task of eliciting verbal paradigms, transcribing and translating texts, glossing texts, as well as providing language consultancy during elicitation sessions (see Sharma 2012a). They were Premdhoj Rāi (now Belṭār, Udaypur), Shree Kumār Rai, and Kalpanā Rāi from Diplung Village Development Committee. Premdhoj Rai was the main language consultant in the CPDP. For my PhD project, Premdhoj Rai is a contributor, Shree Kumar Rai is a research assistant, and Kalpana Rai is a transcriber.

**Figure 8:** Shree Kumar Rai
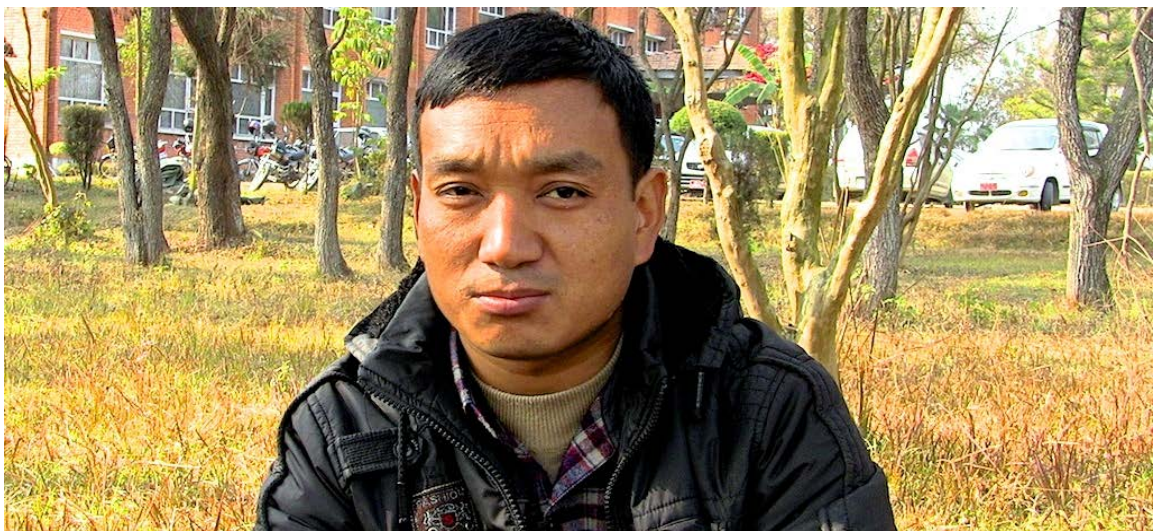


**Figure 9:** Premdhoj Rai                               **Figure 10:** Kalpana Rai

### 1.12.3  Language of elicitation

As the major lingua franca of the area where I work is Nepali, which is also the official language of the country, it is my medium of elicitation. All language contributors are bilingual as they speak both Nepali and Puma fluently. Abbi (2001) makes a distinction between the target language, the contact language and the meta-language for eliciting data. Some of my transcribers who have completed their bachelor degree do not feel comfortable using English directly as a language of elicitation. Nepali was the language of linguistic elicitation in CPDP.

I tried using English as a language of elicitation for my doctoral research, but the contributors asked me to translate using Nepali. The word order of Nepali and Puma is the same, namely SOV, compared to English SVO. That is probably why they prefer Nepali as an elicitation language rather than English. However still there are different kinds of semantic and grammatical distinctions in Puma and Nepali. Nepali, for instance, does not have separate inclusive and exclusive pronouns in the first person plural. Similarly, Nepali has a dative construction, while Puma has a possessive construction. As a result, the researcher should be careful when using Nepali as an elicitation language.

### 1.12.4  Chintang and Puma Documentation Project (CPDP)

The Chintang and Puma Documentation Project (2004-2008) was carried out jointly to provide a rich linguistic and ethnographic documentation of these two endangered Kiranti languages of eastern Nepal, by the Department of Linguistics at the University of Leipzig (Germany) and the Central Department of Linguistics at Tribhuvan University, Kathmandu. This project was sponsored by the special program for the Documentation of Endangered Language (DoBeS) of the Volkswagen Foundation, Germany, which was also a part of the Linguistic Survey of Nepal (LinSuN). Prof. Balthasar Bickel, now University of Zürich, served as the principal investigator (PI).

The core objective of the project was to record language practices in context, following the methodology of the ethnography of speaking, and to provide transcripts of the audio-visual materials with rich linguistic and ethnographic annotations.

The project team included linguists (Prof. Balthasar Bickel, Prof. Novel Kishore Rāī, Vishnu Singh Rāī) as well as anthropologists (Prof. Martin Gaenszle until 2006, Dr. Mark Turin from around 2006, and Dr. Judith Pettigrew from around 2007) and

psycholinguists specialised in child language (Prof. Elena Lieven, Dr. Sabine Stoll). The project employed seven research assistants (RA), with M.A degrees from Tribhuvan University, Kathmandu: Nārāyaṇ Sharmā (the author of this dissertation), Arjun Rāi and Shree Kumār Rāi for the Puma language, and Gomā Banjāḍe, Netra Paudyāl, Icchā Rāī, Manoj Rāī and Toyā Bhaṭṭa for the Chintang language. Native speakers of Puma (Kamalā Rāī, Gaṇesh Rāī and Kalpanā Rāī) and Chintang (Rikhī Māyā Rāī, Jānakī Rāī, Lāsh Kumārī Rāī, Anitā Rāī, Durgā Rāī) were also involved in this project.

The author worked on the Puma language. His main responsibilities were linguistic analysis, verb paradigms, glossing, and creation of a Puma grammar and dictionary (cf. Rai et al. 2009). During the five years of the project, a total of 325 sessions were recorded, including natural conversations, autobiographies, folk stories, descriptive accounts, myths, legends, songs, and rituals. More than 200 comprehensive sets of verbal paradigms were collected and analysed, including about 6800 lexical entries in the dictionary and sent to Nijmegen for the digital archive. An investigation into the use of a prefix *kha-* to mark generic-patient (anti-passive) forms was published (Bickel et al. 2007). The major contributions during the project comprise Sharma et al. (2005), Stutz (2005), Bickel et al. (2007), Schackow (2008), Rai et al. (2009), and Jänen (2009).

The CPDP corpus provides an excellent resource for my research on morphosyntax of Puma. This corpus is supplemented by large quantities of new data which includes twelve hours of audiovisual recordings, almost 7,100 lexical items, 125 sessions, many elicited examples and comprehensive paradigms of experience verbs to bridge gaps in the existing corpus. The details of work that was performed and contributions made by different members of the project during the CPDP are listed at the end of bibliography under the 'Puma mini bibliography' (see also Section 1.2.1).

## 1.13    *Fieldwork remarks*

All the language consultants, who I met during my second fieldtrip to the Puma core area, have very positive attitudes towards the documentation of their language. In fact, they were happy being recorded as Puma language consultants. Most of the language consultants prefer video recording rather than audio recording. They are usually happier when they have a chance to see their own video.

During CPDP some of the Puma shamans were requested for mocking performance

and/or recitation to record a sample of rituals. Unfortunately two of the shamans became seriously ill later. It was thought they should not have performed mocking acts that must be done in the proper month and proper time. We do not know whether it was just a coincidental or really the consequence of mocking performance, as it was believed that the ancestors got angry and the performers were cursed. We came to know that one shaman denied providing ritual information about weddings even to her daughter. In Mauwāboṭe and Diplung VDC, some Puma people have been Christianised.

## 1.14   Socio-linguistic observations

Interestingly, immigrant Rai people usually adopt the local Puma language as their mother tongue (CPDP 2004). However during my SOAS fieldtrip on Puma, the author and Shree Kumar Rai, Puma native speaker, noticed that two close neighbours, a Puma speaker and a Bantawa speaker, of Buyāṭār village of Pauwāserā VDC were in conversation. It was really interesting that they spoke in their own mother tongue without using any contact language or lingua franca, neither Nepali nor Bantawa. Their understanding is because of both knowing each other's languages. Similarly, other immigrant Rais such as Kulung and Thulung speak Puma in the daily life and their own mother tongue at home with their family. They do not speak Bantawa, no Camling either, whereas Bantawa and Camling do speak their language at home and in conversation with Puma. Bantawa and Camling both understand Puma well; so Puma speakers use Puma while the Bantawa speak in Bantawa when turn taking in conversations.

The other striking thing we noticed is, in Bansilā, Pauwāserā VDC, children speak Puma instead of their mother tongue Bantawa or Camling. Perhaps it is primarily due to heavy influence from Puma speaking friends and their own father as well. This kind of asymmetrical use of language has been found for Australian languages (Peter Austin, p.c.). The language situation we found in Dãdāgāũ of Mauwāboṭe VDC was the reverse, compared to Pauwāserā. Two Puma adults were in conversation speaking in Nepali whereas both of them knew Puma very well. In daily conversation in the village, the use of the genitive marker -bo is in decline, and the shorter form of the connective, for example maki 'why', is in use instead of nʌmmaki or nʌmmakinan. Ritual performance in ward number 6 and 9 of Cisāpānī VDC is also interesting. In ward number 6, Bantawa perform rituals in the Puma language, though they claim that they are using their own

Bantawa language. In contrast, in ward number 9, Puma perform rituals is Bantawa, but they also claim that they are using the Puma language.

In Siddīpur VDC of Udayapur district, we found that Puma adult speakers use their mother tongue to talk with Bantawa adult speakers; however, they use the Bantawa language to talk with Bantawa children. Likewise, in Āhāle, Pauwāserā VDC, parents use Puma with their elder daughter who can understand Puma but cannot speak it fluently. In return, she uses Nepali with her parents. On the other hand, parents use Nepali with their younger daughter who has no knowledge of Puma.

## *1.15    Motivation for the study*

The Puma language is very rich in its nominal and verbal morphology, and shows complex morphology in agreement. This doctoral dissertation focuses on elucidating morpho-syntactic phenomena in Puma, and explores morpho-syntactic structures in-depth in the context of both descriptive and typological concerns.

### 1.15.1  Research questions

The research questions which motivates this thesis, where particularly Chapters 3, 4 and 6 address them, are:

(2)    (a)    What are the clause structures of Puma predicates?

(b)    What are grammatical relations in Puma?

(c)    Why is the Nepali dative marker '-*lai*' obligatory in Puma while optional in other neighbouring languages?

(d)    What are transitivity alternations in Puma?

(e)    What are the conditions for *zero*-detransitivisations and *kha*-antipassivisations?

(f)    Can Puma be categorised as a primary object type or a direct object type (Dryer 1986, 2007) language? If not, why?

## *1.16    Overview of the dissertation*

I present findings of the research in a somewhat theory-neutral analysis. This dissertation proceeds as follows. It is divided into seven distinct chapters. The first chapter provides the background of the study, the language situation in Nepal, the status of Puma, cultural background, life cycle and its rites, annual ritual and agriculture cycles, fieldwork and socio-linguistic observations, and motivation for the study.

Chapter 2 presents an overview of phonology and morphology. Chapter 3 provides an in-depth analysis of the clause structure. I first provide some theoretical issues with respect to clause structures. In particular, as Puma is a morphologically split ergative language, and my treatment of case marking is focussed while examining clause structures. I provide a brief discussion of verb classes, clause types, and ergativity. This chapter outlines the basic morpho-syntactic features of Puma. Chapter 4 examines transitivity alternations of Puma. Chapter 5 investigates compound verb constructions. I examine all possible types of compound verb constructions available in Puma with cross-linguistic references where is possible. Chapter 6 focuses on grammatical relations. In this chapter I explore properties of syntactic and semantic arguments. Chapter 7 describes nominalisation and relativisation constructions. The last chapter draws conclusions and summarises the findings of the dissertation and considers their theoretical implications.

# Chapter 2

# An overview of phonology and morphology

## *2.1 Background*

The preceding chapter presented a description of the complex language situation within the Puma-speaking area in Nepal and an overview of the Puma language and Puma people. This chapter is divided into two parts. Part I is an outline of Puma phonology and Part II is an outline of Puma morphology. In the phonology part, at first I present orthographic symbols that will be used throughout my dissertation. Since the analysis of the sound system is not a major component of this work, a detailed in-depth phonemic analysis will not be presented here. The phoneme inventory and syllable structure are provided and explained.

The organisation of this chapter is as follows: in Part I phonology, the phoneme inventory is presented in section 2.3. Consonants are described in 2.4, while minimal pairs are discussed in 2.5. Distribution of consonant phonemes is provided in 2.6, while consonant clusters are presented in 2.7. Vowels are discussed in 2.8 and their description in 2.9, while vowel minimal pairs are presented in 2.10. Sections 2.11 to 2.15 deal with diphthongs, nasal vowels, syllable structure, syllable patterns and syllable structure in verbs. Sections 2.16 and 2.17 discuss suprasegmental features and the phonology of loans from Nepali, respectively. Loanwords in Puma are described in Section 2.18. Similarly, Part II morphology is divided into two subparts: nominal morphology and verbal morphology. Pronouns are presented in 2.19, while adjectives are described in 2.20. In section 2.21 numerals and classifiers are described, whereas adverbials are dealt in 2.22 and gender in 2.23. Sections 2.24-2.27 deal with the case marking, grammatical and semantic case, grammatical cases, and semantic cases. In the second subpart looking at verbal morphology, the verb and upside-down ergativity are presented in sections 2.28 and 2.29. Section 2.30 deals with person and number affixes. Section 2.31 describes the Puma verbs and Proto-Kiranti verbal agreement. Person affixes are presented in 2.32. Antipassive is introduced in section 2.33. Number suffixes are described in 2.34. Sections 2.35 to 2.37 deal with tense markers, negative morphemes, and imperfective morphemes. Stem alternations are discussed in 2.38. Categories of stem alternations are described in Sections 2.39 to 2.44. The Puma

template of intransitive and transitive verb conjugations and suffixes are discussed and presented in Section 2.45. Section 2.46 gives a chapter summary.

# Part I    Phonology

This section includes consonants, vowels, minimal pairs, syllable structures, and some phonological processes occurring across morpheme boundaries. The orthographic symbols used in the dissertation are as follows: The symbol /c/ is used for an affricate in place of IPA [ts] and /ch/ is its aspirated counterpart representing IPA [tsh], /y/ is used for the palatal glide corresponding to IPA [j], while other symbols have their IPA values. Note that the phonology part is analysed and discussed, drawing heavily on lexical resource of Rai et al. (2009) *Pumā Shabdakosh tathā vyākaraṇ*.

## *2.2    Introduction*

In Puma we can find three types of vocabulary: Puma ordinary words, Puma ritual words, and loan words from Nepali, Maithili, Bantawa and English. The phonology of Puma ordinary vocabulary, and ritual words, and loan words is not the same. The loan words are not taken into account when establishing a phoneme inventory. The most distinctive feature of the ritual language in Puma is binomials (Gaenszle et al. 2011). Binomials are used only in ritual speech, e.g., *bettumbuŋ moribuŋ* 'flower' which is in ordinary speech *buŋ* 'flower' and *chorom borom* 'dried meat' which is in ordinary speech *chopaku sa* 'dried meat'. Puma also has some ritual verbs, adjectives and adverbs. A few verbs are also binomials, for example, *kapma cenma* 'protect' which in ordinary speech is *red* 'protect'. This is rather unusual and has not been reported from other Kiranti languages (Gaenszle et al. 2011).

We can see Nepali influence in the phonological description of Puma. There is no doubt that Puma phonology does not differ greatly from phonology (see Section 2.17). Puma ordinary vocabularies show certain characteristics from Nepali and other Tibeto-Burman languages of the Bodish sub-group, compared to closely related neighbouring languages, such as Bantawa and Camling. We can find loan words in Puma. The retroflex /ʈ/ ~ /ʈh/ show a contrast between aspirated and unaspirated in the initial, medial and final position of words while /ɖ/ ~ /ɖh/ are contrastive only in a word-initial and word-final position. These are very marginal but still distinct in the overall lexicon type frequency and are found mostly in Nepali loan words.

Puma has also some loan words from other Indo-European languages, namely the Maithili language that is spoken in the Terai, the plain area south of the Puma settlements. Puma people come down from their isolated areas to the Terai, particularly in a *haṭ* 'weekly market' to sell their goods such as fruit, ginger, herbs, green vegetables, goats and bullocks, and to buy salt, kerosene oil, tea dust, sugar, soap and clothes. They come in contact mainly with Maithili speaking people for these types of transactions. According to Rai et al. (2009), some examples of loan words from Maithili to Puma are *gaṇḍā* 'a quarter', *sonā* 'gold', *korī* 'twenty', *hārdī* 'tumeric'(~ *hardī* Maithili) (see Sections 2.16 and 2.17).

Unlike other Kiranti languages, Puma has preserved distinctive phonemes like a dental and retroflex consonant (Rai 1985; Rai 2003). However, no argument can be made that other languages do not influence the Puma language. Conversely, some important features such as the glottal stop /ʔ/ seem to be disappearing and replaced by the velar /k/ (e.g., *kʌpheʔwa > kʌphekwa* 'money'), while the unrounded high back vowel /ɔ/ is replaced by rounded high back vowel /o/ (e.g., *ʈɔŋ > ʈoŋ* 'head'). We assume that such a disappearance is not generational distinction but influence from Nepali as the unrounded high back vowel is not found in Nepali.

## 2.3    *Phoneme inventory*

Puma has 32 consonant phonemes and 6 vowel phonemes, as shown respectively in Table 4, which is revised and updated version of Rai et al. (2009) and Table 5. Diphthongs are marginal, and are presented in Table 6.

**Table 4:** Consonant inventory

| Place of articulation | | Bilabial | | dental | | retroflex | | palatal | | velar | | glottal |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Manner of articulation | | voiceless | voiced | voiceless | voiced | voiceless | voiced | voiceless | voiced | voiceless | voiced | |
| stops | unaspirated | p | b | t | d | ṭ | ḍ | | | k | g | |
| | aspirated | ph | bh | th | dh | ṭh | ḍh | | | kh | gh | |
| nasals | unaspirated | | m | | n | | | | | | ŋ | |
| | aspirated | | mh | | nh | | | | | | | |
| affricates | unaspirated | | | | | | | c | j | | | h |
| | aspirated | | | | | | | ch | jh | | | |
| trills | unaspirated | | | | | | r | | | | | |
| | aspirated | | | | | | rh | | | | | |
| fricatives | | | | | s | | | | | | | |
| liquid | | | | | l | | | | | | | |
| glides | | | w | | | | | | | y | | |

**Table 5:** Vowel inventory

| | front | central | back |
|---|---|---|---|
| high | i | | u |
| mid | e | ʌ | o |
| low | | a | |

**Table 6:** Diphthongs
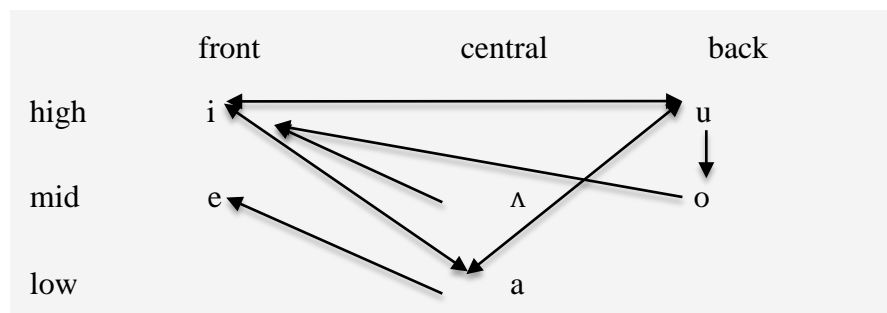


*ai, ia, au, ua, ae, ui, iu, uo, ʌi, oi* (see Section 2.11)

## 2.4 Consonants

Puma has thirty-two consonantal phonemes. They can be grouped by four-dimension of contrasts: manner of articulation, place of articulation, voicing, and aspiration. On the basis of place of articulation, the consonants can be grouped into six different types. They are bilabial, dental, retroflex, palatal, velar and glottal. With regard to the manner

of articulation, consonant phonemes can also be classified into seven different types. They are stops, nasals, affricates, fricative, liquid, trill and glides.

The stops and affricates show a contrast in terms of voicing and aspiration. For oral stops, there is a contrast of voiceless stops vs. voiceless aspirated stops vs. voiced stops vs. voiced aspirated stops, for example, /p/ ~ /ph/ ~ /b/ ~ /bh/, /t/ ~ /th/ ~ /d/ ~ /dh/, /ʈ/ ~ /ʈh/ ~ /ɖ/ ~ /ɖh/, and /k/ ~ /kh/ ~ /g/ ~ /gh/. Similarly, the affricates also show an opposition of voiceless vs. voiceless aspirated vs. voiced vs. voiced aspirated, for example, /c/ ~ /ch/ ~ /j/ ~ /jh/. Nasal stops show a contrast between voiced vs voiced aspirated, except for /ŋ/, for example /m/ ~ /mh/, /n/ ~ /nh/, and /ŋ/ (see Table 4). For the fricative, liquid and glide, the contrast of voiced vs. voiced aspirated only applies to /r/ ~ /rh/, though the frequency of /rh/ is marginal in Puma vocabulary.

Puma is not a tonal language and intonation does not play a role for identifying phonemes. In Puma some verbs are monosyllabic but most of the verb roots and other lexical words are polysyllabic. These polysyllabic words make the Puma phonological system very complex. The consonant phonemes were determined on the basis of minimal pairs and where there were no minimal pairs, near minimal pairs are considered (see Section 2.5).

### 2.4.1  Stop consonants

Puma has altogether sixteen stops. Stop consonants in Puma occur in word-initial, word-medial and word-final positions, with almost any vowel combination. There are four types of stops, namely bilabial, dental, retroflex and velar. Contrasts between voiceless, voiceless aspirated, voiced, and voiced aspirated can be found in all types of stops. Both voiced aspirated, except /dh/ and /jh/, and voiceless aspirated do not occur word finally. The detail description of different stops is given below.

### (a)  Bilabial stops

Bilabial stops are /p/, /ph/, /b/, /bh/. They contrast in different word positions (initial, medial and final). /p/ is a voiceless unaspirated bilabial stop and it occurs in all three positions. /ph/ is a voiceless aspirated bilabial stop, which occurs in word initial and word medial positions only. /b/ is a voiced unaspirated bilabial stop and it occurs in all three positions. /bh/ is a voiced aspirated bilabial stop, which occurs in initial and medial positions only. In this way, /p/ and /ph/, and /b/ and /bh/ contrast only in initial and medial positions, while /p/ and /b/ contrast in all three positions, as presented in

Table 7.

**p ~ ph ~ b ~ bh**

**Table 7:** Bilabial stops

| word-initial | | word-medial | | word-final |
|---|---|---|---|---|
| *puks* | 'go' | *taps* | 'pour' | *bokhop* 'edible tadpole' |
| *phuks* | 'escape' | *cʌphuk* | 'a kind of grass' | - |
| *bhuks* | 'break' | *cabha* | 'tiger' | - |
| *patd* | 'flow away' | | | |
| *batd* | 'go around' | | | |
| *bukd* | 'have heat' | *cʌbuŋ* | 'mountain ebony' | *bob* 'round' |
| *bhukd* | 'bury' | | | |

## (b)　Dental stops

The dental stops are /t/, /th/, /d/ /dh/. They contrast in different positions. /t/ is a voiceless unaspirated dental stop and occurs in all three positions. /th/ is a voiceless aspirated dental stop, which occurs in word initial and word medial positions only. /d/ is a voiced unaspirated dental stop and occurs in all three positions, while its voiced aspirated counterpart /dh/ also occurs in all three positions. Thus, /t/ and /th/ contrast only in initial and medial positions, whereas /t/ and /d/, and /d/ and /dh/ contrast in all three positions, as shown in Table 8.

**t ~ th ~ d ~ dh**

**Table 8:** Dental stops

| word-initial | | word-medial | | word-final | |
|---|---|---|---|---|---|
| *tapd* | 'freeze' | *bitd* | 'walk' | *bomt* | 'make round' |
| *thapd* | 'winnow' | *jethu* | 'wife's elder brother' | - | |
| *dapd* | 'kick' | *khodi* | 'hook' | *repd* | 'protect' |
| *dhapd* | 'wash' | *tudhi* | 'up there' | *tupdh* | 'fill' |

## (c)　Retroflex stops

Retroflex /ʈ/, /ʈh/ and /ɖ/, /ɖh/ which are contrastive in different positions in basic vocabulary are very marginal in overall lexicon type frequency, and are found mostly in Nepali loan words. Unlike the close neighbouring languages Bantawa (Rai 1985; Doornenbal 2009) and Camling (Rai 2003), Puma preserves retroflex sounds and dental sounds. The retroflex is one of the more reliable features defining 'South Asia as a linguistic area' (Masica 2001; Noonan 2003). The disappearance of retroflex sounds

from other Kiranti languages in contrast to Puma may be cross-linguistically relevant for the evidence of one of the South Asian features. Note that these stops are distinct in voicing.

As discussed above, the retroflex stops /ʈ/, /ʈh/, /ɖ/, /ɖh/ show contrasts in different positions. /ʈ/ is voiceless unaspirated retroflex stop and occurs in all three positions. /ʈh/ is a voiceless aspirated retroflex stop, which occurs in initial and medial positions only. /ɖ/ is a voiced unaspirated retroflex stop and occurs in all three positions. /ɖh/ is a voiced aspirated retroflex stop, which occurs in initial and medial positions only. As a consequence, /ʈ/ and /ʈh/ contrast only in initial and medial positions, /ɖ/ and /ɖh/ also contrast in initial and medial positions whereas /ʈ/ and /ɖ/ contrast in all three positions.

**ʈ ~ ʈh ~ ɖ ~ ɖh**

**Table 9:** Retroflex stops

| word-initial | | word-medial | | word-final | |
|---|---|---|---|---|---|
| *ʈoŋ* | 'head' | *kʌnʈi* | 'big cooking pot' | *raŋʈ* | 'make big fire' |
| *ʈhoŋma* | 'upwards' | *rokʈhok* | 'bamboo net for fishing' | - | |
| *ɖoŋ* | 'waist' | *bʌɖɖhe* | 'many' | *rakɖ* | 'get stuck' |
| *ɖhaŋ* | 'heap' | *rakɖha* | 'yam' | - | |

**(d)   Velar stops**

The velar stops are /k/, /kh/, /g/, and /gh/. They are distinct in different positions. /k/ is a voiceless unaspirated velar stop and occurs in all three positions. /kh/ is a voiceless aspirated velar stop, which occurs in initial and medial positions only. /g/ is a voiced unaspirated velar stop and occurs in initial and medial positions only and its voiced aspirated counterpart /gh/ occurs in initial and medial positions only. In this way, /k/ and /kh/ contrast only in initial and medial positions, as do /g/ and /gh/. /k/ and /g/ contrast in initial and medial positions, as set out in Table 10. The occurrence of /g/ and /gh/ in word-initial and word-medial positions is very marginal.

**k ~ kh ~ g ~ gh**

**Table 10:** Velar stops

| word-initial | | word-medial | | word-final | |
|---|---|---|---|---|---|
| *koŋma* | 'acceptance' | *puks* | 'go' | *bhok* | 'pig' |
| *khoŋma* | 'pig for ancestors' | *bekha* | 'bag' | - | |
| *goŋma* | 'height' | *ogi* | 'sweet potato' | - | |
| *ghotpa* | 'belch' | *sighotma* | 'a kind of bird' | - | |

### 2.4.2 Affricates

There are four affricates - /c/, /j/ and their aspirate counterparts /ch/ and /jh/. They contrast in different positions. /c/ is a voiceless unaspirated affricate and occurs in initial and medial positions only. Similarly, /ch/ is a voiceless aspirated affricate, which occurs also in initial and medial positions only. /j/ is a voiced unaspirated affricate and occurs in initial and medial positions while its voiced aspirated counterpart /jh/ occurs in initial and final positions. Thus, /c/ and /ch/ contrast only in initial and medial positions, whereas /j/ and /jh/ contrast in initial position only. /c/ and /j/ contrast in initial and medial positions that are presented in Table 11. The overall occurrence of /j/ and /jh/ in word-initial and word-medial, and word-final positions is very marginal. The contrast of /j/ and /jh/ in word-medial position is not attested.

**c ~ ch ~ j ~ jh**

**Table 11:** Affricates

| word-initial | | word-medial | | word-final | |
|---|---|---|---|---|---|
| *cokd* | 'join' | *phuci* | 'vagina' | - | |
| *chokd* | 'lit fire' | *bechuk* | 'ginger' | - | |
| *jokd* | 'keep' | *sojje* | 'false' | - | |
| *com* | 'edge' | - | | - | |
| *jhom* | 'bunch' | - | | *sajh* | 'a tool for weeding' |

### 2.4.3 Nasals

Nasals involve three distinct tongue positions: bilabial /m/, alveolar or dental /n/ and velar /ŋ/. There are altogether five nasals consonants in Puma - /m/, /n/, /ŋ/, and an aspirate counterpart for /m/ and /n/, namely /mh/ and /nh/, which are not found in Bantawa (Doornenbal 2009) but are found in Camling (Rai 2003).

Like other neighbouring Kiranti languages, a velar nasal occurs in word-initial position (e.g., *ŋa* 'I', *ŋenma* 'keep'), while the Nepali language does not have a velar nasal in word-initial position. Nasal consonants contrast in different positions. Three nasal consonants /m/, /n/ and /ŋ/ occur in all three positions, while /mh/ occurs in initial position only, and /nh/ occurs in initial and final positions. Thus, /m/, /n/ and /ŋ/ contrast in all positions, whereas /m/ and /mh/ contrast in initial position only. /n/ and /nh/ contrast in initial and final positions, as in:

**m ~ mh ~ n ~ nh ~ ŋ**

**Table 12:** Nasals

| word-initial | | word-medial | | word-final | |
|---|---|---|---|---|---|
| *mi* | 'fire' | *phamt* | 'grab' | *khim* | 'house' |
| *ni* | 'get well' | *kent* | 'tame' | *bhan* | 'root' |
| *ŋi* | 'cook' | *koŋpi* | 'match maker' | *bhuŋ* | 'a lot of' |
| *mu* | 'do' | - | | - | |
| *mhu* | 'fight' | - | | - | |
| *nhaps* | 'smell' | - | | *onh* | 'run' |

### 2.4.4   Fricatives

There are only two fricatives: /s/ and /h/ in Puma. They show phonological oppositions in different positions. /s/ occurs in all positions, while /h/ occurs in initial and medial positions only. They show contrast in initial and medial positions only.

**Table 13:** Fricatives

| word-initial | | word-medial | | word-final | |
|---|---|---|---|---|---|
| *si* | 'grain' | *busit* | 'in front of' | *pis* | 'speak' |
| *hi* | 'blood' | *tuhi* | 'below' | - | |

### 2.4.5   Trills

There are two trills – voiced unaspirated /r/ and its aspirate counterpart /rh/. They contrast in word-initial position only. /r/ occurs in all three positions, while its aspirate counterpart /rh/ occurs only in initial position, as shown in Table 14.  Unlike Bantawa, there is an aspirated counterpart in Camling.

**Table 14:** Trills

| word-initial | | word-medial | | word-final | |
|---|---|---|---|---|---|
| *ri* | 'thread' | *doro* | 'what' | *ɖher* | 'beat' |
| *rhʌndh* | 'rub' | - | | - | |

### 2.4.6   Liquid

The only liquid /l/ contrasts in different positions and occurs in all three word-initial, word-medial and word-final positions, which is presented in Table 15.

**Table 15:** Liquid

| word-initial | | word-medial | | word-final | |
|---|---|---|---|---|---|
| *li* | 'penis' | *khula* | 'jungle' | *pil* | 'squeeze' |

### 2.4.7 Glides

There are two glides: /w/ and /y/ which show phonological oppositions in different positions. They contrast in initial and medial positions only.

**Table 16:** Glides

| word-initial | | word-medial | | word-final |
|---|---|---|---|---|
| *was* | 'throw' | *tawa* | 'peacock' | - |
| *yas* | 'tickle' | *chiya* | 'living' | - |

### 2.5    *Consonant minimal pairs*

In principle, when two sounds cause a change of meaning in an otherwise identical pair of words, they are considered to be separate phonemes. They contrast phonetically and their distinction is based on the parameter of their voice difference. Minimal pairs for consonant phonemes that have been identified are presented in Table 17, and where there are no minimal pairs, near minimal pairs are given. The minimal pairs for retroflex /ʈ/, /ʈh/, /ɖ/, /ɖh/ and voiced unaspirated affricate /j/ and its aspirated counterpart /jh/, minimal pairs are not attested.

**Table 17:** Consonant minimal pairs

| | | | | |
|---|---|---|---|---|
| /p/ | *pis* | speak | *pitd* | squeeze |
| /ph/ | *phis* | be ill | *phitd* | hit by throwing |
| /b/ | *ba* | weave | *bukd* | have heat |
| /bh/ | *bha* | cut | *bhukd* | uproot |
| /t/ | *tas* | fell | *tep* | wash face |
| /th/ | *thas* | bind | *thep* | fat |
| /d/ | *di* | up | *dup* | earn |
| /dh/ | *dhi* | vagina | *dhup* | strike against |
| /ʈ/ | *ʈokpa* | chief | | |
| /ʈh/ | *ʈhakpa* | wooden basket | | |
| /ɖ/ | *ɖakɖ* | close hole | | |
| /ɖh/ | *ɖhak* | make a wall | | |
| /k/ | *kus* | hide | *kepd* | sting |
| /kh/ | *khus* | steal | *khepd* | be stick |
| /g/ | *gondra* | dirt | | |
| /gh/ | *ghotpa* | belch | | |
| /ca/ | *ca* | eat | *cakɖ* | send ritual gift |
| /ch/ | *cha* | child | *chakɖ* | be hard |
| /j/ | *jokd* | keep | | |
| /jh/ | *jhokka* | a kind of basket | | |
| /m/ | *mi* | fire | *meri* | tail |
| /mh/ | | | *mheri* | a tree |
| /n/ | *ni* | get well | | |
| /nh/ | - | | | |
| /ŋ/ | *ŋi* | cook | | |
| /s/ | *si* | grain | *sokd* | weed |
| /h/ | *hi* | blood | *hokd* | be warm |
| /l/ | *li* | penis | *loks* | spread |
| /r/ | *ri* | rope | *roks* | tease |
| /rh/ | - | | | |
| /w/ | *wat* | put on | *wʌk* | farm land |
| /y/ | *yat* | be soft | *yʌk* | flesh of ribs |

## 2.6 *Distribution of consonant phonemes*

In section 2.3 we present the phonological contrast of Puma consonants in different positions. In this section I demonstrate the distribution of consonants in different positions according to their manner of articulation: word-initial, word-medial (intervocalic) and word-final, and the possibility of gemination of consonants, the distribution of pre-consonantal position and the distribution of post-consonantal position. These are stops, nasals, affricates, liquid, trill and glides. The positional distribution of consonants is presented in Table 18.

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**Table 18:** Distribution of consonant phonemes

| Sound | # - | V-V | - # | Gemination | -C | C- |
|-------|-----|-----|-----|------------|-----|-----|
| /p/ | + | + | + | + | + | + |
| /ph/ | + | + | - | - | + | + |
| /b/ | + | + | + | - | + | + |
| /bh/ | + | + | - | - | + | + |
| /m/ | + | + | + | - | + | + |
| /mh/ | + | - | - | - | - | - |
| /n/ | + | + | + | + | + | + |
| /nh/ | + | - | + | - | - | - |
| /ŋ/ | + | + | + | + | + | + |
| /t/ | + | + | + | + | + | + |
| /th/ | + | + | - | - | + | + |
| /d/ | + | + | + | - | + | + |
| /dh/ | + | + | + | - | + | + |
| /ṭ/ | + | + | + | - | + | + |
| /ṭh/ | + | + | - | - | + | - |
| /ḍ/ | + | + | + | - | + | + |
| /ḍh/ | + | + | + | - | + | + |
| /k/ | + | + | + | + | + | + |
| /kh/ | + | + | - | - | + | + |
| /g/ | + | + | - | - | + | + |
| /gh/ | + | + | - | - | + | - |
| /c/ | + | + | - | - | + | - |
| /ch/ | + | + | - | - | + | + |
| /j/ | + | + | - | - | - | + |
| /jh/ | + | - | - | - | - | - |
| /s/ | + | + | + | + | + | + |
| /h/ | + | + | - | - | + | + |
| /l/ | + | + | + | + | + | + |
| /r/ | + | + | + | + | + | + |
| /rh/ | + | - | - | - | - | - |
| /w/ | + | + | - | - | + | + |
| /y/ | + | + | - | - | + | + |

Tables (18-21) illustrate examples of positional distribution of consonant phonemes. The details of the positional distribution of each class: stops, nasals, affricate and fricative, and liquid, trill and glide is separately presented in Tables (18-21).

**Table 19:** Stops and their distribution

| Sound | # - | V-V | - # | Gemination | -C | C- |
|-------|-----|-----|-----|-----------|-----|-----|
| /p/ | *pond* 'offer' | *bopoti* 'round' | *sanap* 'bird' | *copp* 'watch' | *taps* 'pour' | *pempak* 'bread' |
| /ph/ | *phu* 'bladder' | *waphuci* 'stye' | | | | *samphi* 'as much as' |
| /b/ | *bal* 'wander' | *labuŋ* 'master' | *bob* 'round' | | | *sombuk* 'breast' |
| /bh/ | *bhoks* 'break' | *nebha* 'lemon' | | | | |
| /t/ | *tups* 'ripe' | *watam* 'pond' | *tit* 'clothes' | *dhitt* 'find' | *itd* 'give' | *citthum* 'after.tomorrow' |
| /th/ | *tho* 'intestine' | *cuthe* 'turmeric' | | | | *sʌntha* 'myth' |
| /d/ | *daŋ* 'back' | *roduŋ* 'Rai' | *tapd* 'freeze' | | | *waddhum* 'a tree' |
| /dh/ | *dhit* 'find' | *todho* 'there' | *tʌŋdh* 'elope' | | | |
| /ʈ/ | *ʈoŋ* 'head' | *kʌʈokpa* 'chief' | *paŋʈ* 'pass.time' | | | *kʌnʈi* 'cooking pot' |
| /ʈh/ | *ʈhaklok* 'ladder' | *rokkʌʈhok* 'net' | | | | |
| /ḍ/ | *ḍuŋ* 'thick' | *bʌḍḍhe* 'many' | *kakḍ* 'strike' | | | *rakḍ* 'get stuck' |
| /ḍh/ | *ḍher* 'beat' | *rakḍha* 'yam' | *cʌŋḍh* 'long live' | | | *rakḍha* 'yam' |
| /k/ | *ku* 'hide' | *rʌkoŋ* 'Puma' | *bok* 'leaf' | *bekk* 'please' | *puks* 'go' | *bomka* 'right order' |
| /kh/ | *khim* 'house' | *takhi* 'cap' | | | | *cʌkkhanma* 'pink.bauhinia' |
| /g/ | *goŋma* 'height' | *ʈeguwa* 'a tree' | | | | *coŋge* 'greeting' |
| /gh/ | *ghotpa* 'belch' | *sighotma* 'a bird' | | | | |

As can be seen from Table 18 only three stop consonants /p/, /t/ and /k/ occur in all three positions: word-initial, word-medial and word-final. Only these consonants can be geminated. All stop phonemes can occur in word-initial and word-final positions.

**Table 20:** Nasals and their distribution

| Sound | # - | V-V | - # | Gemination | -C | C- |
|---|---|---|---|---|---|---|
| /m/ | *ma* 'fever' | *samet* 'protoclan' | *casum* 'grain goddess' | | *cemt* 'grind' | *chamda* 'decision' |
| /mh/ | *mhu* 'fight' | | | | | |
| /n/ | *nuk* 'rub' | *caniku* 'tasty' | *ben* 'weapon' | *enn* 'listen' | *nant* 'rest' | *tonŋe* 'that much' |
| /nh/ | *nhaps* 'smell' | | *onh* 'run' | | | |
| /ŋ/ | *ŋa* 'I' | *buŋkha* 'outside' | *hoŋ* 'king' | *rʌŋŋ* 'say' | *tʌŋdh* 'chase' | *koŋpi* 'matchmaker' |

As can be seen from Table 20 all nasals but not their aspirated counterparts occur in all three positions: word-initially, word-medially and word-finally while their aspirated counterparts occur at least in word-initial positions. Non-aspirated nasals except /m/ can be geminated.

**Table 21:** Affricates and fricatives and their distribution

| Sound | # - | V-V | - # | Gemination | -C | C- |
|---|---|---|---|---|---|---|
| /c/ | *ci* 'copulate' | *wacak* 'bird' | | | | *damca* 'banana peel' |
| /ch/ | *chi* 'hand' | *bechuk* 'ginger' | | | | *mʌkcha* 'son-in-law' |
| /j/ | *jokd* 'keep' | *jʌnja* 'snake.gouard' | | | | |
| /jh/ | *jhara* 'all' | | | | | |
| /s/ | *set* 'kill' | *bhusup* 'a tree' | *tups* 'ripe' | *ŋess* 'keep' | *taps* 'pour' | *cʌksi* 'kidney' |
| /h/ | *has* 'distribute' | *nihon* 'aboard' | | | | *sʌŋhokwa* 'great barbet[7]' |

As can be seen Table 21 only /s/ occurs in word-initial, word-medial and word-final positions, and gemination is attested only with it and /j/. /jh/ is least versatile as it occurs in word-initial position only.

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[7] A large-headed, brightly coloured fruit-eating bird that has a stout bill with tufts of bristles at the base.

**Table 22:** Liquid, trill and glides and their distribution

| Sound | # - | V-V | - # | Gemination | -C | C- |
|---|---|---|---|---|---|---|
| /l/ | *lek* 'lick' | *nilo* 'nice' | *hil* 'churn' | *poll* 'touch' | | *taŋlan* 'immoral relation' |
| /r/ | *rum* 'salt' | *purup* 'cucumber' | *car* 'be clever' | *ḓherr* 'beat' | | *toŋrit* 'hair decoration' |
| /rh/ | *rhʌndh* 'run' | | | | | |
| /w/ | *wa* 'water' | *buŋwa* 'flower' | | | | *mukwa* 'hair' |
| /y/ | *yoŋ* 'nest' | *niya* 'right' | | | | *tohya* 'DIST' |

As can be seen from Table 22 only /l/ and /r/ occur in word-initial, word-medial and word-final positions. These consonants can also be geminated. The glides occur only in word-initial and word-final positions. As illustrated in Tables (19-22), In Puma we can make the following generalisations in terms of description of consonants:

(3) (a) All the consonant phonemes occur in word-initial position.

   (b) All stops, all nasals but their aspirated counterparts, all affricates but the phoneme /jh/, the liquid, and the trill but not its aspirated counterpart, and both glides occur in word-medial positions.

   (c) Only voiceless stop phonemes /p/, /t/, /k/, nasals /n/ and /ŋ/, and phonemes /s/, /l/ and /r/ can be geminated.

## 2.7    Consonant clusters

Consonant clusters of two segments occur in all positions: word-initially, word-medially and word-finally (see Sections 2.13 and 2.14 for details about syllables) and there are a number of combinatorial possibilities of different consonants. I exclude the exceptional CCC sequence noted in *paŋpoytpa* 'a kind of bird'. The consonants that can occur in the $C_2$- slot are restricted. Almost all consonants occur in the first consonant slot. In each consonant cluster, the second segment ($C_2$) does not necessarily need to be a liquid or glide but they can also be stops and nasals. Table 23 illustrates the combinatorial possibilities for the different consonants in CC -Clusters. As can be seen from Table 23 some stop consonants like /p/, /t/ and /k/ and nasals /m/, /n/, /ŋ/ can occur in consonant clusters as $C_1$ and $C_2$. The number of CC with a trill occurred in the second consonant slot is very limited. Stop consonants such as /b/, /th/, /kh/ and can occur only in cluster-initial positions with glides.

**Table 23:** Consonant clusters

| C₁ C₂→ ↓ | p | ph | b | bh | t | th | d | dh | ṭ | ṭh | ḍ | ḍh | k | kh | g | gh | m | n | ŋ | c | ch | j | s | h | l | r | w | y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| p | pp | pph | | pbh | pt | pth | pd | pdh | | | | | pk | pkh | | | pm | | | pc | pch | | ps | | pl | | pw | |
| b | | | | | | | | | | | | | | | | | | | | | | | | | | | bw | |
| t | | | | | tt | tth | td | tdh | | | | | tk | | | | tm | tn | | | tch | | ts | | tl | | tw | |
| th | | | | | | | | | | | | | | | | | | | | | | | | | | | thw | |
| d | | | | | | | | ddh | | | | | | | | | | | | | | | | | | | | |
| k | kp | | kb | | kt | kth | kd | kdh | | | kḍ | kḍh | kk | kkh | kg | | km | kn | | kc | kch | | ks | | kl | | kw | |
| kh | | | | | | | | | | | | | | | | | | | | | | | | | | | khw | |
| m | mp | mph | mb | mbh | mt | mth | md | mdh | | | | | mk | | | | | mn | | mc | mch | | ms | | ml | mr | | my |
| n | np | | | | nt | nth | nd | ndh | | | | | nk | nkh | | | nm | nn | nŋ | nc | | | | | | | nw | |
| ŋ | ŋp | | ŋb | ŋbh | ŋt | | ŋd | ŋdh | ŋṭ | ŋṭh | | | ŋk | ŋkh | ŋg | ŋgh | ŋm | ŋn | ŋŋ | ŋc | ŋch | ŋj | ŋs | ŋh | ŋl | ŋr | ŋw | ŋy |
| c | | | | | | | | | | | | | | | | | | | | | | | | | | | cw | |
| s | | | | | | | | | | | | | | | | | | | | | | | ss | | | | | |
| h | | | | | | | | | | | | | | | | | | | | | | | | | | | hw | hy |
| l | lp | | | | | | | | | | | | | lkh | | | | | | | | | | | ll | | | |
| r | | | | | | | | | | | | | | | | | | | | | | | | | | rr | | |

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We present examples of consonant clusters in Tables (24 to 25). As can be seen from Table (24 to 25) Puma permits two-element consonant clusters. The consonant clusters in Puma occur in word-initial, word-medial and word-final positions. Puma allows a maximum of two consecutive consonants in a word. It only allows clusters of very limited set of some consonants with glides and nasal in the onset position (see Section 2.4.7), while two consecutive consonants in the coda position (see Section 2.14.2) is very common.

The only words initial CC seem to be like *cw, pw* and *hw*, followed by the glide. This is typologically very unusual (Peter Austin, p.c.). However, note that Puma allows to use a vowel instead of glide like *pwa > puwa* 'tree', *cwabuŋ > cuwabuŋ* 'a kind of tree', and *hwaku > huwaku* 'such', in such a situation Puma does not seem to be unsual.

**Table 24:** Stop consonant clusters

| CC | consonant cluster | gloss | CC | consonant cluster | gloss |
|---|---|---|---|---|---|
| pph | *sapphi* | plentiful | pkh | *cʌpkhepkhepwa* | sticky |
| pbh | *lupbha* | tufted bamboo | pm | *bhuisupma* | red horent |
| pt | *laptikhoŋ* | door | pc | *khapce* | obstinate |
| pth | *lapthʌŋ* | middle finger | pch | *napchoŋ* | sun |
| pk | *ropkawa* | sick person | ps | *khaps* | make roof |
| pd | *lupd* | touch | pl | *cheplekwa* | scar on the face |
| pdh | *cipdh* | hold with pilers | pw | *pwa* | tree |
| bw | *bwasa* | wild asparagus | | | |
| tth | *hʌttha* | narrow valley | tn | *thʌtni* | in this way |
| tk | *chetkuma* | female | tch | *kametcha* | young lady |
| tm | *ronabhetma* | evil woman | ts | *natsipa* | soul of dead |
| td | *mitd* | remember | tl | *ketlo* | like something |
| tdh | *cetdh* | beat | tw | *jhetwa* | thursh |
| thw | *thwaku* | such that | | | |
| ddh | *waddhum* | sauravia napaulensis | | | |
| kp | *kaʈokpa* | chief | kg | *khakgunca* | a kind of paddy |
| kb | *tuhekbi* | broom | km | *tohekmi* | wooden spoon |
| kth | *mokthumpa* | cloud | kn | *haknuwa* | sweat |
| kkh | *cʌkkhanma* | pink bauhinia | kc | *khakcʌŋ* | prickly ash |
| kd | *bhukd* | bury | kch | *chokchen* | filter for liquor |
| kdh | *lʌkdh* | try | kt | *bhaktaŋ* | shoulder |
| kɖ | *bokɖ* | patch | kl | *toklikon* | mosquito |
| kɖh | *lʌkɖh* | fill | kw | *mukwa* | hair |
| ks | *puks* | go | khw | *rikhwa* | bamboo stripes |

**Table 25:** Nasal consonant clusters

| CC | Consonant cluster | Gloss | CC | Consonant cluster | Gloss |
|---|---|---|---|---|---|
| mp | *tumpʌchʌk* | knee | mk | *bomka* | correct order |
| mph | *ʌmphi* | alangium | mn | *bamna* | *Brāhmaṇ* |
| mb | *tʌmbʌlʌk* | nail | mc | *limcʌɲri* | bamboo strips |
| mbh | *nambhan* | horizon | mch | *lemchokwa* | sweet thing |
| mt | *tomt* | push | ms | *wabomsi* | rainbow |
| mth | *sumthʌŋ* | third finger | ml | *camla* | a kind of tree |
| md | *chamda* | decision | mr | *namritbuŋ* | sun flower |
| mdh | *namdhuŋma* | a protoclan | my | *namyuŋ* | exist |
| np | *khunpaluŋ* | a sub clan | nkh | *wapenkha* | worship house |
| nth | *sʌntha* | myth | nm | *cʌkkhanma* | pink bauhinia |
| nk | *tonmamdanko* | courageous | nŋ | *tonŋe* | that much |
| nt | *lunt* | sink | nc | *suncokwa* | sour |
| nd | *cind* | teach | nw | *ŋanwa* | hornet |
| ndh | *kindh* | frighten | | | |
| ŋp | *koŋpi* | matchmaker | ŋm | *toŋmaluŋ* | sub-clan |
| ŋb | *roŋbi* | a bamboo | ŋn | *yoŋnima* | female bond friend |
| ŋkh | *maŋkha* | far | ŋc | *moŋcem* | wedding custom |
| ŋg | *coŋge* | greeting | ŋch | *maŋcha* | goddess |
| ŋgh | *soŋghu* | wooden bridge | ŋj | *jʌnja* | snake gourd |
| ŋdh | *tʌŋdh* | chase | ŋs | *taŋsu* | chief |
| ŋʈ | *soŋʈ* | booze | ŋh | *sʌŋhokwa* | great barbet |
| ŋt | *loŋtoŋ* | ankle | ŋl | *taŋlan* | immoral relation |
| ŋd | *yoŋdahaŋ* | a clan | ŋr | *toŋrit* | hair decoration |
| ŋbh | *roŋbhok* | wild boar | ŋw | *buŋwa* | flower |
| ŋʈh | *loŋʈhim* | ritual custom | ŋy | *toŋya* | wisdom |
| ŋk | *pheŋkukwa* | beaten rice | | | |

## 2.8    Vowels

There are six vowels in Puma. The vowels are front, /i/ and /e/, central, /ʌ/ and /a/, and back, /u/ and /o/. No central vowel /ʌ/ is found in Kiranti languages like Bantawa (Doornenbal 2009) and Athpare (Ebert 1997).

## 2.9    Description of vowels

The vowels contrast in different phonological positions. In this section I present phonological oppositions in all positions: word-initial, word-medial and word-final. The vowels are shown like this: front vowels, central vowels, back vowels, high vowels, mid vowels and low vowel.

### 2.9.1   Front vowels

In Puma there are two front vowels, namely /i/ and /e/. They contrast in all positions,

word-initial, word-medial and word-final.

**Table 26:** Front vowels

| word-initial | | word-medial | | word-final | |
|---|---|---|---|---|---|
| *it* | 'bring down' | *niya* | 'right' | *khi* | 'shit' |
| *et* | 'make listen' | *set* | 'kill' | *ke* | 'we all' |

### 2.9.2 Central vowels

/ʌ/ and /a/ are two central vowels in Puma which show phonological contrasts in all positions, word-initially, word-medially and word-finally.

**Table 27:** Central vowels

| word-initial | | word-medial | | word-final | |
|---|---|---|---|---|---|
| *ʌpʌ* | 'DEM' | *cʌkḍ* | 'save' | *ʌsʌ* | 'two' |
| *apa* | 'father' | *cakḍ* | 'send the ritual gift' | *sa* | 'meat' |

### 2.9.3 Back vowels

Puma has two back vowels. They are /u/ and /o/ which show contrast in all positions.

**Table 28:** Back vowels

| word-initial | | word-medial | | word-final | |
|---|---|---|---|---|---|
| *und* | 'push' | *khukd* | 'strike with horn' | *mu* | 'do' |
| *ond* | 'grind' | *khokd* | 'cut into pieces' | *khodo* | 'so and so' |

### 2.9.4 High vowels

There are two high vowels in Puma. They are /i/ and /u/. They contrast in all positions, as presented in:

**Table 29:** High vowels

| word-initial | | word-medial | | word-final | |
|---|---|---|---|---|---|
| *ips* | 'sleep' | *pis* | 'speak' | *khi* | 'shit' |
| *ups* | 'hold in the mouth' | *pus* | 'begin' | *khu* | 'chew' |

### 2.9.5 Mid vowels

There are three mid vowels in Puma. They are /e/, /ʌ/ and /o/. They show contrast in all positions: word-initial, word-medial and word-final.

**Table 30:** Mid vowels

| word-initial | | word-medial | | word-final | |
|---|---|---|---|---|---|
| *et* | 'make listen' | *khek* | 'bite' | *ke* | 'we all' |
| *ot* | 'break' | *khok* | 'crush oil' | *gogo* | 'cow' |
| *ʌk* | 'scoop out' | *khʌk* | 'be bitter' | *ʌsʌ* | 'two' |
| *ok* | 'crow of a cock' | | | | |

## *2.10    Vowel minimal pairs*

There are numerous minimal pairs for all vowels of Puma that are presented in Table 31. All vowels[8] except mid central vowel /ʌ/ can be lengthened in both past tense and non-past tense (see Section 2.35 for details) but no minimal pairs based on vowel length are attested. Minimal pairs for vowels are presented in Table 31.

**Table 31:** Vowels in minimal pairs

| VOWELS | EXAMPLES | | EXAMPLES | |
|---|---|---|---|---|
| i ~ e | *it* | 'bring down' | *sit* | 'louse' |
| | *et* | 'make listen' | *set* | 'kill' |
| ʌ ~ a | *ʌpʌ* | 'DET' | *cʌkɖ* | 'save' |
| | *apa* | 'father' | *chakɖ* | 'send the ritual gift' |
| u ~ o | *und* | 'push' | *khukd* | 'strike with horn' |
| | *ond* | 'grind' | *khokd* | 'cut into pieces' |
| i ~ u | *ips* | 'sleep' | *pis* | 'speak' |
| | *ups* | 'hold in the mouth' | *pus* | 'begin' |
| e ~ ʌ ~ a | *khek* | 'bite' | *ʌk* | 'scoop out' |
| | *khʌk* | 'be bitter' | *ok* | 'crow of cock' |

## *2.11    Diphthongs distribution*

Diphthongs are marginal in Puma. The diphthong /ai/ is productive, compared to others which occur to about a dozen stems. The diphthongs /ui/, /au/, and /ʌi/ occur only in a couple of stems, while /ia/ and /ae/ occur only in one stem each. Whatever diphthongs are found in Puma are illustrated in Table 32.

---

[8] Vowels *a, o, i* and *u* are lengthened as in: *bha-a* 'cut-PST', *co-o* 'eat-PST', *chi-i* 'bind-PST', and *mu-u* 'do-PST'

**Table 32:** Diphthongs distribution

| DIPHTHONGS | TERMS | GLOSS |
|---|---|---|
| /ai/ | *ai* | today |
| | *chai* | childhood |
| | *waitma* | thirst |
| | *cais* | be not well |
| /ia/ | *siaku* | dead |
| /au/ | *khau* | which |
| /ua/ | *rauma* | lammergeyer[9] |
| | *muama* | creation |
| /ae/ | *khaetma* | proclamation |
| /ui/ | *kuiyama* | dark |
| /iu/ | *tuniu* | moulmain cedar |
| /uo/ | *puoŋkha* | place of source |
| /ʌi/ | *kʌisʌmak* | bad |
| /oi/ | *biyoi* | greeting |

## 2.12 *Nasal vowels*

Nasalisation of vowels is not phonemic in many other Rai languages. For example, Bantawa (Rai 1985), Dumi (van Driem 1993) and Wambule (Opgenort 2002), however, it is phonemic in Camling (Rai 2003). No nasal vowels are attested in Puma. There are some nasalized vowels borrowed from Nepali, but in Puma they lose their nasal quality.

## 2.13 *Syllable structure*

In this section I first describe the basic concept of different constituents of a syllable and then I illustrate Puma syllable structure. Finally, I analyse root level phonotactics and syllable level phonotactics in Puma.

The syllable consists of three phonological constituents: the onset, the nucleus and the coda. It can be represented as an onset followed by a rhyme. The rhyme consists of the nucleus followed by the coda (Spencer 1996). The onset is the consonant or sequence of consonants at the beginning of a syllable, while the coda is the consonant or sequence of consonants at the end of a syllable. The nucleus of a syllable is the vowel. It is obligatory for a syllable, while the onset and the coda may be empty. Cross-linguistically the lack of a coda for a syllable is very common while the lack of onset is less common (Hayes 2009). The syllable is labeled with /σ/. The Puma syllable is illustrated in Figure 11.

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[9] A large Eurasian bird of prey of the vulture family.

**Figure 11:** The syllable
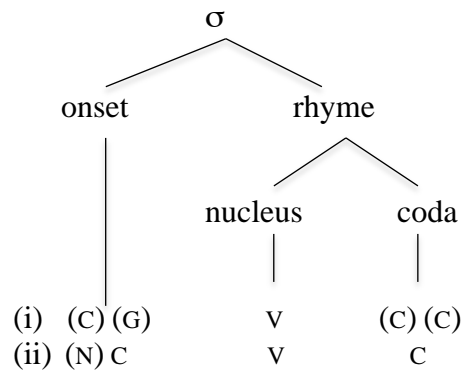


As can be seen from Figure 11, the maximum syllable in Puma can be represented in two ways: the first for open syllables with complex onset and the second for closed syllables with complex onset. When the coda is optional or empty in a syllable, then that type of syllable is called an open syllable while a syllable that has a coda is called a closed syllable. Puma allows both open and closed syllables. Most verbs in Puma are polysyllabic.

Like other Kiranti languages, Puma has various patterns of syllables. The maximum syllable in Puma is (C) (G) V (C) (C) for complex onset open syllables and (N) C V C for complex onset closed syllables, where 'G' is a glide and 'N' is a nasal. Borrowed words (mostly from Nepali) are excluded from this analysis. Rai et al. (2009) claim that initial consonant clusters are not found in Puma, except for one word *pwa* 'stem of a plant or a tree', but that was found to be in free variation with *puwa* with the same meaning. But, I find that more initial consonant clusters are attested in Puma.

As we can see from Figure 11 the nucleus can be preceded by not more than one consonant with a glide or a nasal and can be followed by not more than two consonants. In Puma the nucleus is obligatory while the onset and the coda are optional (see Table 33).

### 2.14    Syllable patterns

In Puma there are eight types of syllable patterns. These types are based on the analysis from the chart of consonantal clusters (Table 23), description of consonants (Table 18) and the minimal pairs for vowels (Table 31).

**Table 33:** Syllable patterns

| PATTERN | ROOT | GLOSS |
|---|---|---|
| CV | *ba* | weave |
|  | *ma* | fever |
|  | *su* | wash |
| V | *i* | come down |
|  | *a* | our |
|  | *o* | DEM |
| VC | *ot* | break |
|  | *is* | be unwell |
|  | *ʌk* | one |
| CVC | *ben* | come level |
|  | *chor* | pay |
|  | *bil* | squeeze |
| VCV | *abo* | now |
|  | *ʌsʌ* | two |
|  | *ogi* | sweet potato |
| CVCC | *betd* | bring |
|  | *cind* | teach |
|  | *dhuks* | collide |
| CGV | *pwa* | tree |
|  | *jya* | all |
|  | *thaw* | the same way |
| NCVC | *ŋsʌŋ* | similar |
|  | *ŋnʌŋ* | that much |
|  | *ŋkʌŋ* | ABL |

## 2.14.1 Complex onsets

In Puma every phonemic consonant can occur in syllable-initial position. The second consonant position of a complex syllable onset can only be glides /w/ and /y/ but instead glides can be swapped by a vowel (see Section 2.7 and Table 34). As illustrated in Figure 11, in addition of a simple consonant, the syllable onset may also comprise of a glide or a nasal that makes the syllable onset complex.

## 2.14.2 Complex codas

As illustrated in Figure 11, the syllable coda can include $C_1$ and $C_2$ that makes the syllable coda complex, as in Table 34. As can be seen from Table 34 nasals, liquid, affricates do not appear in syllable-final position. /t/ in $C_2$ position only follows nasal /n/, while in $C_1$ position /t/ only appears with /d/.

**Table 34:** Complex codas

| ROOT | GLOSS |
|------|-------|
| *khaps* | make roof |
| *mitd* | remember |
| *lupd* | touch |
| *bhukd* | bury |
| *lʌkdh* | try |
| *bokɖ* | patch |
| *puks* | go |
| *lʌkɖh* | fill |
| *tomt* | push |
| *lunt* | sink |
| *cind* | teach |
| *soŋt* | booze |

## 2.15 Syllable structure in verbs

In this section I present different syllable structures of a root and a word. The syllable structures for a root and a word are different in Puma. *-ma* is an infinitive marker that is suffixed to roots. Most Puma verbs are irregular in terms of attaching the infinitive marker. The Puma syllable structure of verbs is illustrated in Figure 12.

**Figure 12:** The syllable structure of verbs
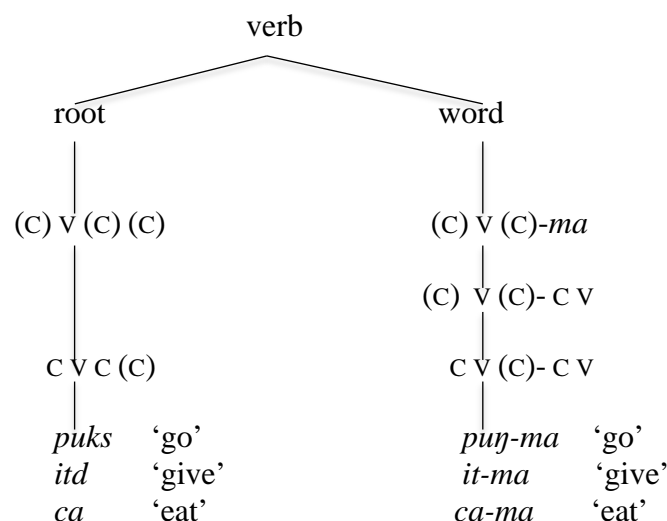


As illustrated in Figure 12, root phonotactics are CVC (C) and word phonotactics are CV(C)-*ma*. Puma allows only two consecutive consonants in a root. Across a syllable boundary, Puma is restrictive in terms of more than two consecutive consonants in the coda while only one consonant is permitted in the onset. In a word Puma permits only one consonant both in the onset and the coda, as we cannot have CC.*ma*, and infinitive marker *ma* is separately treated, as shown in Figure 12.

## 2.16   Suprasegmental features

### 2.16.1  Stress

Like a number of other Tibeto-Burman languages, Puma has no phonemic tonal contrast. Word stress is predictable from the phonemic shape of words, a pattern that is common in Tibeto-Burman, as Noonan (2003: 7) notes. Morphemes in Tibeto-Burman languages are basically monosyllabic (Matisoff 2000: 87), however, due to its productive agglutinating morphology, there are many disyllabic and polysyllabic words in Puma.

Monosyllabic words such as pronouns, nouns, adverbs, and verbs are always stressed. In glossary entries in the lexicon, stress is indicated by a stress mark [ˈ] before the stressed syllable. Unless otherwise indicated, all Puma words are stressed on the first syllable.

(4)   [ˈŋa]       ‘I’
      [ˈca]       ‘eat’
      [ˈsa]       ‘who’
      [ˈmi]       ‘fire’
      [ˈdoŋ]      ‘year’

In words with an initial high back vowel /u/ followed by a nasal /ŋ/, the /u/ remains silent and only /ŋ/ is pronounced (when Puma native speakers such as Shree Kumar Rai write Puma in the Devanāgarī script, they never write initial high back vowel /u/ if it is immediately followed by nasal /ŋ/). This means that disyllables beginning with /uŋ/ will be stressed on what is underlying the second syllable, as in:

(5)   *uŋ-bo*          *uŋ-nʌŋ*          → [ˈŋbo ˈŋnʌŋ]
      1SG.POSS-GEN     POSS-name
      ‘My name.’ (Rai et al. 2009: 444)

In Puma most infinitive forms of verbs are disyllabic words. These disyllabic verbs as well as disyllabic nouns, pronouns, adjectives, and adverbs receive stress on the first syllable.

(6)   [ˈkhʌnna]         ‘you’
      [ˈpuŋ-ma]         ‘to go’
      [ˈase]            ‘yesterday’
      [ˈnilo]           ‘nice’
      [ˈapa]            ‘father’

Compound verb forms do not deviate from the above rules, as illustrated in:

(7)  [ˈsom-tuk-ma]        'to love'
     [ˈman-ma-ken-ma]     'to forget'
     [ˈwass-uŋ-kess-uŋ]   'I threw.'
     [ˈdha-puks-a]        'He fell.'
     [ˈris-i-ŋes-i]       'She laughed.'

## 2.16.2 Intonation

Puma polar questions involve the same words, morphemes, and word order as the corresponding declarative sentence, but employ a distinct intonation pattern as the sole indication of their polar questions status (see Section 3.18.1). Polar questions have a rising intonation at the end of the utterance while declarative statements have a falling intonation at the end the utterance. Other examples of languages that use only intonation to distinguish polar questions from statements are colloquial Italian and Lesotho, a Bantu language spoken in South Africa (cf. Dryer 2013). In Puma there is no linguistic means other than intonation to indicate a polar question. Dryer (2013) notes that many languages which employ different strategies for forming polar questions such as use of a question particle, interrogative verbal morphology, both question particles and interrogative verb morphology, different word order, and the absence of morphemes used in declarative sentences, also employ a distinct intonation for polar questions. Here are two Puma examples:

(8)  (a)  *khim-di-tni*          *mʌ-puks-a*          *jammai*↓
          house-UP.LOC-ALL     3PL.S/A-go-PST     all

          'All went home.' (convers_01.017.b)

     (b)  *khim-di-tni*          *mʌ-puks-a*          *jammai*↑
          house-UP.LOC-ALL     3PL.S/A-go-PST     all

          'All went home?'

The example in (8a) is a declarative sentence as it is characterised with a falling intonation and (8b) is a polar question which has a rising intonation. Note that the word order of both examples is the same and no other strategy is employed except distinct intonation.

Content questions in Puma have the content question words in *situ* and are characterised by a falling intonation contour at the end of the utterance (see Section 3.13.3).

## 2.17 The phonology of loans from Nepali

Unlike Kiranti languages such as Bantawa (Rai 1985; Doornenbal 2009), Camling (Rai 2003) and Wambule (Opgenort 2004), Puma distinguishes the central vowel /ʌ/ from the back vowel /a/. When speakers write Puma in Devanāgarī script, they use the symbol for short /a/ to represent /ʌ/, and the symbol for long /ā/ to represent /a/.

The Nepali spoken by mother tongue Tibeto-Burman speakers such as Tamāng, Gurung, Sherpā, Newar and Thāngmi (Turin 2004: 101) shows considerable differences, reflecting the speaker's first language. In comparison, the Nepali spoken by Puma is similar to the Nepali of mother tongue speakers because Puma phonology does not differ greatly from Nepali phonology. The inventory of consonant phonemes is almost identical, as is the inventory of vowel phonemes, apart from central /a/ vs back /ʌ/ and the lack of a vowel length distinction. The most obvious differences in the Nepali of Tibeto-Burman mother tongue speakers are failure to distinguish vowel length (e.g., /a/ vs /ā/) and failure to distinguish alveolar and retroflex consonants (/t/ vs /ṭ/). For example, Tamāng speakers do not differentiate Nepali *marnu* 'to die' and *mārnu* 'to kill' and Newar speakers do not differentiate Nepali *tāto* 'hot' and *ṭāṭo* 'scar'. Nepali mother tongue speakers sometimes imitate Tibeto-Burman speakers' 'pronunciation' of Nepali by mimicking their lack of these contrasts (cf. Turin 2004:101).

Like Kiranti languages such as Bantawa (Doornenbal 2009: 48), Puma has been heavily influenced by Nepali. Nepali words are borrowed in two ways: direct loans (both phonetic form and semantic content) and nativised loans. The actual process of borrowing is complex and involves several strategies. Some phonological changes that take place in borrowings from Nepali are, as follows:

**(a)   Vowel modification**

Nepali long vowels (except for /ā/) correspond to short vowels in Puma loans. Long /ā/ becomes /a/ while short /a/ becomes /ʌ/:

(9)   *bistarʌi*      *< bistārai*   'slowly'
       *pʌhila*        *< pahilā*     'first'
       *bijori*        *< bijorī*     'odd'
       *ṭhikkʌ*        *< ṭhīkka*     'right'
       *beuli*         *< beulī*      'bride'

**(b)   Addition of -*a***

Nepali monosyllables ending in a consonant have /a/ added when they are borrowed

into Puma:

(10)  *kama*     *< kām*      'work'
      *sukha*    *<sukh*      'happiness'
      *risa*     *< ris*      'anger'
      *caha*     *<cāh*       'need'
      *khola*    *< khol*     'open'

Compare this with Nepali polysyllabic loans where addition of */a/* does not occur.

(11)  *bela*     *< belā*        'time'
      *phʌlana*  *< phalanā*     'so and so'
      *bhaka*    *< bhākā*       'promise'
      *pura*     *< purā*        'all'
      *gʌhʌna*   *< gahanā*      'jewellery'

**(c)   Rare and irregular strategy**

There are few loanwords where *-it* is added.

(12)  *sibit*    *< simī*     'bean'
      *masit*    *< mās*      'black lentil'

## 2.18   Loanwords in Puma

In multilingual communities it is believed that borrowing from other (source) languages strengthens the usage of recipient languages. Cross-linguistically loanwords are common across languages. The contact of different languages makes the history of language contact in Nepal complex. The Tibeto-Burman languages spoken in Nepal have borrowed numerous Nepali words, where Puma is also no exception. Loanwords in Puma come primarily from three sources: Nepali, neighbouring languages such as Bantawa, and other languages such as Maithili, English and Hindi. The influence of English is limited but there does seem to have been the loan of handful of English words into the Puma lexicon, perhaps travelling via Nepali. It is observed that there are no sections of the Puma lexicon, such as nouns, verbs, adjectives, adverbs, numerals, idiophones, and even grammatical categories like connectives, particles, fillers, exclamations and vocatives, which are untouched by Nepali. The description of loanwords in Puma is discussed, following data of Rai et al. (2009).

In Puma nouns are the most borrowed type of word class where most loanword nouns are from Nepali. A number of loaned nouns come from English not because English is the global language of communication but because many Pumas serve the

British and Indian armies, where they learn those English words, such as *kʌmandʌr* 'commander', *kyansil* 'cancel', *paket* 'pocket', *pʌlṭʌn* 'platoon' and *ʌḍʌr* 'order'. There is a comparatively smaller amount of loaned verbs where majority of verbs are from Nepali. These loaned verbs conjugate following Puma complex pronominalisation. This is typologically not very surprising, given that many languages borrow comparatively fewer verbs than other lexical classes (Hildebrandt 2009: 454). Those verbs that are borrowed have been nativised by adding *-a* at the end of a word, such as *sukh-a-lima* 'be happy', *bigr-a-lima* 'ruin' and *ris-a-ketma* 'be angry' (see Section 2.17). A number of loaned adjectives are also found in Puma. Puma actually has three distinct classes of adjectives: a small (closed) class of underived adjectives, a larger (open) class of derived adjectives from verbs (see Section 2.20), and borrowed adjectives. Similarly, a number of adverbs, such as *balla* 'just', *bharkhar* 'recently' and *jhaṇḍai* 'approximately' are also borrowed from Nepali. The other borrowed words comprise pronouns, such as *aru* 'other', *phalanā* 'so and so', *pratek* 'each', emphatics, such as *mʌi*, *nʌi*, *cai*, idiophones like *phuttʌ*, *parra*, *swātta*, connectives, such as *bhane*, *abo*, and *ani*, particles, such as *nī*, *ta*, *la*, and exclamations, such as *āhā*, *oho*, and *āttho*.

According to Rai et al. (2008), the database for Puma contains a total of 5,624 completed entries, including a large number of borrowed words mainly from Nepali, English, Maithili, and Hindi, but Nepali loans make up the majority of borrowing in the Puma database. Of the total 5,624 lexicon, 794 words from different semantic classes are loaned, with over 90% of identified loanwords of Nepali origin. It should be noticed that most borrowed words have Puma equivalents, but borrowed words are used more frequently. To date the database for Puma comprises a total of 7,100 lexicons. There are a number of loanwords, which are borrowed from the neighbouring language Bantawa. We assume that there are definitely more loanwords in Puma from this whole database. As can be analysed and seen also from the dictionary (Rai et al. 2009), there is a high degree of borrowing from Nepali. Approximately 15% of the lexicon is loaned from Nepali, which is about 88% of loanwords from Nepali. Note that as already said in Section 2.17, in Puma many but not all borrowed words are nativised. Table 35 shows a number of loanwords into Puma.

**Table 35:** Loanwords by semantic class

| Word classes | | Source languages | | | | | |
|---|---|---|---|---|---|---|---|
| | | Nepali | English | Maithili | Bantawa | Hindi | **TOTAL** |
| Lexical words | Nouns | 411 | 57 | 12 | | | 480 |
| | Adjectives | 73 | 5 | | | | 78 |
| | Adverbs | 58 | 1 | | 1 | 1 | 61 |
| | Verbs | 58 | 1 | | 10 | 1 | 70 |
| | Pronouns | 17 | | | 5 | | 22 |
| | Numerals | 34 | | | | | 34 |
| Grammatical categories | Particles | 7 | | | | | 7 |
| | Connectives | 15 | | | | | 15 |
| | Idiophones | 8 | | | | | 8 |
| | Exclamations | 5 | | | | | 5 |
| | Emphatics | 7 | | | | | 7 |
| | Miscellaneous | 23 | | | | | 23 |
| | **TOTAL** | 716 | 64 | 12 | 16 | 2 | 810 |

# Part II     Morphology

# Part II    Morphology

# (I)    Nominal morphology

Puma is rich in both nominal and verbal morphology. In Part II I first describe nominal morphology and then verbal morphology. The part on nominal morphology deals with personal pronouns, possessive pronouns, demonstrative pronouns, interrogative pronouns and indefinite pronouns, adjectives, numerals, classifiers, adverbs, gender and case markers, and affixes. The outline of verbal morphology is discussed in the following part. The verbal morphology deals with upside-down ergativity, person, number, tense, and negative affixes, stem classes, and templates of verb paradigms.

## (I)    Nominal morphology

### *2.19    Pronouns*

### 2.19.1 Personal pronouns

Personal pronouns are unbound nominal morphemes. They distinguish person (first, second and third) and number (singular, dual and plural). Non-singular includes dual and plural numbers. Puma also makes an inclusive and exclusive distinction in the non-singular. The feature value of dual and plural number and inclusive and exclusive in first person pronouns does not exist in Nepali. Duality is marked by the non-singular suffix *-ci*, but with the third person pronouns, it refers to non-singular (dual and plural). Table 36 gives the full paradigm of personal pronouns.

**Table 36:** Personal pronouns

| Persons | ABS | ABRV | Gloss | ERG | DAT |
|---|---|---|---|---|---|
| 1st person | *ŋa* | 1SG | I | *ŋa-a* | *ŋa-lai* |
| | *keci* | 1DL.INCL | we two | *keci-a* | *keci-lai* |
| | *kecika* | 1DL.EXCL | we two but not you | *kecika-a* | *kecika-lai* |
| | *ke* | 1PL.INCL | we all | *ke-a* | *ke-lai* |
| | *keka* | 1PL.EXCL | we all but not you | *keka-a* | *keka-lai* |
| 2nd person | *khʌnna* | 2SG | you | *khʌnna-a* | *khʌnna-lai* |
| | *khʌnnaci* | 2DL | you two | *khʌnnaci-a* | *khʌnnaci-lai* |
| | *khʌnnanin* | 2PL | you all | *khʌnnanin-a* | *khʌnnanin-lai* |
| 3rd person | *khokku* | 3SG | s/he | *khokku-a* | *khokku-lai* |
| | *khokkuci* | 3NS | they two/ they all | *khokkuci-a* | *khokkuci-lai* |

Table 36 illustrates the ten personal pronouns in the absolutive, ergative and dative cases. Except for the third person, the personal pronouns differ for singular, dual and plural number. No language has a dual unless it has a plural (Greenberg 1966: 94).

The third person does not distinguish dual and plural. The third person dual and third person plural have the same stems *khokku*[10]*-ci* (cf. Table 36) as the non-singular suffix *-ci* denotes both dual and plural. However, the third person dual and third person plural differ in their inflectional behaviour and contrast in verb agreement.

### 2.19.2 Possessive pronouns

Kiranti languages generally have possessive person markers that can be distinct from regular personal pronouns, but the languages vary as to whether these markers are themselves pronominal stems or prefixes. These pronouns and prefixes can be free or bound, depending upon their host (cf. Bickel & Nichols 2007). These two variables (stem vs. prefix; phonologically free vs. bound) probably reflect various stages of historical developments of free pronouns into bound agreement markers (Sharma et al. 2005). A full grammatical Puma possessive construction requires both possessive pronouns marked with a genitive marker and a possessive pronoun without genitive marker. In Puma the possessive markers of the first and second person function as pronominal stems, while those of the third person function as prefixes. Puma is interesting in this regard as it has stems for the first and second person, but prefixes for the third person. Regardless of person and their status as stems or prefixes, possessive markers are obligatory constituents in NPs containing a genitive-marked pronoun (Sharma et al. 2005). Table 37 is extended and elaborated from Sharma et al. (2005) and presents an overview of personal and possessive pronouns with the example of *la* 'language', where all possessive markers are procliticised.

**Table 37:** Personal and possessive pronouns

| GLOSS | ABS | POSS | GEN | Acceptable forms | | Ungrammatical |
| | | | | Full form | Short form | |
|---|---|---|---|---|---|---|
| 1SG | *ŋa* | *uŋ-* | *uŋ-bo* | *uŋ-bo uŋ la* | *uŋ la* | *\*uŋ-bo la* |
| 1DL.INCL | *keci* | *enci-* | *enci-bo* | *enci-bo enci la* | *enci la* | *\*enci-bo la* |
| 1DL.EXCL | *kecika* | *aci-* | *aci-bo* | *aci-bo aci la* | *aci la* | *\*aci-bo la* |
| 1PL.INCL | *ke* | *en-* | *en-bo* | *en-bo en la* | *en la* | *\*en-bo la* |
| 1PL.EXCL | *keka* | *a-* | *a-bo* | *a-bo a la* | *a la* | *\*a-bo la* |
| 2SG | *khʌnna* | *ka-* | *ka-bo* | *ka-bo ka la* | *ka la* | *\*ka-bo la* |
| 2DL | *khʌnnaci* | *kenci-* | *kenci-bo* | *kenci-bo kenci la* | *kenci la* | *\*kenci-bo la* |
| 2PL | *khʌnnanin* | *ken-* | *ken-bo* | *ken-bo ken la* | *ken la* | *\*ken-bo la* |
| 3SG | *kho* | *kʌ-* | *kho-bo* | *kho-bo kʌ la* | *kʌ la* | *\*kho-bo la* |
| 3NS | *khoci* | *kʌci-* | *khoci-bo* | *khoci-bo kʌ-ci la* | *kʌci la* | *\*khoci-bo la* |

---

[10] *Khokku* is the full form, and *kho* is the abbreviated form which is often used.

The possessive construction can be shortened and remains grammatical, dropping the genitive-marked possessive pronoun, but it is impossible to drop the procliticised pronoun. Using a possessive pronoun with genitive marker is not acceptable and ungrammatical. For example, *uŋ-bo uŋ la* 'my language' is the full possessive construction, and its alternative shorter form *uŋ la* 'my language' is grammatical and meaningful. However, the construction *uŋ-bo-la* 'my language' is ungrammatical.

(13)  (a)  *uŋ-bo*        *uŋ*       *la*
           1SG.POSS-GEN    1SG.POSS    language
           'My language.'

     (b)  *uŋ*        *la*
           1SG.POSS    language
           'My language.'

     (c)  *\*uŋ-bo*       *la*
           1SG.POSS-GEN    language
           'My language.'

The third person possessive markers do not allow genitive marking (*\*kʌ-bo*, *\*kʌci-bo*) and appear to have been reanalysed as prefixes, so that third person possessive prefix marking genitive is not acceptable and ungrammatical in (14c). When a pronominal genitive-marked construction is to be expressed, the regular personal pronouns based on the stem *kho(kku)* are used.

(14)  (a)  *khokkuci-bo*     *kʌci*      *la*
           3NS-GEN         3NS.POSS    language
           'Their language.'

     (b)  *kʌci*       *la*
           3NS.POSS    language
           'Their language'.

     (c)  *\*khokku-ci-bo*     *la*
           3NS.POSS-GEN    language
           'Their language'.

This constraint is not found in other Southern Kiranti languages (cf. Ebert 1994). However, in examples (15), the genitive-marked pronoun can be used without procliticised pronoun if the genitive-marked pronoun is immediately followed with *-lāgi* (for the sake). We see this phenomenon because *-lāī* and *-lāgi* are allomorphs of dative markers which are both Nepali loans. But *-lāgi* only occurs with genitive, while *-lāi*

occurs with personal pronouns (see Section 2.19.1/ Table 36) in which the semantics of both markers is not varied. The example (15c) is ungrammatical as the genitive marker -*bo* restricts using -*lai*, followed by the genitive marker.

(15) (a) *ʌntʌre-bo-lāgi      chetkuma      dot-si      puŋ-ma=ni…*
Antare-GEN-DAT      girl.ABS      beg-PURP      go-INF=REP

'It is said to go to and beg a girl for Antare.' (convers_13:20)

(b) *ka-bo-lāgi      ŋa      nʌmma      ci-ma      ri-ŋa?*
2SG-GEN-F/S      1SG.ABS      what      do-INF      can-1SG.S/P.NPST

'How can I help you?'

(c) *\*kabo-lāi      ŋa      nʌmma      ci-ma      ri-ŋa?*
2SG-GEN-DAT   1SG.ABS      what      do-INF      can-1SG.S/P.NPST

'How can I help you?'

## 2.19.3 Demonstrative pronouns

Puma makes only a singular and non-singular distinction for demonstrative pronouns. Demonstrative pronouns are used for animate and inanimate referents. Generally third person pronouns are related to demonstratives in a direct way. Dixon (2003: 61–62) defines a demonstrative simply as 'any item, other than 1st and 2nd person pronouns, which can have pointing or (deictic) reference'. Demonstratives not only include pronouns, but also locational adverbs such as English *here* and *there* (Diessel 1999).

Puma exhibits a three-way proximal-distal-remote distinction in demonstratives. The distinction between the demonstratives is distance related and also speaker related as well. In Puma demonstratives can be used pronominally and adnominally, as in (16). The Pronominal and adnominal demonstratives may function as independent pronouns.

(16) (a) *tʌkku      sa-bo      kʌ-khim?*
DEM      who-GEN      3SG.POSS-house

'Whose house is that?'

(b) *ŋa-a      tʌkku      pʌ-ca-nʌŋ*
1SG-ERG      DEM      NEG-eat-1SG.NEG

'I do not eat that.'

In (16a) the demonstrative is adnominal as it co-occurs with a noun *khim* in a noun phrase, while in (16b) the demonstrative is pronominal as it occurs independently as the P argument in a monotransitive clause (see Section 3.8 for a detailed description of arguments). Independent demonstrative pronouns function as the head of an argument and require all the obligatory syntactic markers as in (17) in which the demonstrative

pronoun requires the ergative marker *-a* to fulfill the syntactic requirements.

(17) *tʌkku-a    kʌ-khim        hud-i*
    DEM-ERG    3SG.POSS-house  buy-3P

    'That one (person) bought a house'.

Unlike other Kiranti languages like Bantawa, Chintang, Koyu (Lahaussois 2009) and Camling (Rai 2003), Puma has specific demonstrative pronouns. The demonstrative pronouns show a three-way contrast *ʌkku-tʌkku-hakku* and *ʌppʌ-tʌppʌ-happʌ*. This is like in Nepali *yo* 'this' and *yʌs* 'this one' and *tyo* 'that' and *tyʌs* 'that one'. It is assumed that the first *ʌkku-tʌkku-hakku* distinction is generic and the other *ʌppʌ-tʌppʌ-happʌ* distinction is specific. The specific demonstratives can only occur with non-animate nouns which have the general locative marker *-do* suffixed to them, whereas other demonstratives can occur elsewhere. Furthermore, the specific demonstratives are uninflected for case and precede an inflected locative marked noun phrase, as in (18a). The specific demonstrative pronouns only occur adnominally. Example (18c) is also ungrammatical, as specific demonstratives are not allowed with an adnominal animate and there is no locative marking also, while (19b) is ungrammatical, as specific demonstrative requires locative marked noun phrase.

(18) (a)  *ʌppʌ/tʌppʌ       khim-do        kʌ-yuŋ          munima-ci*
          PROX/DIST       house-GEN.LOC   ACT.PTCP-stay   cat-NS

          'The cats that live in this/ that house.'

    (b)  *ʌkku/tʌkku       mʌnna      si-a*
          PROX/DIST       man.ABS    die-3SG.PST

          'This/that man died.'

    (c)  **ʌppʌ/tʌppʌ       mʌnna      si-a*
          PROX/DIST       man.ABS    die-3SG.PST

          'This/that man died.'

(19) (a)  *ʌkku/tʌkku       khim-bo   kʌ-luŋ           bīs        hajār*
          PROX/DIST       house-GEN  3SG.POSS-cost    twenty     thousand

          'The cost of this/that house is twenty thousand.'

    (b)  **ʌppʌ/tʌppʌ       khim-bo   kʌ-luŋ           bīs        hajār*
          PROX/DIST       house-GEN  3SG.POSS-cost    twenty     thousand

          'The cost of this/that house is twenty thousand.'

The overview of paradigm of demonstratives is presented in Table 38.

**Table 38:** Demonstrative paradigms

| TYPES | DEMONSTRATIVE | ABSOLUTIVE | ERGATIVE | DATIVE | GENITIVE |
|---|---|---|---|---|---|
| GENERIC | PROXIMAL | *ʌkku* | *ʌkku-a* | *ʌkku-lai* | *ʌkku-bo* |
| | DISTAL | *tʌkku* | *tʌkku-a* | *tʌkku-lai* | *tʌkku-bo* |
| | REMOTE | *hakku* | *hakku-a* | *hakku-lai* | *hakku-bo* |
| SPECIFIC | PROXIMAL | *ʌppʌ* | | | |
| | DISTAL | *tʌppʌ* | | | |
| | REMOTE | *happʌ* | | | |

### 2.19.4 Interrogative pronouns

The so-called WH-words, (based on the initial consonants wh-in English except for 'how') could be referred to, only partially, as '*kh*-words' like *khappʌ* 'which', *khado* 'where', *khʌsʌŋni* 'how', and *khatni* 'where to' in Puma for the same reason. Though WH-words in Nepali, too, begin with /k/ like *kun* 'which', *kahā̃* 'where', *kasarī* 'how', *ke* 'what', *kahile* 'when', and *kina* 'why' etc., the correlation is coincidental (cf. Sharma 2000). The form (*kh-*) is a widespread Tibeto-Burman element, as in Tibetan *kha-* (Watters 2002). Interrogative pronouns are used in order to ask information questions. The question word *sa* 'who' is inflected for several cases, while *doro* 'what' is only inflected for genitive. However *nʌmma* 'what' is uninflected. The interrogative pronoun *khado* 'where' can be inflected for ablative, with different stem forms and allative case form. Some examples of interrogative pronouns are presented, as in:

(20)  (a)  *khokku      sa-oŋ      bihā      mu-a?*
        3SG.ABS     who-COM$_1$ marriage  do-3SG.PST

      'Who did he marry?'

      (b)  *ʌkku doro-bo    kʌ-pwa?*
        DEM  what-GEN   3SG.GEN.tree

      'What tree is this?'

      (c)  *(khʌnna)    khatni*[11]      *tʌ-puŋ=ku?*
        2SG.ABS     where.to     2-go=NMLZ

      'Where are you going to?'

(21)  (a)  *nʌmma      lis-a?*
        what         be-3SG.PST

      'What happened?'

---

[11] The *kh*-words such as *kha-tni?* 'where to?' and *kha-do?* 'where?' index allative and locative cases. However it is interesting that these *kh*-words are not segmentable because *kha-* denotes nothing except ANTIP and 1NS.P which makes no sense in these interrogative pronouns.

(b)  *doro[12]     lis-a
     what         be-3SG.PST

     'What happened?'

The full paradigm of interrogative pronouns is presented in Table 37.

### 2.19.5 Indefinite pronouns

Cross-linguistically, it is common for indefinite pronouns, those like 'someone', 'somewhere' etc. in English, to take the same basic form as WH-words. The indefinite pronouns in Puma are partially derived from interrogative pronouns and obligatorily suffixed with -tchaŋ, as in Table 38.

The same indefinite pronouns allow both affirmative and negative forms. Indefinite pronouns marked with the additive focus marker -tchaŋ 'also, too, even' occur exclusively with negative verbs to express a negative meaning (see Sections 2.36 and 3.14). The use of the additive marker with indefinite and interrogative pronouns with negative verbs is a distinctive feature of Kiranti languages (Opgenort 2002: 213–214; Borchers 2008: 81). The full paradigm of indefinite and interrogative pronouns are presented in Tables 39 and 40, respectively.

(22)  (a)  to-dho          sa-tchaŋ     metdʌŋ
           DIST-GEN.LOC    who-ADD      NEG.EXIST.NPST

           'Nobody is there.'

      (b)  ŋa           doro-tchaŋ    pʌ-duŋ-nʌŋ
           1SG.ABS      what-ADD      NEG-drink-1SG.NEG

           'I drink nothing.'

**Table 39:** Indefinite pronouns

| ABS | ERG | DAT | GEN | GLOSS |
|-----|-----|-----|-----|-------|
| *satchaŋ* | *satchaŋ-a* | *satchaŋ-lai* | *satchaŋ-bo* | someone, no one |
| *dorotchaŋ* | | | | something, nothing |
| *khappʌtchaŋ* | | | | whichever, none |
| *khatnichaŋ* | | | | somewhere, nowhere |

---

[12] *Doro* and *nʌmma* both are synonymous which refer to 'what?'. However, they are semantically distinct. *Doro* occurs generally with definite and specific nominals, while *nʌmma* occurs with indefinite and non-specific nominals.

**Table 40:** Interrogative pronouns

| GLOSS | ABS | ERG | DAT | GEN | COM | ALL | ABL |
|---|---|---|---|---|---|---|---|
| who | *sa* | *sa-a* | *sa-lai* | *sa-bo* | *sa-oŋ* | | |
| what | *doro* *nʌmma* | *doro-a* *\*nʌmma-a* | *doro-lai* *\*nʌmma-lai* | *doro-bo* *\*nʌmma-bo* | | | |
| why | *nʌmmaki* | | | | | | |
| which | *khappʌ* | | | | | | |
| where | *khado* | | | | | *kha-tni* | *khado-ŋkʌŋ* |
| how | *khʌsʌŋni* | | | | | | |
| how much | *demni* | | | | | | |
| when | *demkha* | | *demkha-lai* | | | | |

## 2.20    Adjectives

Unlike some Tibeto-Burman languages such as Lahu, which express adjectival concepts through intransitive verbs (Tolsma 2006: 40), Puma possesses adjectives. There is a small number of independent or underived adjectives that express colour and dimension in Puma, while many adjectives can be derived from verbs by suffixing *=ku* to the verb, as in (23) (cf. section 7.14.1). Some adjectives, especially colour adjectives, are suffixed with *-ma*, which can be dropped sometimes but not in all cases. It is identical with the infinitive marker *-ma*. Furthermore, other adjectives, which end in *=ku,* are not actually derived from verbs. This makes the Puma adjectival system complex.

   Puma adjectives can be grouped into three sets: underived adjectives, underived adjectives ending in *=ku,* and derived adjectives suffixing *=ku* to verbs. Like other Kiranti languages, Puma adjectives precede the noun they modify. Like Tibeto-Burman languages, the verb-like adjectives in Puma are primarily derived from verbs with nominalizing affixes.

(23)  (a)   *ɖher-a=ku        munima      ta-a*
            beat-PST=NMLZ   cat.ABS      come-PST

            'A cat that was beaten came.'

      (b)   *pʌŋ   ʌru   cʌhi   abo   dot   mu-ma-ŋa=ku        cʌlʌnʌ*
            SEQ   other  TOP   now   beg   do-INF-IPFV=NMLZ    tradition

            'The other tradition that is arranged (marriage).' (birth_death: 031)

**Table 41:** Descriptive adjectives

| Types | Adjectives | Gloss |
|---|---|---|
| underived | *sehenma* | clean |
|  | *sokma* | idle |
|  | *kuama* | warm |
|  | *kuiyama* | dark |
|  | *kuwako* | hot |
|  | *bopoti* | round |
| underived ending in *-ku* | *ʌlleŋmetku* | long |
|  | *ʌlleŋgoŋku* | high |
|  | *koŋyaŋku* | obedient |
| derived ending in *-ku* | *siaku* | dead |
|  | *siku* | the thing which is dying |
|  | *tumaku* | ripen |
|  | *khʌkku* | bitter |

The  underived  adjectives  are  comprised  mainly  of  colour  terms  and  a  few  other

semantic types like physical dimension and value. Semantic types of adjectives for dimension, value and colour are illustrated below in Table 42 (cf. Dixon 2002).

**Table 42:** Semantic types of adjectives

| Property | Adjective | Gloss |
|---|---|---|
| Dimension | *kʌheppaŋ* | big |
| | *kʌcuppaŋ* | small |
| | *bʌḍḍhe* | much/ many |
| Value | *kʌnimak* | good |
| | *kʌisʌmak* | bad |
| Colour | *ompʌacima* | white |
| | *makcʌkma* | black |
| | *halachuma* | red |
| | *halapekma* | yellow |

## *2.21 Numerals and classifiers*

Numerals are one of the most important characteristics of Puma nominal morphology. It is interesting to note that Puma speakers do not count more than three in day-to-day life. However, they claim that the language has numbers up to one hundred, and the forms were published in their bilingual magazine *Buŋwakhop*. But those numbers except one to three have never been used in discourse and daily conversation. Although the Nepali numeral system is now widely used by Puma speakers for numerals above four, and often even for numerals above zero, a native numeral system does still exist. Table 43 below shows the Puma numeral forms from one to three.

**Table 43:** Numerals

| | |
|---|---|
| 1 | *ʌk* |
| 2 | *ʌsʌ* |
| 3 | *sum* |

Like in the neighbouring Kiranti languages, attributive forms of the numerals are used in most cases, and also sometimes for counting. These attributive forms are formed by indexing one of the numeral classifier suffixes to the numeral.

Numerals have classifier suffixes affixed to the numeral stem. These numerals obligatorily occur with classifiers. The use of classifiers depends on whether the enumerated noun is human or non-human. For non-human referents, the classifier *-ta* occurs only with *ʌk* 'one' whereas *-ra* occurs with *ʌsʌ* 'two' and *sum* 'three' to show non-human. Like other Kiranti languages, Puma classifiers always follow the numeral

but precede the noun head, and the classifiers are bound morphemes, as in:

(24)　(a)　*ʌk-ta*　　*munima*
　　　　　one-CLF　　cat.ABS

　　　　　'A cat.'

　　　(b)　*ʌsʌ-ra*　　*cabha-ci*
　　　　　two-CLF　　tiger-NS.ABS

　　　　　'Two tigers.'

　　　(c)　*sum-ra*　　*takhi-ci*
　　　　　three-CLF　cap-NS.ABS

　　　　　'Three caps.'

Like in the Tibeto-Burman languages such as Thangmi (Turin 2012: 324), certain nouns do not require numeral classifiers because nouns themselves function as numeral classifiers.

(25)　*casum*　　　*ʌsʌ*　*doŋ*　*betd-i*
　　　Casum　　　two　year　reach-3P

　　　'Casum is two years old.' (Rai et al. 2009: 2)

When counting human referents, only the human classifier *-poŋ* is attached to the numeral stem, as in:

(26)　(a)　*ʌk-poŋ*　　*marchacha*
　　　　　one-CLF　　girl.ABS

　　　　　'A girl/daughter.'

　　　(b)　*ʌsʌ-poŋ*　　*throŋcha-ci*
　　　　　two-CLF　　boy-NS.ABS

　　　　　'Two boys/ two sons.'

There are also other classifiers in Puma which are attached to a noun but not used with a numeral. The classifier *-si* is used to denote objects, especially fruits or grains, which are small and round in shape in (27a). The other classifier *-la* is attached to a noun to refer to a bunch of plantains in (27b).

(27)　(a)　*suntala-si*　　*ca-ma*　　*pʌ-li-nin*
　　　　　orange-CLF　　eat-INF　　NEG-be-NEG

　　　　　'Orange's seed should not be eaten.'

　　　(b)　*mʌkʌi-la*
　　　　　corn-CLF

　　　　　'Corn plantain.'

Table 44 presents an overview of numerals and classifiers in Puma. The classifiers (*-tut*, *-tep*, *-cok*) which refer to liquid are synonymous.

**Table 44:** Numerals and classifiers

| NUMERAL | 1 | 2 | 3 |
|---|---|---|---|
| COUNTING FORM | *ʌk* | *ʌsʌ* | *sum* |
| HUMAN REFERENT | *ʌk-poŋ* | *ʌsʌ-poŋ* | *sum-poŋ* |
| NON-HUMAN REFERENT | *ʌk-ta* | *ʌsʌ-ra* | *sum-ra* |
| ROUND REFERENT | *ʌk-lut* (natural)<br>*ʌk-bop* (man-made) | *ʌsʌ-lut*<br>*ʌsʌ-bop* | *sum-lut*<br>*sum-bop* |
| VINE REFERENT | *ʌk-ri* | *ʌsʌ-ri* | *sum-ri* |
| LEAVES REFERENT | *ʌk-pheŋ* | *ʌsʌ-pheŋ* | *sum-pheŋ* |
| LONG REFERENT (e.g. bamboo) | *ʌk-sora* | *ʌsʌ-sora* | *sum-sora* |
| LIQUID REFERENT | *ʌk-tut*<br>*ʌk-tep*<br>*ʌk-cok* | *ʌsʌ-tut*<br>*ʌsʌ-tep*<br>*ʌsʌ-cok* | *sum-tut*<br>*sum-tep*<br>*sum-cok* |
| PIECES REFERENT | *ʌk-ɖhaŋ* | *ʌsʌ-ɖhaŋ* | *sum-ɖhaŋ* |

Following Turin (2012: 325), the numeral classifiers and the semantic classes of nominals with which they occur are presented in Table 45.

**Table 45:** Numeral classifiers

| Form | Semantic class of noun | Gloss |
|---|---|---|
| *poŋ* | humans | CLF.HN |
| *ta* | non-humans | CLF |
| *lut* | round natural | $CLF_2$ |
| *bop* | round man made | $CLF_3$ |
| *ri* | vine | $CLF_4$ |
| *pheŋ* | leaves | $CLF_5$ |
| *sora* | long things | $CLF_6$ |
| *tut* | liquid | $CLF_7$ |
| *tep* | liquid | $CLF_8$ |
| *cok* | liquid | $CLF_9$ |
| *ɖhaŋ* | pieces | $CLF_{10}$ |
| *cilo* | times | $CLF_{11}$ |
| *bhuŋ* | pile | $CLF_{12}$ |

## *2.22   Adverbials*

### 2.22.1 Manner adverbs

Manner adverbs in Puma are mostly heterogeneous. Some adverbs are derived from an adjective while others are reduplicated. When derived from an adjective, no uniformity is found. In (28a) the adjective *mʌjʌ* 'good' is suffixed by *-le* to derive an adverb. However it is interesting to note that this adjective *mʌjʌ* 'good' cannot independently

occur in any way because it has been borrowed from Nepali and the genitive morpheme -*bo* should be suffixed to use it as an adjective.

(28) (a)  *mʌjʌle      kanch-o           cham      mu-ci-ne       puma-bo*
          nicely       last.born.male-VOC  song.ABS   do-DL-OPT       Puma-GEN
          *kʌ-la-a                    mu-ci-ne!*
          3SG.POSS-language-ERG        do-NS-OPT

      'Kancha! Let us sing a song in the Puma language nicely!' (pum_song_01)

    (b)  *mʌjʌ-bo    cham*
         nice-GEN    song

      'Nice song.'

The phonological nature of the reduplicated morphemes varies from language to language and construction to construction (Rubino 2013). Puma only employs full reduplication, which is a lexical device to form manner adverbs. In full reduplication an entire word is repeated. Reduplicative morphemes can carry a number of meanings, and in some languages such as Ilocano, spoken in Philippines, and Nez Perce, spoken in the United States, the same repeated morpheme is used to denote quite contrary meanings (Rubino 2013). However, in Puma a word without repetition never independently occurs. Such kind of repetition (partial as well) is also found in idiophones and few adjectives. Consider Puma examples:

**Table 46:** Manner adverbs

| Manner adverb | Gloss |
|---|---|
| *dopsi dopsi* | slowly with laziness |
| *doyom doyom* | slowly |
| *mʌto mʌto* | quickly |
| *kʌle kʌle* | daily |
| *kʌsit kʌsit* | continuously |

(29) (a)  *kharo-ŋkʌŋ        dopsi-dopsi      tʌ-ta-yaŋ?*
          where-ABLT         slowly           2-come-IPFV

      'Where are you coming from slowly?' (Rai et al. 2009: 80)

    (b)  *khʌnna    kʌle-kʌle  toŋya-khim         puks-a!*
         2SG.ABS    daily      knowledge-house    go-IMP

      'Go to school daily!' (Rai et al. 2009: 14)

### 2.22.2  Temporal adverbs

Puma has an impressive set of indigenous time adverbials. Temporal adverbs are broader in scope than manner adverbs and characterise entire events. In many Tibeto-

Burman languages, including the sub-group of Kiranti, while the terms used for days of the week and months of the year are loans from Nepali, indigenous Puma temporal adverbs exist and their widespread use and range of meanings extend beyond those of the corresponding Nepali terms (cf. Turin 2012: 334). There are distinct Puma lexical items for three days in the past to four days in the future, and from three years in the past to four years in the future. Temporal adverbs are presented in Table 47.

**Table 47:** Temporal adverbs

| | | | |
|---|---|---|---|
| DAY | -3 | *adhyʌdhepa*<br>*addhyʌpa*<br>*ase* | three days ago<br>the day before yesterday<br>yesterday |
| | **0** | ***ai*** | **today** |
| | +4 | *setlam*<br>*citthum*<br>*sotthum*<br>*botthum* | tomorrow<br>the day after tomorrow<br>three days from now<br>four days from now |
| YEAR | -3 | *adoŋbatnʌŋ*<br>*achenbatnaŋ*<br>*atapnʌŋ/anemnʌŋ* | three years ago<br>two years ago<br>last year |
| | **0** | ***aipʌdoŋ*** | **this year** |
| | +4 | *nammʌŋ*<br>*chenmʌŋ*<br>*lenmʌŋ*<br>*donmʌŋ* | next year<br>two years ahead<br>three years ahead<br>four years ahead |
| PERIODS OF A DAY | +2 | *ramarumi*<br>*kʌsetlam* | dawn/dusk<br>morning |
| | **0** | ***kʌleda*** | **noon** |
| | -2 | *kʌnamdʌŋ/kʌnampʌk*<br>*kʌkhakhut* | evening<br>night |

Like in Indo-Aryan languages such as Nepali, a distinct use of special words for days and years in the past and the future is very wide spread in Tibeto-Burman languages, including the Kiranti sub-group. Caughley (2000) mentions special forms for eight days and years before and after the present day or year in Cepang. Puma has special terms for three days in the past and four days in the future, three years in the past and fours year in the future.

**(a) Periods of a day**

Puma specifies five periods in any given day: *rāmārumī* 'dawn' which is most probably a loan from Nepali, *kʌsetlam* 'morning', *kʌleda* 'daytime', *kʌnampʌk* 'evening' and *kʌkhakhut* 'night'. Example (30) below illustrates the uses of Puma temporal adverb

*kʌsetlam* 'morning' and *kʌkhakut* 'night'.

(30) (a) *setlam    kʌsetlam    ŋa    beltār    puŋ-ŋa*
tomorrow  morning   1SG.ABS  Beltar   go-1SG.S/P.NPST

'Tomorrow morning I go to Beltar.' (Rai et al. 2009: 14)

(b) *kʌkhakhut  ka-kima      ket-a*
night    2SG.POSS-fear   feel-PST

'You were frightened at night.' (Rai et al. 2009: 14)

## (b) Past and future days

As already presented above in Table 43, Puma has separate lexical items from three days in the past to four days in the future. Nepali has separate lexical items from three days in the past (*hijo*, *asti*, *jhanasti*) to five days in the future (*bholi*, *parsi*, *nikorsi*, *kānekorsi* and *piṭhekorsi*[13]). Turin (2012: 338) notes that with respect to these distinct lexical temporal adverbs, Nepali has more in common with many Tibeto-Burman languages than it does with its genetically close cousin languages such as Hindi, in which *kal* refers to both 'yesterday' and 'tomorrow', and *parsō* refers to both 'the day before yesterday' and 'the day after tomorrow.' Example (31) below shows the use of the adverbs illustrated in Table 47.

(31) (a) *hen setlamʌŋ  mʌjʌle-a  bas  ḍʌbʌl  paisā  it-na-nin*
now  tomorrow  nicely-ERG  FS  double  paisa  give-1SG>2-1/2PL

'Tomorrow I will give you_PL the double money.' (myth_boka: 200)

(b) *sanima-o          khʌnna    doro khan   tʌ-ŋi-yaŋ      ai*
mother's.y.sister-VOC  2SG.ABS  what curry  2-cook-IPFV   today

'Today what curry are you cooking, auntie?' (convers_01: 15)

## (c)   Past and future years

Exactly as in past and future days, Puma also is rich in the adverbs for past and future years in which a set of Puma temporal adverbs extend three years into the past and four years into the future. As can be seen from Table 47 above, there is a greater range of adverbs for expressing future years (up to four years after next) than past ones (up to three years back), which appears to be opposite to Thangmi, in which Turin (2012: 342) proposes that this is to be expected since past years have definitely occurred, while future years have an element of uncertainty about them at least in Thangmi. Perhaps this

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[13] In Nepālī Brihat Shabdakosh, 7th edition 2067 B.S, *piṭhekorsi* is not listed, however, this term is often used in author's Parbate dialect.

does not help to make generalisation in the case of Puma in this way. Example (32) illustrates the use of the adverbs of past and future years shown in Table 47.

(32) (a) *premdhoj*   *adoŋbatnʌŋ*   *khim*   *mu-a*
Premdhoj.ABS   three.years.ago   house   do-PST

'Premdhoj built houses three years ago.' (Rai et al. 2009: 4)

(b) *kipmakha-o*   *aipʌdoŋ*   *bhartī*   *puŋ-ŋa-ŋa*
soltini-VOC   this.year   recruit   go-1SG.S/P.NPST-IPFV

'*Soltini*[14], this year I am going to join the army.' (senti_song: 02)

## 2.23 Gender

Like other neighbouring Rai Kiranti languages, Bantawa (Rai 1985) and Camling (Rai 2003), Puma has no grammatical gender, and gender distinctions are commonly expressed lexically, such as *cha* 'son' and *nammet* 'daughter-in-law' which do not have the masculine and feminine suffixes. Natural gender is distinguished for human beings and some other animals such as birds and domestic animals by suffixing *-pa* for masculine and *-ma* for feminine.

The masculine suffix *-pa* is the Tibeto-Burman masculine suffix *\*pa* and the noun *\*pa* = (*p*) *wa* 'man, person, husband and father. Similarly the feminine suffix *-ma* is the Tibeto-Burman feminine suffix *\*ma* and the noun *\*ma* 'mother' (Opgenort 2004: 133). The suffixes *-pa* and *-ma* function as gender markers for male and female respectively, as in (33)-(34). These suffixes function only for some referents, e.g., ascending kin.

(33) (a) *uŋ*   *chadip-pa*
1SG.POSS   father-in-law-MASC

'My father-in-law.'

(b) *uŋ*   *chadip-ma*
1SG.POSS   mother-in-law-FEM

'My mother-in-law.'

(34) (a) *ken*   *wa-pa*
2SG.POSS   bird-MASC

'Your cock.'

(b) *ken*   *wa-ma*
2SG.POSS   bird-FEM

'Your hen.'

---

[14] Brother's wife's sister and sister's husband's sister.

### 2.23.1 Kinship terminology

Most of the Puma kin terms have the same form for reference and address. Those terms which have distinct terms for reference and address are also provided in brackets. Example (35) below provides the common ethnological abbreviations (cf. Vinding 1998: 146; Turin 2012: 132) used for indexing kinship relationships. Abbreviations are combined to indicate complex relationships.

(35)  
| | | | |
|---|---|---|---|
| M = mother | F = Father | B = Brother | Z = sister |
| S = son | D = daughter | H = husband | W = wife |
| E = spouse | G = sibling | C = child | |
| e = elder | y = younger | m = male | f = female |
| m.s = male side | f.s = female side | | |

Like Nepali and Tibeto-Burman languages, Puma diferentiates kin on the basis of generation, age within a generation, gender and in-law relationships, kin by sibling *vs.* kin by spouse. In addition to making distinctions on the basis of generation, Puma differentiates on the basis of age within generation in terms of the relative age of the kin with respect to the speaker. Table 48 below presents the Puma kinship terms.

The kinship address terms *akko* 'elder brother' and *nana* 'elder sister' are widely used as respectful terms of address for male and female strangers of around the same age of the speaker[15]. Nepali and many of the Tibeto-Burman languages of Nepal distinguish an individual's age within a generation by birth order. Nepali is rich in gendered kinship terms such as *jeṭho/ṭhūlo* 'first-born male', *jeṭhī/ṭhūlī* 'first-born female', *māhilo* 'second-born male', *māhilī* 'second-born female' *kāncho* 'fifth-born male', *kānchī* 'fifth-born female', *ṭhā̃hilo* 'seventh-born male', *ṭhā̃hilī* 'seventh-born female' and so on up to eleventh-born[16]. This system is also attested in Italian (cf. Turin 2012: 145). However, the gender principle is not strictly justified in the above Puma sibling terms. No such terminological distinction is present. Both younger brother and younger sister are classified together under the blanket term *nicha* which is indifferent as to gender.

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[15] This also holds true for Nepali, in which *dāī/ dāju* 'elder brother' and *didī* 'elder sister' are commonly used as terms of address for strangers of the same age (Turin 2012: 144).

[16] The complete list of Nepali gendered kinship forms includes: *jeṭho/ṭhūlo* 'first-born male', *jeṭhī/ṭhūlī* 'first-born female', *māhilo* 'second-born male', *māhilī* 'second-born female', *sāhī̃lo* 'third-born male', *sāhī̃lī* 'third-born female', *kāhī̃lo* 'fourth-born male', *kāhī̃lī* 'fouth-born female', *sāno kāncho* 'fifth-born male', *sānī kānchī* 'fifth-born female', *ṭhūlo kāncho* 'sixth-born male', *ṭhūlī kānchī* 'sixth-born female' *ṭhā̃hilo* 'seventh-born male', *ṭhā̃hilī* 'seventh-born female, *rāhī̃lo* 'eighth-born male', *rāhī̃lī* 'eighth-born female', *antare* 'ninth-born male', *mantare* 'tenth-born male', and *pānī jantare* 'eleventh-born male'. Note that the feminine terms for the last three are not attested in author's Parbate dialect.

**Table 48:** Kinship terms

| GENR | MASCULINE | | FEMININE | |
|---|---|---|---|---|
| | TERM | GLOSS | TERM | GLOSS |
| **G+3** | *sakudippa* | FFF, FMF, MFF, MMF | *sakudimma* | MMM, FFM, FMM, MFM |
| **G+2** | *dippa* | FF, FFB, FMB, MF, MFB, MMB | *dima* | MM, FFZ, FMZ, FM, MFZ, MMZ |
| | *sayaŋappa* | SWFF, DHFF | *sayaŋamma* | SWMM, DHMM |
| **G+1** | *papa, pa* | F | *mama, ma* | M |
| | *tuppa* | FeB, FeZH, MeZH, MBWeB | *tumma* | FeZ, MeZ, FeBW |
| | *bʌŋŋa* | FyB, MBWyB, MyZH, FyZH | *chʌnna* | FyZ, FyBW, MyZ, MyBW |
| | *dikku* | MeB | *dini* | MeBW |
| | *cʌkka* | MyB | *chʌnna* | MyBW, FyZ, FyBW, MyZ |
| | | | *māiju* | MyBW |
| | *pusʌĩ* | FyZH | *phūpu* | FyZ |
| | *sāno buwā* | MyZH | *sānimā* | MyZ, MBWyZ |
| | *ŋappa* | SWF, DHF | *ŋamma* | SWM, DHM |
| | *chadippa* | EF, EFB | *chadima* | EM, EMZ |
| **G±0** | *khimhoŋpa* | H | *khimhoŋma* | W |
| | | | *bunnima* | W (loving term) |
| | *pʌkka* | eB (reference) | *nana* | eZ, HeZ (reference) |
| | | | *bhāuju* | eBW |
| | *akko* | eB (address) | *nana* | eZ (address) |
| | *nicha* | yB (reference) | *nicha* | yZ (reference) |
| | | | *nammet* | yBW (reference) |
| | *yayo* | yB (address) | *simma* | yZ (address) |
| | *buwa* | HeB | *busunima* | HeBW |
| | *sibe* | yZH f.s. | | |
| | *mokcha* | yZH m.s | | |
| | *sālā* | WyB | *sālī* | WyZ |
| | *jethu* | WeB | *ana* | WeZ |
| | *bhenā* | eZH | *nana* | eZ |
| | *dewar* | HyB | *dewarāni* | HyBW |
| | *mokcha* | HyZH | *nanda* | HyZ |
| **G-1** | *cha* | S | *cha* | D |
| | *throŋchacha* | S | *marchacha* | D |
| | *chodumpa* | S (abusive) | *chorumma* | D (abusive) |
| | *mokcha* | DH, yZH m.s. | *nammet* | SW, yBW (reference) |
| | *hʌyakpa* | SWB, DHB | *hʌyakma* | DHZ, SWZ |
| | *chocha* | GCm | *chochoma* | GCf |
| **G-2** | *chodum* | SS | *choduma* | SD |
| | *yorumpa* | CS | *yorumma* | CD |
| **G-3** | *yorumpacha* | | | CCC |

Note that terms with gray shading in above Table refer to Nepali loans.

### 2.23.2 The morphology of Puma kinship terms

A number of Puma kinship terms yield readily to language-internal morphological analysis, where they are formed by reduplication or nearly reduplication, such as *mama* 'mother', *papa* 'father', *nana* 'elder sister', *nicha* 'younger brother or sister', *dippa* 'grandfather', *dima* 'grandmother', *tuppa* 'father's elder brother, and *tumma* 'father's elder sister'. According to Turin (2012: 145), the strategy of doubling is a common feature of kinship terminologies in many of the world's languages, including the Tibeto-Burman languages of Nepal.

The kinship terms *thoroŋchacha* 'son', *marchacha* 'daughter' are formed by indexing form of *cha* 'son/daughter, child' in which *thoroŋcha* means 'boy' and *marcha* means 'girl, woman'. Perhaps the morpheme *cha* is also attached to terms such as *mokcha* 'daughter's husband', *nicha* 'younger brother/sister', *yorumpacha* 'great grandchildren', *chadippa* 'spouse's father', and *chadima* 'spouse's mother'.

The native gendered suffix *-ma* 'FEM' and *-pa* 'MASC' are found as suffixed elements of the noun, such as *dima* 'mother's mother', *dippa* 'father's father', *tuppa* 'father's elder brother', *tumma* 'father's elder sister', *khimhoŋpa* 'husband', *khimhoŋma* 'wife', *yorumpa* 'grandson', *yorumma* 'granddaughter', *ŋappa* 'son/daughter's father-in-law', *ŋamma* 'son/daughter's mother-in-law', *chadippa* 'spouse's father', and *chadima* 'spouse's mother'.

### 2.23.3 Puma kinship terms and their Tibeto-Burman cognates

In this section we compare and contrast the Puma kinship terms with a number of cognates in Tibeto-Burman languages spoken in Nepal. We deal with the terms in Puma which have clear Tibeto-Burman cognates and subsequently a number of kinship terms that are related to Tibeto-Burman etyma. The Puma terms *ma* 'mother' and *pa* 'father' are identical to the Tibeto-Burman roots reconstructed by Benedict *ma* 'mother' (1972: 148), *pa* 'father'(1972: 19). The Puma term *cha* 'child' corresponds to the Tibeto-Burman reconstruction *tsa~*za* 'child (offspring)' (1972: 27) as well as in other Tibeto-Burman languages such as Thakali, Tamang and Gurung (cf. Sharma 2000: 16; Turin 2012: 147).

Puma *nana* 'father's elder sister' corresponds to Tibeto-Burman *ni(y)* 'father's sister' or 'mother-in-law' (Benedict 1972: 69), and also to Bantawa *nana* 'father's elder sister', Newar *nini* 'the husband's sister, father's sister', Thangmi *nini* 'father's sister,

mother's brother's wife' (Turin 2012: 147); Limbu *nyaʔ* 'cross aunt' (van Driem 1987: 483); Dumi *nini* 'paternal aunt' (van Driem 1993: 402); Yamphu *niŋi* 'mother's brother's wife' (Rutgers 1998: 560) and Kulung *ni* 'paternal aunt' (Tolsma 1999: 223).

Puma *bʌŋŋa* 'uncle' appears to be cognate to Tibetan *a-baṅ = baṅ-po* 'father's sister's husband, mother's sister's husband', Cepang *pang* 'uncle', Vayu *pong-pong* 'father's brother' and archaic Chinese *xiwaŋ*/*xiwaŋ*ˢ < *\*phwaŋ* (Davids & van Driem 1985: 136), corresponding to which Benedict (1972) posits the reconstructed Tibeto-Burman root *\*bʷaŋ ~ \*pʷaŋ* 'father's brother'.

In Puma, kinship terms are employed to address and to consanguineal and affinal relatives. Kinship terms in practice often replace an individual's given name, both as a term of address and of reference. Kinship terms are also used metaphorically as terms of address and reference for non-kin in which a person's age and social position with respect to speaker determines the choice of kinship term used. For example, an elderly woman may be addressed by a younger person as *dimo* 'grandmother (VOC)' or *nano* 'elder sister (VOC)', depending on how great she imagines the age difference to be. Such metaphorical usage of kinship terms for non-kin is widely observed in many other cultures and is certainly prominent among the peoples of Nepal (Davids & van Driem 1985: 139; Turin 2012: 148). The ordinal terms also are used by non-kin familiar with the family of the addressed. For example, the ninth-born son of family is called *ʌntʌreo* 'ninth-born male' (MAS, VOC) by the parents and the neighbours.

## 2.24  Case marking

Case markers constitute a closed class of bound morphemes. All case markers in Puma are suffixes which are used to distinguish grammatical roles (see Sections 6.2 and 3.10). When a noun is marked for non-singular, the case-marking suffix follows the number markers. In accordance with cross-linguistic patterns of the agentivity hierarchy (Payne 2008: 150–151), humans are more likely to appear for marking than animals, and animals are more likely to appear for marking than things. We assume that the subject may be absolutive, ergative, dative, possessive, genitive, or locative (see Section 7.13). In di-transitive constructions, a recipient (primary object) may be either dative or absolutive or sometimes optionally marked. A detailed analysis of object marking is described in Chapter 3.

Different affixes are added to an NP to indicate the grammatical relation of that NP, these are referred to as case markers. These types of case markers are sometimes referred to as grammatical case markers, to distinguish them from semantic case markers, which are determined on the basis of semantic roles (cf. Kroeger 2007).

In terms of case marking, the Puma language can be classified as morphologically split ergative because the case-marking on intransitive subjects is the same as that on some transitive objects, but different from that on transitive subjects, which take a unique marker. The case marker used for transitive subjects (typically the agent or experiencer) is called ᴇʀɢᴀᴛɪᴠᴇ case, while the case marker used for transitive objects and intransitive subjects is called ᴀʙsᴏʟᴜᴛɪᴠᴇ case. Note that some objects in Puma are in the ᴅᴀᴛɪᴠᴇ case:

(36) (a) *ŋa-a        marchacha-lai    khaŋ-u-ŋ*
           1SG-ERG    girl-DAT          see-3P-1SG.A

        'I saw the girl.'

        *khaŋma* 'see'      < Experiencer, Theme >
                                    |           |
        Case:                      ERG        DAT

    (b) *ŋa-a        khim        khaŋ-u-ŋ*
        1SG-ERG    house.ABS   see-3P-1SG.A

        'I saw a house.'

        *khaŋma* 'see'      < Experiencer, Theme >
                                    |           |
        Case:                      ERG        ABS

    (c) *marchacha        khap-a*
        girl.ABS          cry-PST

        'The girl cried.'

        *khapma* 'weep'    < Theme >
                                |
        Case:                  ABS

As these examples illustrate that in Puma most patients (object) of transitive clauses get the same case as subjects of intransitive clauses, namely the absolutive case, whereas agents of transitive clause take a distinct case marker *-a*. This kind of pattern is cross-linguistically the most common among case-marking languages (Kroeger 2007).

A case-marking pattern in ditransitive constructions is distinct from monotransitive constructions. A case form that is used for transitive subjects is normally

called the ergative case in (37), and a case form that is used for intransitive subjects and transitive objects is normally called the absolutive case; thus it can be said that the absolutive case as in (36b) is unmarked, whereas in (37) the secondary object (T argument) is in absolutive case as it is unmarked because a theme argument can never take case-marking.

(37) *khʌnna-a    ŋa-lai     ʌk-ta      chap-ma=pa            tʌ-itd-oŋ*
     2SG-ERG    1SG-DAT   one-CLF    write-INF=INSTR.NMLZ  2-give-1SG.S/P.PST
     'You gave me a pen.'

     *itma* 'give'      < Agent ,    Recipient,      Theme >
                            |            |              |
     Case:                 ERG          DAT            ABS

This example shows that Puma is a split object language in which theme takes absolutive case marker, whereas recipient takes dative case marker (*-lai*) (cf. Bickel et al. 2007).

## 2.25    *Grammatical case vs. semantic case*

Puma has grammatical and semantic case markers, which are normally used for arguments S, A and P, and oblique arguments and some adjuncts, respectively. In Puma, whereas some noun phrases are obligatorily marked for case, other noun phrases remain unmarked. Cases contrast with adpositions as they are bound formatives and do not govern case but rather affix to nouns that are governed (Bickel & Nichols 2007: 94). Much of the case terminology employed here is discussed in Bickel and Nichols's work on inflection (2007: 92). The Puma case suffixes are summarised in Table 49.

**Table 49:** Case markers

| Case | | | Gloss | Suffix | Function |
|---|---|---|---|---|---|
| GRAMMATICAL CASES | | | ERG | *-a* | ergative, required on the overt agent in transitive clauses and an instrumental marker introducing oblique instruments (AGT) |
| | | | DAT | *-lai* | dative, required on the primary object, and optional on the direct object |
| | | | POSS/GEN | *-bo* | possessive, case marker on the modifier of possessive constructions |
| SEMANTIC CASES | PRIMARY CASES | | GEN.LOC | *-do* | locative, required to show neutral locations |
| | | | UP.LOC | *-di* | locative, required to point up or high level |
| | | | DOWN.LOC | *-i* | locative, required to point down or low level |
| | | | LEVEL.LOC | *-ya* | locative, required to point level or across |
| | | | COM₁ | *-oŋ* | comitative: association 'with' animate |
| | | COM₂[17] | GEN | *pʌ-do* | comitative: 'with' inanimate |
| | | | UP | *pʌ-di* | |
| | | | DOWN | *pʌ-i* | |
| | | | LEVEL | *pʌ-ya* | |
| | SECONDARY CASES | | ABL | *-ʌkʌŋ* | ablative, suffixed to locatives: 'away from' |
| | | | ALL | *-tni* | allative, suffixed to locatives: 'to' or 'towards' |

## 2.26   *Grammatical cases*

### 2.26.1 Ergative and instrumental

As not only in Tibeto-Burman languages, but also in Nepali, ergative and instrumental cases are marked identically in Puma. The ergative suffix *-a* is required for all subjects of transitive clauses. Both agent and instrument arguments of transitive clauses are triggered by *-a*. Other Tibeto-Burman languages of the Kiranti sub-group such as Bantawa (Rai 1984), Athpare and Camling (Ebert 1994), are examples of languages where ergative and instrumental cases are identical. Examples (38a-b) show that ergative and instrumental are identical in Puma. Noun phrases that are marked with the ergative but do not act as the agent in a verb frame translate as instrumental modifiers.

---

[17] Comitative2 is prefixed with *pʌ-*, followed by locative suffixes (*-do*, *-di*, *-i*, *-ya*) where the location denotes the distance between speakers and hearers.

(38) (a) *enci-nicha-a*             *doro*     *junī*     *tok -i*
          1DL.INCL.POSS-y.brother-ERG what       life.ABS    get-3P
          *holā*  *bāphurā-a*
          FUT    poor.brother-ERG

          'What life did our poor brother get?' (myth_01.36)

          *tokma* 'get'       < Agent,      Theme >
                                 |         |
          Case:              ERG      ABS

     (b) *ram-a*        *lauro-a*       *ʌk-ta*     *puchap*    *set-i*
          Ram-ERG     stick-INSTR     one-CLF    snake.ABS kill-3P

          'Ram killed the snake with a stick.'

          *setma* 'kill'      < Agent,    Instrument,   Patient >
                                |         |         |
          Case:              ERG      INSTR    ABS

Note that in (38a) *bāphurā* is loaned from Nepali *baburo* 'wretched; poor' with the same Nepali meaning, but in different phonological form.

### 2.26.2 Dative

Though a dative subject construction is found in a wide variety of the world's languages, they are found cross-linguistically and it seems to be especially characteristic of South Asian languages (Verma & Mohanan 1990; Kroeger 2004). It is also common in Puma. As in other South Asian languages, direct objects take dative case only if they are animate. Inanimate objects remain unmarked (i.e. appear in the absolutive form) (cf. Sharma 2005).

In Puma the dative subject constructions express a notion of receiving or accepting and are marked by *-lai*. This marker *-lai* is borrowed from Nepali dative marker *-lāī* (see also Ebert 1994; Bickel et al. 2007). Thangmi, a Tibeto-Burman language spoken in Nepal, has also an obligatory *-kăi ~ -găi* marker for dative (Turin 2012: 268) in which, as in Puma, animate direct objects take the marker *-kăi ~ -găi* and inanimate direct objects are unmarked. Thangmi *kăi ~ -găi* patient marker and Nepali *-lāī* are similar in both form and function (Turin 2012: 271). However, the distribution of dative case-marking in Puma is different from that of Nepali.

Givón (2001: 212) notes that in Nepali semantically-dative subjects may take either an ergative or a dative marking, depending on whether the mental activity is intended or not. However, Puma does not allow alternate coding patterns as in Nepali,

because in Puma dative subject constructions are triggered by possessive/genitive marking (see Section 2.26.3). Rather it is interesting to note that dative marking for human patient (P) and goal (G) arguments is alike both in Nepali and Puma, where G arguments always receive the dative case marker and theme (T) arguments always remain in the absolutive, even when they are human arguments, as in:

(39) NEPALI

    (a) *mai-le*     *nīrmāyā-lāī*    *bheṭ-ẽ*
         1SG-ERG    Nirmaya-DAT    meet-1SG.PST

         'I met Nirmaya.'

    (b) *mai-le*     *celī*
         1SG-ERG    marriageable.female.clan.relative.ABS
         *wahā̃-haru-lāī*  *di-ẽ*
         3HON-PL-DAT    give-1SG.PST

         'I gave them a *celī* (in marriage).' (Pokharel 2054; cited in Bickel 2011b: 5)

(40) PUMA

    (a) *ŋa-a*     *nirmaya-lai*    *tup-u-ŋ*
         1SG-ERG    Nirmaya-DAT    meet-3P-1SG.A.PST

         'I met Nirmaya.'

    (b) *ŋa-a*     *chetkuma*                 *khokkuci-lai*
         1SG-ERG    marriageable.female.clan.relative.ABS    3PL-DAT
         *itd-u-ŋ*
         give-3P-1SG.A.PST

         'I gave them a clan sister.'

Note that dative marking which is a loan from Nepali is one of the defining characteristics of Puma because the dative marker *-lai* is obligatory for marking animate P and G arguments. Unlike Kiranti languages such as Bantawa and Camling, where dative marking is optional though it is also borrowed from Nepali, we argue that Puma consistently distinguishes animate arguments from inanimate and indefinite arguments, while it is optional in closely related neighbouring languages, as they constantly do not make distinction between animate arguments and inanimate arguments. In consequence, it appears that the loan dative marker becomes obligatory in Puma, while it is optional in other neighbouring languages. Here are more examples, where human P arguments take obligatorily a dative case, as in (41), but in general it is optional, as in (42) with animate P arguments, and inanimate P arguments are not marked, as in (43), unless they are specific (cf. see section 3.10 for a detailed information on object marking).

(41) (a) *ʌkku      beulī-\*(lai)      pʌ-itd-u-m-min=ni      mʌ-rʌŋ*
        DEM      bride-DAT      NEG-give-3P-1/2PL-NEG=REP 3PL-say

        'It is said not to give to bride.' (coribiha.008)

    (b) *ŋa-lai      khokku-a      pempak      pʌ-hud-oŋ-itd-oŋ*
        1SG-DAT      she-ERG      bread.ABS      3S/A-buy-1SG.S/P.PST-TEL-1SG.S/P.PST

        'She bought the bread to me.'

(42) (a) *ka-pʌkka-a      munima-lai      tʌ-khaŋ-nin*
        2SG.POSS-elder.brother-ERG  cat-DAT      2-see-NEG

        'Your brother does not see the cat.'

    (b) *khokku-a      cabha-(lai)      cutt-i*
        3SG-ERG      tiger-DAT      tease-3P

        'S/he teased a/the tiger.'

(43) (a) *khokku-a      kitāp      khaŋ-i*
        she-ERG      book.ABS      3SG-P

        'She saw a book.'

    (b) *ŋa-a      luŋwa      lupd-u-ŋ*
        1SG-ERG      stone.ABS      touch-3P-1SG.A

        'I touched a stone.'

In Puma inanimate P arguments of transitive clauses and S arguments of intransitive clauses both take the absolutive case, but P arguments can take DAT for higher animacy, as shown in (41)-(42). Doornenbal (2009) argues that in Bantawa, under the influence of the national language Nepali, one occasionally finds a dative marker *-lai* (DAT), from Nepali *-lai*, on recipient participants. It is quite true that even in Nepali, not all object participants are equally eligible for marking with this case, as it is primarily used for animate recipients. The dative suffix *-lai* is obligatorily found on G arguments of ditransitive clauses, regardless of animacy, as in:

(44) (a) *narayan-a      iskulʌ-lai      khawa      itd-i*
        Narayan-ERG      school-DAT      money.ABS      give-3P

        'Narayan gave the money to the school.'

    (b) *narayan-a      yoŋni-lai      kʌ-nicha      itd-i*
        Narayan-ERG      friend-DAT      3SG.POSS-y.sister.ABS  give-3P

        'Narayan gave his younger sister to the friend (in marriage).'

### 2.26.3 Possessive/genitive

The genitive suffix *-bo* is required to express possession or a relationship between the head noun and some other word (modifiers) in the noun phrase. In Puma, the general syntax of a genitive construction is not very complicated, as in the possessive

construction. Two noun phrases may be related by marking the first with the genitive (see also Puma pronouns in section 2.19.1). However, if NP<sub>POSS</sub> is a 'headless' possessor, e.g. 'that is mine', then the obligatory possessed NP becomes optional.

**Figure 13:** Possessive construction

```
                              NP
          _____|_____
         |                   |                  |
   NP MODIFIER          POSS MARKER          NP HEAD
         |                   |                  |
   MODIFIER GEN              |                  |
         |                   |                  |
      [uŋ-bo]             [uŋ-               khim]
   1SG.POSS-GEN          1SG.POSS-          house.ABS
      'My house.'
```
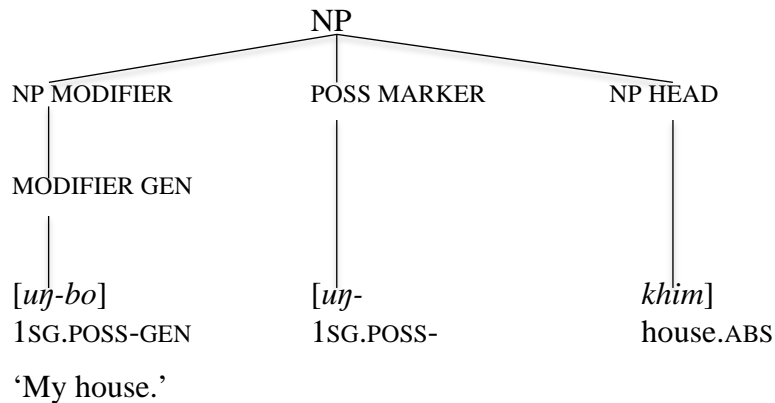
*2.27    Semantic cases*

There are cases that do not mark governed participants in the sentence structure, but rather are used to form adpositional phrases that are used for a wide range of syntactic and semantic functions. These non-structural cases include the locatives as well as allative and ablative. Allative and ablative are marked for locative. What is crucial here is that ablative and allative case marking is double case affixation as they attach only after locative case endings. Puma has interesting types of comitatives different from other Kiranti languages.

Locatives, comitatives and all nominal morphology derived from these are different from other cases in that they are not selected for structural reasons, however they can still be considered *cases* in that (a) they are formatives, i.e. bound morphemes, (b) they are categorically restricted to nominals, and (c) never govern case on the nominal they suffix to (Bickel & Nichols 2007: 94).

**2.27.1 Locative**

There are four types of special locative markers to denote locations in Puma. One of the locatives is neutral or general with regard to vertical level, and the other three index the vertical level of the object referred to. The four-way vertical deictic system affects all grammatical categories like demonstratives, as well as deictic verbs '*come*' and '*go*', and likewise their adverbial expressions of location, direction, etc. The vertical level system is also a defining typological feature of the Kiranti languages of Nepal

(Doornenbal 2009). In neighbouring Indo-Aryan languages like Nepali, the same meanings of direction and movement can be expressed, but the vertical factor has not been grammaticalised to the complete degree as it has in Kiranti languages. Locative markers specify neutral (general), higher, lower, and same-level (parallel), related to the place where the speaker is located:

(45)  (a)    *khim-do*<sub>GENERAL</sub>    'at the house'

    (b)    *khim-ya*<sub>LEVEL</sub>    'at the house'

    (c)    *khim-di*<sub>UP</sub>    'at the house'

    (d)    *khim-i*<sub>DOWN</sub>    'at the house'

The point of reference of this vertical level is the speaker, a directly quoted speaker in a narrative, or, at least, a mutually understood location of reference. The locative expresses location at a place or identifies the location or spatial orientation of the state or action identified by the verb. The locative marker *-do* specifies neutral or general level, *-ya* parallel or same level, *-di* higher level, and *-i* lower level locations.

In Kiranti languages, another eye-catching facet to keep in mind is the correlation of high level with the northern, more hilly and mountainous regions, and even where in fact the altitude may be lower; and likewise the low level plain region with the southern region. As a consequence, in Puma, north is normally considered as up, and south as down while east and west are considered as across or level. North and south are rather perceived as the main directions. The locatives are selected on the basis of the reference point of the speaker, as in (46a-b), and these locatives may appear as oblique adjuncts. The speaker is assumed at a lower place than the addressee in (46a), whereas s/he is higher in (46b).

(46)  (a)    *ŋa*    *bakkha-i*    *dha-a=ku*    *pʌ-ca-nʌŋ*
        1SG.ABS    floor-DOWN.LOC  fall.off-PST=NMLZ  NEG-eat-1SG.NEG

        'I do not eat things that have fallen on the ground.' (folk_tale_01.084)

    (b)    *khim-di*    *mʌ-puks-a*    *jʌmmʌi*
        house-UP.LOC    3PL.S/A-go-PST    all

        'All went home.' (convers_01.013.a)

However, sometimes location is zero-marked, i.e. has no overt marker of its own. Zero-marking is sometimes context-specific; as in Belhare (Bickel & Nichols 2007), the Puma locative case is regularly marked by the suffix *-do,* e.g. *khim-do* 'at/to/on/in the house', but a few location-denoting nouns such as place names or words like *khim*

'house/home' or *gāũ* 'village' have zero-marked locatives if (and only if) they function as the goal of a verb of directed motion (Bickel & Nichols 2007). The location-denoting nouns such as 'school' have the same kind of zero marking in Indonesian languages (Peter Austin, p.c.).

(47)  (a)  (*ŋa*)  *khim*  *puks-oŋ*
          1SG.ABS  house.ABS  go-1SG.S/P.PST

          'I went to the house.'

      (b)  (*ŋa*)  *khim-do*  *yokd-oŋ*
          1SG.ABS  house.ABS-GEN.LOC  stay-1SG.S/P.PST

          'I stayed in the house.'

In (47a), the location *khim* is unmarked because it serves as the goal of the verb. In (47b), locative case must be marked, in contrast, because the place name is in an adjunct to a stative predicate.

## 2.27.2 Ablative

The ablative expresses the notion 'out of' or 'away from' the place from which something moves. It indicates a movement away from the reference point. In Puma, the ablative is always stacked on a locative and cannot be affixed straight to a noun root. As location is specified for vertical level by necessity, the ablative forms of a noun always specify the vertical level of location source. The ablative suffix *-ŋkʌŋ* affixes to either the lower-level locative *-i*, same-level locative *-ya*, the higher-level locative *-di* or the neutral locative *-do*. Note that this ablative suffix attaches to only neutral or general locative with WH-word, as in the first part of (48a).

(48)  (a)  *khado-ŋkʌŋ*  *dāju*  *khim-di-ŋkʌŋ*
          where.GEN.LOC-ABL  elder.brother.ABS  house-UP.LOC-ABL

          'Elder Brother! from where?, from the house?' (convers_01: 002.a)

      (b)  *kʌ-busit-ya-ŋkʌŋ*  *kʌ-laiṭ*  *metdʌŋ*
          3SG.POSS-in.front-LEVEL.LOC-ABL  3SG.POSS-light  NEG.EXIST.NPST

          'There is no light from its (tank) front.' (LH_M_01: 669)

Example (48a) is the most straightforward use of the ablative *-ŋkʌŋ* simply indicating physical location from where the referent is coming. In the first part of the example, the ablative marker has been used to specify movement without notifying locative direction whereas in the second part, the speaker and the addressee are at the same location and the location of the house is higher from where they are talking at that moment. As

illustrated in the example, the relative level or direction of the house where the elder brother comes from is necessarily specified.

### 2.27.3 Allative

The allative expresses a notion of 'to' or 'towards' a place. It indicates movement towards a location. The allative cannot affix to a noun root, but requires locative marking on the noun first where it obligatorily follows a locative suffix. Thus, the allative suffix *-tni* affixes to either the lower-level locative *-i*, same-level locative *-ya*, the higher-level locative *-di* or the neutral locative *-do*.

(49) (a)    *toŋwama*      *pūrba-ya-tni*        *puks-a*    *rʌchʌ*
         Tongwama.ABS   east-LEVEL-ALL      go-PST      MIR

         'Tongwama went towards the east.' (myth_orph_01: 046)

    (b)    *khim-di-tni*        *puks-a=ni*      *pʌ-lid-oŋ*
         house-UP.LOC-ALL     go-IMP=REP     3S/A-tell-1SG.S/P.PST

         '(He) told me to go home.' (LH_M_01: 150)

As in Puma east and west are considered as the same level or parallel place. (49a) is a good example of using *-yatni* (same level) to refer an eastern direction.

### 2.27.4 Comitative

### (a) Comitative I

The comitative denotes association and can be translated as 'with'. In comitative I, only animates are marked by *-oŋ*.

(50)(a)    *dem=ku*      *bʌrsʌ-do*      *uŋ-dipa-oŋ*          *bihā*
         which=NMLZ    year-GEN.LOC    1SG.POSS-grandfather-COM$_1$   marriage
         *tʌ-mu-a-ci*      *tʌllʌ*
         2-do-PST-DL      PTCL

         'On which year did you marry my grandfather?' (tikamaya:08)

    (b)    *ŋa-oŋ*      *hoŋma*       *yuŋyaŋ*
         1SG-COM$_1$   queen.ABS      EXIST.NPST

         'I have the queen.'

In (50a) some kind of association is established with *dipa* 'grandfather' but in (50b) *hoŋma* 'queen' must be there with the speaker at the time of speaking.

### (b) Comitative II

A kind of case is found in Puma but no other Kiranti Languages which denote both possession of something and contact with someone but the person and thing must not be

present with the speaker at the time of speaking. Here the comitative affix *-pʌ-* is affixed with a locative case related to the place where the speaker is. So the comitative suffix is attached with a locative to specify neutral-locative, parallel-locative, higher-locative, and lower-locative.

(51)  (a)  *tonpʌŋ       hekchakupa-a         cha        khiwama-pʌ-ya*
           then.after   Hekchakupa-ERG      ADD       Khiwama-COM$_2$-LEVEL
           *pukd-i=ni*
           took-3P=REP

           'Then after, Hekchakupa also took something to cook with Khiwama.'

           (folk_tale_01.018)

      (b)  *ŋa-pʌ-ya/-di/-i/do*                                    *hoŋma        yuŋ-yaŋ*
           1SG-COM$_2$-ACROSS/UP.LOC/DOWN.LOC/GEN.LOC        queen.ABS   be-IPFV

           'I have the queen.'

In (51a) the marker *-pʌ-ya* shows some kind of possessive relationship. Similarly *-pʌ-do*, *-pʌ-di* and *-pʌ-i* can also be used instead depending upon location and context. In (51b) there is contact between the speaker and the queen but queen must not be there at the time of speaking. Thus, the comitative$_2$ actually means 'with something'.

# (II)   Verbal morphology

## 2.28    The verb

In this section I discuss person and number affixes, upside down ergativity, and stem classes. In Puma, verbs are inflected for tense, aspect, person and number. Some verbs undergo certain changes and only then are inflected for tense and aspect whereas some verbs remain unchanged.

## 2.29    Upside-down ergativity

A striking feature of Puma verb agreement is upside-down split ergativity (cf. Bickel et al. 2005) in which intransitive subjects are marked in the same way as transitive objects with the first person singular and plural, whereas transitive subjects are marked in the same way as intransitive subjects but differently from transitive objects with the third person. The second person and all duals do not distinguish grammatical roles in their verb agreement forms. Table 50 presents a simplified overview of alignment of agreement in Puma, following Bickel et al. (2005). First person singular and plural A arguments of transitive verbs are marked with the ergative case, while third person singular and plural P arguments of transitive verbs are marked, in contrast, third person

singular and plural A arguments of transitive verbs are unmarked, as shown in Table (50) which is exemplified in Table (51).

**Table 50:** Alignment in agreement

| PERSONS | A | | S | P |
|---|---|---|---|---|
| 1SG | *-ŋ* (>3)/*-na* (>2) | | *-ŋa* (NPST)/*-oŋ* (PST) | |
| 1DL | *-ci~-cʌ* *ni- -ci ~ -cʌ* (>2) | | | |
| 1PL | *-m* (>3) | | *-i~ni(n)~nʌ* | |
| 2 | *tʌ-* | | | |
| 3SG | *pʌ-* | | | *-u~-i* |
| 3DL | *pʌ- -ci~-cʌ* | | | |
| 3PL | *mʌ- ~pʌ*(>3SG) */ni-pʌ-*(>1SG) */ni- -nin* | | | *-ci* |

The point here is that contrary to Silverstein (1976) and all subsequent literature, the nature of ergative and accusative is the opposite of other cross-linguistically observed systems, as presented in Table 51.

**Table 51:** Ergative and accusative alignment



As can be seen from Table 51 verbal agreement shows a split alignment in Puma. The following examples show split agreement:

(52) (a)  **ŋa-a**      *khokku-lai*      *cetdh-u-***ŋ**
       1SG-ERG    3SG-DAT       hit-3P-1SG.A

       'I hit him/her.'

  (b)  *khokku-a*  **ŋa-lai**    *pʌ-cet-***ŋa**
       3SG-ERG    1SG-DAT    3S/A-hit-1SG.S/P.NPST

       'He hits me.'

  (c)  **ŋa**      *ciṭhī*      *chap-***ŋa**
       1SG.ABS    letter.ABS   write-1SG.S/P.NPST
       'I write letters.'

  (d)  **ŋa**      *puŋ-***ŋa**
       1SG.ABS    go-1SG.S/P.NPST
       'I go.'

(53) (a) *khokku-a   khokku-lai cetdh-i*
       3SG-ERG   3SG-DAT    hit-3P

      'He hits him/her.'

    (b) *khokku     ciṭhī     chap*
       3SG.ABS   letter.ABS  write[3SG.NPST]

      'He writes letters.'

    (c) *khokku    puŋ*
       3SG.ABS   go[3SG.NPST]

      'He goes.'

The first person *ŋa* 'I' as the A as in (52a) is marked differently and the A argument has a different morpheme *-ŋ*. However, the first person *ŋa* 'I' as the P argument, as in (52b) and as the S argument, as in (52c) and (52d), is marked in the same way, which has a morpheme *-ŋa*. Compared with the first person, the verbal agreement in the third person is different. The second person does not mark any plurals nor duals. The third person *khokku* 's/he' is the A argument in (52b) where the verb *cet* 'hit' takes the prefix *pʌ-* that indicates a 3SG agent, whereas the A, as in (53a), and as the S in (53b) and (53c) is unmarked. In (52a) and (53a) the third person *khokku* 's/he' is the P argument and the morphemes *-u* and *-i* which are morphologically conditioned[18], occur on the verb (cf. Section 2.32.3).

## 2.30   *Person and number affixes*

Kiranti languages are typically characterised by person and number agreement systems with one or two arguments which even by Tibeto-Burman standards may be seen as complex. Conjugations of Kiranti verbs often have two or three prefixal slots and up to eight suffixal slots, and person-number agreement is frequently encoded through portmanteau morphemes or even tensed portmanteau morphemes, especially when involving a first person singular A arguments (van Driem 1990; 1991). In Puma there are three prefix and eight suffix positions, but the suffixes may appear recursively in a form. Affixes express various tense, aspect, mood, and S, A and P arguments as well. Table 48 summarises a morpheme analysis which is modified and updated version of Stutz (2005) and position classes are based exclusively on formal co-occurrence and sequencing constraints (cf. Bickel et al. 2007).

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[18] 3P *-u* occurs with 1st singular and plural acting on 3rd persons and 3P *-i* occurs with 3rd persons acting on 3rd persons.

**Table 52:** Morpheme analysis

| | | | |
|---|---|---|---|
| **PREFIXES** | 1 | *kha*[19]- | 1NS.P; ANTIP |
| | 2 | *ni-* | NS.S/A |
| | 3 | *pʌ*[20]- | NEG or 3S/A |
| | | *tʌ*[21]- | 2 |
| | | *mʌ-* | 3PL.S/A |
| | | *men-* | NEG.IMP |
| **STEM** | | | |
| **SUFFIXES** | 1 | *-a* | PST; IMP |
| | | *-ŋa* | 1SG.S/P.NPST |
| | | *-oŋ* | 1SG.S/P.PST |
| | | *-nʌŋ* | 1SG.NEG |
| | | *-u~ -i~ -o~ -a* | 3P |
| | | *-caŋ* | DL.IPFV |
| | | *-aŋ* | 1/2PL.IPFV |
| | 2 | *-ŋ* | 1SG.A |
| | | *-na* | 1SG>2 |
| | | *-i* | 1/2PL; IMP |
| | | | ~ *-nʌ* (_N) |
| | | | ~ *-nin* (V_) |
| | | | ~ *-ni* (V_N) |
| | | | ~ *-e* (after high V) or 'NS' (in 1SG>2 forms) *-ci* |
| | | | ~ *-cʌ* (_N) DL |
| | | *-naŋ* | 1SG>2.IPFV |
| | | *-nʌŋ* | 1SG.NEG |
| | | *-ŋa* | 1SG.NPST.IPFV; 2/3SG.PST.IPFV |
| | | *-yaŋ* | IPFV |
| | 3 | *-nin* | NEG (if directly after the stem) |
| | | | ~ *-in* (after *a*) |
| | | | ~ *-n* (after other vowels) |
| | | | ~ *-mʌ* (in 1SG.P forms) |
| | | *-m* | 1/2PL.A |
| | 4 | *-yam* | 1/2PL.IPFV |
| | | *-yen* | NEG.IPFV |
| | | *-mʌŋ* | 1SG.P.NEG |
| | 5 | *-ci* | 3NS.P |
| | | | ~ *-cʌ* (_N) |
| | | | ~ *-cin* (after *-in* 'NEG') |
| | 6 | *-ŋ* | 1SG (copy suffix triggered by *ʌ/a*-suffixes) |
| | | *-m* | 1PL.A (copy suffix triggered by *ʌ/a*-suffixes) |
| | 7 | *-min* | DL/PL.NEG |
| | 8 | *-ka* | EXCL[22] |

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[19] *Kha-ni-pʌ-cin-nin*   'We_PL did not teach them_PL.'
[20] *Kha-pʌ-cin-ci*   'They_DL teach us_DL/PL.INCL.'
[21] *Kha-tʌ-cind-i*   'You_PL teach us_DL/PL.EXCL.'
[22] *Pʌ-tup-u-u-m-yam-cʌ-m-min-ka*   'We_PL.EXCL were not teaching them_NS.'

As shown in Table 52 the prefix *kha-* is used to mark non-enumerable objects in antipassive constructions. An antipassive construction is a derived detransitivised construction with a transitive verb where P argument is either suppressed or realised as an oblique complement (cf. Silverstein 1972; Polinsky 2011).

The same antipassive prefix *kha-* has also made its way into the agreement paradigm, (see Section 3.17.2) where it marks forms with a first person non-singular patient (Bickel et al. 2005; Bickel et al. 2007). Consider the following examples where the possible affix positions are filled:

(54)  (a)  *khʌnna*        *kha-tʌ-en-a*
           2SG.ABS        ANTIP-2-listen-PST

           'You$_{SG}$ listened (to people).'

      (b)  *khoci-a*        *ŋa-lai*        *ni-pʌ-mit-ŋa*
           3NS-ERG        1SG-DAT        NS.S/A-3S/A-remember-1SG.S/P.NPST

           'They$_{PL}$ remember me.'

      (c)  *pʌ-cind-u-u-m-yam-cʌ-m-min-ka*          (1PL.EXCL>3NS)
           NEG-teach-3P-PST-1/2PL.A-1/2PL.IPFV-3NS.P-1/2PL.A-NEG-EXCL

           '(We$_{PL.EXCL}$) were not teaching them$_{NS}$.'

## 2.31   Puma verb and the Proto-Kiranti verbal agreement system

Languages differ considerably with respect to the conditions under which they display verbal person marking. Kiranti languages like Puma are typically characterised by complex verbal agreement system, where verbal person marking is obligatory and both A and P arguments are triggered. Like most other Kiranti languages, Puma distinguishes eleven pronominal categories (see Section 2.19).

Previous comparisons of Kiranti verbal agreement systems (van Driem 1991) display the conjugations of Kiranti verbs to reflect a split-ergative system in which third person A arguments are triggered differently in the verb than are first and second person A arguments. In Kiranti languages the person marking of first and second person A arguments follows an ergative pattern and the marking of third person A arguments in the verb follows an accusative pattern (van Driem 1991: 345) in which separate sets of morphemes index for a third person patient (3P) as opposed to a third person S or A arguments (3S/A). It is worthy to note that Thangmi, a Tibeto-Burman language spoken in Nepal, whose genetic affiliation is unclear (between Newar and Kiranti), exhibits the Kiranti split-ergativity model in structure while it differs in the specifics in which only

the first person is indexed ergatively and second and third persons show the accusative pattern (Turin 1998: 485). Contrary to this, Puma exhibits upside down ergativity (see Section 2.29) in which S arguments are indexed in the same way as P arguments with the first person singular and plural, while A arguments are indexed in the same way as S arguments but differently from P arguments with the third person.

The Proto-Kiranti verb model is developed by the previous comparisons of the conjugational morphology of Bahing, Kulung, Thulung, Lohorung, Limbu, Dumi and Hayu verbs. The Proto-Kiranti model, proposed in (van Driem 1991: 354), is presented in Table 53.

**Table 53:** The Proto-Kiranti verbal agreement system

| | | | | -ŋa 1SG/NPST | | | | | -k 1PL |
|---|---|---|---|---|---|---|---|---|---|
| | | | -k NPST | -aŋ 1SG/PST | -ci 1/2DL.S/P | -ŋ 1SG.A | | -ni 2PL | -ya EXCL |
| me- 3PL.A | Σ STEM | -nši REFL | +AUX$_1$ | | | | +AUX$_2$ | | |
| | | | -tɛ PST | -na 2 | -ci DL.(S)A | -u 3P | | -m 1/2PL.A | -i INCL |
| | | | | -nya 1SG → 2 | | | | | -ci 3DL.P |

The modern reflexes of the Kiranti third person plural agent ***me-*** are prefixes in those languages which have prefixes and are suffixes in languages which lack prefixes, other than a prefix of negation (van Driem 1991: 347). As the morphological analysis of Puma verbal agreement affixes demonstrates, the Puma third person plural *mʌ-* marks the plurality of both third person S and A arguments. We discuss morphemes in Puma which have clear Proto-Kiranti cognates. Tables 54 to 58 show Puma reflexes which are identical to their Proto-Kiranti cognates.

**Table 54**: Reflexes of the Proto-Kiranti affix *me-*

| Proto-Kiranti | *me- | 3PL | *pf.2 |
|---|---|---|---|
| Limbu | *mɛ-* | NS.S/A | pf.1 |
| Hayu | *-me* | 3PL | sf.3 |
| Thulung | *-mi* | 3PL → 3 | sf.2 |
| Lohorung | *-mi* | 3PL | sf.3 |
| Bahing | *-me* | 3PL → 3/3PL.S | sf.3 |
| | *-m* | 3PL.S/A | sf.3 |
| **Puma** | **mʌ-** | **3PL.S/A** | **pf.3** |

Plural number of a first or second person A argument is indexed by the cognate suffix **\*-m**. Note that the Puma plural agent morpheme *-m* triggers the plural of first and second person A arguments only.

**Table 55**: Reflexes of the Proto-Kiranti first or second person suffix *-m*

| Proto-Kiranti | *-m* | 1/2PL | *sf.6 |
|---|---|---|---|
| Limbu | -mʔna | 1PL.EXCL.S/A.PST | sf.7 |
| | -m | PL.A | sf.7 |
| Kulung | -am | 1PL → 3 | sf.5 |
| | -m | 2PL → 3 | sf.5 |
| Thulung | -mi | PL | sf.8 |
| Lohorung | -m | 1PL.EXCL.S/A; 2PL→3 | sf.5 |
| Bahing | -mi | 3PL/1PL.EXCL | sf.3 |
| **Puma** | **-m** | **1/2PL.A** | **sf.3** |

Some of the reflexes of the Proto-Kiranti first and second person dual morpheme **\*-ci** are listed in Table 56, reflexes of the Proto-Kiranti third person agent morpheme **\*-ci** are provided in Table 57, and reflexes of the Proto-Kiranti third person patient (3P) morpheme **\*-u** are given in Table 58 (cf. Turin 1998: 487).

**Table 56**: Reflexes of the Proto-Kiranti second person dual suffix **\*-ci**

| Proto-Kiranti | *-ci* | 1/2DL | *sf.4 |
|---|---|---|---|
| Limbu | -si, -tchi | DL.S/P | sf.4 |
| Kulung | -ci | 1/2DL | sf.3 |
| Thulung | -ci | DL | sf.4 |
| Lohorung | -ci | DL | sf.3 |
| Bahing | -si | DL.S/P | sf.4 |
| | -sa | 1DL.INCL | sf.4 |
| | -su | 1DL.EXCL | sf.5 |
| **Puma** | **-ci** | **DL** | **sf.2** |

**Table 57**: Reflexes of the Proto-Kiranti third person morpheme **\*-ci**

| Proto-Kiranti | *-ci* | 3DL.A | *sf.4 |
|---|---|---|---|
| Limbu | -si | NS.S/P | sf.8 |
| Kulung | -ci | 3PL | sf.5 |
| Thulung | -ci | 3DL.P | sf.8 |
| Lohorung | -ci | NS.P | sf.6 |
| Bahing | -si | DL.P | sf.8 |
| **Puma** | **-ci** | **3NS.P** | **sf.5** |

**Table 58:** Reflexes of the Proto-Kiranti third person morpheme *-u*

| Proto-Kiranti | *-u | 3P | *sf.5 |
|---|---|---|---|
| Limbu | -u | 3PL | sf.4 |
| Thulung | -u | 1EXCL → 3.NPST | sf.7 |
| Lohorung | -u | 3P | sf.4 |
| Thangmi | -u | 3P | sf.3 |
| Kulung | -o~-ə~-u | 3P | sf.4 |
| **Puma** | **-u~-i~-a~-o** | **3P** | **sf.1** |

Tables 59 to 61 show reflexes of the Proto-Kiranti first person morpheme **-ŋa**, first person agent morpheme **-ŋ**, first person tense morpheme **-aŋ**.

**Table 59:** Reflexes of the Proto-Kiranti first person non-past morpheme *-ŋa*

| Proto-Kiranti | *-ŋa | 1SG.NPST | sf.3 |
|---|---|---|---|
| Dumi | -ŋ | 1SG | sf.2 |
| Hayu | -ŋo | 1SG.S/P.NPST | sf.2 |
| Thulung | -ŋi | 1SG/P | sf.1 |
| Lohorung | -ŋa | 1SG | sf.2 |
| **Puma** | **-ŋa** | **1SG.S/P.NPST** | **sf.1** |

**Table 60:** Reflexes of the Proto-Kiranti first person past morpheme *-aŋ*

| Proto-Kiranti | *-aŋ | 1SG.PST | *sf.3 |
|---|---|---|---|
| Limbu | -aŋ | 1SG.S/P.PST | sf.4 |
| Lohorung | -iŋ | 1SG.S/P.PST | sf.2 |
| Thangmi | -ŋa | 1SG | sf.5 |
| **Puma** | **-oŋ** | **1SG.S/P.PST** | **sf.1** |

**Table 61:** Reflexes of the Proto-Kiranti first person agent morpheme *-ŋ*

| Proto-Kiranti | *-ŋ | 1SG.A | *sf.5 |
|---|---|---|---|
| Limbu | -ŋ | 1SG.A | sf.5 |
| Hayu | -ŋ~-N~-soŋ | 1SG.A | sf.3 |
| Lohorung | -n | 1SG.A | sf.5 |
| **Puma** | **-ŋ** | **1SG.A** | **sf.1** |

Reflexes of the Proto-Kiranti first person plural morpheme **-k** are presented in Table 62.

**Table 62:** Reflexes of the Proto-Kiranti first person plural morpheme *-*k*

| Proto-Kiranti | *-k | 1PL | sf.2 |
|---|---|---|---|
| Dumi | -k | 1PL | sf.2 |
| Kulung | -ka | EXCL | sf.6 |
| Thulung | -ki | EXCL | sf.6 |
| Bahing | -k | 1PL.EXCL | sf.8 |
| | -ka~-ko~-ku | 1EXCL.S/A | sf.5 |
| Lohorung | -ka | EXCL | sf.8 |
| **Puma** | **-ka** | **EXCL** | **sf.8** |

The Puma first person singular non-past morpheme *-ŋa*, dual suffix *-ci*, third person non-singular suffix *-ci*, first person agent morpheme *-ŋ* and third person patient morpheme *-u* are identical with the Proto-Kiranti morphemes. The Puma first/second person plural morpheme *-mʌ*, first person past morpheme *-oŋ* and first person exclusive morpheme *-ka* are cognate with the Proto-Kiranti reflexes. Conjugations of Kiranti languages, when systematically compared with similar conjugations in Tibeto-Burman languages beyond the Kiranti, may be shown to be retentions of an archaic Tibeto-Burman verbal agreement pattern (van Driem 1991: 355). It is observed that in Kiranti languages, as well as in the Tibeto-Burman languages in general, the presence of a velar nasal /ŋ/ indicates the involvement of a first person singular agent (Turin 1998: 487).

## 2.32    Person affixes

### 2.32.1 First person

In Puma, the involvement of a first person singular is always expressed overtly. *-ŋa* and *-oŋ* occur on a verb to mark the subject of an intransitive verb and the object of a transitive verb in the non-past and past tense respectively, while *-ŋ* appears on a verb to mark a first person transitive subject in both tenses.

**(a)    First person non-past suffix -*ŋa***

MORPHEME        *-ŋa*

GLOSS        1SG.S/P.NPST

The suffix *-ŋa* is a portmanteau containing the meaning of non-past tense and first person singular, as in:

(55)   (a)    FIRST PERSON S ARGUMENT

ŋa        ri-**ŋa**
1SG.ABS    laugh-1SG.S/P.NPST
'I laugh.'

(b)    FIRST PERSON P ARGUMENT

*khʌnna-a    ŋa-lai    tʌ-cet-**ŋa***
2SG-ERG    1SG-DAT    2-hit-1SG.S/P.NPST

'You<sub>SG</sub> hit me.'

## (b)    First person past suffix -*oŋ*

| MORPHEME | -*oŋ* |
|---|---|
| GLOSS | 1SG.S/P.PST |

This portmanteau suffix is the past counterpart of -*ŋa* marking a first person singular subject or patient in the past tense, as presented in:

(56)  (a)    *ŋa        ri-**oŋ***
             1SG.ABS    laugh-1SG.S/P.PST

             'I laughed.'

      (b)    *khʌnna-a    ŋa-lai    tʌ-cet-**oŋ***
             2SG-ERG    1SG-DAT    2-hit-1SG.S/P.PST

             'You<sub>SG</sub> hit me.'

## (c)    First person agent suffix -*ŋ*

| MORPHEME | -*ŋ* |
|---|---|
| GLOSS | 1SG.A |

This suffix occurs when a first person singular agent acts on third person patient (1SG>3) in the non-past and past tense. It occurs only after the third person patient morpheme <-u ~ -i ~ -a ~ -o>.

(57)  FIRST PERSON A ARGUMENT

*ŋa-a        khokku-lai    cetdh-u-**ŋ***
1SG-ERG    3SG-DAT        hit-3P-1SG.A

'I hit him.'

### 2.32.2 Second person

## (a)    Second person prefix *tʌ-*

| MORPHEME | *tʌ-* |
|---|---|
| GLOSS | 2 |

The prefix *tʌ-* occurs independently with a second person of number and tense. *Tʌ-* takes precedence over all other prefixes in the same slot and thus appears in all forms where a second person is involved, even in the negative, with the only exception being when a first person singular acts on second person (1SG>2), which is marked by the

portmanteau suffix *-na*.

(58) (a) SECOND PERSON S ARGUMENT

    *khʌnna*     ***tʌ-puks-a***
    2SG.ABS    2-go-PST

    'You<sub>SG</sub> went.'

  (b) SECOND PERSON A ARGUMENT

    *khʌnna-a*   *ŋa-lai*    ***tʌ-khaŋ-ŋa***
    2SG-ERG    1SG-DAT   2-see-1SG.S/P.NPST

    'You<sub>SG</sub> see me.'

  (c) SECOND PERSON P ARGUMENT

    *khokkuci-a*     *khʌnna-lai*     ***ni-tʌ-khaŋ***
    3NS-ERG       2SG-DAT        NS.S/A-2-see

    'They<sub>PL</sub> see you<sub>SG.</sub>'

## (b) 1SG>2 suffix *-na*

MORPHEME      *-na*

GLOSS           1SG>2

The suffix *-na* marks a first singular A, which acts on a second person P. In negative 1SG>2SG forms, *-na* is replaced by the morpheme *-nen*, while with 2<sup>nd</sup> person dual and plural the negative forms are regular (cf. see Appendix A).

(59) (a) *ŋa-a*     *khʌnna-lai*     *nuk-**na***
       1SG-ERG   2SG-DAT       massage-1SG>2

       'I massage you<sub>SG.</sub>'

  (b) *ŋa-a*     *khʌnna-lai*     *pʌ-nuk-**nen***
       1SG-ERG   2SG-DAT       NEG-massage-1SG>2NEG

       'I do not massage you<sub>SG.</sub>'

## 2.32.3 Third person

## (a) Third person subject and agent *pʌ-*

MORPHEME      *pʌ-*

GLOSS           3S/A

The prefix *pʌ-* marks a third person A and a third person P. The northwestern dialect of Camling has a morpheme *pa-*, which Ebert (1997) glosses as inverse, although she states that the 'Camling direction system is obviously in decay'. It has the same distribution as the *pʌ-* described above, with the exception that it does not occur in the

intransitive paradigm. However, In Puma this prefix occurs in the intransitive paradigm (cf. see Appendix A) as well.

(60) (a) *khokku-a    ŋa-lai      **pʌ**-nuk-ŋa*
3SG-ERG    1SG-DAT    3S/A-massage-1SG.S/A.NPST

'She massages me.'

(b) *khokkuci    **pʌ**-puŋ-ci*
3DL.ABS    3S/A-go-DL

'They_DL go.'

**(b)    Third person patient suffix *-u ~ -i ~ -a ~ -o***

MORPHEME        *-u~-i~-a~-o*

GLOSS          3P

This suffix occurs only in the direct third person P forms of the transitive paradigm, with the exception of dual forms. It has altogether four allomorphs, two of which (*-u* and *-i*) are categorically determined and two of which (*-a* and *-o*) are phonologically determined.

The underlying form of all these allomorphs is *-u*, which is related to the proto-Kiranti morpheme *\*-u* as reconstructed by van Driem (1993) (although he analyses it as a third person P morpheme). A morphophonological rule that turns stem-final /a/ into /o/ before a following (usually third person P) suffix *-u* exists in several other Kiranti languages (e.g. Limbu and Wambule) (cf. Stutz 2005).

(61) (a) *khokku-a    khokku-lai  ɖher-**i***
3SG-ERG    3SG-DAT    beat-3P

'He beat him.'

(b) *khʌnna-a    khokku-lai  ɖher-**u**-m*
2SG-ERG    3SG-DAT     beat-3P-1/2PL.A

'You_SG beat him.'

(c) *ŋa-a        khokku-lai bha-**a**-ŋ*
1SG-ERG    3SG-DAT    cut-3P-1SG.A

'I cut_NPST him.'

(d) *ŋa-a        khokku-lai bho-**o**-ŋ*
1SG-ERG    3SG-DAT    cut-3P-1SG.A

'I cut_PST him.'

Examples (61c-d) are the example of the stem final vowel changing[23].

## 2.33   Antipassive prefix kha-

MORPHEME       *kha-*
GLOSS             ANTIP

The antipassive marker is the first prefix slot for verbs. The function of an antipassive marker is to detransitivise transitive verbs and enables them to take indefinite objects (see Section 3.17). Antipassive is marked by the prefix *kha-* and appears only with the verbs that entail a human P-argument. When the pragmatics do not allow to denote a human P-argument, Puma employs a *zero-* detransitivisation. The Puma corpus has more than sixty verbs which can be overtly marked for antipassivisation by *kha-*. Antipassivisation, with *kha-* or *zero*, entails that the P argument is to be understood not as a specific but as a generic kind (Bickel et al. 2007). Syntactically, the sentence becomes intransitive, and the P argument can no longer be expressed as an overt argument.

(62)  (a)    TRANSITIVE CLAUSE

*ŋa-a*          *khokku-lai*          *nukk-u-ŋ*
1SG-ERG     3SG-DAT                 massage-3P-1SG.A

'I massage her.'

      (b)    *kha-*ANTIPASSIVE CLAUSE

*ŋa*          **kha**-*nuk-ŋa*
1SG.ABS     ANTIP-massage-1SG.S/P.NPST

'I massage (people).'

The following (elicited) examples give a minimal pair for zero antipasivisation. The verb *chok* denotes the use of a machete (a *khukurī* 'knife') to work a piece of wood into a plough or other object.

(63)  (a)    TRANSITIVE CLAUSE

**ŋa-a**          *lʌuro*          *chok-**u-ŋ**-yaŋ*
1SG-ERG     stick.ABS     cut.and.chisel-3P-1SG.A-IPFV

'I am chiseling the stick.' ('I am in the middle of working on this piece

right here.')

---

[23] Generally past and non-past remain unmarked unless there is a possibility of vowel lengthening. Primarily the non-past forms are such as *bha-a-ŋ > bha-u-ŋ* and the past forms are *bho-o-ŋ > bha-u-u-ŋ*. However, due to stem final vowel changing, it is difficult to make a distinction between past and non-past tense as vowel lengthening is only realised in careful pronunciation of adult speakers.

(b) ***zero*-ANTIPASSIVE CLAUSE**

| **ŋa** | *lʌuro* | *chok-**ŋa**-ŋa* |
|---|---|---|
| 1SG.ABS | stick.ABS | cut.and.chisel-1SG.S/P.NPST-IPFV |

'I am chiseling (some sticks).' ('That is my activity today, maybe daily work.')

Syntactically, the antipassive differs from the active in that its inflection is intransitive: the verb only agrees with the derived S argument. Moreover, example (63a) does have an overt P argument, while example (63b) would be ungrammatical with a particular/definite P argument. Semantically, the active sentence in (63a) refers to a specific piece of wood and best suits a situation where this piece is right with the speaker, visible to the addressee. In (63b), the speaker reports about his activity of the day, but no specific piece of wood is implied.

Affixes with a similar detransitivising function occur as well in other Kiranti languages, e.g. *-yaŋ* in Athpare (Ebert 1997), *yapmi-* in Limbu (van Driem 1987) and *kha-* in the Southeastern dialect of Camling (Ebert 1997). While the former are probably related to some word meaning 'man', the origin of the latter is unknown. Ebert (1991: 86) calls them 'pseudo-inverse' prefixes.

## *2.34 Number suffixes*

### 2.34.1 Singular

In Puma the singular number is unmarked for the second and the third person. A first person singular is always expressed by some portmanteau containing person, number and tense, as shown in (64) with the some exceptions[24] (and see Section 2.32.1).

(64) *-ŋa*    '1SG.S/P.NPST'

  *-oŋ*    '1SG.S/P.PST'

  *-ŋ*    '1SG.A'

  *-na*    '1SG>2'

### 2.34.2  Dual *-ci~-cʌ*

| MORPHEME | *-ci~-cʌ* |
|---|---|
| GLOSS | DL |

The suffix *-ci ~ -cʌ* marks only dual number. It occurs in combination with all persons and tenses and with all speech act participants: The allomorph *-cʌ* occurs only in two

---

[24] In example (64), the last two forms *-ŋ* and *-na* do not mark tense.

cases, namely 2DL>1SG and 3DL>1SG:

(65) (a) *khʌnnaci-a*     *ŋa-lai*     *tʌ-son-ŋa-cʌ/\*ci-ŋ*
         2DL-ERG     1SG-DAT     2-persuade-1SG.S/P.NPST-DL-1SG[copy][25]

         'You$_{DUAL}$ persuade me.'

     (b) *khokkuci-a*     *ŋa-lai*     *pʌ-son-ŋa-cʌ/\*ci-ŋ*
         3DL-ERG     1SG-DAT     3S/A-persuade-1SG.S/P.NPST-DL-1SG[copy]

         'They$_{DUAL}$ persuade me.'

The following show uses of the dual suffix *-ci*.

(66) (a)   DUAL S ARGUMENT

         *keci*         *ips-a-ci*
         1DL.ABS     sleep-PST-DL

         'We$_{DUAL}$ slept.'

     (b)   DUAL A ARGUMENT

         *keci-a*     *khokku-lai*     *cut-ci*
         1DL-ERG     3SG-DAT        tease-DL

         'We$_{DUAL}$ tease her.'

     (c)   DUAL P ARGUMENT

         *khokku-a*    *keci-lai*     *pʌ-cut-ci-ka*
         3SG-ERG     1DL-DAT     3S/A-tease-DL-EXCL

         'He teases us$_{DUAL}$.'

### 2.34.3 Plural

In Puma the dual suffix functions the same way for nearly all persons and combinations of speech act participants, while the Puma plural suffixes differentiate between speech act participants and third persons.

**(a) Plural suffix *-i***

     MORPHEME       *-i*

     GLOSS            1/2PL.NPST

The suffix *-i* is a portmanteau containing the meaning of first plus second person plural in the non-past tense.

(67) (a)   PLURAL S ARGUMENT
         *ke*            *phind-i*
         1PL.INCL.ABS     jump-1/2PL.NPST

         'We$_{PL.INCL}$ jump.'

---

[25] The copy of the final nasals of the preceding morpheme is a common characteristic of Kiranti languages (van Driem 1993; Ebert 1997).

(b)  PLURAL P ARGUMENT

> *khokku-a    khʌnnanin-lai    tʌ-cind-**i***
> 3SG-ERG    2PL-DAT    2-teach-1/2PL.NPST

'He teaches you<sub>PL</sub>.'

Note that it always appears with S or P arguments but never the A argument. It should be noted that Ebert describes something similar for Athpare and Camling (Ebert 1997a, 1997b), although it seems to occur mainly in the 2>1 forms in those languages. van Driem (1991) has reconstructed a proto-Kiranti morpheme *-i*, which seems to have been an inclusive marker originally, but became reanalysed as a plural morpheme in some of the languages later on (e.g. Limbu, Lohorung, Athpare) (cf. Stutz 2005).

**(b)   The plural suffix *-nin ~ -ni***

MORPHEME    *-nin*

GLOSS    1/2PL.PST

The suffix *-nin* is the past counterpart of the plural morpheme *-i*. Stutz (2005) states that *-nin* occurs in the past tense in exactly those forms where *-i* occurs in the non-past, but this is not true. The suffix *-nin* occurs with the first person plural and second person plural in intransitive verbs, and only with 3SG/3PL/2SG>1DL/PL.EXCL and 1DL/PL.EXCL/3SG/ 3PL> 2SG in transitive verbs.

(68)  (a)  PLURAL S ARGUMENT

> *ke          puks-a-**nin***
> 1PL.INCL.ABS    go-PST-1/2PL.PST

'We<sub>PL.INCL</sub> went.'

(b)  PLURAL P ARGUMENT

> *khokku-a    khʌnnanin-lai    tʌ-cind-a-**nin***
> 3SG-ERG    2PL-DAT    2-teach-PST-1/2PL.PST

'He taught you<sub>PL</sub>.'

Note that since the suffix *-nin* is the past counterpart of the plural morpheme *-i*, it also appears only with S and P arguments. The allomorph *-ni* occurs only in the past negated form, where the initial nasal *-m* in the dual and the plural negative suffix *-min* triggers elision of the final /n/ of the plural suffix.

(69)  (a)  PLURAL S ARGUMENT
> *ke          pʌ-puks-a-**ni**-min*
> 1PL.INCL.ABS    NEG-go-PST-1/2PL.PST-NEG
> 'We<sub>INCL</sub> did not go.'

(b)   PLURAL P ARGUMENT

    *khokku-a*    *khʌnnanin-lai*    *tʌ-cind-a-**ni**-min*
    3SG-ERG    2PL-DAT    2-teach-PST-1/2PL.PST-NEG

    'He did not teach you<sub>PL</sub>.'

**(c)**   ***-m***

MORPHEME    *-m*

GLOSS    1/2PL.A

The suffix marks a first or second person plural agent in 1/2>3 forms. It occurs only after the third person patient morpheme <*-u~ -i~ -a~ -o*>, as in:

(70)  (a)   FIRST PERSON PLURAL A ARGUMENT

    *ke-a*    *khokku-lai*    *sont-u-**m***
    1PL.INCL-ERG    3SG-DAT    persuade-3P-1/2PL.A

    'We<sub>INCL</sub> persuade him.'

    (b)   SECOND PERSON PLURAL A ARGUMENT

    *khʌnnanin-a*    *khokku-lai*    *tʌ-bha-a-**m***
    2PL-ERG    3SG-DAT    2-cut-3P-1/2PL.A

    'You<sub>PL</sub> cut him.'

**(d)**   ***mʌ-***

MORPHEME    *-mʌ*

GLOSS    3PL.S/A

The prefix *mʌ-* occurs in the third prefix slot (see Section 2.45, Table 68) which marks third person plural S and A arguments.

(71)  (a)   PLURAL S ARGUMENT
    *khokkuci*    ***mʌ**-pis-a*
    3PL.ABS    3PL.S/A-speak-PST

    'They<sub>PL</sub> spoke.'

    (b)   PLURAL A ARGUMENT
    *khokkuci-a*    *ke-lai*    *kha-**mʌ**-sont-a*
    3PL-ERG    3DL-DAT    1NS.PL-3PL.S/A-persuade-PST
    'They<sub>PL</sub> persuaded us<sub>INCL</sub>.'

As can be seen from the above examples the suffix *-mʌ* occurs only with the third person plural S and A arguments. The suffix occurs in only two form, namely 3PL>1NS and 3PL>3NS in the transitive paradigm. It does not occur in negated forms because the negation morpheme *pʌ-*, which also occupies the third prefix slot (see Table 68 in Section 2.45), takes precedence as in:

(72)  (a)  PLURAL S ARGUMENT

     *khokkuci*   *ni-**pʌ**-pis-en*
     3PL.ABS   NS.S/A-NEG-speak-NEG.PST

     'They~PL~ did not speak.'

   (b)  PLURAL A ARGUMENT

     *khokkuci-a*     *ke-lai*    *kha-ni-**pʌ**-sont-en*
     3PL-ERG       1DL-DAT   1NS.P-3S/A-NEG-persuade-NEG.PST

     'They~PL~ did not persuade us~PL.INCL~.'

**(e)  *-nin***

    MORPHEME     *-nin*

    GLOSS        1/2PL

This suffix is found only in those two forms where a first person singular A argument co-occurs with second person plural P arguments in transitive clauses. It occurs also with first and second person plural S arguments in intransitive clauses in the past tense only.

(73)  *ŋa-a*     *khʌnnanin-lai*   *son-na-**nin***
    1SG-ERG   2PL-DAT      persuade-1SG>2-2PL

    'I persuade you~PL~.'

Stutz (2005) states that *-nin* '2PL' is not identical with the 1/2PL.PST. Suffix *-nin ~ -ni* and *-ni* and *-nʌ* in this context are no allomorphs of it. The suffix *-nʌ* occurs in the non-past paradigm, while *-ni* occurs only with past-negated paradigm. A morpheme *-ni* with a similar meaning exists in Wambule (Opgenort 2004: 295), Kulung (van Driem 1990: 34), and Bantawa (Doornenbal 2009).

### 2.33.4 Non-singular

Non-singular distinguishes plural and dual in pronouns.

**(a)  Non-singular prefix *ni-***

    MORPHEME     *ni-*

    GLOSS       NS.S/A

The prefix *ni-* occurs in the second prefix slot. It marks non-singularity with the second person and third person A arguments in the transitive paradigms and only with the third person negative plural in the intransitive paradigms.

(74) (a) PLURAL A ARGUMENT

    *khokkuci-a*    *ŋa-lai*    **ni**-*pʌ-son-ŋa*

    3PL-ERG    1SG-DAT    NS.S/A-3S/A-persuade-1SG.S/P.NPST

    'They_PL persuade me.'

(b) DUAL A ARGUMENT

    *khokkuci-a*    *ke-ka-lai*    **ni**-*pʌ-son-ci-ka*

    3DL-ERG    1SG-DAT    NS.S/A-3S/A-persuade-DL-EXCL

    'They_DL persuade us_DUAL.EXCL.'

(75) (a) PLURAL S ARGUMENT

    *khokkuci*    **ni**-*pʌ-puŋ-nin*

    3PL.ABS    NS.S/A-NEG-go-NEG

    'They_PL do not go.'

(b) *khokkuci*    **mʌ**-*puŋ*

    3PL.ABS    3PL.S/A-go

    'They_PL go.'

## (b) Non-singular suffix *-ci ~ -cʌ*

MORPHEME    *-ci ~ -cʌ*

GLOSS    3NS.P

The suffix *-ci ~ -cʌ* marks a non-singular third person P and appears with the first person, second person and third person A argument. Its two allomorphs are the result of vowel harmony with the preceding syllable.

(76) (a) FIRST PERSON SINGULAR A ARGUMENT

    *ŋa-a*    *khokkuci-lai*    *phad-u-ŋ-**cʌ**-ŋ*

    1SG-ERG    3NS-DAT    help-3P-1SG.A-3NS.P-[COPY]

    'I help them.'

(b) FIRST PERSON PLURAL A ARGUMENT

    *ke-a*    *khokkuci-lai*    *phad-u-m-**cʌ**-m*

    1PL.INCL-ERG    3NS-DAT    help-3P-1/2PL.A-3NS.P-[COPY]

    'We help them.'

(c) SECOND PERSON SINGULAR A ARGUMENT

    *khʌnna-a*    *khokkuci-lai*    *tʌ-phad-i-**ci***

    2SG-ERG    3NS-DAT    2-help-3P-3NS.P

    'You_SG help them.'

(d) SECOND PERSON DUAL A ARGUMENT

    *khʌnnaci-a*    *ŋa-lai*    *tʌ-pha-ŋa-**cʌ**-ŋ*

    2DL-ERG    1SG-DAT    2-help-1SG.S/P.NPST-3NS.P-[COPY]

    'You_DUAL help me.'

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As can be seen from example (76) that the non-singular suffix *-ci- ~ -cʌ* is followed by a copy slot, which is usually occupied by a copy of only the nasal of the preceding person and/or number suffix. In (76c) this copy slot remains empty when no nasal precedes the suffix *-ci* such as the third person patient suffix *-i*. This nasal copying also occurs when the negative marker precedes *-ci*. The nasal of the morpheme *-in* is suffixed after *-ci* as shown below:

(77)  *khʌnna-a*          *khokkuci-lai*     *tʌ-phad-in-ci-n*
       2SG-ERG            3NS-DAT          2-help-NEG-3NS.P-[COPY]

       'You_SG don't help them.'

Alternatively, in Puma the distribution of the non-singular suffix *-ci- ~ -cʌ* can also be analysed in terms of a vowel harmony rule as *-ci-* occurs only after the front vowel /i/, while *-cʌ* occurs after the non-front (i.e. mid and back) vowels /a/, /ʌ/, /o/ and /u/.

It is not unusual for Kiranti languages to have two homophonous suffixes occurring in different slots denoting different meanings. The first is a proper dual marker and the second, which has been 'generalised' in van Driem's (1990: 38) words, shows the meaning of plurality or non-singularity.

### 2.34.5 Exclusive marker *-ka*

MORPHEME          *-ka*

GLOSS             EXCL

In Puma pronouns are marked for the distinction of inclusive and exclusive reference. Puma also marks dual number in its pronouns. The first person non-singular inclusive is unmarked on the verb, while the first person non-singular exclusive is marked by the suffix *-ka* on the verb.

(78)  (a)   NON-SINGULAR EXCLUSIVE S ARGUMENT

            *ke-ka*              *baŋŋ-i-**ka***
            1PL-EXCL.ABS        talk-1/2PL-EXCL

            'We_EXCL talk.'

      (b)   NON-SINGULAR EXCLUSIVE A ARGUMENT

            *keci-ka-a*          *kitāp*          *khipd-i-ci-**ka***
            1DL-EXCL-ERG        book.ABS        read-1/2PL.NPST-DL-EXCL

            'We_DL.EXCL read the book.'

(c)   NON-SINGULAR EXCLUSIVE P ARGUMENT

*khokku-a   keci-ka-lai   pʌ-pha-ci-**ka***
3SG-ERG   1DL-EXCL-DAT   3S/A-help-DL-EXCL

'He helps us$_{DL.EXCL}$.'

*-Ka* only co-occurs with the non-singular first person S argument, A argument and P argument. This suffix is never found with a hearer (the second person). The exclusive marker *-ka*, according to van Driem's reconstruction of proto-Kiranti morphemes, is common in several Kiranti languages, and is a reflex of the proto-Kiranti first plural morpheme *-k* and the exclusive marker *-ya*, which coalesced as a single morpheme later due to their frequent co-occurrence (cf. van Driem 1990).

## 2.35    Tense suffixes

### 2.35.1 Non-past

### (a)    First person singular non-past suffix *-ŋa*

MORPHEME      *-ŋa*

GLOSS         1SG.S/P.NPST

In Puma the first person singular non-past is marked by the suffix *-ŋa*. Only arguments S and P are marked by this suffix; note that the A argument allows only the suffix *-ŋ* (agent) which does not indicate any tense.

(79)  (a)   FIRST PERSON SINGULAR S ARGUMENT

*ŋa        puŋ-**ŋa***
1SG.ABS    go-1SG.S/P.NPST

'I go.'

(b)   FIRST PERSON SINGULAR S ARGUMENT IN DETRANSITIVISATION

*ŋa        ciṭhī       chap[26]-**ŋa***
1SG.ABS    letter.ABS   write-1SG.S/P.NPST

'I write letters.'

(c)   FIRST PERSON SINGULAR P ARGUMENT

*khʌnna-a       ŋa-lai      tʌ-kʌk-**ŋa***
2SG-ERG         1SG-DAT     2-hold-1SG.S/P.NPST

'You$_{SG}$ hold me.'

---

[26] *Chap* is the surface form, as in *chap-ma* 'to write'. This form occurs in non-past *zero*-detransitivised clauses with all A arguments, with the exception of 1$^{st}$ and 2$^{nd}$ person plural.

**(b) First person/ second person plural non-past suffix *-i***

MORPHEME          *-i*

GLOSS             1/2PL.NPST

The first person plural plus the second person plural non-past are marked by the suffix *-i*:

(80) (a)  FIRST PERSON PLURAL S ARGUMENT

        *ke          puks-i*
        1PL.INCL.ABS   go-1/2PL.NPST

        'We<sub>PL.INCL</sub> go.'

    (b)  FIRST PERSON PLURAL A ARGUMENT

        *ke-a        ciʈhī     chapd[27]-i*
        1PL.INCL-ERG   letter.ABS  write-1/2PL.NPST

        'We<sub>PL.INCL</sub> write the letter.'

    (c)  SECOND PERSON PLURAL A ARGUMENT

        *khʌnnanin-a    ciʈhī     tʌ-chapd-i*
        2PL-ERG      letter.ABS  2-write-1/2PL.NPST

        'You<sub>PL.INCL</sub> write the letter.'

Note that Puma non-past tense is unmarked for third person singular as in:

(81) (a)  THIRD PERSON S ARGUMENT

        *khokku     puŋ*
        3SG.ABS    go[3SG.NPST]

        'He goes.'

    (b)  THIRD PERSON S ARGUMENT

        *khokku    ciʈhī     chap*
        3SG.ABS    letter.ABS  write[3SG.NPST]

        'He writes letters.'

**2.35.2 Past**

**(a)   First person singular past suffix *-oŋ***

MORPHEME          *-oŋ*

GLOSS             1SG.S/P.PST

In Puma the first person singular past is marked by the suffix *-oŋ*. Note that this form marks both S arguments of intransitive clauses and P arguments of transitive clauses.

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[27] *Chapd* is the root form which only occurs with 1st and 2nd person plural A arguments in the non-past *zero*-detransitivised clauses and elsewhere in transitive clauses with all A arguments.

(82)  (a)  FIRST PERSON SINGULAR S ARGUMENT

       *ŋa*       *puks-**oŋ***
       1SG.ABS    go-1SG.S/P.PST

       'I went.'

    (b)  FIRST PERSON SINGULAR S ARGUMENT IN DETRANSITIVISATION

       *ŋa*       *ciṭhī*     *chapd-**oŋ***
       1SG.ABS    letter.ABS   write-1SG.S/P.PST

       'I wrote letters.'

    (c)  FIRST PERSON SINGULAR P ARGUMENT

       *khʌnna-a*  *ŋa-lai*   *tʌ-kʌkd-**oŋ***
       2SG-ERG    1SG-DAT   2-hold-1SG.S/P.PST

       'You<sub>SG</sub> held me.'

**(b) First person/second person plural past suffix *-nin***

    MORPHEME        *-nin*

    GLOSS           1/2PL.PST

The first person plural plus second person plural past are marked by the suffix *-nin*:

(83)  (a)  FIRST PERSON PLURAL S ARGUMENT

       *ke*        *puks-a-**nin***
       1PL.INCL.ABS   go-PST-1/2PL.PST

       'We<sub>PL.INCL</sub> went.'

    (b)  FIRST PERSON PLURAL A ARGUMENT

       *ke-a*      *ciṭhī*     *chapd-a-**nin***
       1PL.INCL-ERG   letter.ABS   write-PST-1/2PL.PST

       'We<sub>PL.INCL</sub> wrote the letter.'

    (c)  SECOND PERSON PLURAL A ARGUMENT

       *khʌnnanin-a*  *ciṭhī*    *tʌ-chapd-a-**nin***
       2PL-ERG     letter.ABS   2-write-PST-1/2PL.PST

       'You<sub>PL</sub> wrote the letter.'

**(c)  Past suffix *-a***

    MORPHEME        *-a*

    GLOSS           PST

In Puma past tense is marked by the suffix *-a* with all persons, except the first person singular *-oŋ* (see Section 2.32.1).

(84)  (a)  FIRST PERSON PLURAL S ARGUMENT

   *keka*   *puks-**a**-nin-ka*
   1PL.EXCL.ABS  go-PST-1/2PL.PST-EXCL

   'We_{PL.EXCL} went.'

 (b)  SECOND PERSON SINGULAR S ARGUMENT

   *khʌnna*  *tʌ-puks-**a***
   2SG.ABS  2-go-PST

   'You_{SG} went.'

 (c)  THIRD PERSON SINGULAR S ARGUMENT

   *khokku*  *puks-**a***
   3SG.ABS  go-PST

   'S/he went.'

 (d)  FIRST PERSON PLURAL P ARGUMENT

   *khokku-a* *kecika-lai*   *pʌ-khaŋ-**a**-ci-ka*
   3SG-ERG  1DL.EXCL-DAT  3S/A-see-PST-NS-EXCL

   'He saw us_{DL.EXCL}'

## *2.36 Negative morphemes*

In Puma negation is obligatorily marked by means of a negative affix attached to the verb. Puma uses double negative markers- a prefix and a suffix. In some languages with double negation, the negative construction involves a prefix and a suffix on the verb, as in Izi, from Nigeria and formal French (cf. Meier, Meier & Bendor-Samuel 1975: 218; Dryer 2011).

### 2.36.1 Prefix *pʌ-*

   MORPHEME  *pʌ-*

   GLOSS   NEG

The prefix *pʌ-* is the negative marker that co-occurs with the 1st and the 3rd person verbal argument markers but not with the second person marker because of the one prefix restriction. Actually there are three prefix slots, however, there is one prefix slot that can be filled by one of three different prefix types. This prefix is added to a verb, which is followed by the suffix *-nʌŋ*, *-en/nin*, *-min* or *-n* depending on the person. Negation in Puma is thus, marked by one prefix and a choice between three suffixes.

  The negative prefix *pʌ-* is prefixed to all negated forms but it is not realised before the second person marker *tʌ-* due to the one-prefix restriction. Thus, it is dropped when

the second person is the actant. The second person marker *tʌ-* takes precedence over *pʌ-*. It should be noted here that *-en* is used in the past tense whereas *-min* is used with the non-past tense, as in:

(85) (a)     FIRST PERSON SINGULAR S ARGUMENT

         *ŋa*          **pʌ-*puŋ-nʌŋ*
         1SG.ABS     NEG-go-1SG.NEG

         'I do not go.'

      (b)     FIRST PERSON SINGULAR A ARGUMENT

         *ŋa-a*       *khokku-lai*     **pʌ-*pha-nʌŋ*
         1SG-ERG     3SG-DAT        NEG-help-1SG.NEG

         'I do not help her.'

      (c)     THIRD PERSON SINGULAR S ARGUMENT

         *khokku*     **pʌ-*puŋ-nin*
         3SG.ABS     NEG-go-2SG/3PL.NEG.NPST

         'He does not go.'

      (d)     THIRD PERSON SINGULAR A ARGUMENT
         *khokku-a*    *ŋa-lai*     **pʌ-*pha-nʌŋ*
         3SG-ERG     1SG-DAT    NEG-help-1SG.NEG

         'She does not help me.'

(86) (a)     SECOND PERSON SINGULAR A ARGUMENT

         *khʌnna-a*    *ŋa-lai*     **tʌ-*som-tuk-nʌŋ*
         2SG-ERG     1SG-DAT    2-love-love-1SG.NEG

         'You<sub>SG</sub> do not love me.'

      (b)     SECOND PERSON SINGULAR S ARGUMENT

         *khʌnna*     **tʌ-*ips-en*
         2SG.ABS     2-sleep-2SG/3PL.NEG.PST

         'You<sub>SG</sub> did not sleep.'

This means that only one negative marker is used with the second person. But there is an exception to the forms 1SG>2 in which they are not marked by *tʌ-*, but with 1SG>2 portmanteau suffix *-na*, as in:

(87) (a)     1SG>2 ARGUMENT IN AFFIRMATIVE

         *ŋa-a*       *khʌnna-lai*     *som-tuk-**na***
         1SG-ERG     2SG-DAT        love-love-1SG>2

         'I love you<sub>SG</sub>.'

(b)   1SG >2 ARGUMENT IN NEGATIVE

ŋa-a        khʌnna-lai      pʌ-som-tuk-**nen**
1SG-ERG    2SG-DAT        NEG-love-love-1SG>2NEG

'I do not love you_SG.'

## 2.36.2 Suffix *-nʌŋ*

MORPHEME       *-nʌŋ*

GLOSS          1SG.NEG

The negative morpheme *-nʌŋ* is the counterpart of the first person singular A in the affirmative construction, S and/or P morphemes *-ŋ*, *-ŋa* and *-oŋ*, respectively. It shows no tense distinction, as it is a same negative marker both for the present and past tense. It appears with a first person singular actant. The only exception to this is in the 1SG>2 forms, which are always marked by the portmanteau morpheme *-na* (cf. 87). The third person agent/subject prefix *pʌ-* occupies the same affixal slot as the homophonous negative prefix.

(88)       FIRST PERSON SINGULAR S ARGUMENT

ŋa          pʌ-im-**nʌŋ**
1SG.ABS    NEG-sleep-1SG.NEG

'I do/did not sleep.'

## 2.36.3  Suffix *-min*

MORPHEME       *-min*

GLOSS          DL/NS.NEG

The negative marker *-min* occurs only in forms which are marked with dual (*-ci* or plural *-i~-e*, *-nin~ -ni*, *-m* and *-ni~ -nʌ* markers. The only exceptions to this form are remaining forms in which it is marked with the negative morpheme *-in~ -nin*.

(89) (a)   DUAL S ARGUMENT

keci              pʌ-ips-a-cʌ-**min**
1DL.INCL.ABS     NEG-sleep-PST-DL-DL/NS.NEG

'We_DL.INCL did not sleep.'

(b)   PLURAL S ARGUMENT

khʌnnanin        tʌ-ips-a-nʌ-**min**
2PL.ABS          2-sleep-PST-PL-DL/NS.NEG

'You_PL did not sleep.'

(c)    DUAL P ARGUMENT

*khokku-a*    *kecika-lai*    *pʌ-son-ci-**min**-ka*
3SG-ERG    1DL.EXCL-DAT    NEG-persuade-NS-NEG-EXCL

'He does not persuade us<sub>DL.EXCL</sub>.'

(d)    PLURAL A ARGUMENT

*ke-a*    *khokku-lai*    *pʌ-bud-u-m-**min***
1PL.INCL-ERG    3SG-DAT    NEG-call-3P-1/2PL.A-NEG

'We<sub>PL.INCL</sub> do not call her.'

## 2.36.4 Suffix *-in ~ -nin*

MORPHEME    *-in ~ -nin*

GLOSS    NEG

The negative morpheme *-in~-nin* is found in all forms except where other negative forms like *-nʌŋ* or *-min* or *-mʌ* appear. Stutz (2005) claims that this morpheme mainly appears in forms that contain at least one singular actant. However this morpheme occurs with the forms in which non-singular actant contains in (90a).

(90)  (a)    PLURAL A ARGUMENT

*khokkuci-a*    *ke-lai*    *kha-ni-pʌ-son-**nin***
3PL-ERG    1PL.INCL-DAT    1NS.P-3NS.S/A-NEG-persuade-NEG

'They<sub>PL</sub> do not persuade us<sub>PL.INCL</sub>.'

(b)    SINGULAR A ARGUMENT

*khokku-a*    *khokku-lai*    *pʌ-sont-**in***
3SG-ERG    3SG-DAT    NEG-persuade-NEG

'He does not persuade her.'

## 2.36.5 Suffix *-mʌŋ*

MORPHEME    *-mʌŋ*

GLOSS    1SG.P.NEG

The negative morpheme appears only in three forms in which the first person actant is P with the forms 2DL>1SG, 2PL>1SG and 3DL>1SG, as in:

(91)  (a)    2<sup>nd</sup> PERSON DUAL A ARGUMENT AND 1<sup>st</sup> PERSON SINGULAR P ARGUMENT

*khʌnnaci-a*    *ŋa-lai*    *tʌ-son-nʌŋ-cʌ-**mʌŋ***
2DL-ERG    1SG-DAT    2-persuade-1SG.NEG-DL-1SG.P.NEG

'You<sub>DL</sub> do not persuade me.'

(b)　2nd PERSON PLURAL A ARGUMENT AND 1st PERSON SINGULAR P ARGUMENT

*khʌnnanin-a*　　*ŋa-lai*　　*tʌ-son-nʌŋ-nʌ-**mʌŋ***
2PL-ERG　　　　1SG-DAT　　2-persuade-1SG.NEG-NS-1SG.P.NEG

'You<sub>PL</sub> do not persuade me.'

(c)　3rd PERSON DUAL A ARGUMENT AND 1st PERSON SINGULAR P ARGUMENT

*khokkuci-a*　　*ŋa-lai*　　*pʌ-son-nʌŋ-cʌ-**mʌŋ***
3DL-ERG　　　　1SG-DAT　　NEG-persuade-1SG.NEG-DL-1SG.P.NEG

'They<sub>DL</sub> do not persuade me.'

## 2.36.6 Imperative affixes *men-* and *-d*

MORPHEME　　　*men-* and *-d*

GLOSS　　　　　NEG.IMP and PROH

The prefix *men-* and infix *-d-* is used to mark a negative imperative. Imperative suffixes *-i* and *-a* are used with the transitive verbs and intransitive verbs, respectively. These suffixes are homophonous to third person patient marker and past tense marker (see Sections 2.32.3 and 2.34.3).

(92)　(a)　AFFIRMATIVE INTRANSITIVE IMPERATIVE

*ips-**a**!*
sleep-IMP

'sleep!'

(b)　NEGATIVE INTRANSITIVE IMPERATIVE

***men**-im-**d**-a!*
NEG.IMP-sleep-PROH-IMP

'Do not sleep!'

(93)　(a)　AFFIRMATIVE TRANSITIVE IMPERATIVE
*laks-**i**!*
sell-IMP
'sell!'

(b)　NEGATIVE TRANSITIVE IMPERATIVE

***men**-laŋ-**d**-o/a!*
NEG.IMP-sell-PROH-IMP

'Do not sell!'

## 2.37　Imperfective morphemes

## 2.37.1 First person imperfective suffix *-ŋa*

MORPHEME　　　*-ŋa*

GLOSS　　　　　1SG.S/P.IPFV

The portmanteau morpheme *-ŋa* appears only with the first person singular S argument and P argument in the non-past tense, but the morpheme *-yaŋ* is found in the past tense and negative constructions, regardless of past or non-past tense.

(94) (a) FIRST PERSON SINGULAR S ARGUMENT

    *ŋa       im-ŋa-**ŋa***
    1SG.ABS   sleep-1SG.S/P.NPST-1SG.S/P.IPFV

    'I am sleeping.'

(b) FIRST PERSON SINGULAR P ARGUMENT

    *khokku-a  ŋa-lai    pʌ-cin-ŋa-**ŋa***
    3SG-ERG   1SG-DAT   3S/A-teach-1SG.S/P.NPST-1SG.S/P.IPFV

    'He is teaching me.'

## 2.37.2 Dual imperfective suffix *-caŋ*

    MORPHEME       *-caŋ*

    GLOSS           DL.IPFV

The morpheme *-caŋ* occurs in all non-past affirmative and negative dual forms. The past form of the marker *-caŋ* is *-aŋ* (see Section 2.32.2).

(95) (a) FIRST PERSON DUAL S ARGUMENT

    *keci         im-**caŋ**-ci*
    1DL.INCLABS   sleep-DL.IPFV-DL

    'We_DL.INCL are sleeping.'

(b) FIRST PERSON DUAL A ARGUMENT

    *keci-a     kitāp     khip-**caŋ**-ci*
    1DL.INCL-ERG   book.ABS   read-DL.IPFV-DL

    'We_DL.INCL are reading the book.'

(c) FIRST PERSON DUAL P ARGUMENT

    *khokku-a  kecika-lai   pʌ-cin-**caŋ**-ci-ka*
    3SG-ERG   1DL.EXCL-DAT   3S/A-teach-DL.IPFV-DL-EXCL

    'He is teaching us_DL.EXCL.'

## 2.37.3 Imperfective suffix *-yaŋ*

    MORPHEME       *-yaŋ*

    GLOSS           IPFV

This morpheme *-yaŋ* also is found with the first person singular A in both non-past and past. The morpheme *-yaŋ* occurs in all non-past and past affirmative and negative

forms, except first person singular non-past. It is found with the first person singular A, second person singular S, and third person singular S and third person plural S and A. However, the different morpheme *-yen* appears with the form 3PL>3PL in the negative.

(96) (a) FIRST PERSON SINGULAR A ARGUMENT

    *ŋa-a*    *khokku-lai*    *cind-u-ŋ-yaŋ*
    1SG-ERG    3SG-DAT    teach-3P-1SG.A-IPFV

    'I am teaching him.'

(b) FIRST PERSON SINGULAR S ARGUMENT IN PAST TENSE

    *ŋa*    *ips-oŋ-yaŋ*
    1SG.ABS    sleep-1SG.S/P.PST-IPFV

    'I was sleeping.'

(c) THIRD PERSON SINGULAR S ARGUMENT

    *khokku*    *im-yaŋ*
    3SG.ABS    sleep-IPFV

    'He is sleeping.'

(d) FIRST PERSON PLURAL P ARGUMENT

    *khʌnna-a*    *kecika-lai*    *kha-tʌ-cin-yaŋ*
    2SG-ERG    1DL.EXCL-DAT    1NS.P-2-teach-IPFV

    'You_SG are teaching us_DL.EXCL.'

## 2.37.4 Imperfective suffix *-aŋ*

    MORPHEME    *-aŋ*

    GLOSS    IPFV

The morpheme *-aŋ* is found with the first person and second person plural S argument in the non-past and past tense. In addition, it appears with the first and second person plural A and P arguments, and third person A arguments and third person singular P arguments, as in:

(97) (a) SECOND PERSON PLURAL A ARGUMENT

    *khʌnnanin-a*    *kecika-lai*    *kha-tʌ-tupp-aŋ-i*
    2PL-ERG    1DL.EXCL-DAT    1NS.P-2-meet-IPFV-1/2PL.NPST

    'You_PL are meeting us_DL.EXCL.'

(b) FIRST PERSON PLURAL EXCLUSIVE A ARGUMENT

    *keka-a*    *khʌnnanin-lai*    *ni-tʌ-tupp-aŋ-i*
    1PL.EXCL-ERG    2PL-DAT    NS.S/A-2-meet-IPFV-1/2PL.NPST

    'We_PL.EXCL are meeting you_PL.'

(c) THIRD PERSON SINGULAR A ARGUMENT

*khokku-a    khokku-lai    tupp-**aŋ**-i*
3SG-ERG    3SG-DAT    meet-IPFV-3P

'He is meeting him.'

(d) FIRST PERSON PLURAL S ARGUMENT

*ke    ips-**aŋ**-i*
1PL.INCL.ABS    sleep-IPFV-1/2PL.NPST

'We_PL.INCL are sleeping.'

(e) SECOND PERSON PLURAL S ARGUMENT

*khʌnnanin    tʌ-ips-**aŋ**-i*
2PL.ABS    2-sleep-IPFV-1/2PL

'You_SG are sleeping.'

## 2.37.5 Imperfective suffix *-yam*

MORPHEME        *-yam*

GLOSS            1/2PL.IPFV

The morpheme *-yam* only appears in the forms 1PL>3 and 2PL>3. It occurs with only first and second person plural A argument, as in:

(98) (a) FIRST PERSON PLURAL A ARGUMENT WITH THIRD PERSON P ARGUMENT

*ke-a    khokku-lai    tupp-u-m-**yam***
1PL.INCL-ERG    3SG-DAT    meet-3P-1/2PL.A-IPFV

'We_PL.INCL are meeting him.'

(b) SECOND PERSON PLURAL A ARGUMENT WITH THIRD PERSON P ARGUMENT

*khʌnna-a    khokku-lai    tʌ-tupp-u-m-**yam***
2PL-ERG    3SG-DAT    2-meet-3P-1/2PL-1/2PL.IPFV

'You_PL are meeting him.'

## 2.37.6 Negative imperfective suffix *-yen*

MORPHEME        *-yen*

GLOSS            NEG.IPFV

The morpheme *-yen* is the imperfective negative marker, which is found both in the non-past and past tense. It is the negative counterpart of *-yaŋ*, *-yam* and *-aŋ*, as in:

(99) (a) SECOND PERSON PLURAL A ARGUMENT

*khʌnnanin-a    keka-lai    kha-tʌ-tupp-i-ni-min-**yen***
2PL-ERG    1PL.EXCL-DAT    1NS.P-2-meet-1/2PL.NPST-NS-NEG-NEG.IPFV

'You_PL are not meeting us_PL.EXCL.'

(b)　FIRST PERSON PLURAL A ARGUMENT

*ke-a*　　　　*khokku-lai*　　*pʌ-tupp-u-m-min-**yen***
1PL.INCL-ERG　3SG-DAT　　NEG-meet-3P-1/2PL.A-NEG-NEG.IPFV

'We<sub>PL.INCL</sub> are not meeting him.'

(c)　THIRD PERSON SINGULAR S ARGUMENT

*khokku*　　*pʌ-ri-en-**yen***
3SG.ABS　　NEG-laugh-NEG.PST-NEG.IPFV

'He was not laughing.'

## 2.37.7 Imperfective suffix *-naŋ*

MORPHEME　　　*-naŋ*

GLOSS　　　　　1SG>2.IPFV

The morpheme *-naŋ* occurs only with forms 1SG>2 in both non-past and past affirmative and negative forms. The only exception here is that it is not found with 1SG>2SG negative form, as in *pʌ-tup-nin-yen* (I am not meeting you<sub>SG</sub>).

(100)(a)　*ŋa-a*　　*khʌnna-lai*　　*tup-**naŋ**-na*
　　　　　1SG-ERG　2SG-DAT　　meet-1SG>2.IPFV-1SG>2

　　　　'I am meeting you<sub>SG</sub>.'

(b)　*ŋa-a*　　*khʌnnanin-lai*　　*pʌ-tup-**naŋ**-na-ni-min*
　　　1SG-ERG　2PL-DAT　　　NEG-meet-1SG/2.IPFV-1SG>2-NS-NEG

　　'I am not meeting you<sub>PL</sub>.'

## *2.38　Stem alternations*

Like Kiranti languages such as Bantawa, Camling, Puma exhibits the characteristic of stem alternations, which makes the morphology very complex. It should be noted that verbs can be classified into phonologically conditioned stem classes, leading to some minor changes in the inflected forms. The verbal root often carries an augment[28] that is visible only when the following suffix is vowel-initial. Examples of paradigms are presented at the end of this chapter (cf. Appendix A). Stem alternations could be reduced to a small number of regular stem types, with no effect on inflectional affixes. The stem classes in Puma can be divided into five categories with their different kinds of subtypes. The discussion of these subtypes (Section 2.39 to 2.44) is heavily based on Bickel et al. (2008).

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[28] In Puma a syllable is added to the end of the word, as in *puŋ-ma* 'go-INF', *puks-a* 'go-PST'. Similarly, other examples are, as in *it* 'give' > *itd*, *tʌŋ* 'chase' > *tʌŋdh*, *chen* 'urinate' > *chess*, *hon* 'mix' > *holl*, and *dham* 'knock down' > *dhaps*.

## (I)    Augmented stems

In augmented stems, there is a coronal augment, which deletes before C, regardless of tense, and there is no gemination in the non-past.

### 2.39    Simple non-tensed augmented stem: CV(C)-T → CV(C) before C

Simple non-tensed augmented stems can be further divided into six subtypes.

### 2.39.1  Subtype CVC-d (never CVCt-)

Verbs like *pʌpma*, *pʌpd-* 'kiss' (*pʌpduŋ,* with first person A argument in the non-past, and *pʌpduuŋ*, with first person A argument in the past tense) and *bitma*, *bitd-* 'milk' (*bitduŋ,* with first person A argument in the non-past, and *bitduuŋ*, with first person A argument in the past tense) fall into this subtype, as in:

(101) (a)    NON-PAST TENSE CONSTRUCTION

       *ŋa-a*      *khokku-lai*     *tupp-u-ŋ*
       1SG-ERG   3SG-DAT     meet-3P-1SG.A

       'I meet her.'

    (b)    PAST TENSE CONSTRUCTION

       *ŋa-a*      *khokku-lai*     *tup-u-u-ŋ*
       1SG-ERG   3SG-DAT     meet-3P-PST-1SG.A

       'I met her.'

### 2.39.2 Subtype CVC-dh

Verbs like *lʌkma*, *lʌkdh-* 'hold', *tʌŋma*, *tʌŋdh-* 'chase' and *kinma*, *kindh-* 'frighten' fall into this subtype.

(102) (a)    NON-PAST TENSE CONSTRUCTION 3SG ARGUMENT

       *khokkuci-a*    *khokku-lai*    *pʌ-tʌŋ*
       3PL-ERG      3SG-DAT     3S/A-chase[3SG.NPST]

       'They<sub>PL</sub> chase her.'

    (b)    NON-PAST TENSE CONSTRUCTION 1SG ARGUMENT

       *ŋa-a*      *khokku-lai*     *tʌŋdh-u-ŋ*
       1SG-ERG   3SG-DAT     chase-3P-1SG.A

       'I chase her.'

### 2.39.3 Subtype CVN-t

Verbs like *tomma*, *tomt-* 'support', *soŋma*, *soŋt-* 'beat' fall into this category.

(103) (a)  FIRST PERSON SINGULAR A ARGUMENT

ŋa-a          khokku-lai       tomt-u-ŋ
1SG-ERG     3SG-DAT          support-3P-1SG.A

'I support her.'

(b)  THIRD PERSON SINGULAR A ARGUMENT

khokku-a   khokku-lai       tomt-i
3SG-ERG    3SG-DAT          support-3P

'He supports her.'

### 2.39.4 Subtype CVN-d

Verbs that fall in this subtype are like *ŋanma*, *ŋand-* 'cut off the tip of a plant to help it grow', *sinma*, *sind* 'recognise', and *onma*, *ond-* 'grind'.

(104) (a)  FIRST PERSON SINGULAR A ARGUMENT

ŋa-a          khokku-lai       sind-u-ŋ
1SG-ERG     3SG-DAT          recognise-3P-1SG.A

'I recognise her.'

(b)  THIRD PERSON SINGULAR A ARGUMENT

khokku-a   khokku-lai       sind-i
3SG-ERG    3SG-DAT          recognise-3P

'He recognises her.'

### 2.39.5 Subtype CV-d

Verbs like *kima*, *kid-* 'cook', *huma*, *hud-* 'buy' fall into this subtype.

(105) (a)  FIRST PERSON SINGULAR A ARGUMENT

ŋa-a          kitāp         hud-u-ŋ
1SG-ERG     book.ABS   buy-3P-1SG.A

'I buy the book.'

(b)  FIRST PERSON SINGULAR S ARGUMENT

ŋa            kitāp         hu-ŋa
1SG.ABS    book.ABS   buy-1SG.S/P.NPST

'I buy books.'

### 2.40    *Alternating non-tensed augmented stem: CVC-T → CVN- before C*

The alternating non-tensed augmented stems are divided into three subtypes.

### 2.40.1 Subtype CVK-S

Verbs like *phuŋma*, *phuks* 'escape', *soŋma*, *soks-* 'swell', and *puŋma*, *puks-* 'go', fall into this subtype.

(106) (a)   FIRST PERSON SINGULAR S ARGUMENT

      *ŋa*        *puŋ-ŋa*
      1SG.ABS   go-1SG.S/P.NPST

      'I go.'

  (b)   FIRST PERSON PLURAL S ARGUMENT

      *ke*            *puks-i*
      1PL.INCL.ABS   go-1/2PL.NPST

      'We go.'

## 2.40.2 Subtype CVS-S (< CVT-S)

Verbs like *chenma*, *chess-* 'urinate', and *lenma*, *less-* 'light' fall under this subtype.

(107) (a)   FIRST PERSON SINGULAR S ARGUMENT

      *ŋa*        *chen-ŋa*
      1SG.ABS   urinate-1SG.S/P.NPST

      'I urinate.'

  (b)   FIRST PERSON PLURAL S ARGUMENT

      *ke*           *chess-i*
      1PL.INCL.ABS   urinate-1/2PL.NPST

      'We urinate.'

## 2.40.3 Subtype CVP-S

Verbs like *dhamma*, *dhaps-* 'knock down', *chemma*, *cheps-* 'taste' and *khamma*, *khaps-* 'cause weep' fall into this subtype.

(108) (a)   FIRST PERSON SINGULAR A ARGUMENT

      *ŋa-a*     *khokku-lai*     *dhaps-u-ŋ*
      1SG-ERG   3SG-DAT     knock.down-3P-1SG.A

      'I knock down him.'

  (b)   FIRST PERSON SINGULAR S ARGUMENT

      *ŋa*        *kha-dham-ŋa*
      1SG.ABS   ANTIP-knock.down-1SG.S/P.NPST

      'I knock down (people).'

## 2.41   *Tensed augmented stems: CV-C ~ CV-CC→ CV before C*

In tensed augmented stems, there is an augment, and gemination of the final consonant can be found in the non-past.

**2.41.1 Subtype CVS-**

Verbs like *pima*, *piss-* 'speak', *thuma*, *thuss-* 'spit', *poma*, *poss-* 'vomit' fall into this subtype.

(109) (a)    FIRST PERSON SINGULAR S ARGUMENT

   *ŋa*          *pi-ŋa*
   1SG.ABS    speak-1SG.S/P.NPST

   'I speak.'

   (b)    FIRST PERSON PLURAL S ARGUMENT

   *ke*              *piss-i*
   1PL.INCL.ABS    speak-1/2PL.NPST

   'We speak.'

**(II)    Non-augmented stems**

*2.42    Tensed non-alternating stems*

In tensed non-alternating stems, there is no augment but gemination of the final consonant can be found in the non-past.

**2.42.1 Subtype CVC**

Verbs like *enma*, *en-* 'listen' and *dhitma*, *dhitt* 'find' are found in this subtype. The possible geminations of *en-*'listen' is *ennuŋ*, and vowel lengthening is *enuuŋ* (with first person A argument in the non-past and past tense, respectively) while the possible geminations of *dhit-* 'find' is *dhittuŋ*, and vowel lengthening is *dhituuŋ* (with first person A argument in the non-past and past tense, respectively). Note that the geminate like *enn* and *dhitt* are only found in the non-past tense, and the lengthening of vowels are found in the past tense only with a careful pronunciation.

(110) (a)    NON-PAST TENSE CONSTRUCTION

   *ŋa-a*        *khokku-lai*      *dhitt-u-ŋ*
   1SG-ERG    3SG-DAT          find-3P-1SG.A

   'I find him.'

   (b)    PAST TENSE CONSTRUCTION

   *ŋa-a*        *khokku-lai*      *dhit-u-u-ŋ*
   1SG-ERG    3SG-DAT          find-3P-PST-1SG.A

   'I found him.'

## 2.43 Tensed alternating stem CVC ~ CVN before C

In tensed alternating stems, there is no augment but gemination of the final consonant in the CVC can be a variant in the non-past. These types of stems can further be categorised into three subtypes as in:

### 2.43.1 Subtype CVr

The possible geminations of *tanma*, *tar-* 'fall' are *tarri* (with third person A argument), *tara* (with third person S argument in the past tense), *tan* (with third person S argument in the non-past) etc.

(111) (a)   FIRST PERSON PLURAL S ARGUMENT

　　　　　*ke*　　　　　*tarr-i*
　　　　　1PL.INCL.ABS　　fall-1/2PL.NPST

　　　　　'We fall.'

(b)   THIRD PERSON SINGULAR S ARGUMENT IN PAST TENSE

　　　　　*khokku*　　*tar-a*
　　　　　3SG.ABS　　fall-PST

　　　　　'He fell.'

(c)   THIRD PERSON SINGULAR S ARGUMENT IN NON-PAST TENSE

　　　　　*khokku*　　*tan*
　　　　　3SG.ABS　　fall.NPST

　　　　　'He falls.'

### 2.43.2 Subtype CVs

The possible geminations of *tanma*, tas- 'fell, cause to fall' are *tassuŋ* (with first person A argument in the non-past tense), *tasuuŋ* (with first person A argument in the past tense) etc.

(112) (a)   NON-PAST TENSE CONSTRUCTION

　　　　　*ŋa-a*　　　*khokku-lai*　　*tass-u-ŋ*
　　　　　1SG-ERG　　3SG-DAT　　　fell-3P-1SG.A

　　　　　'I fell him.'

(b)   PAST TENSE CONSTRUCTION

　　　　　*ŋa-a*　　　*khokku-lai*　　*tas-u-u-ŋ*
　　　　　1SG-ERG　　3SG-DAT　　　fell-3P-PST-1SG.A

　　　　　'I fell him.'

### 2.43.3 Subtype CVl

The possible geminations of *honma*, *hol-* 'mix' are *holli* (with third person A argument in the non-past and past tense), *holluŋ* (with first person A argument in the non-past), *holuuŋ* (with first person A argument in the past tense) etc.

(113) (a)    NON-PAST TENSE CONSTRUCTION

       *ŋa-a*     *wa*     *holl-u-ŋ*
       1SG-ERG   water.ABS  mix-3P-1SG.A

       'I mix water.'

    (b)    PAST TENSE CONSTRUCTION

       *ŋa-a*     *wa*     *hol-u-u-ŋ*
       1SG-ERG   water.ABS  mix-3P-PST-1SG.A

       'I mixed water.'

    (c)    THIRD PERSON SINGULAR A ARGUMENT

       *khokku-a*  *wa*     *holl-i*
       3SG-ERG   water.ABS  mix-3P

       'He mixes/mixed water.'

### *2.44    Open syllable stems*

In open syllable stems, there is no gemination and no augment as well. This category can further be divided into four subtypes.

### 2.44.1 Subtype Cu

Verbs like *muma*, *mu-* 'do' fall into this subtype. The possible augments of *mu-* 'do' are *mu* (with third person S argument in the non-past), *muu* (with third person A argument), and *mua* (with third person S argument in the past tense).

(114) (a)    THIRD PERSON SINGULAR A ARGUMENT

       *khokku-a*  *kām-a*     *mu-u*
       3SG-ERG   work-N.NATIV  do-3P

       'He does the work.'

    (b)    THIRD PERSON SINGULAR S ARGUMENT

       *khokku*   *kām-a*     *mu/-a*
       3SG.ABS   work-N.NATIV  do[3SG.NPST]/-PST

       'He does/did work.'

### 2.44.2 Subtype Ci

The verbs like *chima*, *chi-* 'bind' fall into this subtype and the possible forms of this verb are like *chiiŋ* (when first person A argument acts on third person P argument),

*chiŋa* (with first person S argument in the non-past tense), *chioŋ* (with first person S argument in the past tense)*,* and *chia* (with third person S argument in the past tense)*.*

(115) (a)    FIRST PERSON SINGULAR A ARGUMENT

       *ŋa-a*      *khokku-lai*     *chi-i-ŋ*
       1SG-ERG    3SG-DAT     bind-3P-1SG.A

       'I bind her.'

   (b)    THIRD PERSON SINGULAR S ARGUMENT

       *khokku*     *ghāsā*    *chi-a*
       3SG.ABS    grass.ABS  bind-PST

       'He bound grass.'

## 2.44.3 Subtype Ca

Verbs like *cama*, *ca-* 'eat' and *bhama*, *bha* 'cut' fall into this subtype. The possible augments of *ca-* 'eat' are *caaŋ* (with first person A argument in the non-past tense), *cooŋ* (with first person A argument in the past tense), *caŋa* (with first person S argument in the non-past tense), *caoŋ* (with first person S argument in the past tense)*,* *caa* (with first person A argument in the non-past tense), *coo* (with first person A argument in the past tense)*,* and *cee* (with first person plural S argument in the non-past tense). There is a lots of stem vowel change here and none of the previous subtypes has this.

(116)(a)    FIRST PERSON SINGULAR A ARGUMENT IN NON-PAST

       *ŋa-a*      *pempak*     *ca-a-ŋ*
       1SG-ERG    bread.ABS    eat.NPST-3P-1SG.A

       'I eat bread.'

   (b)    FIRST PERSON SINGULAR A ARGUMENT IN PAST

       *ŋa-a*      *pempak*     *co-o-ŋ*
       1SG-ERG    bread.ABS    eat.PST-3P-1SG.A

       'I ate bread.'

   (c)    THIRD PERSON SINGULAR A ARGUMENT

       *khokku-a*  *pempak*    *ca-a*
       3SG-ERG    bread.ABS  eat-3P

       'He eats bread.'

   (d)    FIRST PERSON PLURAL S ARGUMENT

       *ke*          *pempak*     *ce-e*
       1PL.INCL.ABS    bread.ABS     eat-1/2PL.NPST

       'We eat breads.' (generic reference)

## 2.44.4 Subtype Co

The only verb that falls into this subtype is *ŋoma*, *ŋo-* 'fry.' The possible augments of *ŋo-*'fry' are such as *ŋooŋ* and *ŋoo*, as in:

(117)(a)    FIRST PERSON SINGULAR A ARGUMENT IN PAST

*ŋa-a*      *pempak*      *ŋo-o-ŋ*
1SG-ERG    bread.ABS     fry.PST-3P-1SG.A

'I fried bread.'

(b)    THIRD PERSON SINGULAR A ARGUMENT

*khokku-a*   *pempak*   *ŋo-o*
3SG-ERG    bread.ABS  fry-3P

'He fried bread.'

The distribution of stem classes is presented in Table 63.

**Table 63:** Stem alternations

| Cu | Ci | Ca | Co | CVC | | CVC-d | | CVC-dh | CVN-t | CVN-d | CV-d | CVK-s | CVS-s | CVP-s | CVS- | CV-r | CV-s | CV-l |
|----|----|----|----|-----|---|-------|---|--------|-------|-------|------|-------|-------|-------|------|------|------|------|
| mu | chi | ca | ŋo | enn | satt | lupd | chakɖ | lʌkdh | tomt | ŋand | kid | soks | chess | cheps | thuss | tar | tas | hol |
| hu | ri | bha | | dhitt | pott | bitd | phad | tʌndh | soŋt | dind | hud | sʌks | less | khaps | poss | chor | | bal |
| su | bhi | la | | lokk | nukk | batd | itd | cipdh | ŋant | bhund | bud | kʌks | bhus | aps | khuss | khur | | bhul |
| | ti | kha | | rʌŋŋ | mapp | betd | chotd | cetdh | lunt | sind | khud | bhuks | kess | bops | chiss | por | | bil |
| | | ba | | onnh | lekk | bhekd | chetd | lukɖh | pʌnt | cind | cid | khʌks | iss | hops | huss | par | | khil |
| | | ta | | baŋŋ | lamm | bhukd | chʌpd | kindh | mant | | pid | tʌks | poss | nhaps | kuss | tar | | thul |
| | | na | | batt | khaŋŋ | bokd | mitd | podh | kent | | rid | bʌks | ŋess | ŋaps | | car | | hul |
| | | | | bekk | huŋŋ | bopd | metd | | hont | | lid | lʌks | chess | chaps | | chʌr | | tol |
| | | | | bett | dhapp | khopd | mʌkɖ | | bamt | | sud | thʌks | bhiss | ips | | ɖher | | pol |
| | | | | app | cutt | pukɖ | lupd | | bhamt | | red | dʌks | jhess | khaps | | | | khol |
| | | | | bʌkk | chʌkk | cupd | khotd | | khʌnt | | thud | choks | phess | dhaps | | | | |
| | | | | baŋŋ | bekk | chʌkɖ | kʌkɖ | | sont | | chid | dʌks | piss | | | | | |
| | | | | batt | satt | wand | hepd | | bomt | | | ruks | loss | | | | | |
| | | | | bekk | bopp | tupd | dotd | | pamt | | | roks | chuss | | | | | |
| | | | | bett | chʌkk | thakd | mopd | | phamt | | | kʌks | bhuss | | | | | |
| | | | | bhukk | rett | pʌpd | | | mamt | | | coks | | | | | | |
| | | | | lokk | yokk | | | | sont | | | puks | | | | | | |
| | | | | chokk | sett | | | | somṭ | | | | | | | | | |
| | | | | sokk | bopp | | | | kuŋṭ | | | | | | | | | |
| | | | | tokk | copp | | | | khʌnt | | | | | | | | | |
| | | | | mokk | khopp | | | | chemt | | | | | | | | | |
| | | | | patt | ɖhaŋŋ | | | | | | | | | | | | | |
| | | | | latt | chaŋŋ | | | | | | | | | | | | | |
| | | | | lett | laŋŋ | | | | | | | | | | | | | |
| | | | | bett | phaŋŋ | | | | | | | | | | | | | |

## 2.45    Puma template

In templatic morphology the structure of the string of formatives is flat and departs in a number of ways from layered structure (Francis & Stonham 2006; Spencer 1991). There can be more than one root or head. The position of formatives in the string can be determined by their formal categories, or by phonological principles, rather than their syntactic or semantic functions (Bickel 2007).

Templatic morphology is characteristic, for example, of verb agreement not only in Algonquian, Bantu, but also in Kiranti languages, where it regulates the sequencing of inflectional formatives (Bickel & Nichols 2007, 2011). Tables 64 and 65 present intransitive verb conjugations, while Tables 66 and 67 present transitive verb conjugations. Table 68 illustrates the templatic structure of Puma (Kiranti) verb. As is typical for templatic morphology, there are many long-distance dependencies across several affix positions.

**Table 64:** Intransitive verb conjugations

| INTRANSITIVE INDICATIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
| | NPST | PST | NPST | PST |
| 1SG | *Σ-ŋa* | *Σ-oŋ* | *pʌ-Σ-nʌŋ* | |
| 1DL.INCL | *Σ-ci* | *Σ-a-ci* | *pʌ-Σ-ci-min* | *pʌ-Σ-a-ci-min* |
| 1PL.INCL | *Σ-i/e* | *Σ-a-nin* | *pʌ-Σ-i-min* | *pʌ-Σ-a-ni-min* |
| 1DL.EXCL | *Σ-ci-ka* | *Σ-a-ci-ka* | *pʌ-Σ-ci-min-ka* | *pʌ-Σ-a-ci-min-ka* |
| 1PL.EXCL | *Σ-i-ka* | *Σ-a-nin-ka* | *pʌ-Σʌ-min-ka* | *pʌ-Σ-a-ni-min-ka* |
| 2SG | *tʌ-Σ* | *tʌ-Σ-a* | *tʌ-Σ-nin* | *tʌ-Σ-en* |
| 2DL | *tʌ-Σ-ci* | *tʌ-Σ-a-ci* | *tʌ-Σ-ci-min* | *tʌ-Σ-a-ci-min* |
| 2PL | *tʌ-Σ-i/e* | *tʌ-Σ-a-nin* | *tʌ-Σ-ʌ-min* | *tʌ-Σ-a-ni-min* |
| 3SG | *Σ* | *Σ-a* | *pʌ-Σ-nin* | *pʌ-Σ-en* |
| 3DL | *pʌ-Σ-ci* | *pʌ-Σ-a-ci* | *pʌ-Σ-ci-min* | *pʌ-Σ-a-ci-min* |
| 3PL | *mʌ-Σ* | *mʌ-Σ-a* | *ni-pʌ-Σ-nin* | *ni-pʌ-Σ-en* |

Intransitive imperfective paradigm is presented in Table 65.

**Table 65:** Intransitive imperfective paradigms

| | INTRANSITIVE IMPERFECTIVE | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
| | NPST | PST | NPST | PST |
| 1SG | *Σ-ŋa-ŋa* | *Σ-oŋ-yaŋ* | *pʌ- Σ-nʌŋ-yaŋ* | |
| 1DL.INCL | *Σ-caŋ-ci* | *Σ-aŋ-ci* | *pʌ- Σ-caŋ-ci-min* | *pʌ- Σ-aŋ-ci-min* |
| 1PL.INCL | *Σ-aŋ-i* | *Σ-aŋ-nin* | *pʌ- Σ-aŋ-ni-min* | |
| 1DL.EXCL | *Σ-caŋ-ci-ka* | *Σ-aŋ-ci-ka* | *pʌ- Σ-caŋ-ci-min-ka* | *pʌ- Σ-aŋ-ci-min-ka* |
| 1PL.EXCL | *Σ-aŋ-i-ka* | *Σ-aŋ-nin-ka* | *pʌ- Σ-aŋ-ni-min-ka* | |
| 2SG | *tʌ- Σ-yaŋ* | *tʌ- Σ-a-ŋa* | *tʌ- Σ-nin-yen* | *tʌ- Σ-en-yen* |
| 2DL | *tʌ- Σ-caŋ-ci* | *tʌ- Σ-aŋ-ci* | *tʌ- Σ-caŋ-ci-min* | *tʌ- Σ-aŋ-ci-min* |
| 2PL | *tʌ- Σ-aŋ-i* | *tʌ- Σ-aŋ-nin* | *tʌ- Σ-aŋ-ni-min* | *tʌ- Σ-aŋ-ni-min* |
| 3SG | *Σ-yaŋ* | *Σ-a-ŋa* | *pʌ- Σ-nin-yen* | *pʌ- Σ-en-yen* |
| 3DL | *pʌ- Σ-caŋ-ci* | *pʌ- Σ-aŋ-ci* | *pʌ- Σ-caŋ-ci-min* | *pʌ- Σ-aŋ-cʌ-min* |
| 3PL | *mʌ- Σ-yaŋ* | *mʌ- Σ-a-ŋa* | *ni-pʌ- Σ-nin-yen* | *ni-pʌ- Σ-en-yen* |

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**Table 66:** Non-past transitive verb paradigms[29]

| | 1sg | 1dl.incl | 1pl.incl | 1dl.excl | 1pl.excl | 2sg | 2dl | 2pl | 3sg | 3ns | ANTIPASSIVE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1sg | A —P→ (↓) | | | | | Σ-na<br>pʌ-Σ-nen | Σ-na-ci<br>pʌ-Σ-na-ci-min | Σ-na-nin<br>pʌ-Σ-na-nimin | Σ-u-ŋ<br>pʌ-Σn-ʌŋ | Σ-u-ŋ-cʌŋ<br>pʌ-Σ-nʌŋ-cʌŋ | kha-Σ-ŋa<br>kha-pʌ-Σ-nʌŋ |
| 1di | | | | | | | | | Σ-ci<br>pʌ-Σ-ci-min | Σ-ci-ci<br>pʌ-Σ-ci-ci-min | kha-Σ-ci<br>kha-pʌ-Σ-ci-min |
| 1pi | | | | | | | | | Σ-u-m<br>pʌ-Σ-u-m-min | Σ-u-m-cʌm<br>pʌ-Σ-u-m-cʌm-min | kha-Σ-i<br>kha-pʌ-Σ-i-min |
| 1de | | | | | | ni-tʌ-Σ | ni-tʌ-Σci<br>ni-tʌ-Σ-ci-min | ni-tʌ-Σ-i | Σ-ci-ka<br>pʌ-Σ-ci-min-ka | Σ-ci-ci-ka<br>pʌ-Σ-ci-ci-min-ka | kha-Σ-ci-ka<br>kha-pʌ-Σ-ci-min-ka |
| 1pe | | | | | | ni-tʌ-Σnin | ni-tʌ-Σi<br>ni-tʌ-Σi-min | ni-tʌ-Σ-i-min | Σ-u-m-ka<br>pʌ-Σ-u-m-minka | Σ-u-m-cʌm-ka<br>pʌ-Σ-u-m-cʌm-minka | kha-Σ-i-ka<br>kha-pʌ-Σ-i-min-ka |
| 2sg | tʌ-Σ-ŋa<br>tʌ-Σ-nʌŋ | | | kha-tʌ-Σ<br>kha-tʌ-Σ-nin | | | | | tʌ-Σ-i<br>tʌ-Σ-in | tʌ-Σ-i-ci<br>tʌ-Σ-in-cin | kha-tʌ-Σ<br>kha-tʌ-Σ-nin |
| 2dl | tʌ-Σ-ŋa-cʌŋ<br>tʌ-Σ-nʌŋ-cʌ-mʌŋ | | | kha-tʌ-Σ-ci<br>kha-tʌ-Σ-ci-min | | | | | tʌ-Σ-ci<br>tʌ-Σ-ci-min | tʌ-Σ-ci-ci<br>tʌ-Σ-ci-ci-min | kha-tʌ-Σ-ci<br>kha-tʌ-Σ-ci-min |
| 2pl | tʌ-Σ-ŋa-nʌŋ<br>tʌ-Σ-nʌŋ-nʌ-mʌŋ | | | kha-tʌ-Σ-i<br>kha-tʌ-Σ-i-min | | | | | tʌ-Σ-u-m<br>tʌ-Σ-u-m-min | tʌ-Σ-u-m-cʌm<br>tʌ-Σ-u-m-cʌm-min | kha-tʌ-Σ-i<br>kha-tʌ-Σ-i-min |
| 3sg | pʌ-Σ-ŋa<br>pʌ-Σ-nʌŋ | kha-Σ<br>kha-pʌ-Σ-nin | | pʌ-Σ-ci-ka<br>pʌ-Σ-ciminka | pʌ-Σ-i-ka<br>pʌΣiminka | tʌ-Σ<br>tʌ-Σ-nin | tʌ-Σ-ci<br>tʌ-Σ-ci-min | tʌ-Σ-i<br>tʌ-Σ-i-min | Σ-i<br>pʌ-Σ-in | Σ-i-ci<br>pʌ-Σ-in-cin | kha-Σ<br>kha-pʌ-Σ-nin |
| 3dl | pʌ-Σ-ŋa-cʌŋ<br>pʌ-Σ-nʌŋ-cʌ-mʌŋ | kha-pʌ-Σ-ci<br>kha-pʌ-Σ-ci-min | | ni-pʌ-Σ-ci-ka<br>ni-pʌ-Σ-ci-min-ka | | ni-tʌ-Σ | ni-tʌ-Σ-ci<br>ni-tʌ-Σ-ci-min | ni-tʌ-Σ-i | pʌ-Σ-ci<br>pʌ-Σ-ci-min | pʌ-Σ-ci-ci<br>pʌ-Σ-ci-ci-min | kha-pʌ-Σ-ci<br>kha-pʌ-Σ-ci-min |
| 3pl | ni-pʌ-Σ-ŋa<br>ni-pʌ-Σ-nʌŋ | kha-mʌ-Σ<br>kha-ni-pʌ-Σ-nin | | ni-pʌ-Σ-i-ka<br>ni-pʌ-Σ-i-min-ka | | ni-tʌΣnin | ni-tʌ-Σ-i<br>ni-tʌ-Σ-i-min | ni-tʌ-Σ-i-min | pʌ-Σ<br>ni-pʌ-Σ-in | mʌ-Σ-i-ci<br>ni-pʌ-Σ-in-cin | kha-mʌ-Σ<br>kha-ni-pʌ-Σ-nin |

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[29] Within the paradigm table, upper case refers to affirmative and lower case refers to negative forms.

**Table 67:** Past transitive verb paradigms

|  | 1sg | 1dl.i | 1pl.i | 1dl.e | 1pl.e | 2sg | 2dl | 2pl | 3sg | 3ns | ANTIPASSIVE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1sg** | A → P | | | | | *Σ-na* / *pʌ-Σ-nen* | *Σ-na-ci* / *pʌ-Σ-na-cimin* | *Σ-na-nin* / *pʌ-Σ-na-nimin* | *Σ-u-u-ŋ* / *pʌ-Σ-nʌŋ* | *Σ-u-u-ŋ-cʌŋ* / *pʌ-Σ-nʌŋ-cʌŋ* | *kha-Σ-oŋ* / *kha-pʌ-Σ-nʌŋ* |
| **1di** | | | | | | | | | *Σ-a-ci* / *pʌ-Σ-a-ci-min* | *Σ-a-ci-ci* / *pʌ-Σ-a-ci-ci-min* | *kha-Σ-a-ci* / *kha-pʌ-Σ-a-ci-min* |
| **1pi** | | | | | | | | | *Σ-u-u-m* / *pʌ-Σ-u-u-m-min* | *Σ-u-u-m-cʌm* / *pʌ-Σ-u-u-m-cʌm-min* | *kha-Σ-a-nin* / *kha-pʌ-Σ-a-ni-min* |
| **1de** | | | | | | *ni-tʌ-Σ-a* / *ni-tʌ-Σ-en* | *ni-tʌ-Σ-a-ci* / *ni-tʌΣ-a-cimin* | *ni-tʌ-Σ-a-nin* | *Σ-a-ci-ka* / *pʌ-Σ-a-ci-min-ka* | *Σ-a-ci-ci-ka* / *pʌ-Σ-a-ci-ci-min-ka* | *kha-Σ-a-ci-ka* / *kha-pʌ-Σ-a-ci-min-ka* |
| **1pe** | | | | | | | *ni-tʌ-Σ-a-nin* / *ni-tʌΣ-a-nimin* | *ni-tʌΣ-a-nimin* | *Σ-u-u-m-ka* / *pʌΣ-u-u-m-minka* | *Σ-u-u-m-cʌm-ka* / *pʌ-Σ-u-u-m-cʌm-minka* | *kha-Σ-a-nin-ka* / *kha-pʌ-Σ-a-ni-min-ka* |
| **2sg** | *tʌ-Σ-oŋ* / *tʌ-Σ-nʌŋ* | | | *kha-tʌ-Σ-a* / *kha-tʌ-Σ-en* | | | | | *tʌ-Σ-i* / *tʌ-Σ-in* | *tʌ-Σ-i-ci* / *tʌ-Σ-in-cin* | *kha-tʌ-Σ-a* / *kha-tʌ-Σ-en* |
| **2dl** | *tʌ-Σ-oŋ-cʌŋ* / *tʌ-Σnʌŋcʌmʌŋ* | | | *kha-tʌ-Σ-a-ci* / *kha-tʌ-Σ-a-ci-min* | | | | | *tʌ-Σ-a-ci* / *tʌ-Σ-a-ci-min* | *tʌ-Σ-a-ci-ci* / *tʌ-Σ-a-ci-ci-min* | *kha-tʌ-Σ-a-ci* / *kha-tʌ-Σ-a-ci-min* |
| **2pl** | *tʌ-Σ-oŋ-nʌŋ* / *tʌ-Σnʌŋnʌmʌŋ* | | | *kha-tʌ-Σ-a-nin* / *kha-tʌ-Σ-a-ni-min* | | | | | *tʌ-Σ-u-u-m* / *tʌ-Σ-u-u-m-min* | *tʌ-Σ-u-u-m-cʌm* / *tʌ-Σ-u-u-m-cʌm-min* | *kha-tʌ-Σ-a-nin* / *kha-tʌ-Σ-a-ni-min* |
| **3sg** | *pʌ-Σ-oŋ* / *pʌ-Σ-nʌŋ* | *kha-Σ-a* / *kha-pʌ-Σ-en* | *pʌ-Σ-a-cika* / *pʌΣaciminka* | *pʌΣa-ninka* / *pʌΣaniminka* | | *tʌ-Σ-a* / *tʌ-Σ-en* | *tʌ-Σ-a-ci* / *tʌ-Σ-a-ci-min* | *tʌ-Σ-a-nin* / *tʌ-Σ--a-ni-min* | *Σ-i* / *pʌ-Σ-in* | *Σ-i-ci* / *pʌ-Σ-in-cin* | *kha-Σ-a* / *kha-pʌ-Σ-en* |
| **3dl** | *pʌ-Σ-oŋ-cʌŋ* / *pʌΣnʌŋcʌmʌŋ* | *kha-pʌΣ-a-ci* / *khapʌΣacimin* | *ni-pʌ-Σ-a-ci-ka* / *ni-pʌ-Σ-a-ci-min-ka* | | | *ni-tʌ-Σ-a* | *ni-tʌ-Σ-a-ci* / *ni-tʌΣ-a-cimin* | *ni-tʌ-Σ-a-nin* | *pʌ-Σ-a-ci* / *pʌ-Σ-a-ci-min* | *pʌ-Σ-a-ci-ci* / *pʌ-Σ-a-ci-ci-min* | *kha-pʌ-Σ-a-ci* / *kha-pʌ-Σ-a-ci-min* |
| **3pl** | *ni-pʌ-Σ-oŋ* / *ni-pʌ-Σ-nʌŋ* | *kha-mʌ-Σ-a* / *kha-nipʌΣ-en* | *ni-pʌ-Σ-a-nin-ka* / *ni-pʌ-Σ-a-ni-min-ka* | | | *ni-tʌ-Σ-en* | *ni-tʌ-Σ-a-nin* / *ni-tʌΣ-a-nimin* | *ni-tʌ-Σ-a-nimin* | *pʌ-Σ-a* / *ni-pʌ-Σ-in* | *mʌ-Σ-i-ci* / *ni-pʌ-Σ-in-cin* | *kha-mʌ-Σ-a* / *kha-ni-pʌ-Σ-en* |

**Table 68:** Puma template verbs

| pf1 | pf2 | pf3 | Σ | sf1 | sf2 | sf3 | sf4 | sf5 | sf6 | sf7 | sf8 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| kha | ni | *tʌ* | | *ŋa* | *na* | *nin* | *yam* | *ci* | *ŋ* | *min* | *ka* |
| | | *pʌ* | | *oŋ* | *ŋ* | *mʌ* | *yen* | | *m* | | |
| | | *mʌ* | STEM | *a* | *nʌŋ* | | *mʌŋ* | | | | |
| | | *pʌ* | | *caŋ* | *i* | | | | | | |
| | | *men* | | *a~u~i~o* | *naŋ* | | | | | | |
| | | | | *aŋ* | *yaŋ* | | | | | | |

## 2.46   Chapter summary

This chapter presents an overview of the phonology and morphology of Puma, based on primary fieldwork data. The chapter is divided into two parts: phonology and morphology. Puma has thirty-two consonant phonemes and six vowel phonemes. All consonant phonemes occur in word-initial position, while vowel phonemes occur in all word-initial, word-medial and word-final positions. Unlike neighbouring languages like Bantawa and Camling, Puma has retroflex and dental sounds. I demonstrate the distribution of consonants in different positions according to their manner of articulation: word-initial, word-medial (intervocalic) and word-final, and the possibility of gemination of consonants, and the distribution of consonant clusters word-initially, word-medially and word-finally. The syllable can be formulated minimally and maximally. In Puma the minimal syllable is v and the maximum syllable is (c) (g) v (c) (c), where 'g' is a glide. Puma allows initial consonant cluster in n c v c, where 'n' is a nasal. The loanwords from other languages and the phonology of loanwords from Nepali are discussed.

Part II presents an overview of morphology in Puma, including details of nominal and verbal morphology. Puma makes an inclusive and exclusive distinction in the first person non-singular of pronouns where non-singular includes dual and plural. Transitive verbs show agreement with person and number. Puma has a split case-marking system between nominative-accusative and ergative-absolutive-dative and shows a highly unusual system of ergativity (where intransitive subjects are marked the same way as some transitive objects and differently from transitive subjects). A striking feature of Puma is upside-down split ergativity (Bickel et al. 2005) in which intransitive subjects are marked in the same way as transitive objects for the first person singular and plural, while transitive subjects are marked in the same way as intransitive subjects but differently from transitive objects for the third person. Puma verbs and Proto-Kiranti verbal agreement system is described in which the Puma morphemes which have clear Proto-Kiranti cognates are presented. There are a total nine reflexes in Puma which are either identical or cognate. The features of personal pronouns, case-marking, possessive constructions, demonstratives, affixes and Puma templates are also discussed.

# Chapter 3

# Clause structures

## 3.1    *Background*

This dissertation focuses on the morphosyntax of Puma and this chapter describes clause structures, including verbal and non-verbal predicates, argument types, basic clause types, and derived clause types. In the typological linguistic literature, while a significant amount of research has been carried out on clauses, it has been widely assumed that clauses that express equation, location, existence, and possession are universal, especially with respect to predicate nominals which are said to be found in all languages (cf. Payne 2008).

The preceding chapter presented an outline of Puma phonology and morphology in which the major components of phonology and morphology were described. In the morphology part, both nominal and verbal morphology were discussed. This chapter examines clause structure in Puma. Section 3.1 gives background on clause structure, and non-verbal predicates are discussed in Section 3.2. Verbal predicates and predicate types are introduced in Section 3.3 and 3.4, respectively. Section 3.5 describes argument types. The basic clause types are presented in 3.6. Intransitive, transitive, and ditransitive clauses are described in Sections 3.7, 3.8, and 3.9, respectively. Differential object-marking is discussed in section 3.10. Genitive experiencers are discussed in section 3.11, while the imperatives are examined in 3.12. Sections 3.13 to 3.16 introduce interrogatives, negative clauses, comparative and superlative clauses, and derived clause types, respectively. Sections 3.17 and 3.18 look at valence decreasing ans increasing constructions. Selectional restrictions are investigated in 3.19. Finally, section 3.20 gives a summary of the chapter.

## 3.2    *Non-verbal predicates*

All clause types must contain a verb with the exception of non-verbal predicate clauses. Properties of non-verbal and verbal predicates vary considerably across languages (cf. Dryer 2007). Puma distinguishes adjectival predicates and locative predicates from nominal predicates. It is common cross-linguistically for languages to treat at least one of these types differently from the other two (Dryer 2007).

There are no copulas in Puma for expression of identificational meaning, though

Puma does not lack copulas entirely. Puma syntactically distinguishes predicate nominals of identification from nominals with existential meaning. Dixon (1979) argues that every language shows a minor type of 'equational clause' which contains two noun phrases. Some languages like English require a copula, while other languages like Puma do not.

(118) (a)   *uŋ-bo*        *uŋ-marchacha*      *dākṭ∧r∧*
           1SG.POSS-GEN    1SG.POSS-daughter    doctor.ABS

           'My daughter is a doctor.'

     (b)   *t∧kku*      *sa* ?
           DEM         who

           'Who is that?'

     (c)   *t∧kku*      *munima*
           DEM         cat.ABS

           'That is a cat.'

Examples (118a-c) show equative constructions without any copula verbs where two entities are equated with each other in the present tense. Such a construction also exists in the neighbouring languages like Bantawa (Doornenbal 2009). This is not uncommon cross-linguistically and is found in languages like Russian, and Maltese (Stassen 2011). However, we must use a copula verb, namely *lima* 'be' to express identification in the future and past tense in Puma, as in Lango (Noonan 1992), a Nilotic language spoken in Uganda.

(119) (a)   *uŋ-bo*        *uŋ-marchacha*       *dākṭ∧r∧*      *li*
           1SG.POSS-GEN    1SG.POSS-daughter.ABS    doctor.ABS    be.NPST

           'My daughter will be a doctor.'

     (b)   *ŋa*       *māsṭ∧r∧*      *lis-oŋ*
           1SG.ABS    teacher.ABS    be-1SG.S/P.PST

           'I was a teacher.'

It is possible to use *lima* 'be' in the present tense with an adjectival predicate but it is not possible to use it with a nominal predicate as it requires another argument.

(120) (a)   *cumama*    *li-yaŋ*
           cold         be-IPFV

           'It is cold.'

     (b)   *\*khokku*    *li-yaŋ*
           3SG.ABS    be-IPFV

           'He is becoming.'

(c)  *khokku*      *dakṭʌrʌ*       *li-yaŋ*
    3SG.ABS     doctor.ABS      be-IPFV

    'He is becoming a doctor.'

Cross-linguistically copulas are most commonly treated by morpho-syntax as verbs, as with the copula 'be' in English. They have similar syntactic behaviour, but have different distributional restrictions. In Puma, copulas have grammaticalised from verbs with more specific meanings, like 'sit', and still have the meaning of 'sit' in some contexts. Grammaticalised copulas are found in other languages, such as Wambaya, a Non-Pama-Nyungan language of northern Australia, as mentioned by Dryer (2007). In Puma, *yuŋma* is the general verb meaning 'sit', or 'stay' and it is used for existential and locative predication, as in Bantawa (Rai 1985; Doornenbal 2009).

Non-verbal predicates in Puma can be divided into four types: adjective predicates, locative predicates, nominal predicates and predicative possession.

### 3.2.1   Adjectival predicates

Adjectival predicates in Puma that express descriptive meaning occur obligatorily with the copula verb *yuŋ*.

(121) (a)  *luŋwa-ci*        *ompʌcima*      *mʌ-yuŋ-ci*
          stone-NS.ABS      white           3PL-stay-NS

          'The stones are white.'

     (b)  *tʌkku*      *hikha*      *luŋkʌkwa*   *yuŋ-yaŋ*
          DEM         bag.ABS      heavy        be-IPFV

          'That bag is heavy.'

### 3.2.2   Locative predicates

Locative clauses consist of an argument and a predicate containing a post-positional phrase plus the copula *yuŋ*. Puma employs the same copula for locative predicates as it does for adjectival predicates, whereas nominal predicates occur with a different copula, as will be explained in section 3.2.3. It is very common, according to Dryer (2007), for a different copula to be used with locative predicates with a meaning like, 'sit', 'stay' or 'be at'.

(122) (a)  *khokku*     *mela-i*              *yuŋ-yaŋ*
          3SG.ABS     market-DOWN.LOC       be-IPFV

          'S/he is in the market.'

(b)    *khoṭāng-do*            *inṭarneṭ*    *yuŋ-yaŋ*?
Khotang-GEN.LOC        internet    be-IPFV

'Is there internet available in Khotang?'

Note that there are some languages such as Diyari (Austin 1981), a Pama-Nyungan language spoken in Australia, in which locative predicates are expressed with three verbs, meaning 'sit', 'stand' and 'lie' depending in the context (with a further contrast between 'lie (of animates)' and 'lie (of inanimates)'). Consider the Diyari example:

(123)     DIYARI

*ngapa*          *pirna*           *pantu-nhi*      *parra-yi*
water           big.ABS       lake-LOC      lie-PRES

'There is a lot of water in the lake.' (Austin 1981: 104)

Dryer (2007) argues that (122) does not involve a non-verbal predicate, though this is how Diyari expresses locative meaning that other languages express by means of non-verbal locative predicates. Clauses with existential predicates can include a locative in Puma, and these should be distinguished from locative predicate clauses.

(124)    *tonpʌʌŋ=na*       *kʌ-khim-di*          *ʌk*      *chup*
then.after=PTCL     3SG.POSS-house-UP.LOC    one     fistful
*kʌ-camcam*        *yuŋ-a-ŋa=ni=ku*
3SG.POSS-ration     sit-PST-IPFV=REP =NMLZ

'There was one fistful of uncooked rice in his house.' (folk_tale_01)

Puma, like Ma'anyam (Gudai 1998; cf. Dryer 2007), an Austronesian language spoken in Kalimantan (Borneo) in Indonesia, is a language that uses the same copula verb for a range of functions which includes locative and existential copula.

### 3.2.3 Nominal predicates

As already described above in Section 3.2, In Puma clauses with nominal predicates lack a copula verb. Puma is dissimilar to English in this respect as it employs the copula verb *be* for nominal predicates (Dryer 2007). Adjectival predicates and locative predicates occur with the copula verb *yuŋ*, while nominal predicates occur without a copula in the present tense.

### 3.2.4 Predicative possession

In Puma we can also consider predicate possessives to be a subtype of existential clauses, as they occur with the copula verb *yuŋ*. Possession can be indicated in a number of different ways, but the only one that is considered here is the existential one.

Languages differ considerably in the ways they express predicate possession. In some languages such as English, the possessive relationship between possessor and possessed item is expressed with a transitive construction (Dryer 2007).

(125)    *Mary has a car.*

This is an instance of the Have-possessive (Stassen 2001) in which the possessor NP occurs as the subject and possessed NP occurs as the complement of a 'have'-verb. Opposed to the Have-possessive, many languages employ predicate locatives or existential clauses to express such a meaning. Cross-linguistically, an existential possessive construction has the basic form of an existential clause, employing a one-place predicate with a locational or existential meaning. They have frequently grammaticalised from verbs with more specific meanings, like 'to be at', 'to be there', and 'to exist' (Dryer 2007). The difference between these types lies in the encoding of the possessor NP and the possessed NP.

Dryer (2007) notes that in many languages, predicate possession clauses are similar to existential clauses to some extent but the possessor expression is treated somewhat differently. Consider example (126) from Puma where we have a comitative construction (predicate) to express the meaning of possession.

(126) (a)  *ŋa-oŋ*       *uŋ-khimhoŋma*       *yuŋ-yaŋ*
           1SG-COM$_1$   1SG.POSS-wife.ABS    be-IPFV

           'I have a wife.' (Literary: 'Wife is with me.')

      (b)  *ŋa-pʌ-do*           *kar*        *yuŋ-yaŋ*
           1SG-COM$_2$-GEN.LOC   car.ABS      be-IPFV

           'I have a car.' (Literary: 'Car is with me.')

Example (126) shows that the predicate possession clause, with a possessed item in the absolutive case and the possessor in the comitative case, as in (126a) and (126b).

In the oblique possessive, the possessed NP occurs as the grammatical subject of an 'exist'-predicate, while the possessor NP occurs in some oblique form (Stassen 2001). The oblique marking on the possessor NP has its basic meaning for the specification of a locational relation. Depending on the particular type of locational relation selected in many languages, it would be possible to further subcategorise this type into the following:

(127) (a)  Locative possessive (with the possessor NP being marked by some elements meaning 'at', 'on' or 'in'), as in Mongolic (Poppe 1954: 147), a language group spoken in China, Russia, Afghanistan and Kyrgyzstan.

(b)  Dative possessive (with a marker 'to' or 'for' on the possessor NP), as in Kannada (Sridhar 1990), a Dravidian language spoken in southern India.

(c)  Comitative possessive (with a marker 'with'), as illustrated in (126a) from Puma, and also found in Finnish (Sulkala & Karjalainen 1992).

Puma presents a somewhat more complicated case, as two ways of expressing existential possession are possible. Example (128a) is a full version of genitive possessive which is synonymous to example (128b), a contracted version of genitive possessive. Note that (128c) is an ungrammatical (see cf. Section 2.26.3 for details). The predicate only indicates existential meaning but not identificational meaning, in the case of identificational meaning, the copula is not used.

(128) (a)  *uŋ-bo*           *uŋ-khimhoŋma*      *yuŋ-yaŋ*
        1SG.POSS-GEN        1SG.POSS-wife.ABS    be-IPFV

'I have a wife.' (Literally: 'My wife exists.')

(b)  *uŋ*          *khimhoŋma*      *yuŋ-yaŋ*
        1SG.POSS    wife.ABS        be-IPFV

'I have a wife.' (Literally: 'My wife exists.')

(c)  *\*uŋ-bo*        *khimhoŋma*      *yuŋ-yaŋ*
        1SG.POSS-GEN    wife.ABS      be-IPFV

'I have a wife.' (Intended: 'My wife exists.')

## 3.3 Verbal predicates

While clauses with non-verbal predicates are exceptional and less frequent in most languages, clauses with verbal predicates can be found with high frequency in all languages (cf. Dryer 2007). There are different types of clauses with verbal predicates whose properties vary considerably across languages. An analysis of verbal predicates is described in Section 3.4.

## 3.4 Predicate types

Puma verbs can be classified according to the number and types of arguments they take. We assume that each predicate in every language is correlated with a set of arguments, the number and type of which are not systematically predictable from the meaning of the verb. Examples of the basic predicates types of verbs are presented in (129) in

which predicates such as *run* and *sleep* are one place predicates, *love* and *finish* are two place predicates, and *give* is a three place predicate.

(129) (a)  *run <1>*              *Mary$_1$ ran.*

(b)  *sleep <1>*            *Mira$_1$ sleeps.*

(c)  *love <1, 2>*         *Ram$_1$ loves Sita$_2$.*

(d)  *finish <1, 2>*       *Jen$_1$ finished the work$_2$.*

(e)  *give <1, 2, 3>*      *Martin$_1$ gave Nubia$_2$ a book$_3$.*

Intransitive clauses are normally characterised by a single argument while transitive clauses involve two arguments. There are many languages in which predicates denoting states of weather require no arguments. In Puma weather predicates can be expressed by a single word, a bare predicate with no arguments. It does not require dummy pronoun like *it* in English.

(130)      *<namchoyaŋ>*          *nam-cho-yaŋ$_0$*
                                 sun-be.surplus-IPFV

                                 'It is hot.'

Example (130) shows that *nam* 'sun' is verbal which we can contrast with the verb here. The verb *cho-* 'be.surplus' which is homophonous to *cho* 'plough' is not productive and it only occurs in these zero-argument clauses. It is not simply *nam cho-yaŋ*, with *sun* being a nominal with zero-marked abslutive because it only occurs with *nam* 'sun'. These clauses are grammatically intransitive and semantically non-argument clauses (cf. Dryer 2007). Puma is actually not unusual cross-linguistically in using non-argument verbs, as lots of languages like Latin (Peter Austin, p.c.), Tahitian (Tryon 1970), Mandarian Chinese, and Spanish have zero-argument verbs. For some weather notions, Puma employs a regular intransitive verb construction.

(131) (a)  *wa*          *ta-yaŋ*
           water.ABS   come-IPFV

           'It is raining.' (Literally: 'Water is coming.')

Compare this with:

(b)  *khokku*      *ta-yaŋ*
     3SG.ABS     come-IPFV

     'S/he is coming.'

The corresponding Puma examples of the English examples given in (129) are as follows:

(132)(a)   *run <1>*       *mary*     *onh-a*
                             Mary.ABS   run-PST

                             'Mary$_1$ ran.'

     (b)   *sleep <1>*     *mary*     *ips-a*
                             Mary.ABS   sleep-PST

                             Mary$_1$ slept.

     (c)   *love <1, 2>*    *ram-a*    *sita-lai*    *som-tukd-i*
                             Ram-ERG   Sita-DAT   love-love-3P

                             Ram$_1$ loves Sita$_2$.

     (d)   *finish <1, 2>*   *jen-a*    *kām-a*     *cil-i*
                             Jen-ERG   work-N.NATIV   finish-3P

                             Jen$_1$ finished the work$_2$.

     (e)   *give <1, 2, 3>*   *martin-a*    *nubia-lai*    *kitāp*    *itd-i*
                             Martin-ERG   Nubia-DAT   book.ABS  give-3P

                           Martin$_1$ gave Nubia$_2$ a book$_3$.

## 3.5   *Argument types*

The arguments of a predicate are realised syntactically as NPs bearing a grammatical function, such as S(ubject), and O(bject), and semantic roles, such as A(gent), P(atient), G(oal), and T(heme). Grammatical functions and semantic roles are terms that are frequently used in grammars for describing languages. The abbreviations for grammatical functions S (intransitive subject), A (transitive subject), P (transitive object), and T (theme-like argument of a ditransitive) and G (goal-like argument of a ditransitive) have been used in the literature since the 1970s to describe morphosyntax and to characterise the differences between major alignment patterns such as ergative-absolutive vs. nominative-accusative that relate to the coding and behaviour of arguments in different languages (Haspelmath 2011).

Verb arguments are classified into semantic categories according to the kind of role they play in relation to their predicates. Semantic roles involve information that is also relevant for meaning. We use the term argument structure to refer to syntactically relevant lexical information that specifies the arguments of a predicate and their semantic and syntactic properties, following Bresnan (2001), Babby (2011) and Van Valin (2005), among others.

Not all conceptions of argument structure are the same. Some scholars like Bresnan and Zaenen (1990) and Bresnan (2001) claim that argument structure is a

distinct syntactic representation, while Alsina (Alsina 1993: 85) suggests that a-structure is a purely semantic representation. Several different notions of a-structure are presented in different linguistic theories.

Babby (2011) proposes that argument structure of verbs is subject to a universal hierarchy which determines cases and grammatical relations of NPs within clauses. Other works on argument structures exist which use different models, such as Role and Reference Grammar (Pavey 2010; Van Valin 2005; Van Valin & LaPolla 1997), argument realization (Hovav & Levin 2007), Lexical Functional Grammar (Alsina 1993; Mohanan 1994; Butt 1995; Bresnan 2001) and Government Binding Theory (Grimshaw 1990).

Most languages have some way of distinguishing A, transitive subject which is prototypically an agent, from P, transitive object which is prototypically a patient, although it should be noted that the A need not be an agent, nor need the P be a patient; they can bear other thematic roles, such as experiencer for A and stimulus for P. Thus, semantic roles such as Agent and Patient vary according to different types of predicates. Predicates determine the semantic role(s) of the arguments associated with them in clauses, and can be grouped into classes (see Chapter 4) according to this association. Consider verbs of *impact* in English, followed by the Puma counterparts where A is typically an Agent, while P is typically a Patient:

(133)    ENGLISH

    (a)    *John beats Fred.*

    (b)    *John slaps Fred.*

    (c)    *John punches Fred.*

(134)    PUMA

    (a)    *john-a      fred-lai     ḍher-i*
         John-ERG    Fred-DAT    beat-3P

        'John beats Fred.'

    (b)    *john-a      fred-lai     cetdh-i*
         John-ERG    Fred-DAT    hit-3P

        'John hits Fred.'

Note that semantically English distinguishes between *beat* and *hit*. The Puma counterpart of *hit* is *cetdh* which does not show any prepositional alternations as in *hit* in English. Thus, the A argument of *hit* in English may not be the same as the A

argument of *beat*. However, in Puma the A argument of both *ɖher and cetdh* are the same. For verbs of perception, however, A is typically an experiencer and P as the perceived entity has the semantic role of Stimulus.

(135) (a)  *piʈʌr-a      fred-lai    khaŋŋ-i*
          Peter-ERG   Fred-DAT   see-3P

          'Peter sees Fred.'

      (b)  *piʈʌr-a      fred-lai    en-i*
          Peter-ERG   Fred-DAT   hear-3P

          'Peter heard Fred.'

The argument structure of the two different predicate classes can be represented:

(136) (a)  *ɖher* 'beat'      <Agent, Patient>           for verbs of *impact*

      (b)  *khaŋ* 'see'      <Experiencer, Stimulus>    for verbs of *perception*

For grammatical relations I follow the cross-linguistic typological literature (Dixon 1972; Comrie 1978; Van Valin 1981) and use 'S' for the subject of an intransitive verb, 'P' for the patient-like argument of a prototypical transitive verb, and 'A' for the agent-like argument of a prototypical transitive verb:

(137)    S    The subject-like arguments of intransitive clauses

         A    The more agent-like arguments of transitive clauses

         P    The more patient-like arguments of transitive clauses

## 3.6    Basic clause types

The grammatical unit that expresses a predicate, its argument(s) and TAM (tense, aspect and mood) is called a clause or simple sentence. Following Dryer (2007), clause types can be distinguished in four ways in a language. They are:

(138) (a)  a distinction between declarative, interrogative, and imperative clauses;

      (b)  a distinction between main clause and dependent clause;

      (c)  a distinction in terms of information structure, and grammatical consequences such as voice, topic and focus; and

      (d)  the basic distinction between verbal and non-verbal predicates which we already discussed above in Sections 3.2 and 3.3.

Among clauses with verbal predicates, we can make further distinctions based on the argument structure of the verb, including a distinction between one-argument verbs, two-argument verbs and three-argument verbs. Intransitive, monotransitive and

ditransitive clauses employ one-place predicate, two-place predicate and three-place predicate, respectively. I begin my discussion with intransitive clauses.

Kiranti languages are typically characterised by complex verbal agreement. Puma also is a polysynthetic and complex pronominalised language where words can consists of a series of morphemes, most typically a root and one or more suffixes. The system of verbal agreement, where verbs agree with subjects and objects, is very complex. It is interesting to note that the complex verbal morphology of Thangmi, a Tibeto Burman language spoken in Nepal, provides a fascinating link between the canonical Kiranti verbal agreement patterns and their wider Tibeto-Burman verb agreement, which is reminiscent of the Kiranti model. However, it should be noticed that in Thangmi a transitive verb agrees with A or P arguments, and often both, and unlike Kiranti languages, Thangmi does not distinguish dual from plural number, not does it exhibit an inclusive-exclusive distinction (Turin 1998: 477). Turin (1998: 488) notes that Thangmi is a living example of the Proto-Kiranti model of verbal agreement patterns and more canonically Kiranti in morphological structure than some extrant Kiranti languages (see Section 2.31), while the verbal morphology of Thangmi is clearly related to Dolkha Newar verbal agreement pattern.

## 3.7 *Intransitive clauses*

While an intransitive predicate takes a single argument, the distinction can be further described in terms of objects in many languages. Intransitive clauses do not have objects, while transitive clauses do. The grammatical criteria for distinguishing transitive and intransitive clauses may vary considerably from language to language (cf. Dryer 2007).

It is interesting to note that Puma possesses two types of intransitive clauses: unergative intransitive clauses and unaccusative intransitive clauses. This contrast is also described as 'split-S' by Dixon (1994) who argues for a division of intransitive clauses where the single argument (S) reveals grammatical properties similar to those of the more agent-like argument in a transitive clause (labeled $S_A$) or to those of the more patient-like argument in a transitive clause (labeled $S_P$).

Split-S or the unergative/unaccusative distinction surfaces in different ways in the world's languages (Dryer 2007). There are languages like Bukiyip (cf. Dryer 2007), a Torricelli language spoken in Papua New Guinea, (and Puma, as we will see below) in

which some intransitive verbs have an S cross-referenced on the verb in the same way as the A in a transitive clause, and other intransitive verbs whose S is cross-referenced on the verb like the P in a transitive clause.

### 3.7.1 Unergative intransitive clauses (S_A)

Unergative intransitive clauses in Puma are regular intransitive clauses whose single S argument bears absolutive case and whose verb agrees with the single S argument.

(139) (a)  *khokku-bo*  *kʌ-makacʌk-pa*  *cha*  *ta-a*
    3SG-GEN    3SG.POSS-black-MASC son.ABS  come-[3sg]PST

    'His black son came.'

  (b) *ŋa*   *yuŋ-oŋ*
    1SG.ABS  sit-1SG.S/P.PST

    'I stayed.'

### 3.7.2 Unaccusative intransitive clauses (S_P)

Unaccusative intransitive clauses are those where the single S argument bears absolutive case, but, the verb takes an agreement suffix which is the same as the third person patient suffix *-i* found on transitive verbs to code 3SG>3SG. Examples of unaccusative intransitive verbs are *butd* 'become grey', *pepd* 'become sour', *pudh* 'originate', *yumt* 'melt' and *pakd* 'fruit', all of which occur with the suffix *-i*, instead of regular past tense suffix *-a* (cf. Section 4.16.2). Semantically unaccusative intransitive verbs in Puma denote non-volitional or not-controlled states of affairs.

(140) (a)  *dippa-bo*  *kʌ-ʈoŋ-mukwa*   *butd-i/*-a*
    Grandpa-GEN 3SG-head-hair.ABS  become.grey-3P/-[3SG.]PST

    'Grandfather's hair became grey.'

  (b) *wachon*  *pepd-i/*-a*
    liquor.ABS  become.sour-3P/-[3SG.]PST

    'The home made liquor became sour.'

  (c) *comoloŋma-di=ku*    *hiŋ*   *yumt-i/*a*
    Mount Everest-UP.LOC=NMLZ snow.ABS  melt-3P/[3SG.]PST

    'The snow melted on the Mount Everest.'

  (d) *amba*   *pakd-i/*a*
    mango.ABS  produce.fruit-3P/[3SG.]PST

    'The mango fruits/fruited.'

Example (140) shows that the third person non-volitional S argument is indexed by the suffix *-i*, instead of third person past affix *-a* (compare (139a) above). Marking with the

third person past affix -*a* is ungrammatical with non-volitional S arguments.

Examples involving first person clearly show this agreement pattern. In addition, verbs like *dhund* 'shiver', *hotd* 'tire' and *hakluppa metd* 'hiccup' take a single argument with pronominal marking like transitive clauses, as in (141c) (cf. see Section 4.11).

(141) (a)  *ŋa*　　　*pʌ[30]-dhund-oŋ*
　　　　　1SG.ABS　3S/A-shiver-1SG.S/P.PST

　　　　　'I shivered.'

　　　(b)  *ŋa*　　　*pʌ-hotd-oŋ*
　　　　　1SG.ABS　3S/A-tire-1SG.S/P.PST

　　　　　'I was tired.'

　　　(c)  *ŋa-lai*　　*khokku-a*　*pʌ-hepd-oŋ*
　　　　　1SG-DAT　　3SG-ERG　　3S/A-embrace-1SG.S/P.PST

　　　　　'She embraced me.'

The striking characteristics of Puma split-S (or unergative-unaccusative split) is that while there are only a few verbs in this class they are associated with bodily actions (cf. 139a) and seem to be semantically related with other causes. The difference between volitional arguments and nonvolitional arguments is commonly represented in the morphosyntax of the world's languages, but the treatment for nonvolitional arguments varies from language to language (Dryer 2007). In Choctaw (Davies 1986), a Muskogean language spoken in the United States, non volitional verbs take P-agreement like in Puma:

(142)　　CHOCTAW

　　　(a)  *sa-ttola-tok*
　　　　　1SG.P-fall-PST

　　　　　'I fell.'

　　　(b)  *sa-habishko*
　　　　　1SG.P-sneeze
　　　　　'I sneezed.'

　　　(c)  *chi-pisa-li-tok*
　　　　　2SG.P-see-1SG.A-PST
　　　　　'I saw you.'

---

[30] It is interesting to note that this prefix agrees with no P arguments at all in examples (141a-b), but this form is identical in verb-marking as in (141c) in which we see explicitly the verb agrees with the P argument. In examples (141a-b) perhaps the verb agrees with the abstract P argument, such as fear which frightens and tiredness which causes exhaustion and these abstract P arguments have an effect on experiencers.

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(d)  *is-sa-pisa-tok*
     2SG.A-1SG.P-see-PST

     'You saw me.' (Broadwell 2006: 152)

In examples (142a-b) we see that the intransitive verb takes the P argument prefix *sa-* rather than the A suffix *-li* in (142c). Likewise, example (142d) shows that the object 'me' of the transitive verb is like the unaccusative S. Note that in some languages telicity may be relevant as well (Zaenen 1998). However this not relevant in Puma. In Puma the split-S can be presented in Table 69:

**Table 69:** Split-S pattern

| Argument(s) | Case | Agreement |
|---|---|---|
| S$_A$ | ABSOLUTIVE | V$_{-S}$ |
| S$_P$ | ABSOLUTIVE | V$_{-P}$ |
| A | ERGATIVE | V$_{-A-P}$ |
| P | ABSOLUTIVE/DATIVE | |

## 3.8    Transitive clauses

In Puma, predicates in transitive clauses take two arguments A and P and verbs agree with both A and P. The A arguments always bear ergative case and the P arguments bear dative or absolutive case depending on animacy and definiteness. The P arguments remain unmarked (absolutive) if they are inanimate and/or indefinite (cf. Section 2.26.2).

(143)(a)  *ŋa-a*        *khim*           *khaŋ-u-ŋ*
          1SG-ERG    house.ABS      see-3P-1SG.A

          'I see the house.'

   (b)  *ŋa-a*        *khipa*        *khaŋ-u-ŋ*
        1SG-ERG    dog.ABS     see-3P-1SG.A

        'I see a dog.'

   (c)  *ŋa-a*        *khipa-lai*    *khaŋ-u-ŋ*
        1SG-ERG    dog-DAT     see-3P-1SG.A

        'I see the dog.'

   (d)  *ŋa-a*        *khʌnna-lai*    *khaŋ-na*
        1SG-ERG    2SG-DAT        see-1SG>2

        'I see you.'

In (143a) the direct object *khim* 'house' is inanimate and hence in the absolutive case. For an animate NP object we have two choices, (143b) in the absolutive case which is

understood as indefinite, and (143c) in the dative case which is understood as definite. For pronouns only dative is possible, as in (143d).

In texts in the corpus there is a very strong tendency for the animate P arguments to be marked with the dative rather than the absolutive as they tend to be definite (and identifiable from the context) rather than indefinite.

A somewhat similar phenomenon is found in Hindi (Mohanan 1994) where animate objects require the accusative, indefinite inanimate objects bear the nominative, and definite inanimate objects can take either nominative or accusative. In Spanish (Andrews 2007), animate objects are marked with an object-marker (the preposition *a* which also codes dative case for recipients of ditransitive verbs), and inanimate objects are unmarked.

### 3.8.1 Ergative versus accusative patterns

In languages with ergative morphology, S and P are treated in the same way, while A is treated differently. In other words, S and P get the same case-marking of absolutive, and A gets a unique case marker, ergative. Puma exhibits a split-ergative morphology as the A arguments employ ergative case, the S arguments get absolutive case and the P arguments bear either absolutive or dative.

Not all languages with ergative-absolutive case-marking show uniformity across all transitive constructions or all NP argument types, and indeed Dixon (1979, 1994) argues that no language is fully morphologically ergative-absolutive. Depending on the particular type of case-marking, it would be possible to further categorise languages cross-linguistically in terms of how they treat S, A and P.

(144) (a)    Ergative-absolutive case-marking patterns occur widely in
             Tibeto-Burman, Indo-European languages like Nepali, Hindi, Urdu,
             Kashmiri, and Marwari, Australian languages like Dyirbal, Yidin[y],
             Warlpiri, and Kalkatungu, Mayan languages (Central America), Papuan
             languages (New Guinea), Eskimo languages (e.g., Inuit, Inuktitut) and
             Caucasian (e.g., Avar, Georgian), and among others.

      (b)    In Roviana (Corston 1996), an Austronesian language spoken in the
             Solomons, both ergative and absolutive are marked by prepositional
             markers (cf. Dryer 2007).

      (c)    In Nias (Brown 2001), an Austronesian language spoken on the

Indonesian island of Sumatra, the transitive subject (ergative) is morphologically unmarked, while the absolutive case is overtly marked.

(d) Languages like Pitta-Pitta, an extinct Australian language previously spoken in Queensland which distinguishes three different cases for each of the core arguments, S, A and P, are very rare (cf. Tallerman 2007).

(e) Ergativity does not occur in European languages like Romance, Germanic, Celtic, and Greek, and is very rare in African languages (cf. Tallerman 2007).

## 3.9    Ditransitive clauses

Ditransitive constructions in Puma take three arguments: an agent (A), a theme (T) and a goal (G). The A of a ditransitive is case-marked the same as the more agent-like argument of a transitive clause, and hence we abbreviate it as A. In di-transitive constructions Puma does not exhibit the mixed case-marking system for non-agents seen in monotransitive constructions. The G argument of di-transitive constructions is consistently marked with dative case and the T argument is consistently marked with absolutive case, regardless of animacy and definiteness of G or T. In addition, verbs agree with only two arguments in ditransitive clauses: they agree with their A argument and with their G argument, but not with their T argument.

(145) (a) *ŋa-a        pʌsupʌti   iskul-lai        kʌphekwa      itd-u-ŋ*
1SG-ERG   Pashupati  School-DAT     money.ABS     give-3P-1SG.A

‘I gave money to the Pashupati School.’

(b) *ŋa-lai        uŋ-bʌŋŋa-a              pʌndhrʌ      sʌy*
1SG-DAT       1SG.POSS-uncle-ERG          fifteen       hundred
*pacās      pāunḍ        pʌ-itd-oŋ*
fifty       pound.ABS     3S/A-give-1SG.S/P.PST

‘My uncle gave me £1550.’

(c) *ŋa-lai        pʌdʌm-a       kʌ-marchacha         pʌ-itd-oŋ*
1SG-DAT      Padam-ERG     3SG.POSS-daughter.ABS  3S/A-give-1SG.S/P.PST

‘Padam gave me his daughter (in marriage).’

(d) *ŋa-a        parbʌti-lai    chaplawa      itd-u-ŋ*
1SG-ERG    Parbati-DAT    letter.ABS     give-3P-1SG.A

‘I gave the letter to Parbati.’

(e) *ŋa-a        khʌnna-lai     chaplawa      it-na*
1SG-ERG    2SG-DAT        letter.ABS     give-1SG>2

‘I gave the letter to you.’

The examples in (145) shows that the A argument always takes ergative case, and the arguments P and T consistently bear the dative and absolutive case, respectively, regardless of animacy. The verb agreement always indexes A and G, never T, as example (145e) shows unambiguously. Depending on how they treat their A, G and T arguments, languages can be categorised cross-linguistically as follows:

(146) (a)    In Tibeto-Burman languages like Mising (Prasad 1991), spoken in India, arguments G and T are marked in the same way with the accusative (see Dryer 2007: 256).

    (b)    Verbs never agree with the G argument in European languages (cf. Tallerman 2007).

    (c)    In languages like Kambera, spoken in Indonesia, verbs agree with all three arguments, as in:

(147)    *i    Ama    na-kei-ngga-nya*
        the  father    3SG:NOM-buy-1SG:DAT-3SG:DAT
                      A             G          T
    'Father buys it for me.' (Tallerman 2007: 186)

Dryer (1986) looks at the encoding of grammatical relations in monotransitive and ditransitive clauses and makes a typological distinction between languages that distinguish direct objects (P and T) from indirect objects (G) and languages that distinguish primary objects (P and G) from secondary objects (T). Puma does not neatly fit this dichotomy and is neither a fully direct object language nor a fully primary object language. It shares characteristics of both patterns. It is partially a direct object language since the arguments inanimate/indefinite P=T in the absolutive case but it is also partially a primary object language since the arguments animate P=G in the dative case.

(148) (a)    *ŋa-a    khim    copp-u-ŋ*
        1SG-ERG    house.ABS  see-3P-1SG.A
    'I see the house.'

    (b)    *ŋa-a    marcha-lai    copp-u-ŋ*
           1SG-ERG    3SG-DAT    see-3P-1SG.A
    'I see the woman.'

    (c)    *ŋa-a    marcha-lai    khim    itd-u-ŋ*
           1SG-ERG    woman-DAT    house.ABS  give-3P-1SG.A
    'I give a house to (my) daughter.'

Example (148) shows split-marking on the P arguments. We get P=T if we compare

(148a-c), and we get P=G if we compare (148b-c). Dryer (1986) refers to this phenomenon, as split-objectivity.

## 3.10    *Differential object marking*

Differential object marking (DOM) is the syntactic or morphological marking of direct objects only when they are high in animacy, definiteness or specificity. A number of functional and typological studies (Givón 1984; Bossong 1991) and LFG studies (Morimoto 2002; Aissen 2003; Dalrymple & Nikolaeva 2011) have shown that DOM is cross-linguistically very robust. Object marking is often characterised by the interaction of animacy features of nominals. The referential animacy hierarchy in Puma can be presented as in Figure 14.

**Figure 14:** Referential animacy hierarchy

| 1, 2 ,3> | animate> | definite inanimate > | indefinite  inanimate |
|---|---|---|---|

Marked ←――――――――――――――――――――――→ Unmarked
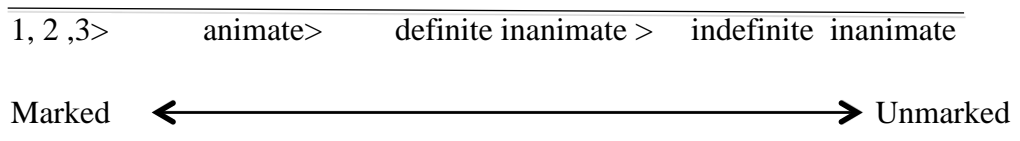
Nominals on the low end of the animacy hierarchy cannot occur with dative. In Puma animate P NPs are marked with dative and inanimate (indefinite) P NPs are marked with absolutive. Hence, objects are differentiated in the syntax according to definiteness and animacy. The cross-linguistic variability in differential case-marking seems to be restricted. Aissen (2003: 437) proposes the following extended definiteness hierarchy as cross-linguistically valid:

(149)    Extended Definiteness Hierarchy:

Personal pronoun > Proper name > Definite > Indefinite specific >
Indefinite non-specific

P arguments higher in the hierarchy are more likely to be case marked than those that are lower in the hierarchy and the markings of lower items seems to imply the marking of the higher items (Croft 1990; Givón 1984; Aissen 2003). Aissen (2003) argues that there are a number of languages which distinguish personal names and pronouns from other definite.

According to Dixon (1979, 1994), human NPs are more likely to function in discourse as A rather than P, and inanimate NPs are more likely to function as P rather than A. Thus, for object marking, those NPs that are at the left end of the hierarchy are

most likely to be marked, and those that are at the right end are most likely to be unmarked. A possible explanation for this is that since it is most economical and natural to mark a participant only when it is in an 'unaccustomed role', it is expected that an NP in the A role from the right side of the hierarchy and an NP in the P role from the left side should be overtly marked in a case-marking languages (cf. Li 2007). Therefore, as far as inanimate NPs are concerned, they are expected to be unmarked when in the P grammatical function and marked when in the A grammatical function.

(150) (a)   NON-SPECIFIC CONSTRUCTION

        *anu-a*     *pempak* (*-lai)   *cop-i*
        Anu-ERG   bread-DAT       see-3P

        'Anu saw bread.'

    (b)   SPECIFIC CONSTRUCTION

        *anu-a*     *pempak-(lai)*  *cop-i*
        Anu-ERG   bread-DAT   see-3P

        'Anu saw some bread.'

(151)   INDEFINITE CONSTRUCTION

    (a)   *anu-a*     *khipa-(lai)* *cop-i*
        Anu-ERG   dog-DAT   see-3P

        'Anu saw a dog.'

    (b)   SPECIFIC CONSTRUCTION

        *anu-a*     *khipa-lai*  *cop-i*
        Anu-ERG   dog-DAT   see-3P

        'Anu saw the dog.'

(152)   ANIMATE CONSTRUCTION

    (a)   *anu-a*     *jasodā*(-lai)*    *cop-i*
        Anu-ERG   Jasoda-DAT       see-3P

        'Anu saw Jasoda.'

    (b)   *anu-a*     *ŋa*(-lai)*  *pʌ-cop-oŋ*
        Anu-ERG   1SG-DAT   3S/A-see-1SG.S/P.PST

        'Anu saw me.'

Note that example (150a) is ungrammatical with the dative case, while (152a-b) are ungrammatical without the dative case.

## 3.11   Genitive experiencers

In Puma, as in other Kiranti languages (Bickel 1997), the expression of experiential states of affairs is formed in parallel to all other bodily feeling or experiential

expressions, with a possessive of experience construction. In Indo-European languages such as Nepali, this kind of predicate is expressed with a dative subject construction using the case marker *-lai.* Dative subjects are generally considered a characteristic of the South Asian language area (Masica 1976).

Dative constructions are used with a class of verbs expressing certain physical, mental and emotional states in Nepali. Dative subjects in Nepali are required to be sentient beings. However, Puma gives a different treatment to experiencer arguments that are inflected for genitive case. The following examples present dative constructions from Nepali and their Puma counterparts, respectively.

(153) (a)   NEPALI

| *ma-lāi* | *soās* | *man* | *par-cha* |
|---|---|---|---|
| 1SG-DAT | SOAS | like | be-3SG.MASC.NPST |

'I like SOAS.'

(b)   PUMA

| *uŋ-bo* | *uŋ* | *soas* | *uŋ-sukhalid-i* |
|---|---|---|---|
| 1SG.POSS-GEN | 1SG.POSS | SOAS | 1SG.POSS-like-3P |

'I like SOAS.'

Example (153) shows that the dative *-lai* marked experiencer arguments in Nepali and their Puma counterparts do not control verb agreement. Experiencer arguments in Puma never bear the ergative case suffix. The use of genitive case for the semantic role experiencer is quite common across Kiranti languages and other Tibeto-Burman languages such as Thakali, Gurung and Tamang, however it is found in Puma with some exceptions.

### 3.12   Imperatives

Dixon (1979) notes that it is a universal property of imperatives that they have a second person pronoun that is either an A or an S argument. He suggests that the deletion (absence) of A and S arguments in the imperative in a language is no evidence for it being either accusative or ergative. Palmer (1994) writes that this proves, however, not to be entirely true because it is natural that the second person pronouns (omitted or not) should be agents, but this is essentially a semantic or pragmatic constraint, not a grammatical one.

A construction which seems to come close to universally targeting subjects is imperative formation (Van Valin 2003). Imperatives express a wish of the speaker about

a future state of affairs. They convey an appeal to the addressee to help make the future state of affairs (cf. van der Auwera, Dobrushina & Goussev 2011). The second-person subject pronoun *you* is normally omitted and is interpreted as the addressee for both one-place and two-place predicates. Puma has three imperative constructions: a positive imperative, a negative imperative and a first-person imperative. Each construction has a unique structure.

### 3.12.1 Positive imperatives

Positive imperative has two constructions: one for intransitive verbs and another for transitive verbs. In the positive imperative, a second person pronoun references the addressee. In intransitive clauses, the S argument that represents the addressee may be optionally absent.

(154) (a)    (*khʌnna*)    *ips-a!*
             2SG.ABS    sleep-IMP

             '(You_{SG}) sleep!'

     (b)    (*khʌnna*)    *ben-a!*
             2SG.ABS    come-IMP

             '(You_{SG}) come!'

Puma has two separate suffixes *-a* to denote past tense and imperative that are just homophonous. Sometimes it is not easy to identify whether the suffix means past tense or imperative due to this homophony, as in the following examples. However, note that in declarative sentences a verb will bear a second person prefix agreement marker *tʌ-*.

(155) (a)    IMPERATIVE CLAUSE

        (*khʌnna*)    *puks-a!*
        2SG.ABS    go-IMP

        '(You_{SG}) go!'

     (b)    DECLARATIVE CLAUSE

        *khʌnna*    *tʌ-puks-a*
        2SG.ABS    2-go-PST

        'You_{SG} went.'

(156) (a)    IMPERATIVE CLAUSE

        *khʌnna*    *yuŋ-a!*
        2SG.ABS    sit-IMP

        '(You_{SG}) sit!'

(b)    DECLARATIVE CLAUSE

*khʌnna*      *tʌ-yuŋ-a*
2SG.ABS       2-sit-PST

'You<sub>SG</sub> sat.'

In transitive clauses, the A argument representing the addressee is optionally absent. Note also that the imperative marker for transitive clauses is homophonous with the third person patient marker *-i* of declarative clauses.

(157) (a)    IMPERATIVE CLAUSE

(*khʌnna-a*)     *khokku-lai*     *khaŋ-i!*
2SG-ERG          3SG-DAT          see-IMP

'(You<sub>SG</sub>) look at her!'

(b)    DECLARATIVE CLAUSE

(*khʌnna-a*)     *khokku-lai*     *tʌ-khaŋ-i*
2SG-ERG          3SG-DAT          2-see-3P

'(You<sub>SG)</sub> see her.'

(158) (a)    (*khʌnna-a*)     *khokku-lai*     *phad-i!*
2SG-ERG          3SG-DAT          help-IMP

'(You<sub>SG</sub>) help her!'

(b)    (*khʌnna-a*)     *pempak*     *hud-i!*
2SG-ERG          bread.ABS    buy-IMP

'(You<sub>SG</sub>) buy bread!'

### 3.12.2 Negative imperatives

In Puma imperative takes a special negation. The negative imperative requires a second person subject like the positive imperative, however this argument is always absent. In addition, Puma does not distinguish between transitive imperatives and intransitive imperatives, as all negative imperatives employ a negative prefix *men-* and a suffix *-da/-do* which immediately follows the bare verb stem. These *men-* and *-da/-do* are distinct from the negative markers used in declarative clauses.

The difference between the suffixes *-da* and *-do* is not significant and primarily depends on the personal choice of the speakers, though it seems *-da* frequently occurs with intransitive negative, while *-do* is often found with the transitive negative:

(159) (a)    *men-ben-d-a!*
NEG.IMP-come-PROH-IMP

'Don't come!'

(b)   *men-puŋ-d-a!*
      NEG.IMP-go-PROH-IMP

      'Don't go!'

(160) (a)   *mʌnna-lai*        *men-set-d-o!*
            man-DAT            NEG.IMP-kill-PROH-IMP

            'Don't kill the man!'

(b)   *marchacha-lai*    *men-laŋ-d-o!*
      girl-DAT           NEG.IMP-sell-PROH-IMP

      'Don't sell the girl!'

Examples (159)-(160) show that omission of the addressee in the negative imperative follows a nominative pattern.

### 3.12.3 First-person and third-person imperatives

The first-person and third-person imperatives have two constructions: one for intransitive verbs and another for transitive verbs. Both first person and third person take a special verb marker *-ne* (OPTATIVE) following the agreement suffixes, regardless of transitivity, and the subject represents the addressee.

(161) (a)   INTRANSITIVE IMPERATIVE

(i)   *im-ŋa-ne!*
      sleep-1SG.S/P.NPST-OPT

      'Let me sleep/ may I sleep!'

(ii)  *im-ci-ne!*
      sleep-DL-OPT

      'Let us (DL) sleep!'

(iii) *ips-i-ne!*
      sleep-1/2PL.NPST-OPT

      'Let us (PL) sleep!'

(b)   TRANSITIVE IMPERATIVE

(i)   *itd-u-ŋ-ne!*
      give-3P-1SG.A-OPT

      'Let me give him!'

(ii)  *it-ci-ne!*
      give-DL-OPT

      'Let us (DL) give him!'

(iii) *itd-u-m-ne!*
      give-3P-1PL.A-OPT

      'Let us (PL) give him!'

Example (161a) shows that the intransitive verb *ips* 'sleep' agrees with the S argument of imperative, while in (161b) the transitive verb *itd* 'give' agrees with A and P arguments.

### *3.13   Interrogatives*

### 3.13.1 Polar questions

A polar question is a question which can be answered with a simple 'yes' or 'no'. Traditionally, they are also known as *yes-no questio*ns. They look for specific responses that individuals give spontaneously (cf. Schuman & Presser 1979), to help us make a decision quickly, or even just to gather more information and they do not necessarily present a range of alternative answers. Polar questions are sometimes referred to as closed questions, as the set of possible answers is closed, containing normally just two members like *yes* and *no* (cf. Kroeger 2004).

While polar questions do not contain a question word like *who, what, why, where, when, and how*, the Kiranti languages like Puma and the Tibeto-Burman languages like Thangmi (Turin 2012: 370) have a special question intonation to distinguish them from simple declarative clauses. Polar questions in Puma are formed by a rising question intonation at the end of the clause, where word order is the same as in declarative clauses. The use of rising question intonation in yes-no questions is one of the universals of human languages (cf. Bolinger 1972; Cruttenden 1997). Optionally the question particle *he* can be used; it is always placed at the end of the clause following a verbal predicate. Note that the question particle *he* cannot be used with copulas.

(162) (a)  *tʌkku* *ka-bo* *ka-marchacha?*
    DEM  2SG.POSS-GEN 2SG.POSS-daughter.ABS

   'Is she your daughter?' (Literally: 'Is that your daughter?')

 (b)  *priti*  *asemʌŋ*  *puks-a?*
    Priti.ABS yesterday  go-3SG.PST

   'Did Priti go yesterday?'

 (c)  *roŋ*  *tʌ-met-ŋa-it-ŋa*        *he?*
    rice.ABS 2-do-1SG.S/P.NPST-TEL-1SG.S/P.NPST  TAG

   'Could you please cook for us?'

### 3.13.2 Negative questions and yes/no polarity

In Puma, polar questions can be formed in both positive and negative constructions. Existential and identificational clauses employ different negative morphemes. A

negative existential clause distinguishes between non-past and past tense, while an identificational clause does not (cf. Section 3.2.2):

(163) (a)  IDENTIFICATIONAL NEGATIVE POLAR QUESTION

*tʌkku       ka-bo           ka-marchacha              he    pee?*
DEM        2SG.POSS-GEN    2SG.POSS-daughter.ABS      TAG   NEG

'Is not she your daughter?' (Literally: 'Is not that your daughter?')

(b)  ANSWER

*ji/ pee*
yes/ no

'Yes/No.'

(164) (a)  EXISTENTIAL POLAR QUESTION

*bimʌl        ta-yaŋ/-a-ŋa?*
Bimal.ABS     arrive-NPST.IPFV/-PST-IPFV

'Is/was Bimal arriving?'

(b)  ANSWER

*men-ta-yuk*
NEG-arrive-?[31]

'No.'

(165) (a)  EXISTENTIAL NEGATIVE POLAR QUESTION

*tara       pʌ-ta-nin?*
Tara.ABS    NEG-arrive-3SG.NEG

'Does Tara not arrive?'

(b)  ANSWER

*pʌ-ta-nin/ je*
NEG-arrive-3SG.NEG/ yes

'Not arrive/ yes.'

Note that the order of question particle *he* and negative particle *pee* in (163a) is cross-linguistically very interesting as the question particle *he* is preceded by the negative particle *pee* (Peter Austin, p.c.). The negative particle, followed by the question particle is very common but not vice-versa.

### 3.13.3 Content questions

Content questions contrast with polar questions in that they cannot be answered with a simple 'yes' or 'no', but with a specific piece of information. Traditionally they are

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[31] The meaning of the morpheme *-yuk* is obscure– cf. dictionary definition 'keep'; 'ride'; TEL, and 'spend.life'.

known as WH-questions in English. Non-polar questions are sometimes phrased as a statement that requires a response and some more specific answer is expected. They are used to avoid the bias that may result from suggesting responses to individuals (Schuman & Presser 1979). Content questions are sometimes referred to as non-polar questions, as the set of possible answers is open and there is (in principle) no limit to the number of potential responses (cf. Kroeger 2007).

Content questions in Puma are formed by using interrogative pronouns like *sa* 'who', *khakku* 'which', *doro* 'what', *khaḍo* 'where', *nʌmmakinan* 'why', *demni* 'how much', and *demkha* 'when' etc. which typically occur in the same place as the non-interrogate constituents. Thus, in Puma, like other so-called 'in *situ* WH languages', interrogative phrases do not appear obligatorily at the beginning of a clause and appear naturally in the position where the non-interrogative constituents that they replace would normally occur in a corresponding declarative clause. Hence, the corresponding interrogative phrases remain in *situ* (cf. Dryer 2005; Kroeger 2007). Consider these examples:

(166) (a)     DECLARATIVE

        *sima-a      suntolā         lo-o.*
        Sima-ERG   orange.ABS      pick-3P

        'Sima picked oranges.'

    (b)     WHO QUESTION (ERGATIVE)

        *sa-a        suntolā         lo-o?*
        who-ERG   orange.ABS      pick-3P

        'Who picked up oranges?'

    (c)     WHAT QUESTION (ABSOLUTIVE)

        *sima-a     doro       lo-o?*
        Sima-ERG   what.ABS   pick-3P

        'What did Sima pick up?'

(167)     HOW QUESTION

        *khʌsʌŋni   kʌphekwa      tʌ-tokk-i?*
        how         money.ABS     2-get-3P

        'How did you get money?'

(168)     WHY QUESTION

        *nʌmmakinan     asudevi         wʌkwaritoŋ     puks-a?*
        why           Asudevi.ABS    Wakwaritong   go-PST

        'Why did Asudevi go to Wakwaritong?'

(169)    WHICH QUESTION

       *khʌnna-a*   *khakku*   *marchacha-lai*   *tʌ-sind-i?*
       2SG.ERG   which    girl-DAT      2-recognise-3P

       'Which girl do you recognise?'

Note that *khakku* is in the same place as a determiner.

(170)    *khʌnna-a*   *tʌkku*   *marchacha-lai*   *tʌ-sind-i.*
       2SG.ERG   DEM    girl-DAT      2-recognise-3P

       'You recognise that girl.'

(171)(a)    WHOSE QUESTION (GENITIVE)

       *ʌkku*     *sa-bo*    *kʌ-kitāp?*
       DEM     who-GEN   3SG.POSS-book.ABS

       'Whose book is this?'

   (b)   *ʌkku*     *kʌ-kitāp.*
       DEM     3SG.POSS-book.ABS

       'This is his book.'

## 3.14   Negative clauses

### 3.14.1 Negative particle *metdʌŋ*

Puma employs a distinct way of using different elements for expressing negation in locative clauses, existential clauses and identificational clauses. Standard negation (Dahl 1979), which refers to the negation of simple indicative clauses with an overt verb predicate, as in *Deepti does not sing*, is discussed in (175). Unlike most other types of negative clauses in which some other item is negated, negation in existential clauses is an inherent part of the predication itself (cf. Dryer 2007). In Puma, locative clauses employ separate negative particles in expressing negative meaning which distinguish between non-past and past tense.

Dryer (2007) notes that some languages like Kutenai, spoken in North America, and Malayalam, spoken in India, employ a single negative locative morpheme, as in Puma:

(172)    *bulākī*       *wat-ma*   *sʌmʌi*   *metdʌŋ-yaŋ*
       nose.ring.ABS   wear-INF   time    NEG.EXIST-IPFV.PST

       'It was not the time to wear the nose ring.' (oldtimes:17)

A negative locative clause that distinguishes between past and non-past is presented in example (173). Thus, note that *metdʌŋ* denotes non-past and *metdʌŋ-yaŋ* denotes past tense reference.

(173) (a)   *uŋ-bo*           *uŋ-khipa*      *khim-di*      *metdʌŋ*
         1SG.POSS-GEN   1SG.POSS-dog  house-UP.LOC  NEG.EXIST.NPST

         'My dog is not in the house.'

     (b)   *uŋ-bo*           *uŋ-khipa*      *khim-di*      *metdʌŋ-yaŋ*
         1SG.POSS-GEN   1SG.POSS-dog  house-UP.LOC  NEG.EXIST-IPFV.PST

         'My dog was not in the house.'

### 3.14.2 Negative particle *pee*

In Puma, existential clauses and identificational clauses employ the same negative particle in expressing negation, namely *pee*. The negative particle *pee* does not make a contrast between past and non-past.

(174) (a)   *lam-do*        *tup-ma*    *pee*
         road-GEN.LOC    meet-INF   NEG

         'There is/was no one to meet on the road.' (myth_02: 60)

     (b)   *tʌkku*     *munima*     *pee=ku*
         DEM       cat.ABS       NEG=NMLZ

         'That is/was not a cat.'

Example (174a) shows the negative existential and (174b) the negative identificational clause types.

### 3.14.3 Negative main clauses

While I exclude discussion of negative verbal clauses in detail here, it is worth mentioning some examples of negative verbal clauses at least for reference. Negative verbal clauses in Puma employ double negation, as in the neighbouring language Bantawa (Rai 1985; Doornenbal 2009) but unlike other Kiranti languages like Thulung (Lahaussois 2003) and Koi (Lahaussois 2009) that have only single negation.

    The word order in the negative construction is A P [NEG-V-NEG] where the first negative prefix *pʌ-* is applicable to all persons except the second, and the second negative suffix has different forms depending upon person, number, and tense. The prefix *pʌ-* is prefixed to all negative verbal clauses (cf. Section 2.36.1) except those continuing the ubiquitous second person marker *tʌ-* (cf. Section 2.32.2).

(175) (a)   *ŋa*       *pʌ-im-nʌŋ*
         1SG.ABS   NEG-sleep-1SG.NEG

         'I do/did not sleep.'

(b) *khʌnna*      *tʌ-im-nin*
2SG.ABS      2-sleep-NEG

'You do/did not sleep.'

(c) *khokku*      *pʌ-im-nin*
3SG.ABS      NEG-sleep-NEG

'He does/did not sleep.'

(d) *ŋa-a*    *khokku-lai*    *pʌ-cin-nʌŋ*
1SG-ERG   3SG-DAT    NEG-teach-1SG.NEG

'I do/did not teach her.'

(e) *khʌnna-a*  *khokku-lai*    *tʌ-cind-in*
2SG-ERG   3SG-DAT    2-teach-2/3SG.NEG

'You do/did not teach her.'

(f) *khokku-a*  *khokku-lai*    *pʌ-cind-in*
3SG-ERG   3SG-DAT    NEG-teach-2/3SG.NEG

'He does/did not teach her.'

### 3.14.4 Negative imperative clauses

In Puma negative imperative clauses contain verbs bearing the prefix *men-* and the suffix *-d,* as in:

(176) (a) *nimna-ci-oŋ*      *men-pi-d-a!*
other-NS-COM₁      NEG.IMP-speak-PROH-IMP

'Do not speak with others!' (Sharma 2005: 6)

(b) *bihā*    *ni=ki*    *bʌḍḍhe*    *men-ca-d-o=e!*
marriage   REP=CONN   much    IMP.IMP-eat-PROH-IMP=EMPH

'Do not eat too much at a marriage party!' (khali_rong: 047)

(c) *khim*      *men-puŋ-d-a!*
house.ABS     NEG.IMP-go-PROH-IMP

'Do not go to the house!'

### 3.15   *Comparative and superlative clauses*

In Puma comparatives and superlatives have no special morphological form. Puma has a comparative postposition *bhandā* 'than' and a superlative postposition *jammai bhandā* 'than all' which are borrowed from Nepali:

(177) (a) *rajkumar*     [*bhandā*]  *srikumar*    *goŋ=ku*    *yuŋ-yaŋ*
Rajkumar.ABS   COPAR   Srikumar.ABS   tall=NMLZ   be-IPFV

'Srikumar is taller than Rajkumar.'

(b) *caudharī* [*jammai-bhandā*] *bʌḍḍhe*    *khaba*    *tok=ku*    *mʌnna*
   Chaudhari SUPER    much    money    get=NMLZ man

   'Chaudhari is the richest man.'

## 3.16    Derived clause types

In Puma derivation of clauses is interesting because most transitive verbs can be used intransitively where the P of monotransitive verbs and the G and T of ditransitive verbs (primary objects) can be suspended, and the agent-like NP functions like the subject S of an intransitive verb. This kind of change is not simply a fact about morphological coding. It reflects a change in lexical semantics as well. Suspending a P argument from verbal agreement can be pragmatically perceived as making generic rather than specific reference to the affected entity. Thus, all verbs which can be detransitived with *kha-* ban on overt object.

A further derived clause type exists where there is suspended object NP without the prefix *kha-*. I refer to this as '*zero*-detransitive' (cf. Bickel et al. 2007) which is also known as zero derivation or transposition. Constructions with suspended objects are identical to regular intransitive forms, but the characteristics of the P argument are different for *zero*-detransitives and *kha*-detransitives. Puma employs also valence-increasing constructions such as causativisation. Hence, there are two main types of valence affecting derivations in Puma – valence-decreasing (cf. Section 3.17) and valence-increasing (cf. Section 3.18).

## 3.17    Valence-decreasing constructions

Languages can have morphological, lexical, and periphrastic means for reducing the valence of a verb. Payne (2008) notes that the most common morphological valence decreasing operations are reflexives, reciprocals (see Chapter 6, Section 6.6.1 for reflexives in Puma), passives and antipassives. Since Puma lacks passives, antipassive valence-decreasing constructions are discussed here (see Chapter 4 for how Puma actually construct what we might call simple passives in English). Puma uses detransitive forms to express simple passives in English, as in:

(178) (a) *ram-lai*    *saŋsa*    *itd-a*
         Ram-DAT    goat    give-PST

         'The goat was given to Ram.'

(b) *sayahang*　　*kʌkhakhut*　*basʌŋ*　　　　　*cen-a*
　　 Sayahang.ABS　night　 long.pieces.firewood　saw-PST

'Firwood was cut by Sayahang.' (Rai et al. 2009: 45)

Derived clauses with a verbal predicate show two versions of agreement in which one follows the typical Kiranti pattern with incorporation and optional agreement, and the other one is antipassivisation which is typologically closer to antipassives found in other languages (Bickel et al. 2007).

### 3.17.1 The *zero*-detransitive

In clauses with detransitive verb forms, case assignment and agreement normally follow the syntax of intransitive clauses where agreement is exclusively with the S argument, which is assigned the absolutive case. It is quite interesting that the P argument is suspended in the detransitivisation but still the *zero*-detransitive clause requires a P argument. Consider the following examples:

(179)(a)　*ŋa-a*　　*khim*　　　*copp-u-ŋ*
　　　　　1SG-ERG　house.ABS　　look-3P-1SG.A

　　　　　'I look at a house.'

　　(b)　*ŋa-a*　　*khim-lai*　　*copp-u-ŋ*
　　　　　1SG-ERG　house-DAT　　look-3P-1SG.A

　　　　　'I look at the house.' (Bickel et al. 2007: 7)

　　(c)　*ŋa*　　　*khim(*-lai)*　*cop-ŋa*
　　　　　1SG.ABS　house (-DAT)　look-1SG.S/P.NPST

　　　　　'I see houses.' or 'I do house-seeing.' (Bickel et al. 2007: 7)

Example (179a-b) shows that the dative-marking of the P argument *khim* 'house' is optional in transitive clauses, while with *zero*-detransitive forms the P is obligatorily unmarked and appears in the absolutive form. Dative-marking with example (179c) is ungrammatical because the demoted object cannot take dative-marking. In general, we assume that the speaker does not have any specific house in his mind at the time of speaking. In *zero*-detransitives an object is obligatory, as in (180), and the object cannot be dropped under any pragmatic conditions.

(180) (a)　*ŋa*　　　*ṭivi*　　*cop-ŋa*
　　　　　1SG.ABS　TV.ABS　 watch-1SG.S/P.NPST

　　　　　'I do telivision watching.' (In general, it does not entail the existence of a

　　　　　specific TV that the speaker has in mind.)

(b)  *ŋa        cop-ŋa
     1SG.ABS    watch-1SG.S/P.NPST

     Intended:  'I watch something.'

Constructions like this in other languages have been referred to as 'incorporation' where a bare NP is incorporated into the predicate (Mithun 1984, 1986). Such an analysis is problematic for Puma. When the pragmatics allow, it is possible to relativise the detransitivised P argument of monotransitive clauses and T argument of ditransitive clauses (cf. see Section 7.13.4 for detailed description of relativisation and examples).

(181) (a)  **ŋa**       *chapd-**oŋ**=ku*             *kitāp*
           1SG.ABS    write-1SG.S/P.PST=NMLZ     book

           'The (generic) kind of book that I wrote.'

      (b)  **ŋa**       *itd-**oŋ**=ku*               *kitāp*
           1SG.ABS    give-1SG.S/P.PST=NMLZ      book

           'The (generic) kind of book that I gave.'

      (c)  *ŋa         kitāp      kha-itd-oŋ=ku                  mʌnna
           1SG.ABS    book       ANTIP-give-1SG.S/P.PST=NMLZ    man

           Intended: 'The person that I gave a book to someone.'

Bickel et al. (2007) note that this type of relativisation is unexpected under classical incorporation in which there is a very unusual case of relativisation on incorporated objects (see Hermelink 1992). In ditransitive clauses only T arguments can appear with the detransitivised verb.

(182) (a)  *ŋa-a*      *khipa-lai*  *wa*       *itd-u-ŋ*
           1SG-ERG    dog-DAT    water.ABS  give-3P-1SG.A

           'I gave water to the dog.'

      (b)  *ŋa*        *khipa-lai*  *wa*       *itd-oŋ*
           1SG.ABS    dog-DAT    water.ABS  give-1SG.S/P.PST

           'I gave water to dogs.'

      (c)  *ŋa*        *khipa*      *wa*       *itd-oŋ*
           1SG.ABS    dog.ABS    water.ABS  give-1SG.S/P.PST

           Intended: 'I gave water to some dogs.'

Example (182) involves an augmented form of the verb *itma* 'give', realised as *itd-* 'give'. Example (182a) is a general ditransitive construction, while in (182b), the verb is detransitivised and the T argument *wa* 'water' still appears. It is striking that the T argument is obligatory, but has only a generic reference. In (182c) the verb is detransitivised but the goal argument *khipa* 'dog' cannot be stripped of its dative case

marking. Hence, detransitived clauses align monotransitive patients with ditransitive themes. Note that T arguments cannot be dropped from detransitivised ditransitive clauses.

### 3.17.2 The *kha-* detransitive

In *kha*-detransitive clauses, in contrast to *zero*-detransitive clauses, an overt P argument is prohibited. The verbs, which are overtly marked for antipassivisation by a prefix *kha-,* always entail a human P-argument. There are semantic restrictions. It should be noted that verbs can occur in *zero*-detransitive clauses and *kha*-detransitive clauses. Pragmatically it is assumed that the prefix *kha-* is mutually exclusive with a human P argument in antipassivisation.

(183) (a)  *ŋa-a*       *khokku-lai*       *copp-u-ŋ*
        1SG-ERG     3SG-DAT          see-3P-1SG.A

     'I see him/her.'

    (b)  *ŋa*       *kha-cop-ŋa*
        1SG.ABS     ANTIP-see-1SG.S/P.NPST

     'I see someone/people.' but not:  'I see something.'

While the *kha*-detransitive is confined only to a human P, the *zero*-detransitive is common with a non-human P. However, this does not mean that the *zero*-detransitive is incompatible with human P arguments, as noted by Bickel et al. (2007) in (184).

(184) (a)  *ŋa*       *thoroŋ-cha*       *tat-oŋ*
        1SG.ABS     male-offspring.ABS     bring-1SG.S/P.PST

     'I brought some young man/men (e.g. to help me in work).'

    (b)  *ŋa*       *kha-tat-oŋ*
        1SG.ABS     ANTIP-bring-1SG.S/P.PST

     'I brought someone/people.'

    (c)  *ŋa*       *mʌnna*       *tat-oŋ*
        1SG.ABS     person.ABS     bring-1SG.S/P.PST

     'I brought someone/people'. (Literally: 'I bought human for work.')

Example (184a) shows that the speaker wants to add more information about the types of the human P arguments, while (184b) is essentially equivalent to (184c) with the generic P *mʌnna* 'human being, person'. However, (184b) is preferred by speakers though (184c) also conveys the same meaning as (184b).

The opposite restriction on T can be found in Puma. While *zero*-detransitives

allow relativisation on the detransitivised P argument, this is impossible with *kha*-detransitives. With *kha*-detransitivisation, relativisation of the T is only possible in the basic transitive constructions (see Section 7.13.6). The *zero*-detransitives can only be applied to theme arguments of ditransitive constructions (cf. 182) while *kha*-detransitives, by contrast, can only be applied to goal arguments as in (185b) where *kha*-detransitive is derived from normal ditransitive construction. Consider the following Puma examples from (Bickel et al. 2007: 10):

(185) (a)  *ŋa-a*        *yoŋni-lai*      *chetkuma*         *itd-u-ŋ*
       1SG-ERG    friend-DAT      clan.sister.ABS    give-3P-1SG.A

       'I gave my sister to the friend (in marriage).'

    (b)  *ŋa*        *chetkuma*        *kha-itd-oŋ*
       1SG.ABS    clan.sister.ABS    ANTIP-give-1SG.S/P.PST

       'I gave away my sister (to someone/people).'

    (c)  *\*ŋa*        *yoŋni(-lai)*        *kha-itd-oŋ*
       1SG.ABS    friend(-DAT)      ANTIP-give-1SG.S/P.PST

       Intended: 'I gave someone/people/sister to a friend.'

In (185b), the T argument is retained while the G argument is omitted, and the example indicates a generic goal but human semantics as 'to someone, to people'. Example (185c) is ungrammatical because with detransitivised clauses, the T argument cannot be omitted in contrast to the G argument. The various clause types presented above can be summarised in Figure 15 (cf. Sharma 2013b).

**Figure 15:** Clause types
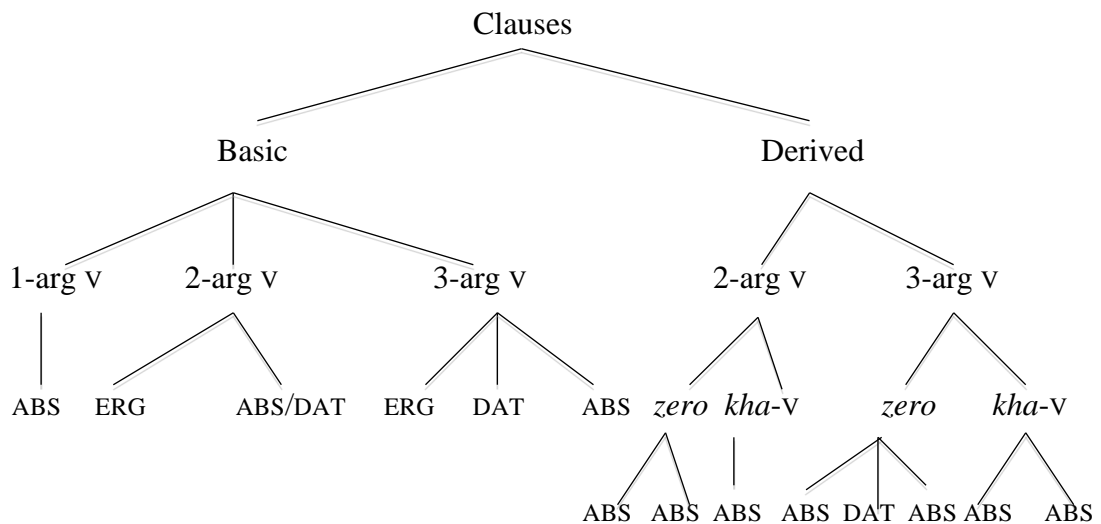


Likewise, based on these kinds of syntactic and semantic properties of the two types of detransitive constructions, the basic properties of derived clauses as summarised in

Bickel et al. (2007: 16) are presented in Table 70.

**Table 70:** The basic properties of derived clauses

| PARAMETERS | *zero*-DETRANSITIVE | *kha*-DETRANSITIVE |
|---|---|---|
| Object agreement | none | |
| Case on agent-like argument | absolutive | |
| Overt object NP | obligatory | banned |
| Relativisation of patients | possible | impossible |
| Roles that can be expressed in ABS case | direct objects | primary objects |
| Semantics of patients | no constraint | human |

Puma *zero*-detransitives share most properties with comparable structures known in other Kiranti languages, except for those found in Limbu and Belhare (cf. Bickel et al. 2007) which allow expansion of object NPs by adjectival modification. Bickel et al. (2007) note that *kha*-detransitive in Puma is unique both in having a morphological marker *kha-* and in banning the appearance of G argument. Though the Puma derived clauses do not share the whole set of properties of antipassivisation, incorporation or optional agreement, they are not totally different from any one of these either. The basic agreement pattern of derived clauses is summarised in Table 71 (cf. Sharma 2013b).

**Table 71:** Basic agreement pattern of derived clauses

| Parameters | *zero*-detransitive | | *kha*-detransitive | |
|---|---|---|---|---|
| | 2-place V | 3-place V | 2-place V | 3-place V |
| Object agreement | none | | | |
| Case on agent-like argument | absolutive | | | |
| Number of NPs expressed | 2 | 3 | 1 | 2 |
| Arguments | A P | A G T | A only | A and T only |
| Semantic restrictions on non-agent | None | | human | |

An overview of basic agreement system in Puma, based on case-marking can be summarised in Table 72.

**Table 72:** Basic agreement system

| Clause types | Verb types | Cases+V | Agreement |
|---|---|---|---|
| BASIC | 1-place V | ABS V | S |
| | 2-place V | ERG ABS/DAT V | A + P |
| | 3-place V | ERG DAT ABS V | A + G |
| DERIVED | 2-place V | ABS₁ ABS V | S |
| | | ABS *kha*-V | S |
| | 3-place V | ABS₁ ABS *kha*-V | S |
| | | ABS₁ DAT ABS V | S |
| | | ABS₁ DAT *kha*-V | Never |

## 3.18 Valence-increasing constructions

Languages can have valence-increasing constructions like causative constructions. Causative constructions can have morphological, lexical, and periphrastic means of increasing the valence of a verb (cf. Payne 2008). Puma is not rich in morphological and lexical causative constructions. Lexical causative constructions are marginal, while morphological causative constructions are also limited. Hence, Puma employs a periphrastic causative construction. In valence-increasing operations the number of arguments required by verbal predicates is increased.

### 3.18.1 Causative constructions

Causative constructions can be formed on the basis of both intransitive and transitive caused events. Valence-increased predicates like causative predicates always involve one more argument than the caused predicate. Thus if the caused event is intransitive, the causative is transitive and takes two arguments. Similarly, if the caused event is transitive, the causative is ditransitive and takes three arguments. If the caused event is ditransitive, the causative takes four arguments. It is interesting to note that the periphrastic causative construction in Puma treats equally intransitive and transitive and ditransitive verbs, as all verbs remain unmarked in causative constructions. Only the causative verb *metma* 'CAUS' and its augment realised as *metd-* agrees with person and tense. Note that in intransitive verbs case-marking is like general transitive verbs, while in ditransitive verbs the increased arguments bear the dative case.

(186)  INTRANSITIVE CAUSED EVENT

(a) *ŋa-a*        *deepti-lai*     *im*        *metd-u-ŋ*
 1SG-ERG    Deepti-DAT    sleep      CAUS-3P-1SG.A

 'I caused Deepti to sleep.'

(b) *ŋa-a*        *deepti-lai*     *pi*        *metd-u-ŋ*
 1SG-ERG    Deepti-DAT    speak     CAUS-3P-1SG.A

 'I caused Deepti to speak.'

(187)  TRANSITIVE CAUSED EVENT

(a) *ŋa-a*        *bʌŋŋa-lai*     *ṭikaṭ*        *hu*    *metd-u-ŋ*
 1SG-ERG    uncle-DAT      ticket.ABS  buy   CAUS-3P-1SG.A

 'I caused uncle to buy a ticket.'

(b) *ŋa-a*        *matrika-lai*     *okhto*            *tat*        *metd-u-ŋ*
 1SG-ERG    Matrika-DAT    medicine.ABS    bring     CAUS-3P-1SG.A
 'I caused Matrika to bring medicine.'

(188)     DITRANSITIVE CAUSED EVENT

(a)   *ŋa-a*     *bʌŋŋa-lai nana-ci-lai*   *khawa*      *it*   *metd-u-ŋ*
      1SG-ERG   uncle-DAT sister-NS-DAT   money.ABS give   CAUS-3P-1SG.A

      'I caused (my) uncle to give money to (my) sisters.'

(b)   *ŋa-a*     *juna-lai    yadu-lai   marchacha*   *it*   *metd-u-ŋ*
      1SG-ERG   Juna-DAT   Yadu-DAT daughter.ABS   give   CAUS-3P-1SG.A

      'I caused Juna to give a daughter to Yadu (in marriage).'

## 3.19   Selectional restrictions

Some verbs place selectional restrictions on their arguments, while adjuncts are never selected. For example, as pointed out by Kroeger (2004), the patient of *drink* must be a liquid, as in Puma too, whether it appears as subject (in a passive) or object (in a regular transitive), and the patient of *assassinate* must be an important political figure. Similarly, the verbs *love*, and *admire* require an animate experiencer.

Puma has two predicates for 'send'– *chid*, which requires a human theme, and *haŋd*, which requires a non-human theme. Restrictions of these types are associated with a specific predicate, and are never applied to adjuncts.

(189) (a)   *ŋa-a*     *khokku-lai*    *chid-u-ŋ*
            1SG-ERG   3SG-DAT       send-3P-1SG.A

            'I send him/her.'

(b)   *\*ŋa-a*     *khokku-lai*    *haŋd-u-ŋ*
      1SG-ERG    3SG-DAT       send-3P-1SG.A

      'I send her.'

(c)   *parbati-a*     *sima-lai*      *chaplawa*      *haŋd-i*
      Parbati-ERG    Sima-DAT       letter.ABS      send-3P

      'Parbati sent Sima the letter.'

(d)   *\*parbati-a*     *sima-lai*      *chapla-wa*     *chid-i*
      Parbati-ERG     Sima-DAT       letter.ABS      send-3P

      'Parbati sent Sima the letter.'

Note that Puma also has selectional-restrictions on verbs like *touch*. Puma has two predicates *pol* 'touch for animate' and *lup* 'touch for inanimate' (see Section 4.6.2).

## 3.20   Chapter summary

This chapter gives an overview of clause structures of Puma, including types of predicates, basic clauses, derived clauses, and valency-increasing and valency-decreasing constructions. Puma distinguishes one-place, two-place and three-place

predicates on the basis of the number of arguments they require. Puma has differential object marking (DOM) as it marks some P arguments with dative and some with absolutive. One-place predicates take a single argument in absolutive case and two-place predicates in monotransitive clauses take two arguments marked as ergative and absolutive, or ergative and dative, depending on animacy and definiteness of the P argument. It shows verbal agreement with both A and P arguments. Three-place predicates take three arguments marked for ergative, absolutive and dative cases, where we find that G arguments are always marked with dative, while T arguments, even if human, are always morphologically unmarked. In addition, Puma exhibits characteristics of a split-S case-marking pattern because some intransitive verbs take P agreement while most take S agreement. Puma case-marking for three-place predicates cannot be categorised as either fully direct object type or fully primary object type (Dryer 1986) since Puma constructions share characteristics of both patterns. Inanimate P and T are marked in the same way, and G is treated differently (the direct object type) but animate and definite P and G are treated in the same way, and T is marked differently (as in the primary object type).

Derived clauses with a verbal predicate show two versions of valency-decreasing constructions: *kha*-detransitivisation, which follows the typical Kiranti pattern, and *zero*-detransitivisation, which is typologically closer to typical detransitivisation constructions in other languages around the world (cf. Bickel et al. 2007). For *kha*-antipassive constructions, the affected object must be human.

The chapter then discusses Puma verb sub-classes. In Puma, as in other Kiranti languages (Bickel 1997), the expression of experiential states of affairs is formed in parallel to all other bodily feeling or experiential expressions, using a possessive of experience construction. Dative case-marked subjects are used with a class of verbs expressing certain physical, mental and emotional states in Nepali, however, in Puma genitive constructions are used to express the experiencers of these verbs. Puma distinguishes adjectival and locative predicates that occur with a copula verb from nominal predicates which occur without a copula in the present tense. Negative existential clauses distinguish between non-past and past tense, while negative identificational clauses do not. The same negative particle occurs in both past and non-past negative identificational clauses.

# Chapter 4

# Transitivity alternations

## *4.1    Background*

The preceding chapter focused on clause structure, particularly on predicate types and clause types where transitivity, intransitivity, ergativity and negation were investigated. This chapter discusses the different types of grammatical and semantic role patterns and lexical verb classes in Puma, drawing heavily on the framework of Levin (1993) *English Verb Classes and Alternatio*ns. The organisation of this chapter is as follows: 4.1 gives introductory information about transitivity alternations, while 4.2 deals with verb classes. Clause types are focused on in section 4.3. Argument alternations are discussed in 4.4, where various verb classes are distinguished along with types of alternations defined over verb types that take particular arguments. From sections 4.5 to 4.10, change-of-state verbs, surface of contact verbs, *give*-type verbs, *get*-type verbs, *throw*-type verb, and *send*-type verbs are described, respectively. Section 4.11 and 4.12 deal with *psych*-verbs and transitive agreement with them. *Want*-type verbs, *deictic* verbs, the *put* verb, verbs of combining and attaching, *separate*-type verbs, *make*-type verbs, and *sing*-type verbs are described in sections 4.13 - 4.19. Sections 4.20 - 4.25 look at *perception* verbs, *search*-type verbs, verbs of social interaction, *teach*-type verbs, *talk*-type verbs, and *eat*-type verbs, respectively. Further, the *kill* verb, verbs of motion, aspectual verbs, and *weather* verbs are introduced in sections 4.26 - 4.29 to identify their transitivity alternations. Finally, section 4.30 gives the chapter summary.

The relationships between grammatical marking and semantic roles are normally predictable in simple constructions like intransitive, transitive and ditransitive clauses. However, this is not always true as Kiranti languages exhibit a complex system of transitivity and intransitivity. The striking characteristic of Kiranti languages like Puma is that transitive verbs can function intransitively. Intransitive clauses only have an S argument which can express various types of semantic roles. The S argument is normally referenced in the verb agreement but sometimes it is not.

Puma is known to have a split ergative case-marking pattern in which one argument of transitive clauses (A, the most agent-like) typically bears an ergative marker, while another argument (P, the most patient-like) typically is absolute, or

dative if it is a human (see Section 2.26.2). Additionally, the single argument of intransitive clauses has no overt marker and is in the absolutive case. Hopper and Thompson (1980) claim that transitivity involves a number of semantic parameters (e.g., participants punctuality, volitionality, affectedness of P, kiness, affirmation, agency, mode, and telicity ) and those parameters co-vary from language to language. Tsunoda (1985) examines their theory of transitivity with various parameters and suggests that the concept of transitivity and the parameters need to be refined.

Lavidas (2009), quoting Hopper and Thompson (1980), says the degree of transitivity (high-low) has morphosyntactic and semantic consequences. However, LaPolla (2011) notes that the lumping of a morphosyntactic property (transitivity) together with a semantic quality (effectiveness) under the same name is problematic. We need to explicitly distinguish between parameters related to semantic and morphosyntactic properties for testing transitivity alternations in languages.

## 4.2    *Verb classes*

Levin's (1993) study of English verb classes and alternations has been widely cited as the seminal study of lexical semantics and the notion that syntactic properties of particular verbs and verb classes is an expression of their semantic structure. Many other scholars have hypothesised that the syntactic realisation of arguments and the behaviour of verbs, particularly with respect to the expression and interpretation of their arguments, comes to a large extent from the meanings of verbs (Fillmore 1965; Green 1974; Jackendoff 1983; Givón 1984; Chomsky 1986; Gropen et al. 1989; Levin 1993; Goldberg 1995).

When syntactic properties of verbs follow to an extent from their meaning, then it can be possible to identify general principles that derive the behaviour of an individual verb from its meaning. Lexical semantics looks at the relations between verbs and their arguments. The set of verbs sharing a range of properties, their behaviour and alternations must be taken into account in proposing a lexical representation of verb meaning. Levin (1993) argues that verbs which display argument alternations, that is alternative expressions of their arguments, such as the middle alternation and the causative alternation, can be assumed to share certain meaning components and to form a semantically coherent class. Argument alternations involve *multiple argument realisation* in which verbs can appear in a variety of syntactic contexts (Hovav & Levin

2007).

Hovav and Levin (2007) show that two comparable classes of verbs with distinct behaviour can be identified in English and other languages like Lhasa Tibetan, spoken in Nepal, China and India (DeLancey 1995); Berber, spoken in North Africa mainly Morocco and Algeria; Warlpiri, spoken in Australia; and Hocank (Winnebago), spoken in the United States (Guerssel et al. 1985).

In this Section, we investigate verb classes for Puma that Levin (1993) discusses for English. While the membership of the verb classes is to a large extent the same in many languages, there is a substantial body of vocabulary where apparently equivalent predicates fall into different classes in languages. The membership of verb classes demonstrates considerable agreement in languages, while they also disagree in a number of cases. For example, there are a significant number of Puma verbs whose closest Nepali and English translational equivalent belongs to another category.

The existence of a link between verb behaviour with respect to argument alternation and verb meaning is not peculiar to English. Such alternations found in English are attested across languages by verbs of the same semantic types. Warlpiri, spoken in Australia, shows the *Conative Alternation* with *hit*-type and *cut*-type verbs but not with *break*-type verbs and *touch*-type verbs (Guerssel et al. 1985; Laughren 1988). The conative alternation has two syntactic variants– the transitive variant and the conative variant where a semantic relationship is assumed between two different syntactic structures. In conative alternation the object of a verb in the transitive variant is realised as the object of a prepositional phrase headed by the preposition *at* in the conative variant which reflects an aspectual shift between them (Levin 1993: 42). English differentiates *hit* from *break*. However, *break*-type verbs are consistently transitive across languages while *hit*-type verbs are not (Hovav & Levin 2007). Similarly, *eat*-type verbs which differ from *break*-type verbs, demonstrate some unique properties in other languages.

Hovav and Levin (2007) show that *eat*-type verbs may causativise differently from other transitive verbs in different languages like Amharic, spoken in Ethiopia (Amberber 2002); Berber, spoken in North Africa, mainly Morocco and Algeria (Alalou & Farrell 1993; Guerssel 1986); Kannada, spoken in India predominantly in the state of Karnataka (Fried 1992); Tariana, spoken in Brazil (Aikhenvald 2000); and a number of

Indo-Aryan languages (Masica 1976; Alsina & Joshi 1991; Ramchand 1997).

## 4.3    Clause types

Like many languages, clauses in Puma are divided into three types: intransitive clauses, transitive clauses, and ditransitive clauses. However, Puma employs distinct case marking and agreement for these clauses. Based on the NP morphological marking and verb agreement pattern for Puma, clauses are divided into seven types. I give examples of each type and a detailed description is described in the next sections.

(190) (a)    GENERAL INTRANSITIVE CLAUSES

**S.ABS**          **V-S**

*ŋa*          *ips-oŋ*
1SG.ABS    sleep-1SG.S/P.PST

'I slept.'

(b)    NON-VOLITIONAL (UNCONTROLLED) INTRANSITIVE CLAUSES

**S.ABS**          **V-i ('3P')**

*himālaya-di=ku*          *hiŋ*          *yumt-i*
Himalaya-UP.LOC=NMLZ          snow.ABS    melt-3P

'The snow melted in the Himalayas.'

(c)    TRANSITIVE CLAUSES

**A-ERG  P-ABS/DAT  V-P-A**

(i)    *ŋa-a*          *koima*          *tʌŋdh-u-ŋ*
     1SG-ERG    mouse.ABS          chase-3P-1SG.A

'I chase a mouse.'

(ii)    *ŋa-a*          *cha-lai*          *tʌŋdh-u-ŋ*
      1SG-ERG    child-DAT    chase-3P-1SG.A

'I chase the child.'

(d)    DITRANSITIVE CLAUSES

**A-ERG  G-DAT  T-ABS  V-G-A**

*khʌnna-a*  *ŋa-lai*    *chi-tup-ma=yu*                    *tʌ-itd-oŋ*
2SG-ERG  1SG-DAT  hand-meet-INF=N.INSTR.NMLZ    2-give-1SG.S/P.PST
'You$_{SG}$ gave me the present.'

(e)    PSYCH-CLAUSES

**S-POSS-GEN  S-POSS  V-S**

*uŋ-bo*          *uŋchi*          *tuk-a*
1SG-GEN    1SG.POSS-hand.ABS    hurt-PST

'My hand hurt.'

(f)  *PUT*-CLAUSES

**A-ERG P-ABS/DAT LOC-OBL V-A-P**

| *khaʌnna-a* | *mobail* | *wa-di* | *tʌ-ŋes-i* |
|---|---|---|---|
| 2SG-ERG | mobile.ABS | water-UP.LOC | 2-put-3P |

'You put the mobile in the water.'

(g)  BODY-PART CLAUSES

**A-ERG P-POSS-GEN BODY.PART-GEN.LOC V-A-P**

| *ŋa-a* | *kho-bo* | *kʌ-ʈoŋ-do* | *cetdh-u-ŋ* |
|---|---|---|---|
| 1SG-ERG | 3SG-GEN | 3SG.POSS-head-GEN.LOC | hit-3P-1SG.A |

'I hit him on the head.'

### 4.3.1  Intransitive and transitive clauses

The possible semantic role of the S argument in intransitive clauses covers a wide range, including actor, experiencer, patient and theme. There are many verbs which can only appear in an intransitive construction, and hence have a single agreement slot.

(191)  INTRANSITIVE

(a)
| *ŋa* | *khim-do* | *puŋ-ŋa* |
|---|---|---|
| 1SG.ABS | house-GEN.LOC | go-1SG.S/P.NPST |

'I go to the house.'

(b)
| *\*puŋ-u-ŋ* |
|---|
| go-3P-1SG.A |

Intended: 'I go (to him/her).'

However, in Puma there are also many verbs that can appear in an intransitive clause which can also be used transitively. We take the intransitive construction to be an antipassive alternative. For example, *chap* 'write' can be used intransitively.

(192) (a)  TRANSITIVE

| *ŋa-a* | *ciʈhī* | *chapd-u-ŋ* |
|---|---|---|
| 1SG-ERG | letter.ABS | write-3P-1SG.A |

'I write the letter.'

(b)  ANTIPASSIVE

| *ŋa* | *ciʈhī* | *chap-ŋa* |
|---|---|---|
| 1SG.ABS | letter.ABS | write-1SG.S/P.NPST |

'I write letters.' (Letters denote generic reference.)

Example (192a) is the transitive construction where the augment *chapd* 'write' occurs transitively (with two agreement slots and A in the ergative and P in the absolutive), while example (192b) shows the antipassive construction where the surface *chap* 'write'

occurs intransitively (with a single agreement slot and S in the absolute case) which is a *zero*-detransitivised clause (cf. see section 3.17.1).

### 4.3.2  Intransitive verbs with a complement

The verb *sima* 'want' is a morphologically intransitive verb, but obligatorily takes a second NP (or an infinitive clause – see Section 6.7.8) as a complement. The verb agreement morphology solely indexes the S argument of the verb. This verb does not imply any change or effect on its complement. The verb *sima* 'want' is homophonous with *sima* 'die', but the number of arguments that the two verbs require are different. The verb *sima* 'want' takes two arguments and both of them are in the absolute case, as in:

(193) (a)  *khokku*    *mobail*    *si-yaŋ*
          3SG.ABS    mobile.ABS    want-IPFV

          'He wants a mobile.'

    (b)  *khʌnna*    *mobail*    *tʌ-si-yaŋ*
          2SG.ABS    mobile.ABS    2-want-IPFV

          'You want a mobile.'

    (c)  *ŋa*    [*khim*    *puŋ-ma*]    *si-ŋa-ŋa*
          1SG.ABS    house.ABS    go-INF    want-1SG.S/P.NPST-1SG.IPFV

          'I want to go home.'

The verb *sima* 'die' is strictly intransitive and does not take a complement, as in:

(194)    *ŋa*    *si-ŋa*
          1SG.ABS    die-1SG.S/P.NPST

          'I die.'

### 4.3.3  Transitivity and intransitivity

There are a number of characteristics that distinguish intransitive clauses from transitive clauses. However, in languages like English we find that some transitive verbs that must normally take an overt object, as in *he ate an apple*, may also be used without an object, as in *he ate*. However, the transitive and the intransitive uses are semantically different (cf. LaPolla, Kratochvíl & Coupe 2011) since in the case of verbs like *eat*, the intransitive use has an implicit patient argument which must be something conventionally edible, while the transitive verb can take any kind of overt object, including something conventionally inedible, for example, *a shoe* (Fillmore 1986).

Puma also has verbs that can be used in this way, however their semantics remains

constant while the pattern of transitive and intransitive verb agreement is different:

(195) (a)   *ŋa-a*       *pempak*    *co-o-ŋ*
           1SG-ERG    bread.ABS   eat-3P-1SG.A

           'I ate bread.'

     (b)   *ŋa*           *ca-oŋ*
           1SG.ABS    eat-1SG.S/P.PST

           'I ate.'

What was eaten in (195b) which is a zero-detransitivised clause (see Section 3.17.1), is understood as whatever referent is relevant in the context, and could be (conventionally) edible or inedible. Hopper and Thompson (1980) adopt a multi-dimensional approach to transitivity and argue for the relevance of several parameters by analysing a wide range of languages with respect to case marking of A and P arguments, incorporation, verb morphology, the occurrence of antipassive and passive, and reflexive structures. Certain predicates are more likely to be transitive than others, depending on semantic factors (Hopper & Thomson 1980; Tsunoda 1981; 1985; Testelec 1998).

Hopper and Thompson (1980) note that if a certain feature of the transitivity parameters contributing to high transitivity is missing, it can lead in some languages to a less transitive construction. For example, in Estonian agentivity and volitionality contribute to high transitivity, while in languages like Hindi or Georgian transitivity alternations are conditioned by tense/aspect (cf. Malchukov 2004). Like many Kiranti languages Puma transitivity alternations are conditioned by agency. Likewise, individuation of P arguments, which depends on animacy, definiteness and referentiality, impacts on case-marking, where higher animate P arguments are marked by dative case and lower and inanimate P arguments are marked by absolutive case.

Puma employs different types of transitivity alternations to encode different transitivity parameters pertaining to P-individuation. For example, clauses with a P having an entailment of human reference are rendered through a *kha*-antipassive construction (see Section 3.17.2) where the most agent-like argument appears as S in absolutive case, and an overt P-argument is not allowed. Such an antipassive alternation serves not only to demonstrate the relevance of individual parameters but also to illustrate different morpho-syntactic manifestations of transitivity alternations which can involve a change in case-marking and in agreement.

This section investigates syntactic and semantic properties of Puma verbs. The study assumes that the behaviour of a verb, typically with respect to the expression and interpretation of its arguments, is partly determined by its meaning. Verb behaviour can be used to explore different aspects of verb meaning which is properly associated with syntactic expressions of their arguments. Verbs, as argument-taking elements, demonstrate especially complex sets of properties, compared with other elements like arguments S, A and P.

A verb may participate in various transitivity alternations, also called *diathesis alternations*, which are changes in the realisation of the argument structure of a verb that are sometimes accompanied by changes in meaning (Levin 1993). Cross-linguistically languages differ in argument alternations, though some alternations might be shared. In this chapter, alternations that we test the transitivity for, in Puma, are presented, as in:

(196) (a)    Pro-drop

(b)    Antipassive

(c)    Middle

(d)    Inchoative

(e)    Body-part ascension

(f)    Reflexive

(g)    Reciprocal

(h)    Locative

## 4.4.1   Pro-drop alternation

The pro-drop alternation is a characteristic of Kiranti languages. Like many Kiranti languages, since verbs in Puma agree with the S arguments in intransitive clauses, A and P arguments in monotransitive clauses, and A and G arguments in ditransitive clauses, pronouns with these grammatical functions may be freely omitted (dropped), as in the following examples:

(197)       PRO-DROP ALTERNATION

(a)    (*ŋa*)        *puks-oŋ*
       1SG.ABS    go-1SG.S/P.PST

       'I went.'

(b)   (*khokku-a*) (*ŋa-lai*)   *pʌ-ḍher-oŋ*
       3SG-ERG   1SG-DAT   3S/A-beat-1SG.S/P.PST

       'He beat me.'

## 4.4.2   Antipassive alternation

Like most Kiranti languages, Puma transitive verbs can occur alternatively in two types of intransitive constructions, both of which are antipassive, namely *kha*-antipassive and *zero*-antipassive. The *kha*-anitipassive allows only one argument while the *zero*-antipassive requires two arguments, though the verb does not agree with the P argument (cf. Section 3.17).

(198)     TRANSITIVE/ANTIPASSIVE ALTERNATIONS

   (a)   TRANSITIVE CONSTRUCTION

       *ŋa-a*     *khokku-lai*   *tʌŋdh-u-ŋ*
       1SG-ERG   3SG-DAT      chase-3P-1SG.A

       'I chase her.'

   (b)   ANTIPASSIVE ALTERNATION WITH *kha-*

       *ŋa*       *kha-tʌŋ-ŋa*
       1SG.ABS   ANTIP-chase-1SG.S/P.NPST

       'I chase (people).'

   (c)   ANTIPASSIVE ALTERNATION WITH *zero-*

       *ŋa*       *munima*   *tʌŋ-ŋa*
       1SG.ABS   cat.ABS    chase-1SG.S/P.NPST

       'I chase cats.'

## 4.4.3   Middle alternation

The middle construction is an intransitive alternation which is characterised by an unexpressed agent (cf. Levin 1993). Middle alternations are restricted to verbs with affected objects. Syntactically they need an adverbial, and semantically their time reference cannot be specific. These properties distinguish the middle alternation from the causative/inchoative alternation. Middle verbs are also designated as *break*-type verbs. In Puma the verb *ot* 'break' takes only one argument in the middle construction, that argument is understood as correlated with the P argument rather than the A argument of the transitive clause.

(199) (a)   TRANSITIVE CONSTRUCTION

       *khokku-a*      *rimit*          *ot-i*
       3SG-ERG      bamboo.shoot.ABS   break-3P

       'He broke the bamboo shoot.'

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MIDDLE CONSTRUCTION

> *rimit*                  *mʌjʌle*      *ot-a*
> bamboo.shoot.ABS    nicely      break-PST
>
> 'The bamboo shoot broke easily.'

Example (199b) shows a middle construction where *rimit* 'bamboo shoot' did not break anything, though the clause is active, but *rimit* 'bamboo shoot' can be broken. The middle verb *ot* 'break' shows features of both active and detransitive. In these alternations, the same arguments of the verb appear in different syntactic positions, carrying a distinct, coherent semantic interpretation.

### 4.4.4   Causative alternation

Causative alternations involve verbs that can be used intransitively and transitively. The transitive use of a verb can be expressed as approximately 'cause to V-intransitive' (Levin 1993). There is a wide range of verbs which show both transitive and intransitive uses in Puma. This alternation is known by other names, including 'anti-causative' and 'ergative' (Levin 1993; Smith 1970). Verbs that undergo causative alternations are normally verbs of change of state or change of position. There are some verbs like change of possession that are only used transitively, and some verbs of appearance that are only used intransitively. In English, unlike in Kiranti languages like Puma, a few pysch-verbs participate in the causative alternation in English, while all verbs of this type appear to participate in French, Italian and Russian (Levin 1993; see Ruwet 1972 for French).  However, verbs that display the causative alternation are also found in the middle alternation. Consider the following examples from a number of verb classes in Puma (for most of the examples I give 3SG>3SG and 1SG>3SG, so that we can see the pronominal agreement explicitly):

(200) (a)  *ŋa-a*        *si-a=ku*         *puchap*         *wand-u-ŋ*
           1SG-ERG    die-PST=NMLZ   snake.ABS      move-3P-1SG.A

           'I moved a dead snake.'

(b)  *vesnina-a*        *si-a=ku*         *puchap*         *wand-i*
     Vesnina-ERG     die-PST=NMLZ   snake.ABS      move-3P

     'Vesnina moved a dead snake.'

(c)  *si-a=ku*            *puchap*         *wand-a*
     die-PST=NMLZ     snake.ABS      move-PST

     'A dead snake moved.'

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(201) (a) *ŋa-a*       *uŋ-khim*       *cotd-u-ŋ*
         1SG-ERG    1SG.POSS-house  shift-3P-1SG.A

         'I shifted my house.'

    (b) *juli-a*       *kʌ-khim*       *cotd-i*
         Juli-ERG    3SG.POSS-house  shift-3P

         'Juli shifted her house.'

    (c) *\*kʌ-khim*       *cotd-a*
         3SG.POSS-house  shift-PST

         'His/her house shifted.'

Examples (200a) and (200b) show causative constructions in which the predicate *wand* 'move' takes two arguments: A argument in ergative case and P argument with absolutive case, while (200c) shows the middle construction where the same predicate requires only one S argument in absolutive. Many *roll* verbs which normally exhibit manner of motion that are characteristics of inanimate entities show the causative alternation in English (Levin 1993). In contrast, many *roll* verbs such as *chir* 'wrap', *cotd* 'shift' and *wal* 'stir' (see Table 100 in 4.27.2 for the class membership of *roll*-type verbs) in Puma do not show the causative alternation, except for *wand* 'move' in (200a) and (200b). The majority of verbs like *cotd* 'shift' cannot be used in the middle construction, so (201c) is ungrammatical.

### 4.4.5 Body-part possessor ascension alternation

The body-part possessor ascension alternation denotes a change in the expression of the possessor of a body part. The possessor can appear as a dependent of the body part in genitive case, or as the P argument of the verb in dative case, as in:

(202)       BODY-PART POSSESSOR ASCENSION ALTERNATION

    (a) *susma-a*      *sri-lai*      *kʌ-chi-do*           *pol-i*
         Sushma-ERG    Sri-DAT     3SG.POSS-hand-GEN.LOC    touch-3P

         'Sushma touched Sri on the head.'

    (b) *pabita-a*      *mitraman-bo*  *kʌ-loŋ-do*        *pol-i*
         Pabita-ERG    Mitraman-GEN  3SG.POSS-leg-GEN.LOC    touch-3P

         'Pabita touched Mitraman's leg.'

### 4.4.6 Reflexive object alternation

The reflexive object alternation is found with verbs like *hit*, *touch* etc. These verbs take a body part as a P argument in their transitive use, or can omit the body part and carry a reflexive marker on the verb (note that marking of A is unaffected):

(203) (a)   BODY-PART OBJECT

    *mala-a    dadʌri-do    kʌ-ʈoŋ    dhuks-i*
    Mala-ERG   wall-GEN.LOC   3SG.POSS-head   collide-3P

    'Mala hit her head on the wall.'

(b)   REFLEXIVE OBJECT

    *mala-a    dadʌri-do    dhuŋ-nen-cen*
    Mala-ERG   wall-GEN.LOC   collide-2/3SG.REFL.PST-REFL

    'Mala collided with the wall.'

## 4.4.7   Reciprocal object alternation

The reciprocal object alternation is manifested with verbs like *marry*, *mix* etc. in Puma. There are restrictions on this alternation as all participants in this construction must be of comparable status (cf. Levin 1993). For example, with a verb like *marry*, each member must be human and able to participate in initiating and carrying out the action. This alternation is often discussed in languages like English, Romance and Slavic (cf. Levin 1993) as well.

(204)   SIMPLE RECIPROCAL ALTERNATION (TRANSITIVE)

(a)   *mira-a   ca   thuli-do    birosi    thuli    hol-i*
    Mira-ERG  rice  flour-GEN.LOC   chilli    flour    mix-3P

    'Mira mixed the rice flour with the chilli powder.'

(b)   *mira-a   ca   thuli-oŋ  birosi    thuli-oŋ    hol-i*
    Mira-ERG  rice  flour-COM$_1$ chilli    flour-COM$_1$    mix-3P

    'Mira mixed the rice flour and the chilli powder.'

## 4.4.8   Locative alternation

The locative alternation is found with certain motion verbs like *climb*. Clark and Clark (1979) argue that locative alternations are the locatum argument, as the substance or entity whose location is changed (cf. Levin 1993). In Puma we find the location can be either in the locative case or else unmarked absolutive, as in:

(205)   LOCATIVE ALTERNATION

(a)   *munima    sʌŋpwa-do    waŋ-a*
    cat.ABS    tree-GEN.LOC    climb-PST

    'The cat climbed on the tree.'

(b)   *munima    sʌŋpwa    waŋ-a*
    cat.ABS    tree.ABS   climb-PST

    'The cat climbed the tree.'

## 4.5    Change-of-state verbs

### 4.5.1    *Break-type* verbs

These verbs denote changes of state and involve different subsets of this pattern. The meaning of these verbs relates to actions that bring about a change in what Hale and Keyser (1987a) call the 'material integrity' of some entity. English change-of-state verbs *break* and *cut* show distinct properties: *break* verbs are pure verbs of change-of-state and their meaning bears no information about how the change of state occurs, while *cut* verbs cause a change-of-state by moving something into contact with the entity that changes state (Levin 1993).

Most of the *break* verbs in Puma display the middle alternation (see (206-209)) with some exceptions. The verbs that are involved in this alternation denote processes and states. The meaning of *bend* verbs involves a change in the shape of an entity which does not affect its material integrity but still we can say that its material integrity is partially affected and if we keep bending something, it eventually breaks. Unlike *cut* verbs, still they do share the same properties with *break* verbs. Hence, we put *break* and *bend* verbs into the same type. The class membership of *break* verbs is presented in Table 73.

**Table 73:** *Break*-type verbs

| ROOT | GLOSS | TRANSITIVE | ANTIP |
|------|-------|------------|-------|
| *bhuks* | break down (completely destroy) | *bhuks-i* | *bhuks-a* |
| *chʌps* | press (partially destroy) | *chʌps-i* | *chʌps-a* |
| *hot* | break/open (destroy a little bit), e.g. land | *hot-i* | *hot-a* |
| *khet* | break, fracture (round thing), e.g. ball | *khet-i* | *khet-a* |
| *khoks* | break, crush (break rope with a stone) | *khoks-i* | *khoks-a* |
| *ot* | notch, break (long thing), e.g. leg, hand | *ot-i* | *ot-a* |
| *pheks* | break (flat object), e.g. flake | *pheks-i* | *pheks-a* |
| *phutd* | break (break rope with hands) | *phutd-i* | *phutd-a* |

Properties:

(206)    PRO-DROP AND CAUSATIVE/INCHOATIVE ALTERNATION

    (a)    (*ŋa-a*)    *rimit*        *ot-u-ŋ*
           1SG-ERG    bamboo shoot.ABS    break-3P-1SG.A

        'I broke the bamboo shoot.'

    (b)    *rimit*           *ot-a*
           bamboo shoot.ABS    break-PST

        'The bamboo shoot broke.'

(207)    ANTIPASSIVE ALTERNATION

  (a)    *zero*-ANTIPASSIVE ALTERNATION

    *ŋa        rimit               ot-oŋ*
    1SG.ABS    bamboo shoot.ABS    break-1SG.S/P.PST

    'I broke bamboo shoots.'

  (b)    **kha*-ANTIPASSIVE ALTERNATION

    **ŋa        kha-ot-oŋ*
    1SG.ABS    ANTIP-break-1SG.S/P.PST

    'I broke people.'

(208)    *BODY-PART POSSESSOR ASCENSION

  (a)    *matrika-a        kali-bo        kʌ-chi           ot-i*
    Matrika-ERG    Kali-GEN    3SG.POSS-hand    break-3P

    'Matrika broke Kali's hand.'

  (b)    **matrika-a        kali-lai        kʌ-chi-do                ot-i*
    Matrika-ERG    Kali-DAT    3SG.POSS-hand-GEN.LOC    break-3P

    'Matrika broke Kali on the hand.'

(209)    MIDDLE ALTERNATION

    *rimit                mʌjʌle        ot-a*
    bamboo shoot.ABS    nicely    break-PST

    'The bamboo shoot broke easily.'

*Break*-verbs do not allow the object drop alternation. The omission of their objects is not possible even in the antipassive alternation. These *break*-type verbs obligatorily require P arguments. They do not allow body-part possessor ascension because perhaps the object which is broken must be the P argument and not an oblique argument. Levin (1993) makes a clear distinction between *destroy* verbs and *break* verbs in English. This difference does not occur in Puma as the verb *bhuks* 'break; destroy; pile up' is used for a wide range of meanings, including both English *break* and *destroy*. Jackendoff (1990) points out that the *destroy* verbs could be viewed as verbs of creation, but these verbs cannot express a created 'product' as *destroy* verbs 'totally incorporate the goal':

(210)    CAUSATIVE/INCHOATIVE ALTERNATION

  (a)    *lutli-a        khim        bhuks-i*
    earthquake-ERG    house.ABS    destroy-3P

    'The earthquake destroyed the house.'

  (b)    *khim        bhuks-a*
    house.ABS    destroy-PST

    'The house was destroyed.'

### 4.5.2 *Bend*-type verbs

*Bend*-type verbs share all alternations that *break*-type verbs do. The class membership of *bend* verbs is presented in Table 74.

**Table 74:** *Bend*-type verbs

| ROOT | GLOSS | TRANSITIVE | ANTIPASSIVE |
|------|-------|------------|-------------|
| *b/bhekd* | fold (clothes, papers) | *bhekd-i* | *bhekd-a* |
| *kuɳʈ* | bend | *kuɳʈ-i* | *kuɳʈ-a* |
| *okd* | twist peak (iron) | *okd-i* | *okd-a* |
| *rʌkd* | sprain | *rʌkd-i* | *rʌkd-a* |
| *rʌmt* | roll, twist round | *rʌmt-i* | *rʌmt-a* |
| *ripd* | plait | *ripd-i* | *ripd-a* |

Properties:

(211)    PRO-DROP AND CAUSATIVE/INCHOATIVE ALTERNATION

    (a)    *(ŋa-a)*    *samba*    *kuɳʈ-u-ŋ*
           1SG-ERG    bamboo.ABS    bend-3P-1SG.A

           'I bent the bamboo.'

    (b)    *samba*    *kuɳʈ-a*
           bamboo.ABS    bend-PST

           'The bamboo bent.'

(212)    *zero*-ANTIPASSIVE ALTERNATION
    (a)    *ŋa*    *samba*    *kuɳʈ-oŋ*
           1SG.ABS    bamboo.ABS    bend-1SG.S/P.PST

           'I bent bamboos.'

    (b)    *\*kha-* ANTIPASSIVE ALTERNATION

           *\*ŋa*    *kha-kuɳʈ-oŋ*
           1SG.ABS    ANTIP-bend-1SG.S/P.PST

           'I bent (people).'

(213)    MIDDLE ALTERNATION
           *samba*    *mʌjʌle*    *kuɳʈ-a*
           bamboo.ABS    nicely    bend-PST

           'The bamboo bent easily.'

(214)    *BODY-PART POSSESSOR ASCENSION

    (a)    *paula-a*    *martin-bo*    *kʌ-chi*    *kuɳʈ-i*
           Paula-ERG    Martin-GEN    3SG.POSS-hand    break-3P

           'Paula bent Martin's hand.'

    (b)    *\*paula-a*    *martin-lai*    *kʌ-chi-do*    *kuɳʈ-i*
           Paula-ERG    Martin-DAT    3SG.POSS-hand-GEN.LOC    break-3P

           'Paula bent Martin on the hand.'

### 4.5.3 *Cut*-type verbs

*Cut* verbs are contrasted with *break* verbs, though both of them involve a change in 'material integrity'. These verbs bear the meaning of motion, contact, and effect. The meaning of these verbs relates to a 'separation in material integrity' in which an instrument or means is used (Hale & Keyser 1987a). Verbs in this class are distinct from each other in meaning with respect to the instrument or means (Rai 2007). An instrument or means determines the verb class and its meaning. The class membership of *cut* verbs is presented in Table 75.

**Table 75:** *Cut*-type verbs

| ROOT | GLOSS | TRANSITIVE | ANTIPASSIVE |
|------|-------|------------|-------------|
| *bha* | cut in general | *bho-o* | *bho-a* |
| *cen*[32] | cut firewood | *cen-i* | *cen-a* |
| *cham*[33] | cut big log with axe | *cham-i* | *cham-a* |
| *chok* | chisel | *chok-i* | *chok-a* |
| *ḍhʌkd* | cut tree grass | *dhʌkd-i* | *dhʌkd-a* |
| *dhaks*[34] | make pieces of bread | *dhaks-i* | *dhaks-a* |
| *hipd* | scrape, strip, peel | *hipd-i* | *hipd-a* |
| *hekd* | saw or cut with a sickle | *hekd-i* | *hekd-a* |
| *kʌpd* | cut clothes with scissors | *kʌpd-i* | *kʌpd-a* |
| *khokd*[35] | make pieces of bone | *khokd-i* | *khokd-a* |
| *khop*[36] | cut firewood, collect | *khop-i* | *khop-a* |
| *ŋand*[37] | cut off all branches of tree | *ŋand-i* | *ŋand-a* |
| *ŋatd* | cut weed for farming | *ŋatd-i* | *ŋatd-a* |
| *sip* | cut rub | *sip-i* | *sip-a* |
| *taŋt* | cut, trim, smooth | *taŋt-i* | *taŋt-a* |
| *weŋ* | peel off ginger, radish etc. | *weŋ-i* | *weŋ-a* |

Properties:

(215)     PRO-DROP AND CAUSATIVE/INCHOATIVE ALTERNATION

  (a) (*khokku-a*)  *mesi*   *bho-o*
    3SG-ERG   buffalo.ABS  cut-3P
    'She cut the buffalo.'

  (b) *\*mesi*   *bha-a*
    buffalo.ABS  cut-PST
    Intended: 'The buffalo was cut.'

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[32] NEP. *cirnu* 'cut with a big knife and axe'.

[33] Cut a big log only into two parts with an axe.

[34] Make pieces of bread without using instruments (e.g., with hands).

[35] Chop bones on a chopping board NEP. '*acāno*'.

[36] Collect only firewood but not grass.

[37] Cut all branches and leaves of tree NEP. '*muḍulāunu*'.

(216)　　ANTIPASSIVE ALTERNATION

 (a) *khokku*  *mesi*    *bha-a*
   3SG.ABS  buffalo.ABS  cut-PST

   'She cut buffaloes.'

 (b) *khokku*  *kha-bha-a*
   3SG.ABS  ANTIP-cut-PST

   'She cut (people)'.

(217)　　MIDDLE ALTERNATION

   \**mesi*    *mʌjʌle*  *bha-a*
   buffalo.ABS  nicely   cut-PST

   'The bamboo cut easily.'

(218)　　\*BODY-PART ASCENSION

 (a) *jhupe-a*   *uŋ-bo*    *uŋ-loŋ*    *bho-o*
   Jhupe-ERG  1SG.POSS-GEN  1SG.POSS-leg  cut-3P

   'Jhupe cut my leg.'

 (b) \**Jhupe-a*  *ŋa-lai*  *uŋ-loŋ-do*    *bho-o*
   Jhupe-ERG  1SG-DAT  1SG.POSS-leg-GEN.LOC cut-3P
   'Jhupe cut me on the leg.'

### 4.5.4　*Cook*-type verbs

These verbs relate to distinct ways of cooking food, where many verbs show properties of both change-of-state verbs and what Wierzbicka (1988) calls 'verbs of preparing' or creation of a product, usually through the transformation of raw materials. The class membership of *cook* verbs is presented in Table 76.

**Table 76:** *Cook*-type verbs

| ROOT | GLOSS | TRANSITIVE | ANTIPASSIVE |
|---|---|---|---|
| *bhoks* | boil | *bhoks-i* | *bhoks-a* |
| *chas* | boil water | *chas-i* | *chas-a* |
| *kid* | cook whole food | *kid-i* | *kid-a* |
| *koŋt* | heat | *koŋt-i* | *koŋt-a* |
| *mu* | cook rice | *mu-u* | *mu-a* |
| *ŋept* | roast | *ŋept-i* | *ŋept-a* |
| *ŋid* | cook curry | *ŋi-i* | *ŋi-a* |
| *ŋo* | fry (dry things) | *ŋo-o* | *ŋo-a* |
| *rapd* | serve polenta | *rapd-i* | *rapd-a* |
| *sumt* | steam (banana, soyabean) | *sumt-i* | *sumt-a* |
| *tumt* | ripe | *tumt-i* | *tumt-a* |

Properties:

(219)    PRO-DROP AND CAUSATIVE/INCHOATIVE ALTERNATION

    (a)    (*khʌnna-a*) *khan*    *tʌ-ŋi-i*
          2SG-ERG   curry.ABS  2-cook-3P

        'You cooked curry.'

    (b)    *khan*     *ŋi-a*
          curry.ABS  cook-PST

        'The curry was cooked.'

(220)    ANTIPASSIVE ALTERNATION

    (a)    *khʌnna*   *khan*     *tʌ-ŋi-a*
          2SG.ABS  curry.ABS  2-cook-PST

        'You cooked some curry.'

    (b)    \**khʌnna*   *kha-tʌ-ŋi-a*
          2SG.ABS    ANTIP-2-cook-PST

        Intended: 'You cooked (people), (but not for people).'

(221)    MIDDLE ALTERNATION

    (a)    \**khan*    *mʌjʌle*   *ŋi*
          curry.ABS  nicely     cook.NPST

        'Curry cooks nicely.'

    (b)    *khan*     *mʌjʌle*   *bhoŋ*
          curry.ABS  nicely     cook.NPST

        'Curry cooks nicely.'

The meanings of verbs in the *cook*-type class entail a change of state in all parts of the P argument. These verbs in Puma meet almost every syntactic test as in English *cook* verbs, except for the middle alternation. However, note that the middle alternation is possible with the different lexeme *bhoŋ* 'cook', the class members of *cook*-type verbs.

## 4.6    Verbs of surface-contact

### 4.6.1    *Hit*-type verbs

Fillmore (1970) discusses two categories of transitive verb in English, the 'surface-contact' or *hit*-type verbs and the 'change-of-state' or *break*-type verbs. Fillmore shows that these two classes have distinct syntactic behaviours, and makes a convincing case that these distinct behaviours reflect distinct underlying semantic patterns. The behaviour of *hit*-verbs shows that they are not change-of-state verbs like *break*-verbs and need not entail a change-of-state.

These verbs relate to moving one entity in order to bring it into contact with another entity. Levin (1993) argues that the with/against alternation is a hallmark of these verbs in English, while such a construction is not available with *hit*-verbs in Puma. The class membership of *hit* verbs is presented in Table 77.

**Table 77:** *Hit*-type verbs

| ROOT | GLOSS | TRANSITIVE | ANTIPASSIVE |
|------|-------|-----------|-------------|
| *bʌks* | beat with a stick | *bʌks-i* | *bʌks-a* |
| *cetdh* | hit | *cetdh-i* | *cetdh-a* |
| *ɖher* | beat severely | *ɖher-i* | *ɖher-a* |
| *dhapd* | kick | *dhap-i* | *dhap-a* |
| *dhup* | strike with fist (boxing) | *dhup-i* | *dhup-a* |
| *khukd* | strike with horn | *khukd-i* | *khukd-a* |
| *kokd* | strike with stone (chasing) | *kokd-i* | *kok-a* |
| *sok* | husk | *sok-i* | *sok-a* |
| *warr* | hit with stone (without chasing) | *warr-i* | *warr-a* |

Properties:

(222)     PRO-DROP AND CAUSATIVE ALTERNATION

    (a)     (*ŋa-a*)    (*khokku-lai*)    *cetdh-u-ŋ*
        1SG-ERG   3SG-DAT        hit-3P-1SG.A

        'I hit him.'

    (b)     **khokku*        *cetdh-a*
        3SG.ABS      hit-PST

        'He was hit.'

(223)     ANTIPASSIVE ALTERNATION

    (a)     *zero-* ANTIPASSIVE ALTERNATION

        *ŋa*        *khipa*     *cetdh-oŋ*
        1SG.ABS   dog.ABS   hit-1SG.S/P.PST

        'I hit dogs.'

    (b)     *kha-* ANTIPASSIVE ALTERNATION

        *ŋa*        *kha-cetdh-oŋ*
        1SG.ABS   ANTIP-hit-1SG.S/P.PST

        'I hit (people).'

(224)     MIDDLE ALTERNATION

        **khipa*    *mʌjʌle*    *cetdh*
        dog.ABS   nicely     hit.NPST

        'A dog hits easily.'

(225)  BODY-PART POSSESSOR ASCENSION ALTERNATION

(a)  *mala-a*    *khipa-bo*    *kʌ-ʈoŋ-di*        *cetdh-i*
Mala-ERG    dog-GEN    3SG.POSS-head-UP.LOC  hit-3P

'Mala hit on the dog's head.'

(b)  *mala-a*    *khipa-lai*    *kʌ-ʈoŋ-di*        *cetdh-i*
Mala-ERG    dog-DAT    3SG.POSS-head-UP.LOC  hit-3P

'Mala hit the dog on the head.'

(226)  REFLEXIVE ALTERNATION

(a)  REFLEXIVE OBJECT

*mala-a*    *dadʌri-do*    *cetdh-nen-cen*
Mala-ERG    wall-GEN.LOC    hit-2/3REFL.PST-REFL

'Mala hit with the wall.'

(b)  BODY-PART OBJECT

*mala-a*    *dadʌri-do*    *kʌ-ʈoŋ*        *cetdh-i*
Mala-ERG    wall-GEN.LOC    3SG.POSS-head    hit-3P

'Mala hit her head on the wall.'

Guerssel et al. (1985) suggest verbs that show the conative alternation involve both motion and contact components. Conative alternations in English are expressed in a prepositional phrase, while in Puma, they appear with a locative marking on the P argument. What Fillmore calls 'surface-contact' verbs, like *hit*, do not entail any change of state (222) to (226). Instead, they lexicalise the delivery of some force to a particular location. The counterparts of English transitive verbs of surface-contact in other languages are not necessarily transitive verbs (Tsunoda 1985). DeLancey (1995) notes the counterparts of verbs such as *break*, *cut* and *kill* are obligatorily transitive in Lhasa Tibetan, while the counterpart of *hit* is not since the argument referring to the surface contacted obligatorily takes a locative marker, as in:

(227)  LHASA TIBETAN

(a)  *shing\*(-la)*    *sta=re-s*    *gzhus-pa!*
tree-LOC    axe-ERG    hit

'Hit the tree with an axe!'

(b)  *sta=re-s*    *shing(\*-la)*    *'chad-pa!*
axe-ERG    tree    cut

'Cut the tree with an axe!' (DeLancey[38] 1995)

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[38]  Adapted from a htm entry at http://pages.uoregon.edu/delancey/sb/LECT03.htm.

### 4.6.2 *Touch*-type verbs

Surface-contact verbs are pure verbs of contact and lack what Guerssel et al. (1985) call 'a motion component'. DeLancey (1995) notes that surface-contact verbs have an additional characteristic. This set of verbs in English shows a peculiar paraphrase with *give* and the erstwhile verb used as a noun, as in (228). This happens also in Puma but with the different verb *ca* 'eat. The Puma counterpart example is given in (229).

(228)   ENGLISH

   *She gave me a kiss/slap (on the cheek).* (DeLancey 1995)

(229)   PUMA

   *kho-a       ŋa-lai      (uŋ-gālā-do)              cumma*
   3SG-ERG     1SG-DAT    1SG.POSS-cheek-GEN.LOC    kiss
   *pʌ-ca-oŋ*
   3S/A-eat-1SG.S/P.PST

   'She gave me a kiss (on my cheek).' (Literally: 'She ate kiss me (on my cheek).')

Surface-contact verbs like *touch*-verbs show a more limited range of properties than the verbs of contact by impact like *hit*-verbs. The class membership of *touch*-verbs in Puma is presented in Table 78.

**Table 78:** *Touch*-type verbs

| ROOT | GLOSS | TRANSITIVE | ANTIPASSIVE |
|------|-------|------------|-------------|
| *bopd* | enclose | *bopd-i* | *bopd-a* |
| *cend* | graze | *cend-i* | *cend-a* |
| *chʌk* | pinch | *chʌk-i* | *chʌk-a* |
| *chʌmt* | chew | *chʌmt-i* | *chʌmt-a* |
| *chepd* | chew bone into pieces | *chepd-i* | *chepd-a* |
| *chʌpd* | press | *chʌpd-i* | *chʌpd-a* |
| *dipd* | cover | *dipd-i* | *dipd-a* |
| *dapd* | kick | *dapd-i* | *dapd-a* |
| *khekk* | scrape by bone | *khekk-i* | *khekk-a* |
| *kepd* | sting | *kepd-i* | *kepd-a* |
| *lek* | lick | *lek-i* | *lek-a* |
| *lupd* | touch inanimate by hand | *lupd-i* | *lupd-a* |
| *map* | grope | *mapd-i* | *mapd-a* |
| *pʌpd* | kiss | *pʌpd-i* | *pʌpd-a* |
| *pol* | touch animate by hand | *pol-i* | *pol-a* |
| *sopd* | massage | *sopd-i* | *sopd-a* |
| *themt* | fence | *themt-i* | *themt-a* |

Properties:

(230)    PRO-DROP AND CAUSATIVE/INCHOATIVE ALTERNATION

    (a)   *(khokku-a)*     *bishnu-lai*     *pol-i*
           3SG-ERG        Bishnu-DAT     touch-3P

         'She touched Bishnu.'

    (b)   **bishnu-lai*     *pol-a*
           Bishnu-DAT    touch-PST

         Intended: 'Bishnu was touched.'

(231)    *kha*-ANTIPASSIVE ALTERNATION

      *muna*         *kha-pol-a*
      Muna.ABS     ANTIP-touch-PST
      'Muna touched (people).'

(232)    BODY-PART POSSESSOR ASCENSION ALTERNATION

    (a)   *susma-a*      *sri-lai*     *kʌ-chi-do*           *pol-i*
           Sushma-ERG   Sri-DAT   3SG.POSS-hand-GEN.LOC   touch-3P

         'Sushma touched Sri on the head.' (cf. 187a)

    (b)   *pabita-a*     *mitraman-bo*   *kʌ-loŋ-do*         *pol-i*
           Pabita-ERG    Mitraman-GEN   3SG.POSS-leg-GEN.LOC   touch-3P

         'Pabita touched Mitraman's leg.' (cf. 188b)

(233)    MIDDLE ALTERNATION

      **prasuram*     *mʌjʌle*    *pol*
      Prasuram.ABS   nicely     touch.NPST

      Intended: 'Prasuram touches nicely.'

(234)    REFLEXIVE ALTERNATION

    (a)   REFLEXIVE OBJECT

        *krishna-a*     *pol-en-cen*
        Krishna-ERG   touch-2/3SG.REFL.PST-REFL

        'Krishna touched herself.'(intentional only)

    (b)   BODY-PART OBJECT

        *krishna-a*     *kʌ-mʌk*     *pol-i*
        Krishna-ERG   3SG.POSS-eye   touch-3P

        'Krishna touched her eye.'(intentional only)

*Touch*-verbs require two arguments and do not appear in the causative/inchoative alternation or the middle alternation. Fillmore (1970) notes that surface-contact verbs, when the object is a body part, allow an alternative construction in which the possessor of the body part is the object, and the body part occurs in a locative prepositional phrase in (235).

(235)     *She kissed my cheek. = She kissed me on the cheek.*

The Puma counterparts are illustrated in (232) with the verb *poll* 'touch'. There is a fairly obvious semantic basis for these differences. *Break*-type verbs lexicalise a change of state in an obligatory argument, which can appear in the causative/inchoative alternation. But surface-contact verbs lack this property and they do not show the causative/inchoative alternation.

The fact that they lexicalise delivery of a force to a location explains their tendency to allow this location to be encoded as a location rather than a direct object in the body-part possessor ascension alternation (cf. DeLancey 1995). Like other transitive verbs, the antipassive alternation is found with these *touch*-verbs in (231). As the verb *poll* 'touch' entails only animate NPs, only *kha*-type antipassive is available and the presence of overt object is impossible under any circumstances. The surface-contact verbs only allow intentional action interpretations with reflexive in (234a) and body-part in (234b).

### 4.7     Give-type verbs

Verbs of possession such as *have* and *give* have been extensively studied both typologically and from a cognitive linguistic perspective. *give*-type verbs usually take three arguments and often show a dative alternation. In English, they are found in the double object construction (NP1 V NP3 NP2) and in the prepositional phrase construction (NP1 V NP2 to NP3) which is obligatorily headed by *to* (Levin 1993). The dative alternation does not have an intransitive counterpart, and has been extensively studied with respect to the syntax of double object construction and constraints on the alternation (Dixon 1973; Green 1974; DeLancey 1985; Boguraev & Briscoe 1989; Gropen et al. 1989; Jackendoff 1990; and among others). Unlike English, Puma does not have a dative alternation, as the double object construction is not found in Puma (cf. Margetts & Austin 2007). Puma does have a construction like the English prepositional construction (NP1 V NP2 to NP3). The class membership of *give* verbs is presented in Table 79. *give*-type verbs in Puma appear in the frame:

(236)     {A-ERG G-DAT T-ABS V-G-A}

**Table 79:** *Give*-type verbs

| ROOT | GLOSS | | TRANSITIVE | ANTIPASSIVE |
|---|---|---|---|---|
| *cend* | feed | | *cend-i* | *cend-a* |
| *chor* | pay (partially or whole) | | *chor-i* | *chor-a* |
| *itd* | give | | *itd-i* | *itd-a* |
| *laks* | sell | | *laks-i* | *laks-a* |
| *pakd*[39] | pay for somebody | | *pakd-i* | *pakd-a* |
| *phutd*[40] | repay (whole) | | *phutd-i* | *phutd-a* |

Properties:

(237)     PRO-DROP AND CAUSATIVE ALTERNATION

    (a)     (*ŋa-a*)    *sima-lai*    *mobāil*    *itd-u-ŋ*
          1SG-ERG    Sima-DAT    mobile.ABS    give-3P-1SG.A

          'I give the mobile to Sima.'

    (b)     **sima-lai*    *mobāil*    *itd-a*
          Sima-DAT    mobile.ABS    give-PST

          Intended: 'A mobile was given to Sima.'

(238)     ANTIPASSIVE ALTERNATION

    (a)     *zero*-ANTIPASSIVE ALTERNATION

          *ŋa*    *mobāil*    *itd-oŋ*
          1SG.ABS    mobile.ABS    give-1SG.S/P.PST

          'I give mobiles (to people).'

    (b)     *kha-* ANTIPASSIVE ALTERNATION

          *ŋa*    *mobāil*    *kha-itd-oŋ*
          1SG.ABS    mobile.ABS    ANTIP-give-1SG.S/P.PST

          'I give mobiles (to people).'

(239)     MIDDLE ALTERNATION

          **mobāil*    *mʌjʌle*    *itd-a*
          mobile.ABS    nicely    give-PST

          'Mobile gives nicely.'

As noted by Goldberg (1995) and Pinker (1989), *give*-type verbs lexicalise caused possession and nothing more. Hence, their roots do not contribute anything beyond what is already encoded in the caused possession event schema. *give*-type verbs entail change of possession but not change of location.

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[39] *Pakd* refers to *lagāi dinu* in Nepali.

[40] *Phutd* refers to *riṇ cuktā garnu* in Nepali.

## 4.8 Get-type verbs

*Get*-type verbs belong to the subset of the verbs of obtaining and show a benefactive alternation. These verbs take three arguments in which a benefactive argument can be expressed with dative marking, while the English counterpart is expressed as the first object in a double object construction or in a *for* prepositional phrase. Such an alternation is not available in Puma. *get*-type verbs in Puma appear in the frame:

(240)     {A-ERG G-DAT T-ABS V-A-G}

The class membership of *get* verbs is presented in Table 80.

**Table 80:** *Get*-type verbs

| ROOT | GLOSS | TRANSITIVE | ANTIPASSIVE |
|------|-------|-----------|-------------|
| *bobd* | collect | *bobd-i* | *bopd-a* |
| *bud* | call | *bud-i* | *bud-a* |
| *dhit* | get | *dhit-i* | *dhit-a* |
| *hud* | buy | *hud-i* | *hud-a* |
| *kʌkd* | hold | *kʌkd-i* | *kʌkd-a* |
| *khus* | steal | *khus-i* | *khus-a* |
| *kop* | gather | *kop-i* | *kop-a* |
| *kup* | pick | *kup-i* | *kup-a* |
| *la* | harvest | *lo-o* | *lo-a* |
| *lam* | search | *lam-i* | *lam-a* |
| *lok* | catch | *lok-i* | *lok-a* |
| *ŋet* | keep | *ŋetd-i* | *ŋetd-a* |
| *pek* | pick | *pek-i* | *pek-a* |
| *ri* | win | *ri-i* | * |

Properties

(241)     PRO-DROP AND CAUSATIVE/INCHATIVE ALTERNATION

    (a)   (*ŋa-a*)    *kar*    *hud-u-ŋ*
          1SG-ERG   car.ABS   buy-3P-1SG.A

         'I bought the car.'

    (b)  *kar*    *hud-a*
          car.ABS   buy-PST

         Intended: 'The car was bought.'

(242)     ANTIPASSIVE ALTERNATION

    (a)   *zero*-ANTIPASSIVE ALTERNATION

         *ŋa*     *kar*    *hud-oŋ*
          1SG.ABS  car.ABS   buy-1SG.S/P.PST

         'I bought cars.'

(b)   *kha-* ANTIPASSIVE ALTERNATION

*ŋa        kha-hud-oŋ
1SG.ABS    ANTIP-buy-1SG.S/P.PST

'I bought (people).' (semantically ill-formed clause)

(243)      *MIDDLE ALTERNATION

*kar       mʌjʌle      hu
car.ABS    nicely      buy.NPST

'The car buys easily.'

## 4.9   Throw-type verbs

The meaning of *throw*-class verbs relates to what Gropen et al. (1989) call 'instantaneously causing ballistic motion' by imparting a force. These verbs usually take two to three arguments with respect to the use of adjuncts (the further use of benefactive or locative object) in which one argument of these verbs describes the entity that is set in motion and that moves unaccompanied by the agent of the action (cf. Levin 1993). Normally *give*-type verbs entail change of possession but not change of location, *throw*-type verbs entail change of location but not change of possession. However, it should be noted that a change of possession is a change of location too. I suppose this depends on the size of the entity. If I give someone an apple the possession changes location zero but if it is a house then it will not change location but just possession. Levi and Hovav (2008) report that most *throw*-type verbs describe events in which one entity instantaneously imparts a force to a second entity, the force recipient.

Jackendoff (1990) notes that *throw*-type verbs are basically two-argument verbs. What distinguishes such verbs is how the force is imparted; they have a manner root (e.g., throw) or, perhaps, an instrument root (e.g., kick, shoot). The class membership of *throw* verbs in Puma is presented in Table 81.

**Table 81:** *Throw*-type verbs

| ROOT | GLOSS | TRANSITIVE | ANTIPASSIVE |
|------|-------|------------|-------------|
| *kes* | throw | *kess-i* | *kess-a* |
| *phitd* | hit by throwing | *phitd-i* | *phitd-a* |
| *waskes* | throw away (useless) | *wass-i-kess-i* | *wass-a-kess-a* |
| *watdchod* | give by throwing | *watd-i-chod-i* | *watd-a-chod-a* |

Properties:

(244)    CAUSATIVE ALTERNATIONS

    (a)  *hekchakupa-a   cʌkrʌŋdhipma-lai   ŋaksi  watd-i-chod-i*
        Hekchakupa-ERG Cakrangdhipma-DAT   banana  throw.away-3P-TEL-3P

        'Hekchakupa threw away a banana to Cakrangdhipma.' (folk_tale_01:80)

    (b)  *ŋaksi     watd-a-chod-a*
        banana      throw away-PST-TEL-PST

        Intended: 'A banana was thrown away.'

(245)    MIDDLE ALTERNATION

        *ŋaksi        mʌjʌle    watd-chod*
        banana.ABS      nicely     throw away.NPST-TEL.NPST

        Intended: 'A banana is thrown away nicely.'

(246)    PRO-DROP AND TRANSITIVE/ANTIPASSIVE ALTERNATION

    (a)  (*khokku-a*)     *ŋaksi*        *watd-i-chod-i*
        3SG-ERG       banana.ABS     throw.away-3P-TEL-3P

        'He threw away the banana.'

    (b)  *khokku*   *ŋaksi*        *watd-a-chod-a*
        3SG.ABS  banana.ABS     throw away-PST-TEL-PST

        'He threw away bananas.'

The *throw*-type verbs show a limited range of properties. For instance, they do not show the causative/inchoative alternation and the middle alternation. These verbs display the antipassive alternation.

### 4.10   Send-type verbs

*Send*-type verbs can be characterised as verbs of causing an entity to change location. Levin (1993) says that the entity moves unaccompanied by the agent, unlike verbs like *bring* and *carry*. The motion with *send*-type verbs is 'mediated by a separation in time and space, sometimes bridged by a particular means of transfer' (cf. Pinker 1989). Puma has two class members within this subset of verbs of *sending* and *carrying* in which *chid* 'send human NP' obligatorily is used to denote sending a human being, while *haŋd* 'send things' is used with respect to sending a thing (see Section 3:19 for selectional restrictions). The class membership of *send* verbs in Puma is presented in Table 82.

**Table 82:** *Send*-type verbs

| ROOT | GLOSS | TRANSITIVE | ANTIPASSIVE |
|---|---|---|---|
| *cakd* | send ritual gift in wedding | *cakd-i* | *cakd-a* |
| *chid* | send human NP | *chid-i* | *chid-a* |
| *chidpuks* | send out | *chid-i-puks-i* | *chid-a-puks-a* |
| *chidwaŋd* | send into | *chid-i-waŋd-i* | *chid-a-waŋd-a* |
| *haŋd* | send inanimate NP | *haŋd-i* | *haŋd-a* |

Properties:

(247)  PRO-DROP AND CAUSATIVE/INCHOATIVE ALTERNATION

    (a)  (*ŋa-a*)     *parbati-lai*     *chaplawa*    *haŋd-u-ŋ*
        1SG-ERG    Parbati-DAT    letter.ABS   send-3P-1SG.A

        'I sent Parbati the letter.'

    (b)  **parbati-lai*     *chaplawa*   *haŋd-a*
        Parbati-DAT     letter.ABS   send-PST

        Intended: 'The letter was sent to Parbati.'

(248)  MIDDLE ALTERNATION

    (a)  *ŋa-a*      *uŋ-ma-lai*         *chaplawa*   *haŋd-u-ŋ*
        1SG-ERG    1SG.POSS-mother-DAT   letter.ABS   send-3P-1SG.A

        'I sent my mother the letter.'

    (b)  **uŋ-ma-lai*           *chaplawa*   *mʌjʌle*     *haŋ*
        1SG.POSS-mother-DAT   letter.ABS   nicely      send.NPST

        Intended: 'The letter sends nicely to my mother.'

(249)  ANTIPASSIVE ALTERNATION

        *ŋa*        *chaplawa*   *haŋ-oŋ*
        1SG.ABS    letter.ABS   send-1SG.S/P.PST

        'I sent letters.'

Unlike English, *send*-type verbs do not show a dative alternation in Puma. As these verbs are two argument verbs, they do not display the characteristics of the causative alternation and the middle alternation. Similarly, they do not allow the coreferential interpretation of pronoun. *send*-type verbs are available for the antipassive alternation.

Hovav and Levin (2007) argue that *give*-type verbs only have a caused possession meaning, while *throw*-type verbs and *send*-type verbs have both caused motion and caused possession meanings. The *to*-type dative alternation in English which is similar to Puma expresses caused motion, as what Goldberg (1995) characterises as an agent causes a theme to move along a path to a goal, where the movement and path are interpreted in the possession field (Gruber 1965; Jackendoff 1972, 1983), and a double

object construction expresses caused possession- causing a recipient to possess an entity (Hovav & Levin 2007).

Throw-type verbs, unlike give- and send-type verbs, require obligatory locative marking, while for the two other types, a locative object overtly bears no case marking. However, give-type verbs can be questioned by the locative wh-word where when these verbs are used with respect to offering daughters/sisters to someone in marriage. There is an impression that when someone gets new information from an example like (250), s/he spontaneously may question where s/he gave his daughter/sister rather than to whom. At the first stage of marriage, it is assumed that most important thing is getting information about the place and then only the person.

(250) (a)    *bharatmaya-a*       *yoŋni-lai*    *kʌ-marchacha*       *itd-i*
           Bharatmaya-ERG     friend-DAT 3SG.POSS-daughter.ABS     give-3P

           'Bharatmaya gave her daughter to a friend (in marriage).'

      (b)    *bharatmaya-a*       *kʌ-marchacha*       *khado*    *itd-i*?
           Bharatmaya-ERG     3SG.POSS-daughter.ABS       where    give-3P

           'Where did Bharatmaya give her daughter (in marriage)?'

      (c)    Answer:     'Biratnagar.'

For give-type verbs, unlike throw- and send-type verbs, a recipient can only be an animate complement or an inanimate complement that designates a place (Green 1974; Goldsmith 1980). Consider a famous example widely cited from English.

(251) (a)    *I gave the package to Maria/\*London.*

      (b)    *I sent the package to Maria/London.* (Hovav & Levin 2007)

*London* in (251a) is acceptable only if it is a metonym for the London office or university. In Puma, these verbs also show a common pattern of behaviour, as in:

(252) (a)    *ŋa-a*       *maria-lai*       *cup-ma=pa*       *itd-u-ŋ*
           1SG-ERG    Maria-DAT       pack-INF=INSTR.NMLZ give-3P-1SG.A

           'I gave the package to Maria.'

      (b)    *\*ŋa-a*       *japan*       *cup-ma=pa*       *itd-u-ŋ*
           1SG-ERG    Japan.ABS       pack-INF=INSTR.NMLZ give-3P-1SG.A

           'I gave the package to Japan.'

(253) (a)    *ŋa-a*       *maria-lai*       *cup-ma=pa*       *haŋd-u-ŋ*
           1SG-ERG    Maria-DAT       pack-INF=INSTR.NMLZ send-3P-1SG.A

           'I sent the package to Maria.'

(b)    *ŋa-a*      *japan*      *cup-ma=pa*           *haŋd-u-ŋ*
           1SG-ERG    Japan.ABS    pack-INF=INSTR.NMLZ    send-3P-1sgA

           'I sent the package to Japan.'

(254) (a)   *ŋa-a*      *maria-\*lai/bo*   *kʌ-ŋalʌŋ-do*       *cup-ma=pa*
           1SG-ERG    Maria-DAT/GEN  3SG.POSS-face-GEN.LOC  pack-INF=INSTR.NMLZ
           *kes-u-ŋ*
           throw-3P-1SG.A

           'I threw the package *to Maria/ to Maria's face.'

   (b)   *ŋa-a*      *maria-lai*     *was-u-ŋ-kes-u-ŋ*
           1SG-ERG    Maria-DAT     throw-3P-1SG.A-TEL-3P-1SG.A

           'I threw away Maria.'

   (c)   *ŋa-a*    *japan-ya*   *cup-ma=pa*         *was-u-ŋ-kes-u-ŋ*
           1SG-ERG  Japan-LEVEL  pack-INF=INSTR.NMLZ  throw-3P-1SG.A-TEL-3P-1SG.A

           'I threw the package to Japan.'

As already discussed above, *throw*-type verbs require a locative marking on a recipient or beneficiary. Nevertheless, these verbs, unlike *give-* and *send*-type verbs, do not allow the dative-marked animate recipient (*maria*) while taking three arguments in (254a). They ban the recipient to bear dative marking but allow locative marking with respect to a body part like *ŋalʌŋ* 'face', which is acceptable and is a distinct requirement of these verbs. However, when the predicate *waskess* 'throw' takes only two arguments in (254b), the predicate is satisfied with a patient, bearing dative marking. By contrast, the predicate prohibits dative marking for the recipient when taking three arguments. Note that it is not possible to mark Maria with a locative instead of the dative. Unlike *throw-* and *send*-type verbs, *give*-type verbs never appear with a *from*-marked source. Let us compare an example from Puma:

(255) (a)   *\*siru-a*    *anu-lai*    *ʌphis-do-ŋkʌŋ*      *ŋaksi*       *itd-i*
           Siru-ERG   Anu-DAT    office-GEN.LOC-ABL    banana.ABS    give-3P

           'Siru gave a banana from the office to Anu.'

   (b)   *siru-a*    *anu-lai*    *ʌphis-do-ŋkʌŋ*      *ŋaksi*
           siru-ERG   Anu-DAT    office-GEN.LOC-ABL   banana.ABS
           *watd-i-chotd-i*
           throw-3P-TEL-3P

           'Siru threw a banana from the office to Anu.'

   (c)   *siru-a*    *anu-lai*    *ʌphis-do-ŋkʌŋ*      *ŋaksi*       *haŋd-i*
           siru-ERG   Anu-DAT    office-GEN.LOC-ABL   banana.ABS    send-3P

           'Siru sent a banana from the office to Anu.'

We assume that the only restriction with respect to *give*-type verbs is because of double

sources of a single predicate. A single predicate cannot have two-source-arguments when the A argument of these verbs is lexically specified to be the source of a possessional path. Although *give*-type verbs do not lexicalise a transfer of possession, the subject of a *give*-type verb must be understood as a source, giving the impression that the verb's meaning does involve transfer of possession. In (255a), *Siru* first has possession of *ŋaksi* 'banana' and presumably then *ʌphis* 'office' has possession which is handed to *Anu*. Hovav and Levin (2007) suggest that the transfer interpretation is obligatory only when possession is understood as physical control and this interpretation follows from the nature of this form of possession (Miller & Johnson-Laird 1976; Taylor 1996; Heine 1997).

The question word *khado* 'where' distinguishes *give*-type verbs from *send*- and *throw*-type verbs, while the question word *sa-lai* 'to whom' distinguishes *throw*-type verbs from *give*- and *send*-type verbs. Only *give*-type verbs cannot be questioned by *where*. However, these verbs can be questioned by *sa-lai* 'to whom' in (256). In contrast, *throw*-type verbs, unlike English, cannot be questioned by *sa-lai* 'to whom' but can be questioned only by *khado* 'where' in (257), while *send*-type verbs are compatible with both *sa-lai* 'to whom' as well as *khado* 'where', questions in (258).

(256) (a)  *\*anupā-a    kitāp    khado    itd-i?*
        Anupa-ERG    book.ABS   where    give-3P

        'Where did Anupa give the book?'
        (NEP: '*Anupā-le kitāb kahā̃ diī?*')

     (b)  *anupa-a    kitāp    sa-lai    itd-i?*
         Anupa-ERG    book.ABS   whom-DAT   give-3P

         'To whom did Anupa give the book?'
         (NEP: '*Anupā-le kitāb kaslāi diī?*')

(257) (a)  *anupa-a    kitāp    khado    was-i-kess-i?*
        Anupa-ERG    book.ABS   where    throw-3P-TEL-3P

        'Where did Anupa throw the book?'
        (NEP: '*Anupā-le kitāb kahā̃ phyā̃kidiī?*')

     (b)  Answer:    *bakkha-dhuŋ-do*
                     floor-up-GEN.LOC

                'on/at the floor.'
                (NEP: '*bhū̃ı̃mā.*')

     (c)  *\*anupa-a    kitāp    sa-lai    was-i-kess-i?*
        Anupa-ERG    book.ABS   who-DAT   throw-3P-TEL-3P

        'To whom did Anupa throw the book?'

(258) (a)   *anupa-a*      *kitāp*     *khado*   *haŋd-i*?
         Anupa-ERG    book.ABS   where    send-3P

         'Where did Anupa send the book?'
         (NEP: '*Anupā-le kitāb kahā̃ paṭhāī*?')

(b)   Answer:   'Nepal.'

(c)   *anupa-a*      *kitāp*     *sa-lai*    *haŋd-i*?
         Anupa-ERG    book.ABS   who-DAT  send-3P

         'To whom did Anupa send the book?'
         (NEP: '*Anupā-le kitāb kaslāī  paṭhāī*?')

(d)   Answer:   *premdhoj-lai*
                    Premdhoj-DAT

                    'To Premdhoj.'
                    (NEP: '*Premdhoj-lāi.*')

We do not know how many senses the verb classes have as noted by Hovav and Levin (2007), I agree with Haspelmath (2003) that this is not the right question to ask. Some grammatical morphemes in languages of the world enclose a wide range of closely related concepts, while other comparable morphemes across languages differ from each other. Hovav and Levin (2007) propose that if a language consistently marks goals and recipients differently, unlike English, we can assume only *throw-* and *send*-type verbs show a kind of dative alternation in that language. For instance, in Russian, when *send*-type verbs express caused possession, they take a dative NP in (259a), when they express caused motion, they appear with the allative preposition *k*, as in (259b). Compare (259a) to the Russian counterpart of *send* to *the principal* in (259b).

(259)     RUSSIAN

(a)   *Ja*      *poslal*    *direktoru*    *knigu*
       I.NOM      sent       principal.DAT   book.ACC

       'I sent the principal a book.' (Rappaport and Levin 2007)

(b)   *Ja*      *poslal*    *učenikov*    *k*    *direktoru*
       I.NOM      sent       students.ACC   to    principal.DAT

       'I sent the students to the principal.'

However, *give*-type verbs, as they are associated only with caused possession, are not found with the allative preposition *k* in Russian. Surely *I sent a book to the principal* could equally not be expressed by *k*.

(260)     *\*Ja*      *dal*     *knigu*      *k*    *Borisu*
        I.NOM      gave     book.ACC    to    Boris.DAT

        'I gave a book to Boris.'

In languages like English and Russian, *give*-type verbs show a pattern of argument realisation that is not available in Puma. Unlike causative and locative alternations which are widely attested, many languages lack a dative alternation (Siewierska 1998; Harley 2003; Haspelmath 2005), like Puma. As in Puma, many languages have only one option for marking recipients.

## 4.11 Psych-verbs

Cross-linguistically and within languages, verbs of psychological state (henceforth. *psych*-verbs) exhibit a striking pattern of variation with respect to the semantic realisations and the thematic roles of arguments they take. *psych*-verbs normally take two arguments which are characterised as an experiencer and a stimulus (theme, cause).

Following Dowty (1991), an experiencer (EXPS) is a verbal argument where the verb has a sensation, an emotion and a perception, while a stimulus (STIM) is the entity and the experiencer is sentient of. Semantically, it is possible to divide *psych*-verbs into different classes. The most prominent subclass of *psych*-verbs comprises verbs denoting emotions (*love*, *frighten*, *fear*, etc.).

The term 'psych-verbs' is often used in a narrower sense to designate this subclass. The broader definition of *psych*-verbs also includes perception verbs (*see*, *hear*, etc.), cognitive verbs (*think*, *know*, etc.), and evaluating verbs (*respect*, *appreciate*, etc.) (cf. Bossong 1998). Belletti and Rizzi (1988), arguing from Italian *frighten*-verbs, claim that these verbs do not form verbal passives.

Grimshaw (1990) makes a distinction between agentive and non-agentive *psych* verbs. Grimshaw argues that non-agentive *frighten*-verbs in Italian do not form verbal passives, but only adjectival passives. However, she claims that agentive *frighten*-verbs do form verbal passives. In addition, Pesetsky (1995) argues that, in Italian, these *psych* verbs of the *frighten*-class do form verbal passives, with the presence of an implicit causer. *Psych*-verbs, like *frighten,* are consistently object-experiencer verbs which do not show much cross-linguistic variation (Croft 1993). However, *psych*-verbs like *fear* display a wide range of cross-linguistic variation.

In many languages, these verbs show a distinct pattern of argument realisation (Levin & Hovav 2008) that is rarely available in English. An experiencer appears with dative case and a stimulus with absolutive case (Nichols 1975; Masica 1976; Perlmutter 1978, 1984; Sridhar 1979; Klaiman 1980; Givón 1984; Harris 1984; Tsunoda 1985;

Hermon 1986; Belletti & Rizzi 1988; Rosen & Wali 1989; Verma & Mohanan 1990; Croft 1991, 1993; Massey 1992; Dziwirek 1994; Moore & Perlmutter 2000; Hovav & Levin 2007; and among many others). However, evidence shows that verbs like *kindh* 'frighten' in Puma show a regular transitive construction.

(261)  *bunu-lai*        *khakʌkinma-a*    *kindh-i*
       Bunu-DAT          ghost-ERG         frighten-3P

       'The ghost frightened Bunu.'

The other *psych*-verbs occur with a possessor subject, as shown below:

(262) (a)  *uŋ-bo*         *uŋ-mesuŋ*        *ket-a*
           1SG.POSS-GEN    1SG.POSS-anger    feel-PST

           'I was angry.'

      (b)  *uŋ-bo*         *uŋ-hakluwa*       *lon-yaŋ*
           1SG.POSS-GEN    1SG.POSS-anger     appear-IPFV

           'I am sweating.'

As in Puma, *psych*-verbs encode the experiencer as possessor of the subject in other Kiranti languages like Belhare (Bickel 1997), Bantawa (Doornenbal 2009), Camling (Ebert 1997), Thulung (Allen 1975), and Limbu (van Driem 1987), as in:

(263)  PUMA

       *uŋ-bo*          *uŋ-sokma*          *ket-a*
       1SG.POSS-GEN     1SG.POSS-laziness   feel-PST

       'I am/was lazy.'

(264)  BELHARE

      (a)  *A-bhrem*           *liūra*
           1SG.POSS-laziness    affected

           'I am lazy.'

      (b)  *M-bulma*          *la-e*
           3SG.POSS-anger     AUX-PST

           'He is angry.'

(265)  LIMBU

      (a)  *A-miʔ*              *yu:s-ɛ*
           1SG.POSS-sleepiness    activated-PST

           'I am sleepy.'

      (b)  *Ku-mik*           *ya:sɛ*
           3SG.POSS-eye       horrified-PST

           'She was horrified to see it.'

(266)     BANTAWA

    (a)  *iŋ-niŋa*     *no-ŋa*
        1SG.POSS-mind   be.good-1SG

        'I am pleased.'

    (b)  *iŋ-cɨrpa*    *kat*
        1SG.POSS-anger  feel.NPST

        'I am angry.' (Literary: 'My anger is felt.')

Bickel (1997) argues that the possessive construction of the experiencer verb does not seem to be widespread cross-linguistically. But he notes that a possessive construction is available in Papuan and Austronesian languages of New Guinea (McElhanon 1977) and West Papua of Indonesia. Possessive subject constructions are used instead of dative subject constructions in Kiranti languages, though there are still some *dative*-type verbs in which the subjects are in dative case. A discussion about possible dative subject constructions is given in *shiver*-type of verbs in Section 4.11.4 below. From a morphosyntactic perspective, Puma *psych*-verbs exhibit cross-linguistic variation in expression of argument realisations. These verbs can be sub-classified into three classes with respect to their syntactic constructions:

(267) (a)    *possessive experience*-type verbs

     (b)    *subject experience*-type verbs

     (c)    *shiver*-type verbs

*psych*-verbs that are found in Puma appear within the following frames:

(268) (a)    {POSS-GEN POSS-NP V}

     (b)    {S-ABS V}

     (c)    {3S/P-V-1SG.A}   (only with respect to first person, regular

                     transitive agreement with second person and third person)

*Psych*-verbs in Puma show no range of alternations with the exception of pro-drop in *get hungry*-type verbs (see 4.11.2). A couple of verbs display the causative/inchoative alternations which are discussed below. Verbs like *somtukd* 'love' and *ris* 'laugh' are found in both regular transitive and possessive experiencer constructions.

**4.11.1 Possessive experience-type verbs**

The class membership of *possessive experience*-type verbs (Nepali *lāgnu*) is presented in Table 83.

**Table 83:** *Possessive experience*-type verbs

| ROOT | GLOSS | PAST |
|------|-------|------|
| *cipma ket* | hate | *cipma ket-a* |
| *cirupa ket* | get angry | *cirupa ket-a* |
| *kima ket* | fear | *kima ket-a* |
| *laja ket* | shame | *laja ket-a* |
| *micnʌŋ ket* | be sad | *micnʌŋ ket-a* |
| *rima ket* | laugh | *rima ket-a* |
| *sokma ket* | be lazy | *sokma ket-a* |
| *bhima lonma* | fart | *bhima lond-a* |
| *chepa lonma* | pee | *chepa lond-a* |
| *ghotpa lonma* | belch | *ghotpa lond-a* |
| *khi lonma* | excrete | *khi lond-a* |
| *hakluwa lonma* | sweat | *hakluwa lond-a* |
| *mʌkwa lonma* | tear | *mʌkwa lond-a* |
| *soma lonma* | breathe | *soma lond-a* |
| *ʈoŋ tukma* | feel headache | *ʈoŋ tuk-a* |
| *ipma kuŋma* | feel sleepy | *ipma kuks-a* |

Examples:

(269) (a)  *kho-bo*          *kʌ-sokma*          *ket-a*
           3SG.POSS-GEN   3SG.POSS-laziness   feel-PST

      'S/he was lazy.'

   (b)  *uŋ-bo*          *uŋ-chepa*          *lon-yaŋ*
           1SG.POSS-GEN   1SG.POSS-urine   come out-IPFV

      'I have to urinate.' (Literally: 'My urine comes out/appears.')

(270) (a)  *uŋ-bo*          *uŋ-ʈoŋ*          *tuk-yaŋ*
           1SG.POSS-GEN   1SG.POSS-head   hurt-IPFV

      'I have a headache.' (Literally: 'My head is hurting.')

   (b)  *uŋ-bo*          *uŋ-ip-ma*          *kuŋ-yaŋ*
           1SG.POSS-GEN   1SG.POSS-sleep-INF   twist-IPFV

      'I feel sleepy.' (Literally: 'My sleep is twisting.')

*Possessive experience*-type verbs do not display any alternations. The experiencer argument bears possessive marking. Most *possessive experience*-type verbs appear with either *ket* 'feel' or *lon/d* 'come out, appear', immediately following imperfective marker -*yaŋ*.

### 4.11.2 *Get hungry*-type verbs

The class membership of *si*-type verbs is presented in Table 84.

**Table 84:** *Get hungry*-type verbs

| ROOT | GLOSS | ANTIPASSIVE |
|------|-------|-------------|
| *sokwama si* | feel hungry | * |
| *som si* | satisfy | * |

Example:

(271)     PRO-DROP ALTERNATION

          *(ŋa)        sokwama   si-ŋa-ŋa*
          1SG.ABS      hunger    feel-1SG.S/P.NPST-1SG.S/P.IPFV

          'I am hungry.' (Literally: 'I feel hunger.')

*Get hungry*-type verbs, unlike other *psych*-verbs, show regular intransitive agreement inflected for person, number and tense. These verbs are not found in possessive experiencer constructions and do not display any alternations either.

### 4.11.3 *shiver*-type verbs

The class membership of *shiver*-type verbs is presented in Table 85 (see Section 3.7.2).

**Table 85:** *Shiver*-type verbs

| ROOT | GLOSS | TRANSITIVE |
|------|-------|------------|
| *dhuŋ* | shiver | *dhund-i* |
| *hotd* | tire | *hotd-i* |

Examples:

(272) (a) *ŋa          pʌ-dhund-oŋ*
          1SG.ABS      3S/A-shiver-1SG.S/P.PST

          'I shivered.'

      (b) *khokku      dhund-i*
          3SG.ABS      shiver-3P

          'He shivered.'

      (b) *khokku      cumama-a dhund-i*
          3SG.ABS      cold-ERG  shiver-3P

          'He shivered.'

These *shiver*-type verbs show highly unusual syntactic behaviour. On the one hand, they take just only one argument; nevertheless, they have transitive agreement. Hence, the subject of their clause appears in absolutive rather than regular ergative in (272). It can be argued that presumably an unknown force/cause is responsible for making an event like shivering. Note that our argument for this notion of unseen cause makes a sense, as an agent like cold can be added, as shown in (272c). Examples like in (272)

are not available in regular transitive construction, as in:

(273) (a) *ŋa-lai*     *cabha-a*     *pʌ-kindh-oŋ*
       1SG-DAT    tiger-ERG   3S/A-frighten-1SG.S/P.PST

       'The tiger frightened me.'

   (b) *\*ŋa*         *pʌ-kindh-oŋ*
       1SG.ABS    3S/A-frighten-1SG.S/P.PST

       Intended: 'I was frightened.'

   (c) *khokku-lai*     *cabha-a*   *kindh-i*
       3SG-DAT       tiger-ERG   [3S/A]frighten-3P

       'The tiger frightened him.'

   (d) *\*khokku-lai*     *kindh-i*
       3SG-DAT       [3S/A]frighten-3P

       Intended: 'He was frightened.'

### 4.12 Transitive agreement with psych-verbs

As already mentioned above, in Puma many *psych*-verbs inflect intransitively. An experiencer argument (possessor) does not usually trigger verb agreement. However, there are some verbs which are marked for possessive case and the verb agrees with both the experiencer argument and the P argument, as shown in (274).

(274)    CAUSATIVE/INCHOATIVE ALTERNATION

   (a) *deepti-bo*     *kʌ-nudʌl*      *kʌ-sukhalid-i*
       Deepti-GEN    3SG.POSS-noodles   3SG.POSS-like-3P

       'Deepti liked noodles.'

   (b) *deepti-bo*     *kʌ-sukhali-a*
       Deepti-GEN    3SG.POSS-like-PST

       'Deepti was pleased.'

Unlike verbs *like* and *love*, most *psych*-type verbs appear with either *ket* 'feel', or *lond* or *si* and do not show the causative/inchoative alternation. As an alternative to the possessive experiencer subject in (275a), the verb *ris* 'laugh' has also a regular intransitive construction in (275b).

(275)    POSSESSIVE/INTRANSITIVE ALTERNATION

   (a) *uŋ-bo*      *uŋ-rima*     *ket-a*
       1SG.POSS-GEN   1SG.POSS-laugh   feel-PST

       'I laughed.' (Literally: 'My laugh felt.')

(b)     *ŋa*         *ri-oŋ*
        1SG.ABS   laugh-1SG.S/P.PST

        'I laughed.'

In transitive verb agreement the possessive of experience displays interesting behaviour. Some experience constructions, such as *somtukma* 'love' and *sukhalima* 'like', allow transitive alternations like the antipassive construction:

(276) (a)   *ŋa*         *kha-som-tuk-ŋa*
         1SG.ABS    ANTIP-love-love-1SG.S/P.NPST

         'I love (people).'

    (b)   *(ŋa-a)*     *marchacha-lai*  *som-tukd-u-ŋ*
         1SG-ERG   girl-DAT       love-love-3P-1SG.A

         'I love the girl.'

### 4.13   Want-type verbs

Like *psych*-verbs, *want*-type verbs require an experiencer subject, and take two arguments. Most *want*-type verbs in Puma fall into an intransitive class. Though they are morphologically intransitive verbs, they take a verbal complement (see Section 4.3.2). However, these verbs do not allow nominal complements:

(277) (a)   *deepti*        *momo*       *ca-ma*    *si-yaŋ*
         Deepti.ABS     momo.ABS    eat-INF    want-IPFV

         'Deepti wants to eat *momo*[41](dumplings).'

    (b)   *\*deepti*      *coklet*     *si-yaŋ*
         Deepti.ABS     chocolate.ABS   want-IPFV

         Intended: 'Deepti wants a chocolate.'

### 4.14   Deictic Verbs

In Kiranti languages, unlike Belhare (Bickel 1997), deictic verbs *come* and *bring* but not *go* and *take* distinguish a vertical dimension. Puma has a four-way contrast in deictic verbs of motion (see Sharma 2007, 2009a, 2009b). The marking of relative altitude in its locative case system and deictic verbs of motion is found among the Kiranti languages and the Tibeto-Burman languages such as Thangmi (Turin 2012: 256). *up-down-level* and *neutral* dimensions are clearly specified in deictic verbs of motion. The spatial cases in terms of vertical space marking include locatives, allatives and ablatives (see section 2.27 for semantic cases).

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[41] For more information, see http://en.wikipedia.org/wiki/Momo_(dumpling).

Puma has a class of motion verbs *come* vs *go* and *bring* vs *take*, and manifests a deictic opposition which is frequently characterised as 'motion-towards-speaker' vs 'motion-away-from-speaker', following Talmy (1991) and Wilkins and Hill (1995). Puma is a purely deictic language like the European languages Italian, Spanish, and Portuguese (Ricca 1993; Fortis & Fagard 2010), as they systematically code a centripetal movement with *come* and *bring* which distinguishes a four-way contrast, but a centrifugal movement with *go* and *take* which is less marked as *go* and *take* are not inherently but pragmatically deictic verbs. The class membership of deictic verbs in Puma is presented in Table 86.

**Table 86:** *Deictic*-type verbs

| DIMENSION | DEICTIC VERBS | | | |
|---|---|---|---|---|
| | COME | GO | BRING | TAKE |
| UP | *thoŋ* | | *tho* | |
| DOWN | *i* | *puks* | *it* | *pukd* |
| ACROSS | *ben* | | *bet* | |
| NEUTRAL | *ta* | | *tat* | |

(278)    THE *come* VERB

(a)    *bhartī      li-si        i-oŋ=ku=cha                      pee=ku*
recruit      be-PURP      come.DOWN-1SG.S/P.PST=NMLZ=ADD      NEG=NMLZ

'Also I didn't come down to get recruited.' (LH_M_01: 333)

(b)    *pʌŋ        na   co-a-u          pʌŋ        thoŋ-nin-ka*
FILLER      PTCL eat-PST-3P      CONN        come.UP-1/2PL-EXCL

'After we ate, we came up.' (LH_M_01: 570)

(c)    *maki       abo        ta-a=ku*
why        FILLER      come.NEUTRAL-PST=NMLZ

'Why did the man come?' (story_lang: 015)

(d)    *rʌŋ-a      pʌŋ        ben-a-nin-ka*
say-PST     CONN        come.LEVEL-PST-1/2PL-EXCL

'After he said, we came over.' (LH_M_01: 610)

(279)    THE *bring* VERB

(a)    *pʌŋ=na    tho-ŋa                      kina*
SEQ=FOC   bring.UP-1SG.S/P.NPST           CONN
*pʌ-khʌnt-oŋ-pukd-oŋ*
3S/A-pull-1SG.S/P.PST-TEL-1SG.S/P.PST

'Then, I brought up and they pulled me.' (LH_M_01: 418)

(b)     *pʌŋ*        *betd-u-ŋ*
          FILLER       bring.LEVEL-3P-1SG.A

          'I brought them over.' (LH_M_01: 654)

In *deictic*-type verbs, the predicate *come* takes one argument, while *bring* normally takes two arguments. Since *come* has only one argument, it cannot appear in the antipassive alternation. In contrast, *bring* shows an antipassive alternation.

(280)      PRO-DROP AND TRANSITIVE/ANTIPASSIVE ALTERNATION

     (a)    *(ŋa-a)*      *chaplawa*    *tat-u-ŋ*
          1SG-ERG     letter.ABS    bring-3P-1SG.A

          'I brought the letter.'

     (b)    *zero*-ANTIPASSIVE ALTERNATION

          *(ŋa)*        *chaplawa*    *tat-oŋ*
          1SG.ABS    letter.ABS   bring-1SG.S/P.PST

          'I brought letters.'

     (c)    *kha*-ANTIPASSIVE ALTERNATION

          *(ŋa)*        *kha-tat-oŋ*
          1SG.ABS    ANTIP-bring-3P-1SG.S/P.PST

          'I brought people.'

(281)      INCHOATIVE ALTERNATION

          **chaplawa*        *tat-a*
          letter.ABS        bring-PST

          Intended: 'The letter was brought.'

(282)      MIDDLE ALTERNATION

          **chaplawa*     *mʌjʌle*     *tat-a*
          letter.ABS      nicely      bring-PST

          Intended: 'The letter was brought nicely.'

Gropen et al. (1989) say that verbs like *bring* and *take* refer to 'verbs of continuous causation of accompanied motion in a deictically-specified direction'. In English, these verbs are not used intransitively but they have been considered the 'causative' counterparts of *come* and *go* (cf. Levin 1993). In contrast, verbs *bring* and *take* are also used intransitively in Puma because of their antipassive use, as shown in (280). These verbs display a deictic component of meaning but lack a meaning of manner in which the motion is brought.

## 4.15   The put verb

These verbs take three arguments in which one argument is obligatorily locative. They relate to putting an entity at some location. The location is expressed via a postpositional phrase headed by *dhuŋ* 'up on' or *khuk* 'down on' immediately followed by one of a range of locative postpositions. In *put*-type verbs, the agent causes the theme to move to a location (Margetts & Austin 2007). Hence, three-place predicates like *put* show a semantic component as 'X causes Y to move to Z'.

As in Puma, one of the most fascinating features of Kiranti languages is the encoding of space. Puma has a four-way locative marking system (*up*, *down*, *level* and *general*) (see section 2.27.1). However, these verbs are not found with the goal preposition *to* or source preposition *from* as in English (Levin 1993), thus the Puma counterparts *-lai* and *-ŋkʌŋ*, respectively, do not occur. In contrast, the verb *ŋetd* 'keep an entity to others' are found with the dative construction.

Properties:

(283)      PRO-DROP AND ANTIPASSIVE ALTERNATION

    (a)   (*khokku-a*) *kitāp*      *ʈebʌl-dhuŋ-do*        *ŋes-i*
           3SG-ERG    book.ABS   table-up-GEN.LOC       put-3P

         'She put the book on the table.'

    (b)   **khokku*    *kitāp*      *ʈebʌl-dhuŋ-do*        *ŋes-a*
           3SG.ABS    book.ABS   table-up-GEN.LOC       put-PST

         Intended: 'She put books on the table.'

(284)      LOCATIVE ALTERNATION

      **priti-a*    *ʈebʌl-oŋ*        *kitāp*       *ŋes-i*
      Priti-ERG   table-COM         book.ABS    put-3P

      Intended: 'Priti put the book with table.'

(285)      CAUSATIVE ALTERNATION

      * *kitāp*      *ʈebʌl-dhuŋ-do*        *ŋes-a*
      book.ABS    table-up-GEN.LOC       put-PST

      Intended: 'The book put on the table.'

Unlike English, in Puma *put*-verbs do not display a wide range of alternations. Note that (283a) is a grammatical Puma clause of (283b) in which antipassive alternation with the *put* verb is ungrammatical.

## 4.16    Verbs of combining and attaching

The meaning of these verbs involves notions of combining or attaching. The striking property of these verbs is the *TOGETHER* RECIPROCAL ALTERNATION (Levin 1993). When the simple reciprocal alternation is used with the adverb *together*, it is called the *together* reciprocal alternation.   A wide range of prepositions is associated with the English verbs of combining, while Puma lacks this property.

### 4.16.1 *Mix*-type verbs

The *mix*-verbs that are found in Puma appear within the frame, as in:

(286)        {A-ERG R-LOC/COM T.ABS V-A-P}

Some *mix*-type verbs show a distinct behaviour from other *mix*-type verbs. These verbs take three arguments when they appear with a locative complement. When they do not take a locative complement, they need a collective NP as a P argument in a transitive use or a collective NP as an S argument in an intransitive use.  The *unaccusative*-type verbs require neither a locative complement nor a collective NP. The class membership of *mix*-type verbs in Puma is presented in Table 87.

**Table 87:** *Mix*-type verbs

| ROOT | GLOSS | TRANSITIVE | ANTIPASSIVE |
|------|-------|------------|-------------|
| *bal* | stir | *bal-i* | *bal-a* |
| *cʌkɖ* | knot | *cʌkɖ-i* | *cʌkɖ-a* |
| *chi* | tie | *chi-i* | *chi-a* |
| *cokd* | join | *cokd-i* | *cokd-a* |
| *hol* | mix | *hol-i* | *hol-a* |
| *kaps* | compose | *kaps-i* | *kaps-a* |
| *khepd* | stick | *khepd-i* | *khepd-a* |
| *khopd* | close | *khopd-i* | *khopd-a* |
| *tepd* | add | *tepd-i* | *tepd-a* |

Properties:

(287)        SIMPLE RECIPROCAL ALTERNATION (TRANSITIVE)

　　　　　*mira-a      ca      thuli-oŋ   birosi      thuli        hol-i*
　　　　　Mira-ERG   rice   flour-COM₁ chilli        flour.ABS   mix-3P

　　　　　'Mira mixed the rice flour and the chilli powder.' ('The amount of rice

　　　　　 flour is greater than the amount of chilli.') (cf. 190a)

(288)    SIMPLE RECIPROCAL ALTERNATION (INTRANSITIVE)

    (a)    *ca    thuli-do        birosi      thuli        hol-a*
        rice   flour-GEN.LOC   chilli      flour.ABS    mix-PST
        'The rice flour mixed with the chilli powder.'

    (b)    *ca    thuli-oŋ        birosi      thuli-oŋ      hol-a*
        rice   flour-COM$_1$    chilli      flour-COM$_1$   mix-PST

        'The rice flour and chilli powder mixed.'

(289)    PRO-DROP AND CAUSATIVE/INCHOATIVE ALTERNATION

    (a)    *(ke-a)          wa-do         dʌlli       hol-u-m*
        1PL.INCL-ERG     water-GEN.LOC   oil.ABS     mix-3P-1/2PL.A

        'We mixed oil with water.'

    (b)    INCHOATIVE ALTERNATION

        *wa-do          dʌlli       hol-a*
        water-GEN.LOC   oil.ABS     mix-PST

        'Oil mixed with water.'

    (c)    CAUSATIVE ALTERNATION

        *shri-a          wa-oŋ/do            dʌlli-(oŋ)   hol-i*
        Shree-ERG       water-COM$_1$/GEN.LOC   oil-COM$_1$   mix-3P

        'Shree mixed water and oil.'

    (d)    INCHOATIVE ALTERNATION

        *wa-oŋ          dʌlli       hol-a*
        water-COM$_1$    oil.ABS     mix-PST

        'Water and oil mixed.'

(290)    ANTIPASSIVE ALTERNATION

        *shree       wa-oŋ/do            dʌlli       hol-a*
        Shree.ABS   water-COM$_1$/GEN.LOC   oil.ABS     mix-PST

        'Shree mixed water and oil.'

(291)    *TOGETHER* RECIPROCAL ALTERNATION (TRANSITIVE)

    (a)    *rita-a          wa-do         dʌlli       hol-i*
        Rita-ERG        water-GEN.LOC   oil.ABS     mix-3P

        'Rita mixed oil with water.'

    (b)    *rita-a      wa-oŋ         dʌlli       ʌkni        hol-i*
        Rita-ERG    water-COM$_1$   oil.ABS     together    mix-3P

        'Rita mixed water and oil together.'

(292)    *TOGETHER* RECIPROCAL ALTERNATION (INTRANSITIVE)

    (a)    *wa-do          dʌlli       hol-a*
        water-GEN.LOC   oil.ABS     mix-PST

        'Oil mixed with water.'

(b)  *wa-oŋ*            *dʌlli*        *ʌkni*         *hol-a*
water-COM₁        oil.ABS       together      mix-PST

'Water and oil mixed together.'

(293)    MIDDLE ALTERNATION

*wa-oŋ*            *dʌlli*        *mʌjʌle*      *hon*
water-COM₁        oil.ABS       nicely        mix.NPST

'Water and oil easily mix.'

As in English (Levin 1993), examples above show that *mix* verbs in Puma show the most prominent property of the simple reciprocal alternation and the *together* reciprocal alternation.

### 4.16.2 *Unaccusative*-type verbs

*Unaccusative*-type verbs that are found in Puma appear within the regular framework of intransitive clauses (see Section 3.7.2). The class membership of *unaccusative*-type verbs is presented as in Table 88.

**Table 88:** *Unaccusative*-type verbs

| ROOT | GLOSS | TRANSITIVE | ANTIPASSIVE |
|------|-------|------------|-------------|
| *bamt* | close mouth | *bamt-i* | * |
| *chʌmt* | close teeth | *chʌmt-i* | * |
| *ḍakḍ* | close hole | *ḍakḍ-i* | * |
| *rakḍ* | get stuck | *rakḍ-i* | * |
| *sipd* | close eye | *sipd-i* | * |
| *yotd* | rot | *yotd-i* | * |
| *yumt* | melt | *yumt-i* | * |

Properties:

(294)    PRO-DROP ALTERNATION

(*ŋa*)        *bamt-i*
1SG.ABS     close.mouth-3P

'I closed (my) mouth.'

*Unaccusative* verbs show no range of alternations with the exception of the pro-drop alternation. The S arguments always bear absolutive case but the verb has default agreement with a third person P argument. An unaccusative S argument is more like a P argument. Sometimes we can see that the verb is syntactically intransitive but marked with a third person patient marker *-i*.

## 4.17    Separate-type verbs

These verbs denote separating or disassembling. Verbs in this class, unlike *mix*-type verbs, are never found in *together*-reciprocal alternations. Various members in this class are distinguished from others with respect to whether their meanings involve results or means, and their case markings are the same or different. These verbs fall into two different subclasses according to which case markings they select when they take an agent, although many of the verbs listed below take ergative case. The class membership of *separate*-type verbs in Puma is presented in Table 89.

**Table 89:** *Separate*-type verbs

| ROOT | GLOSS | TRANSITIVE | ANTIPASSIVE |
|------|-------|------------|-------------|
| *bhuk* | uproot | *bhuk-i* | *bhuk-a* |
| *bhul* | pull out | *bhul-i* | *bhul-a* |
| *chent* | divide; choose | *chent-i* | *chent-a* |
| *cont* | winnow | *cont-i* | *cont-a* |
| *hul* | take out | *hul-i* | *hul-a* |
| *hut* | untie | *hut-i* | *hut-a* |
| *kʌps* | separate (making into pieces) | *kʌps-i* | *kʌps-a* |
| *phek* | separate (young from animal mothers) | *phek-i* | *phek-a* |
| *phoks* | undo knot | *phoks-i* | *phoks-a* |

Properties:

(295)    TRANSITIVE/INCHOATIVE ALTERNATION

    (a)    *hetdi-a*    *sʌŋpwa*    *bhul-i*
           elephant-ERG    tree.ABS    pull out-3P

           'The elephant pulled out the tree.'

    (b)    *sʌŋpwa*    *bhul-a*
           tree.ABS    pull out-PST

           'The tree was pulled out.'

(296)    ANTIPASSIVE ALTERNATION

       *hetdi*    *sʌŋpwa*    *bhul-a*
       elephant.ABS    tree.ABS    pull out-PST

       'The elephant pulled out some trees.'

 (297)    MIDDLE ALTERNATION

       *sʌŋpwa*    *mʌjʌle*    *bhun*
       tree.ABS    nicely    pull out.NPST

       'The tree pulls out easily.'

(298)     PRO-DROP ALTERNATION

(ŋa-a)       biruwā      bhul-u-ŋ
1SG-ERG    plant.ABS   pull.out-3P-1SG.A
'I pulled out the plants.'

These verbs show more properties than *elope*-type verbs. They show the causative/inchoative alternation, the antipassive alternation and the middle alternation.

## 4.18 Make-type verbs

These verbs describe a creation or transformation of an entity. Transitive members of this class take one A argument that creates or transforms an entity. However there are some verbs that are used intransitively, like English *turn* that relates to the transformation of an entity, without the reference to an agent (Levin 1993).

Some verbs of creation and transformation take what Levin (1993) calls 'effected objects'- objects brought into existence as a result of the action named by the verb or what Dowty (1991) calls 'representation source'. The class membership of *make*-type verbs in Puma is presented in Table 90.

**Table 90:** *Make*-type verbs

| ROOT | GLOSS | TRANSITIVE | ANTIPASSIVE |
|------|-------|-----------|-------------|
| bhoŋ | make bundle | bhoŋ-i | bhoŋ-a |
| bomt | make round | bomt-i | bomt-a |
| cʌks | make garland | cʌks-i | cʌks-a |
| cemt | press down | cemt-i | cemt-a |
| ḍhak | make wall | ḍhak-i | ḍhak-a |
| dhokd | dig, peck | dhokd-i | dhokd-a |
| hont | pierce | hont-i | hont-a |
| hupd | make bunch | hupd-i | hupd-a |
| khapd | make roof | khapd-i | khapd-a |
| mu | make; do | mu-u | mu-a |
| mukḍh | make big sound | mukḍh-i | mukḍh-a |
| ond | grind | ond-i | ond-a |
| phak | scratch by human | phak-i | phak-a |
| raŋṭ | make big fire | raŋṭ-i | raŋṭ-a |
| romṭ | make dust | romṭ-i | romṭ-a |
| rhʌnd | rub | rhʌnd-i | rhʌnd-a |
| thoks | make net | thoks-i | thoks-a |
| thul | scratch by pig's snout | thul-i | thul-a |

Properties:

(299)     PRO-DROP AND CAUSATIVE/INCHOATIVE ALTERNATION

    (a)   *(khokku-a)/kalpanā-a*     *bechuk*     *ond-i*
         3SG-ERG/Kalpana-ERG     ginger.ABS     grind-3P

         'Kalpana/he ground the ginger.'

    (b)   **bechuk*     *ond-a*
         ginger.ABS     grind-3P

         Intended: 'The ginger was ground.'

(300)     ANTIPASSIVE ALTERNATION

       *kalpanā*     *bechuk*     *ond-a*
       Kalpana.ABS     ginger.ABS     grind-PST

       'Kalpana ground some ginger.'

(301)     MIDDLE ALTERNATION

       *bechuk*     *mʌjʌle*     *on*
       ginger.ABS     nicely     grind.NPST

       'The ginger grinds nicely.'

These verbs show the antipassive and middle alternations. They are never found in the causative/inchoative alternation.

## 4.19 Sing-type verbs

Levin (1993) says that like other verbs of creation and transformation, *sing*-type verbs take effected objects and do not allow the expression of a raw material argument. These verbs relate to performances. The class membership of *sing*-type verbs in Puma is presented in Table 91.

**Table 91:** *Sing*-type verbs

| ROOT | GLOSS | TRANSITIVE | ANTIPASSIVE |
|------|-------|------------|-------------|
| *cetdh* | play (drum, NEP. *mādal*) | *cetdh-i* | *chetdh-a* |
| *cham muma* | sing | *cham mu-u* | *cham mu-a* |
| *lak metma* | dance | *lak metd-i* | * |

Properties:

(302)     PRO-DROP AND CAUSATIVE/INCHOATIVE ALTERNATION

    (a)   *(khʌnna-a)*     *drʌm*     *tʌ-cetdh-i*
         2SG-ERG     drum.ABS   2-play-3P

         'You played the drum.'

(b)  *drʌm    cetdh-a
     drum.ABS   play-PST

     'The drum was played.'

(303)  ANTIPASSIVE ALTERNATION

(a)  *Zero*-ANTIPASSIVE ALTERNATION

     khʌnna    drʌm      tʌ-cetdh-a
     2SG-ABS   drum.ABS  2-play-PST

     'You played drums.'

(b)  *kha-* ANTIPASSIVE ALTERNATION

     *khʌnna    kha-tʌ-cetdh-a
     2SG.ABS    ANTIP-2-play-PST

     Intended: 'You played (people).'

(304)  MIDDLE ALTERNATION

     drʌm       mʌjʌle    cet
     drum.ABS   nicely    play.NPST

     'The drum plays nicely.'

*Sing*-type verbs in Puma, unlike in English (Levin 1993), do not show the dative alternation and the benefactive alternation. They are also not found in the causative alternation as well.

## 4.20   Perception-type verbs

These verbs of perception describe the actual perception of some entity. They take a perceiver as a subject and what is perceived as a direct object. The most important verbs of perception are: *see, hear*, *touch*, *taste* and *smell*. Verbs *taste* and *smell* show a more limited range of alternations compared to the other class members, presumably only a limited range of things can be apprehended through the senses of *taste* and *smell* (cf. Levin 1993). The most important general components in the verbs of perception in English are called *activity*, *experience*, and *copulative* (Viberg 1984). Pairs such as *look at* vs. *see* and *listen to* vs. *hear* can illustrate a distinction between an activity and experience. Such a distinction is available only with the pair *look at* vs. *see* but not *listen to* vs. *hear* in Puma.

Viberg (1984) notes that *activity* refers to an unbounded process that is consciously controlled by a human agent, while *experience* refers to a state that is not controlled.  While many languages share the same lexical items for two or three sensory verbs (Viberg 1984), Puma has different roots for all sensory verbs. The class

membership of *perception* verbs is presented in Table 92.

**Table 92:** *Perception* verbs

| ROOT | GLOSS | TRANSITIVE | ANTIPASSIVE |
|------|-------|------------|-------------|
| *cheps* | taste | *cheps-i* | * |
| *en* | hear | *en-i* | *kha-en-a* |
| *khaŋ* | see | *khaŋ-i* | *kha-khaŋ-a* |
| *nhaps*[42] | smell | *nhaps-i* | *kha-nhaps-a* |
| *pol* | touch | *pol-i* | *kha-pol-a* |

Properties:

(305)  PRO-DROP AND TRANSITIVE/ANTIPASSIVE CONSTRUCTION

    (a)  *dhʌndhoj-lai*  (*ŋa-a*)  *khaŋ-u-ŋ*
       Dhandhoj-DAT  1SG-ERG  see-3P-1SG.A

       'I saw Dhandhoj.'

    (b)  *kha-* ANTIPASSIVE ALTERNATION

       *ŋa*  *kha-khaŋ-oŋ*
       1SG.ABS  ANTIP-see-1SG.S/P.PST

       'I saw (people).'

(306)  *zero*-ANTIPASSIVE CONSTRUCTION

       *ŋa*  *cabha*  *khaŋ-oŋ*
       1SG.ABS  tiger.ABS  see-1SG.S/P.PST

       'I saw tigers.'

(307)  MIDDLE ALTERNATION

       **cabha*  *mʌjʌle*  *khaŋ*
       tiger.ABS  nicely  see.NPST

       Intended: 'The tiger sees nicely.'

Unlike verbs *taste* and *smell*, the other verbs like *khaŋ* 'see' are found in antipassive alternations. These verbs allow two types of antipassive alternations in Puma. In Puma, verbs of perception can be classified into two groups: *see*, *hear touch* and *smell* vs. *taste* and with respect to pronominal agreement. The first four verbs allow *kha*-antipassive, while the other does not.

## 4.21  Search-type verbs

Levin (1993) notes that verbs of searching can take three arguments. *search*-verbs that

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[42] Note that *zero*-antipassive (detransitivisation) is not possible with this verb but it is possible with *kha*-antipassive.

are found in Puma appear with the frame:

(308) {A-ERG P.ABS/DAT NP-LOC V-A-P}

**Table 93:** *Search*-type verbs

| ROOT | GLOSS | TRANSITIVE | ANTIPASSIVE |
|------|-------|------------|-------------|
| *lʌkdh* | looking for a job | *lʌkdh-i* | *lʌkdh-a* |
| *lam* | search | *lam-i* | *lam-a* |
| *lapd* | search for (others) | *lapd-i* | *lapd-a* |

Properties:

(309)   PRO-DROP AND CAUSATIVE/INCHOATIVE ALTERNATION

  (a)  *buŋwa=kha-do*          (*khokku-a*) *koima-lai*        *lam-i*
       flower=LOC.NMLZ-GEN.LOC  she-ERG     mouse-DAT          search-3P

       'In the garden, she searched for the mouse.'

  (b)  INCHOATIVE ALTERNATION

       **buŋwa=kha-do*              *koima*          *lam-a*
       flower=LOC.NMLZ-GEN.LOC      mouse.ABS        search-PST

       Intended: 'The mouse was searched for in the garden.'

(310)   ANTIPASSIVE ALTERNATION

  (a)  *zero*-ANTIPASSIVE ALTERNATION

       *khokku*     *koima*        *lam-a*
       3SG.ABS     mouse.ABS       search-PST

       'She searched for mice.'

  (b)  *kha*-ANTIPASSIVE ALTERNATION

       *khokku*     *kha-lam-a*
       3SG.ABS     ANTIP-search-PST

       'She searched (for people).'

As illustrated frames above, the A argument takes an ergative, the P argument takes a dative and the locative expression takes a locative. These verbs also show the antipassive alternation.

## *4.22    Verbs of social interaction*

Fellbaum (1999) argues that verbs of social interaction encompass a number of different semantic subdomains, including politics (*elect*, *depose*), work (*hire*, *subcontract*, *strike*), and interpersonal relations (*court*, *marry*). Levin's (1993) class of social interaction has only three subclasses (*correspond* verbs, *marry* verbs, and *meet* verbs) which relate mainly to group activities (i.e. involve more than one participant). In English when one

of these verbs takes a subject that refers to a single person, it must take either a direct object (the *marry* verbs) or a *with* phrase (the *correspond* verbs). When the subject is a collective NP, it need not take a complement.

Haspelmath (2007) notes these verbs are lexical reciprocals, denoting mutual configurations by themselves without necessary grammatical marking. They consist of a semantically restricted set of predicates whose meanings generally fall into the class of social actions and relations (*marry*, *quarrel*), spatial relations (*adjoin*, *next to*), and the relations of (non-) identity (*same as*, *different from*, *resemble*). In Puma, these verb classes fall into two subclasses with respect to whether the agent takes a dative argument or a comitative argument. Like in English, ignoring *correspond* verbs, the social interaction verbs fall into *elope*-type verbs and *meet*-type verbs.

### 4.22.1 *Elope*-type verbs

The *elope*-verbs that are found in Puma appear within the frame:

(311)      {A-COM  P-COM V-A-P}

The class membership of *elope*-type verbs is presented in Table 94.

**Table 94:** *Elope*-type verbs

| ROOT | GLOSS | | INTRANSITIVE |
|------|-------|---|-------------|
| *na mu* | divorce | | *na mu-a* |
| *tʌŋdh* | elope | | *tʌŋdh-a* |
| *khi* | quarrel | | *khi-a* |
| *laŋ* | joke | | *laŋ-a* |
| *bihā mu* | marry | | *bihā mu-a* |

Properties:

(312)      SIMPLE RECIPROCAL ALTERNATION

(a)  *kaji-oŋ*      *jhuma-oŋ*      *bihā*      *pʌ-mu-a-ci*
     Kaji-COM$_1$  Jhuma-COM$_1$     marriage   3S/A-do-PST-DL

     'Kaji married Jhuma.'

(b)  *kaji-oŋ*      *jhuma-oŋ*      *bihā*      *pʌ-mu-a-ci=ku*
     Kaji-COM$_1$  Jhuma-COM$_1$     marriage   3S/A-do-PST-DL=NMLZ

     'Kaji and Jhuma married.'

In contrast, the counterparts of Puma in English cannot be used with a *with* phrase in (313) but in Puma it is obligatorily used with the comitative in (312).

(313)      ENGLISH

(a)  *\*Bill married with Kathy*.

(b) *Bill and Kathy married.* (Levin 1993)

(314)     COM/DAT MARKING ALTERNATION

   (a) *shalik-a      resma-lai      bihā       pʌ-mu-a-ci*
       Shalik-ERG     Resma-DAT      marriage   3S/A-do-PST-DL

       Intended: 'Shalik married Resma.'

   (b) *shalik-a      resma-oŋ       bihā       pʌ-mu-a-ci*
       Shalik-ERG     Resma-COM₁     marriage   3S/A-do-PST-DL

       Intended: 'Shalik married Resma.'

*Elope*-type verbs are normally used intransitively. These verbs, unlike in English, show the simple reciprocal alternation. It is not possible to replace the comitative with the dative in (314a). When the agent takes the comitative, the patient (direct object) must also bear the comitative. Hence (314b) cannot be grammatical under any considerations. Similarly, the verb *divorce* shares the same properties of the verb *elope*:

(315)   *khem-oŋ        khima-oŋ       na        pʌ-mu-a-ci*
        Khem-COM₁       Khima-COM₁     divorce   3S/A-do-PST-DL

        'Khem and Khima divorced.'

The verb *namu* 'divorce' shows a limited range of properties with respect to *separate*-type verbs. This verb does not take an ergative marking to the agent. It requires a collective NP which obligatorily takes a comitative marking. *namu* 'divorce' is never found in the ergative marking agent. It is fascinating to note that the noun *bihā* 'marriage' is a loan from Nepali while the terms for divorce and elope are indigenous Puma. Perhaps this tells us about Puma culture that how Puma people and culture are influenced by Nepali culture. Marriage by theft, i.e. elopement is the traditional way, but later arranged marriage became popular, most probably being induced from the Nepali measures. We may suggest that traditionally only 'elopement' and 'divorce' appear to exist in Puma culture in which the Puma people differentiate 'elopement' and 'marriage'. In course of time, *bihā* 'marriage' is loaned from Nepali making distinction between 'elopement' and 'marriage'.

### 4.22.2 *Meet*-type verbs

*Meet*-verbs are found in Puma and appear within the frame:

(316)      {A-ERG P-DAT V-A-P}

The class membership of *meet*-type verbs is presented in Table 95.

**Table 95:** *Meet*-type verbs

| ROOT | GLOSS | TRANSITIVE | INTRANSITIVE |
|------|-------|------------|--------------|
| *hepd* | embrace | *hepd-i* | *kha-hepd-a* |
| *tupd* | meet, visit | *tupd-i* | *kha-tupd-a* |

Properties:

(317)   PRO-DROP AND ANTIPASSIVE ALTERNATION

    (a)   (*khokku-a*)    *jasoda-lai*    *tup-i*
          3SG-ERG      Jasoda-DAT    meet-3P

        'He met Jasoda.'

    (b)   *zero*-ANTIPASSIVE ALTERNATION

        *khokku*    *mʌnna*    *tup-a*
        3SG.ABS    man.ABS    meet-PST

        'He met people.'

    (c)   *kha*-ANTIPASSIVE ALTERNATION

        *khokku*    *kha-tup-a*
        3SG.ABS    ANTIP-meet-PST

        'He met (people).'

(318)   SIMPLE RECIPROCAL ALTERNATION

    (a)   \**shiva-a*    *jasoda-oŋ*    *tup-i*
        Shiva-ERG    Jasoda-COM$_1$    meet-3P

        Intended: 'Shiva met with Jasoda.'

    (b)   *shiva-a*    *jasoda-lai*    *tup-i*
        Shiva-ERG    Jasoda-DAT    meet-3P

        'Shiva met Jasoda.'

*Meet*-type verbs, unlike *elope*-type verbs, show the antipassive alternation, particularly *kha*-antipassive, and do not show the simple reciprocal alternation. It is not possible to use the verb *tup* 'meet' with the patient taking comitative case in (318b). It should be noticed that the simple phrase in (318a) is constructed as in (318b) in Puma. However, these verbs are found in what Levin (1993) calls 'the understood reciprocal alternation'. As in *elope*-type verbs, these verbs do not appear in a DAT/COM marked alternation because the dative and comitative cannot be used interchangeably or vice versa to one another.

### 4.23   Teach-type verbs

These verbs semantically express situations where a *speaker* conveys a *message* to a *recipient*. The semantic participant 'speaker' is realised by the absolutive if it is used

intransitively, and the ergative when it is used transitively, while the recipient or addressee is expressed by dative. The meaning of these verbs involves notions of communication through the transfer of a message, and what Gropen et al. (1989) call, 'verbs of type of communicated message differentiated by something like illocutionary force.' The members of this class differ with respect to the nature of the message and the way it is communicated. The class membership of *teach*-type verbs in Puma is presented in Table 96.

**Table 96:** *Teach*-type verbs

| ROOT | GLOSS | TRANSITIVE | ANTIPASSIVE |
|------|-------|------------|-------------|
| *cind* | teach | *cind-i* | *kha-cind-a* |
| *chapd* | write | *chapd-i* | *chapd-a* |
| *khaŋmetd* | show | *khaŋmetd* | *khaŋmetd-a* |
| *khipd* | read | *khipd-i* | *khipd-a* |
| *lid* | tell | *lid-i* | *kha-lid-a* |
| *sʌks* | ask | *sʌks-i* | *kha-sʌks-a* |

Properties:

(319)  TRANSITIVE/ANTIPASSIVE ALTERNATIONS

    (a)  *premdhoj-a*    *ŋa-lai*    (*chap-ma*)  *pʌ-cind-oŋ*
        Premdhoj-ERG    1SG-DAT   write-INF   3S/A-teach-1SG.S/P.PST

        'Premdhoj taught me (to write).'

    (b)  *kha*-ANTIPASSIVE ALTERNATION

        *premdhoj*    *kha-cind-a*
        Premdhoj.ABS   ANTIP-teach-PST

        'Premdhoj taught (people).'

    (c)  *ZERO* ANTIPASSIVE ALTERNATION

        *premdhoj*    *mʌnna*    *cind-a*
        Premdhoj.ABS   man.ABS   teach-PST

        'Premdhoj taught people.'

(320)  PRO-DROP ALTERNATION

        (*khokku-a*)    *ŋa-lai*    *pʌ-cind-oŋ*
        3SG-ERG     1SG-DAT   3S/A-teach-1SG.S/P.PST

        'He taught me.'

Though the verb *cind* 'teach' allows both nominal complements and verbal complements, such a property is not found in all verbs of this class. In contrast, all verbs show antipassive alternations. Unlike *khip* 'read' and *chapd* 'write', the other verbs show *kha*-antipassive as well. These verbs do not show the DAT/COM alternation

because they never appear with an object in antipassive constructions.

## 4.24 Talk-type verbs

Levin (1993) says that these verbs relate to speaking but do not involve a means or manner specification. These verbs do not take sentential complements. In English, they can take both *with* and *to* phrase, while in Puma, they can take only comitative. *talk*-type verbs are found in Puma and appear within the frame:

(321)     {S.ABS (P-COM) V}

The class membership of *talk*-type verbs is presented in Table 97.

**Table 97:** *Talk*-type verbs

| ROOT | GLOSS | INTRANSITIVE |
|------|-------|--------------|
| *baŋ* | talk | *baŋ-a* |
| *pis* | speak | *pis-a* |
| *pat* | cry | *pat-a* |
| *rʌŋ* | say | *rʌŋ-a* |

Properties:

(322)     PRO-DROP ALTERNATION

(ŋa)      baŋ-oŋ
1SG.ABS    talk-1SG.S/P.PST

'I talked.'

(323)     SIMPLE RECIPROCAL ALTERNATION

(a)   *kamalā*      *ŋa-oŋ*      *baŋ-a*
      Kamala.ABS    1SG-COM₁    talk-PST

      'Kamala talked with me.'

(b)   *\*kamalā-oŋ*      *ŋa-oŋ*      *baŋ-a*
      Kamala-COM₁    1SG-COM₁    talk-PST
      Intended: 'Kamala and I talked.'

*Talk*-type verbs show a limited range of alternations in Puma. The verb *talk* can take comitative, while the reciprocal alternation is not possible.

## 4.25 Eat-type verbs

These verbs relate to ingestion of food or drink. These verbs differ in many languages as to whether or not they allow unspecified object alternation and a conative alternation (Levin 1993). Eating food and drinking liquids represent universal practices amongst humans (cf. Newman 2009). Eating and drinking involve many diverse cultural

practices. There are places specifically designed for eating and drinking, and where eating and drinking are prohibited as in temples in Nepal. Even the presence of food in the building is regarded as unseemly and polluting.

Newman (2009) writes that many languages which have a morphological causative restrict the use of this causative to intransitive verbs. However, there are languages like Puma in which a small set of transitive verbs allow causativisation. These are usually verbs denoting ingestion or consumption (Næss 2007; Amberber 2009). Dixon (2000) notes that if a morphological causative is used with only a few transitive verbs, these are likely to include *eat* and *drink*. He argues that there are languages like Amharic, spoken in Ethiopia (Afro-Asiatic), Palauan, spoken in the Republic of Palau (Austronesian), Kolami, spoken in India (Dravidian), Sinhala, spoken in Sri Lanka (Indo-European) and Maricopa, spoken in USA (Hokan) where *eat* and *drink* and few other verbs like *smoke*, *lick*, *know* and *verbs of perception* involve morphological causativisation (Dixon 2000; Amberber 2009; Jaggar & Buba 2009). In contrast, Puma does not allow morphological causativisation with those verbs, except *eat* and *drink*. The class membership of *eat*-type verbs in Puma is presented in Table 98.

**Table 98:** *Eat*-type verbs

| ROOT | GLOSS | TRANSITIVE | CAUSATIVE | ANTIPASSIVE |
|------|-------|------------|-----------|-------------|
| *ca* | eat | *ca-a-ŋ* | *cend* | *ca-ŋa* |
| *duŋ* | drink | *duŋ-u-ŋ* | *duk* | *duŋ-ŋa* |

Properties:

(324)    PRO-DROP AND ANTIPASSIVE ALTERNATION

    (a)    (*ŋa-a*)    *roŋ*    *ca-a-ŋ*
          1SG-ERG    rice.ABS    eat-3P-1SG.A

          'I eat rice.'

    (b)    *ŋa*    *roŋ*    *ca-ŋa*
          1SG.ABS    rice.ABS    eat-1SG.S/P.NPST

          'I eat some rice.'

(325)    *kha*-ANTIPASSIVE ALTERNATION

    (a)    *cʌkrʌŋdhipma-a*    *hekchakupa-lai*    *co-o*
          Cakrangdhipma-ERG    Hekchakupa-DAT    eat-3P

          'Cakrangdhipma (demon) ate Hekchakupa (man).'

(b) *cʌkrʌŋdhipma          kha-ca-a
    Cakrangdhipma.ABS    ANTIP-eat-PST

    'Cakrangdhipma (a demon) ate (people).'

(c) cʌkrʌŋdhipma          kha-kʌ-ca
    Cakrangdhipma.ABS    ANTIP-ACT.PTCP-eat

    'Cakrangdhipma who eats/ate (people).'

These two verbs relate to ingesting where *eat* involves ingesting solids and *drink* liquids. These verbs are found in the antipassive alternation. It is interesting to notice that unlike *drink*, the verb *eat* can be found in the *kha*-antipassive. However, with respect to this verb, the A argument must be an entity like *cʌkrʌŋdhipma* 'demon' or 'witch' (a man-eater) who is believed to have eaten *man*. Example below in (326) is the Nepali counterpart of Puma in (325c).

(326)    mānche    khā-ne    cakrangdhipmā
         man       eat-INF   Cakrangdhipma

         'Cakrangdhipma who eats man.'

However, like in Nepali, it is not very unusual to use the verb *eat* metaphorically in Puma. Let us consider these examples from Puma, including Nepali counterparts in (328):

(327)    PUMA

    (a) demni        kʌphekwa       kha-mʌ-ca?
        how          money          ANTIP-3PL.S/A-eat

        'How much does it (bus fare) cost?' (Literally: 'How much money do they eat?')

    (b) mʌnna     kha-mʌ-khaŋ        kina      kha-mʌ-ca.
        man.ABS   1NS.P-3PL.S/A-see  CONN      ANTIP-3PL.S/A-eat

        'The (bus) fare is according to the person.' (Literally: 'They see the man and they eat.')

(328)    NEPALI

    (a) kati        paisā      lin-cha?
        how         money      take-3SG.MASC.NPST

        'How much does it (bus fare) cost?' (Literally: 'How much money do they take?')

    (b) mānche     her-era        lin-cha.
        man.ABS    see-PTCP       take-3SG.MASC.NPST

        'The (bus) fare is according to the person.' (Literally: 'They see the man and take.')

In (327) the verb *eat* is used metaphorically to denote the cost of bus service according to the context. Consider examples from Nepali where the verb *eat* is found for a range of metaphorical references:

(329)   NEPALI

(a) *sabinā-le      hāwā       khā-ī*
    Sabina-ERG    wind.ABS    eat-3SG.FEM.PST
    'Sabina failed.'

(b) *kamalā-le      ālu        khā-ī*
    Kamala-ERG    potato.ABS  eat-3SG.FEM.PST
    'Kamala failed.'

(c) *samjhanā-le    kurā       khā-ī*
    Samjhana-ERG   talk.ABS    eat-3SG.FEM.PST
    'Samjhana understood.'

(d) *puspā-le       siltimur   khā-ī*
    Puspa-ERG      herb.ABS    eat-3SG.FEM.PST
    'Puspa died.'

(e) *devīmāyā-le    supārī      khā-ī*
    Devimaya-ERG   nut.ABS     eat-3SG.FEM.PST
    'Devimaya accepted an invitation.'

(f) *rajanī-le      tokeso      khā-ī*
    Rajani-ERG     irritate.ABS   eat-3SG.FEM.PST
    'Rajani got abused.'

(g) *ḍāibarnī-le    paisa       khā-ī*
    Daibarni-ERG   money.ABS   eat-3SG.FEM.PST
    'Daibarni did not pay money/ Daibarni was bribed.'

## 4.26   The kill verb

Verbs in this class lexicalise nothing about the means, manner and purpose of death. The lexical representation of kill would be something like 'x causes [y become dead]' (Van Valin & LaPolla 1997). Puma has only the verb *set* 'kill' in this class. The verb *kill* itself allows the widest range of instruments (Levin 1993).

Properties:

(330)   PRO-DROP AND CAUSATIVE ALTERNATION

(a) (*khokku-a*)    *rāvan-lai*    *set-i*
    3SG-ERG       Ravan-DAT     kill-3P
    'He killed Ravan.'

(b)     *rāvan*        *set-a*
             Ravan.ABS    kill-PST
             Intended: 'Ravan was killed.'

(331)     MIDDLE ALTERNATION

             *rāvan*        *mʌjʌle*     *set*
             Ravan.ABS    nicely      kill.NPST

             Intended: 'Ravan killed easily.'

(332)     *kha*-ANTIPASSIVE ALTERNATION

             *ram*       *kha-set*
             Ram.ABS    ANTIP-kill[3SG.NPST]

             'Ram kills (people).'

## *4.27*    *Verbs of motion*

### 4.27.1 *Climb*-type verbs

These verbs relate to the specification of the direction of motion. In Puma the deictic verb *come* falls in this motion class. None of these verbs specify the manner of motion and behave uniformly in all respects (Levin 1993). They express distinct goal, source and path of motion. The class membership of *climb*-type verbs in Puma is presented in Table 99.

**Table 99:** *Climb*-type verbs

| ROOT | GLOSS | INTRANSITIVE |
|------|-------|--------------|
| *chukd* | jump | *chukd-a* |
| *lam ti* | walk | *lam ti-a* |
| *lipd* | return | *lipd-a* |
| *onh* | run | *onh-a* |
| *phind* | jump | *phind-a* |
| *puks* | go | *puks-a* |
| *phuks* | escape | *phuks-a* |
| *ta* | come | *ta-a* |
| *waŋ* | enter; climb | *waŋ-a* |
| *wa cakd* | swim | *wa cakd-a* |

Properties:

(333)     PRO-DROP AND LOCATIVE POSTPOSITION DROP ALTERNATION

    (a)   (*khokku*)   *sʌŋpwa-do*    *waŋ-a*
          3SG.ABS     tree-GEN.LOC   climb-PST

          'She climbed on the tree.'

    (b)   *khokku*    *sʌŋpwa*   *waŋ-a*
          3SG.ABS     tree.ABS   climb-PST

          'She climbed the tree.'

*Climb*-type verbs are intransitive verbs and they show no alternations with the exception of the pro-drop and locative alternation.

### 4.27.2 *Roll*-type verbs

The class membership of *roll* verbs in Puma is presented in Table 100.

**Table 100:** *Roll*-type verbs

| ROOT | GLOSS | TRANSITIVE | ANTIPASSIVE |
|------|-------|-----------|-------------|
| *chir* | wrap | *chir-i* | *chir-a* |
| *cotd* | shift | *cotd-i* | *cotd-a* |
| *dhas* | drop | *dhas-i* | *dhas-a* |
| *end* | move with support | *end-i* | *end-a* |
| *rʌmt* | roll up | *rʌmt-i* | *rʌmt-a* |
| *sotd* | move | *sotd-i* | *sotd-a* |
| *wal* | stir | *wal-i* | *wal-a* |
| *wand* | use/shake | *wand-i* | *wand-a* |

The properties of *roll*-type verbs were presented previously in (201) (cf. Section 4.4.4).

### 4.28    Aspectual verbs

These verbs relate to the initiation, termination, or continuation of an activity. They fall into two subclasses: *begin*-type verbs and *complete*-type verbs.

### 4.28.1 *Begin*-type verbs

Some members of this subset take one argument, while other members take two arguments. Some verbs take only gerundive complements, whereas others take both gerundive and infinitival complements in English (Levin 1993). The class membership of *begin*-type verbs in Puma is presented in Table 101 (see Section 6.7.7).

**Table 101:** *Begin*-type verbs

| ROOT | GLOSS | TRANSITIVE | ANTIPASSIVE |
|------|-------|-----------|-------------|
| *ŋes* | keep | *ŋess-i* | *ŋess-a* |
| *pus* | begin | *puss-i* | * |
| *rakd* | stop | *rakd-i* | *rakd-a* |

Properties:

(334)    PRO-DROP AND CAUSATIVE ALTERNATION

    (a)   (*khʌnna-a*)    *kaci*    *mu-ma*    *tʌ-puss-i*
        2SG-ERG    work    do-INF    2-begin-3P

        'You began to work.'

(b)  *kaci      mu-ma      puss-a*
     work      do-INF      begin-PST

     'The work began to be done.'

(335)   MIDDLE ALTERNATION

        *\*kaci      mʌjʌle      pun*
        work       nicely      begin.NPST
        Intended: 'The work begins easily.'

(336)   Antipassive alternation

        *sumi,      khʌnna      kaci      mu-ma      tʌ-puss-a*
        Sumi.ABS  2SG.ABS    work      do-INF      2-begin-PST

        'Sumi, you began to do work.'

## 4.28.2 *Complete*-type verbs

Levin (1993) notes that the *complete*-type verbs in English are not used intransitively, while their counterpart in Puma allows intransitive use of these verbs. *Complete*-type verbs show a limited range of properties.

(337)   PRO-DROP CONSTRUCTION

        (*khʌnna*)   *kaci*      *tʌ-mant-a=ku*?
        2SG-ERG     work       2SG-complete-PST=NMLZ

        'Did you complete your work?'

## 4.29   Weather-type verbs

These verbs relate to different types of *weather*. They take the pronoun *it* as subject in English (Levin 1993), while this property is not available in Puma. The class membership of *weather*-type verbs in Puma is presented in Table 102.

**Table 102:** *Weather*-type verbs

| ROOT | GLOSS | INTRANSITIVE |
|------|-------|--------------|
| *bethem dha* | thunder | *bethem dha-a* |
| *hʌk mu* | wind | *hʌk mu-a* |
| *hiŋ dha* | snow | *hiŋ dha-a* |
| *nʌŋ dha* | hail | *nʌŋ dha-a* |
| *wa ta* | rain | *wa ta-a* |

Properties:

(338)   INTRANSITIVE CONSTRUCTION

        (a)   *wa*            *ta-a/\*dha-a*
              water.ABS      come-PST/ fall-PST
              'It is raining.'

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(b) *hiŋ*                 *dha-a/\*ta-a*
     snow.ABS         fall-PST/come-PST

     'It is snowing.'

(c) *khula-ya*          *hʌk*         *mu-a/\*ta-a*
     jungle-LEVEL.LOC    wind         do-PST/come-PST

     'It is blowing in the jungle.'

*Weather*-type verbs show no alternation property. Different weather verbs take different V2, as illustrated in (338) where *ta* 'come' appears with *wa* 'water' for *rain*, in (338a), *dha* 'fall' appears with *hiŋ* 'snow' for *snow*, and *mu* 'do' appears with *hʌk* 'wind' for *wind* in (338b) and (338c), respectively. They do not allow sharing V2.

## *4.30*    *Chapter summary*

This Chapter presents 24 verb classes, which are distinguished, based on their syntactic and semantic properties. Intransitive clauses have only a grammatical subject but this can carry various types of semantic role. The subject normally has control over agreement but sometimes it does not as some subjects show P agreement. A striking characteristic of Kiranti languages like Puma is that transitive verbs can occur intransitively. A verb may participate in transitivity alternations, like diathesis alternations that involve a change in a verb's transitivity. Each verb in Puma shows a distinct pattern of behaviour with respect to different alternations. The members of verb classes share certain aspects of meaning whose members have common syntactic and semantic properties. This chapter uses eight criteria to establish the verb classes: Pro-drop, antipassive, middle, causative, body-part possessor ascension, reflexive object, reciprocal object and locative alternations. This chapter divides Puma verbs classes to look at their transitivity alternations and each class has different numbers of membership of verbs.

Change-of-state is shown by causative verbs that do not alternate, such as the verb *bha* 'cut' which cannot occur in a *kha*-antipassive and only the *zero*-antipassive. An overview of transitivity alternations in Puma is presented in Tables 103 and 104, however this area needs further research.

**Table 103:** Overview of transitivity alternations I

| VERB CLASSES | VERB TYPES | TRANSITIVITY ALTERNATIONS | | | | | | | | | | ARGUM | AGREEMENT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ANTIPASSIVE | | | | | | | | | | |
| | | PRODROP | *zero* | *kha-* | MIDDLE | INCHO | BODYPART | REFL | RECIP | COREF | LOC | | |
| CHANGE-OF-STATE VERB1 | *break* | + | + | - | + | + | - | | | | | 2 | |
| | *bend* | + | + | - | + | + | - | | | | | 2 | |
| CHANGE-OF-STATE VERB2 | *cut* | + | + | + | - | - | - | | | | | 2 | |
| | *cook* | + | + | - | + | + | - | | | | | 2 | |
| SURFACE-CONTACT | *hit* | + | + | + | - | - | + | + | | | | 2 | |
| | *touch* | + | + | + | - | - | + | + | | | | 2 | A$_{ERG}$ P$_{ABS/DAT}$ V-A-P |
| DEICTIC | *bring* | + | + | + | - | - | | | | | | 2 | |
| | *get* | + | + | - | - | - | | | | | | 2 | |
| | *throw* | + | + | - | - | - | | | | | | 2 | |
| | *send* | + | + | + | - | - | | | | - | | 3 | |
| *PSY*-VERB1 | *love* | + | + | + | - | - | | | | | | 2 | |
| *PSYCH*-VERBS2 | *experience* | - | - | - | - | - | | | | | | 1 | S$_{GEN-POSS}$ C$_{POSS}$ V-S |
| | *get hungry* | + | - | - | - | - | | | | | | 1 | S$_{ABS}$ P V-S |
| | *shiver* | - | - | - | - | - | | | | | | 1 | S$_{ABS}$ V-A-P |
| | *give* | + | + | + | - | - | | | | + | | 3 | A$_{ERG}$ G$_{DAT}$ T$_{ABS}$ V-G-A |
| | *put* | + | + | - | - | - | | | | | | 3 | A$_{ERG}$ P$_{ABS/DAT}$OBL$_{LOC}$ V-A-P |

**Table 104:** Overview of transitivity alternations II

| VERB CLASSES | VERB TYPES | TRANSITIVITY ALTERNATIONS | | | | | | | | | | ARGUM | AGREEMENT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PRODROP | ANTIPASSIVE | | MID | INCHO | BODYPART | REFL | RECIP | COREF | LOC | | |
| | | | *zero* | *kha-* | | | | | | | | | |
| -P | *mix* | + | + | - | + | + | | | + | | | 3 | $A_{ERG}$ $P_{ABS/COM}$$OBL_{LOC/COM}$ V-A-P |
| | *separate* | + | + | - | + | + | | | | | | 2 | $A_{ERG}$ $P_{ABS/DAT}$ V-A-P |
| | *make* | + | + | - | + | - | | | | | | 2 | |
| PERCEPTION | *see* | + | + | + | - | - | | | | | | 2 | |
| | *meet* | + | + | + | - | - | | | | | | 2 | |
| | *teach* | + | + | - | | | | | | | | 2 | |
| INGESTING | *eat* | + | + | + | - | - | | | | | | 2 | |
| | *kill* | + | + | + | - | - | | | | | | 2 | |
| ASPECTUAL | *begin* | + | + | - | + | - | | | | + | | 2 | |
| -P | *search* | + | + | + | - | - | | | | | | 3 | $A_{ERG}$ $P_{ABS/DAT}$ $OBL_{LOC}$ V-A-P |
| MOTION | *climb* | + | - | - | - | - | | | | + | | 1 | $S_{ABS}$ V-S |
| | *roll* | + | - | - | - | - | | | | | | 1 | |
| | *complete* | + | - | - | - | - | | | | | | 1 | |
| | *talk* | + | - | - | - | - | | | | | | 1 | |
| WEATHER | *rain* | - | - | - | - | - | | | | | | 1 | |
| UNACCUS | *melt* | - | - | - | - | - | | | | | | 1 | $S_{ABS}$ V-P |
| | *elope* | - | - | - | - | - | | | | | | 2 | $A_{COM}$ $P_{COM}$ V-A-P |

# Chapter 5

# Compound Verbs (CV)

## *5.1    Background*

The preceding chapter dealt with transitivity alternations where verb classes were distinguished in terms of their arguments they required in the syntax. This chapter describes compound verb constructions in which a first verb stem (V1) is followed by a second verb stem (V2). Semantically V2 modifies V1 where normally both V1 and V2 are inflected. The organisation of this chapter is as follows:

The background of a compound verb is described in 5.1 where an introduction of compound verbs and different works of various scholars on compounds verb are discussed. The distinction and similarity between compound verbs and serial verbs are introduced in section 5.2. The characteristics of compound verbs are presented in 5.3, while compound verb composition is given in section 5.4. Sections 5.5 to 5.8 deal with semantics of compound verbs, morphology of compound verbs, selectional restrictions, and category changing. The terminologies 'compound verb' and 'bipartite' are introduced in section 5.9. Frequency (productivity) verbs that appear in V2 positions in compound verbs are presented in 5.10 and the permutation of V2 in 5.11. Section 5.12 distinguishes nominal compounds from verbal compounds. Verbal compounds are described in Section 5.13, while idiosyncratic types, and nominal compounds are discussed in Sections 5.14 and 5.15. Lexical compounds are examined in Section 5.16. Compound verb formation is presented in 5.17. Sections 5.18 to 5.21 deal with logical possibilities of V1 and V2 comparison, compound verbs and agreement, composition of verb sequences, and syntactic constraint on verbal compounds, respectively. Further, properties of Puma compound verbs are examined in Section 5.22, and Section 5.23 gives a summary of the chapter.

Compound verbs (henceforth. CV) are areal features of South Asia, the highlands of the Altai, and the Kirghiz, China, Korea, Japan, Turkey, Central Iran and major parts of East Asia (Masica 1976). CVs are found in all the language families in South Asia like Dravidian (Emeneau 1956; Caldwell, Wyatt & Pillali 1961; Krishmamurti 1968; Masica 1976, 1991; and Zograph 1982), Austroasiatic (Zide 1966), Sino-Tibetan and Indo-Aryan.

CV phenomenon has been extensively studied in Indo-Aryan (Burton-Page 1957; Porízka 1967; Hook 1974; Nespital 1997) and among others followed by Kashmiri (Kaul 1985; Hook & Koul 1992), Bengali (Zbavitel 1970; Dasgupta 1977; Singh 1998), Marathi (Damle 1911; Vale 1948; Pandharipande 1990; Pardeshi 2001), and Nepali (Pokharel 1991) and Dravidian (Emeneau 1956; Caldwell, Wyatt & Pillali 1961; Krishmamurti 1968; Masica 1976; Zograph 1982), while relatively less attention has been paid to their counterparts in Tibeto-Burman (Rai 1985; van Driem 1987; 1993; Ebert 1994; 1997; Bickel 1999; Tolsma 2006; Doornenbal 2009) and Austro-Asiatic (Zide 1966). It has been variously referred to by different scholars as modified verbal expression (Porízka 1967), compound verb (Hook 1974; Singh, Subbarao & Bandyopadhyay 1986; Singh 1998), explicator compound verb (Masica 1976; Abbi & Gopalkrishnan 1991; Gopalkrishnan & Abbi 1992), serial or compound verb (Kachru 1979; Kachru & Pandharipande 1980; Fedson 1985; Pandharipande 1990), and verbal expression (Nespital 1997).

Generally, verbal compounds (verb-verb) consist of two verbs. The first is called pole (V1) (Dasgupta 1977) and the second is called vector (V2) (Hook 1974; Dasgupta 1977; Bhat 1979). Both V1 and V2 are inflected in compound verb constructions. CVs are not confined only to verbal compounds, as there are nominal compound (noun-verb). Nevertheless, the vectors sometimes not only lose their original meaning, but they also twist the pole's meaning and they are grammaticalised in verbal compounds. The meaning of the CV cannot be predicted by simply knowing the meaning of both pole and vector.

In a CV construction, the stems that can occur as V2 (bound roots) are selected and limited in productivity, and are semantically and lexically conditioned. A V2 is selected by either nominal or verbal argument. The argument structure is complex as normally two semantic heads contribute arguments.

The South Asian linguistic area is a home for languages belonging to four different language families e.g. Indo-Aryan, Dravidian, Tibeto-Burman and Austro-Asiatic. Cutting across their genetic affiliations they all share certain syntactico-semantic phenomenon among which is the CV (Masica 1976: 141–148). The CV form is, however, different from the most common compound verb formation in South Asian languages, which is converb + finite verb. However, the Kiranti pattern is distinct from the Indo-Aryan pattern for CV constructions where inflectional morphology involves

V2, as in Nepali (Pokharel 1991), in Hindi (Montaut 2004) and in Urdu (Butt 1995).

## 5.2    Compound verbs and serial verbs

As the formal characteristics of compound verb constructions and serial verb construction overlap (cf. Doornenbal 2009), we find that CVs can be understood as a subspecies of serial verb constructions. CVs are a type of serial verb construction which forms a single grammatical word or single predicate argument. The features of serial verb constructions, defined by Aikhenvald and Dixon (2006:4–20, 339–344), quoted by Doornenbal (2009: 248), are:

(339) (a)    single predicates;

    (b)    monoclausal;

    (c)    prosodic units;

    (d)    share tense, aspect and polarity;

    (e)    denote one event; and

    (f)    share participants.

In Puma compound verb constructions, in our view, share all the properties in (339), with the proviso on (339d), as in the neighbouring language Bantawa (Doornenbal 2009), in which the sharing of tense, aspect and polarity is common to both compound verbs and serial verbs where at least one argument is shared or fused. Though there is only a single subject, the CV behaves like a complex sentence. Person, tense and aspect depend on the composition of verb in that they are not necessarily found in each individual member. Scholars like Payne (1997) do not include compound verbs under the serial verb label. Payne (1997: 307) notes:

> A serial-verb construction contains two or more roots that are neither compounded nor members of separate clauses. Serial verbs occur in all types of languages, but may be more common in languages that have little or no verbal morphology. (...) Typically, verbs in a series will express various facets of one complex event. For example, the concept expressed by the English verb *bring* is divisible into at least two components, the picking up or taking of an object and the movement toward a deictic center. In many languages, this complex concept is embodied in a serial-verb construction.

On any account, as in Bantawa (Doornenbal 2009), Payne's analysis fails for the description of CV constructions found in the Kiranti literature, particularly in Puma, as

V1 and V2 are, of course, compounded, in the sense that they are composed of two or more distinct constituent parts[43] with individual lexical meaning and also in the sense that they form one grammatical or even phonological word. Puma CV constructions restrict different participants for different parts of the compound. Semantically Puma compound verbs are partially congruent with the serial verb description of Payne, as they embody exactly that type of conceptual complexity as Payne describes.

## 5.3    Characteristics of compound verbs

Aikhenvald and Dixon (2006: 3), quoted in Doornenbal (2009), propose some parameters that account for the cross-linguistic variation across languages in serial verb constructions. The same verb classes whose members tend to show variation in argument structure as V1 and V2, show distinct behaviour within and across languages.

**Composition**        Serial verb constructions may be either symmetrical, i.e. with equal and interchangeable parts, or asymmetrical. Most Puma compound verbs are asymmetrical in the sense that V2s in the CV construction are selected and restricted. Doornenbal (2009) argues that at least syntactically, there is no constraint on the selection of any second verb in Bantawa, while not all verbs can appear as V2 in Puma.

**Contiguity**    Verbs that form a serial verb construction may either be required to be next to one another, or other constituents may intervene. In Puma, there are no grammatical intervening constituents. Compound verbs are coherent and contiguous.

**Word-hood**    As a corollary of the contiguity of the verbal compound construction, Puma CVs obligatorily form a single lexical unit and show a single event, even when the construction is composed of two different units.

**Marking of grammatical categories**        Aikhenvald and Dixon (2006: 4) note that verbal categories such as agreement and tense parameters 'may be marked just once per construction ('single marking'); or can be marked on every component ('concordant marking')'. However, as we see above, agreement categories are marked in a both way in Puma and other neighbouring Kiranti languages like Bantawa.

To sum up, according to Aikhenvald and Dixon's terminology and classification of serial verb constructions, in our view as in Bantawa (Doornenbal 2009), Puma compound verbs are a subtype of serial verb constructions.

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[43] There are also a few tripartite verbs in Puma, such as *man-ma-ken-ma-da-ma* 'forget'.

## 5.4    Compound verb composition

In this section, we attempt to provide an overview of the morphosyntax of Puma compound verb constructions. V1 or V2 (if in V-V sequence CV construction) and a verb V (if in N-V sequence CV construction) govern the agreement system and argument structure. The V2 is grammaticalised and adds distinct additional information in the CV construction. The sequences of verbs in the CV construction can be referred to:

(340)   (a)      V1 V2

        (b)      $N_{CV}$ $V_{NML}$

We see two types of CV constructions in Puma in which V1 and $V_{NML}$ function as semantic heads, and V2 and $N_{CV}$ add additional information to the meaning of CV constructions.

## 5.5    Semantics of compound verbs

Compound verb constructions are described as a kind of complex predicate (Butt 1995; Verma 1993) which are composed of two verbs V1 and V2. Both V1 and V2 concatenate to form a complex predicate. It seems that V1 semantically dominates the meaning of the whole compound verb construction which is quite common and productive in Puma. The formation of CV construction is selective and restricted. Not all verbs can appear as V2 and there are also selection-restriction rules to conjugate with V1. In Puma V2 are definitely selective and limited. Normally V2 is semantically grammaticalised or delexicalised in a CV construction and it cannot retain its original lexical meaning. The features of  'semantic principle of compounding' introduced by (Wechsler 1995; Davis 2001), quoted in Paul (2003: 2) are listed:

(341) (a)    The combinatorial well-formedness of a CV structure depends on the
            semantic compatibility between V1 and V2.

    (b)    The composition of CV sequences is not triggered by the  requirement    that
            V1 and their dependents saturate or satisfy V2's unsaturated
            subcategorisation frame or argument structure.

    (c)    CV sequences are a lexical variant of their V1 counterpart because they
            denote an extended or modified version of meaning originally associated
            to the corresponding V1.

Puma compound verbs certainly comply with all of the features described in (341).

When V1 concatenates V2 to form a CV sequence, the composition is based on morphosyntax and semantic structure of the resultant construction. Note that a given V1 can be concatenated with multiple V2s to denote distinctive argument realisations. However, still the concatenation depends upon pragmatics with limited and restricted V2[44].

## 5.6 Morphology of compound verbs

The morphology of compound verb constructions can be summarised:

(342) (a)  V1 can appear in bare stem form.

  (b)  V1 can appear in infinitive form.

  (c)  V1 can be inflected for tense, number, and person.

  (d)  V2 can never be in bare stem form.

  (e)  V2 can appear in infinitive form only if V1 does.

  (f)  V2 can be inflected for tense, number, and person.

  (g)  Intransitive V2 can be inflected transitively when it occurs with transitive V1.

  (h)  V2 is always the inflected head. However, it is morphologically co-head if V1-INFL-V2-INFL occurs.

## 5.7 Selectional restrictions

We find that V2 are fixed and they select V1. Nevertheless, the combination of V1 and V2 is not free. As V2s are selected and restricted from a set of verbs, their number can be fixed. Cross-linguistically, the frequency of occurrence of CV constructions varies in the languages. The attestation of compound verb is most frequent in the compound-verb-rich Indo-Aryan languages like Nepali (Pokharel 1991), Hindi-Urdu (Hook 1974), Marathi (Pardeshi 2001), Bangla (Paul 2003: 2), while it is very rare in the compound-verb-poor languages like Kashmiri (Kaul 1985).

## 5.8 Category changing

Aikhenvald and Dixon (2006: 4), in the definition of serial verb constructions, note that verbal complexes may involve category changing. It means that V2 not only can express derivational notions such as causative, reciprocal, reflexive, and passive, but

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[44] Based on elicitation, *chapd* 'write' as V1 can be concatenated with at least seventeen V2. They are: *ca* 'eat', *cen* 'REFL', *-chod* 'TEL', *-da* 'TEL', *dhas* 'fall.off', *itd* 'give', *kess* 'throw', *-land* 'TEL', *la* 'look for', *lokk* 'hold', *lotd* 'take out', *metd* 'CAUS', *ŋes* 'put', *si* 'want', *pukd* 'carry', *puks* 'go' and *tatd* 'bring'.

also category-preserving inflectional marking for tense, aspect, mood in the Kiranti languages.

Doornnenbal (2009) presents the chart for functional subclassification in the Kiranti languages, particularly based on characteristics of Bantawa, which he argues it is a complete picture of functional subclassification that covers most of the functional areas of V2 across Kiranti languages. Not all V2 in the chart are found across Kiranti languages, as some of them are available in one language and others are in other languages.

(343)     FUNCTIONAL SUBCLASSFICATION OF COMPOUND VERBS

   (a)     Category-changing (*causative, reflexive, applicative*)

   (b)     Category-preserving (*conative, imperfective*)

Compound verb constructions are classified into category-changing and category-preserving compound verbs. Both compound types are treated as different categories because of their semantics. The distinction between category-changing and category-preserving compound verbs is primarily morphological. However, this inflectional morphology relates to different functional categories, as illustrated above.

Doornenbal (2009) notes that for Kiranti languages like Wambule and Yamphu that employ V1 only as a bare root in CV constructions, the difference does not emerge in agreement, as only V2 is concatenated. However, other Kiranti languages such as Puma, Bantawa, Kulung, and Limbu explicitly and transparently display the distinction in form between category changing and category-preserving compound verbs, where both V1 and V2 are conjugated and inflected for tense, person and number in agreement.

Only a bare root appears as V1 in category-changing compound verbs (cf. Doornenbal 2009) like Puma causative. Perhaps it is only true with Bantawa, though he argues and presents functional subclassification of compound verbs, particularly V2 to cover across Kiranti languages, as Puma is not confined within this property. In Puma category-changing compound verbs, not only a bare root appears as V1 and only V2 is inflected, but also both V1 and V2 host inflectional morphology, where the inflection applies to both verbal (V1 and V2) limbs.

The neighbouring language, Bantawa shows a clear distinction between category-changing and category-preserving compound verbs with respect to the inflectional

morphology where only a bare root occurs as V1 to show a category-changing CV construction. V1 and V2 are conjugated to express a category-preserving compound verb, while Puma employs a mixed type. In Puma, both bare V1 and inflected V1 and V2 appear to denote category-changing and category-preserving compound verbs, while inflected V1 and V2 appear to express category-preserving compound verbs only.

We find uniformity between Puma and Bantawa with respect to category preserving compound verbs, where both V1 and V2 concatenate and equally host the inflectional morphology.

## 5.9    *The terminology in Kiranti*

### 5.9.1   Compound verbs

The terminology 'compound verb' presumably does not cover all the scope of serial verb constructions and bipartite stems. However, many properties, as described above, are common to both compound verb constructions and serial verb constructions. We do prefer using the term 'compound verb' here as it is common not only in Kiranti literature but also in the South Asian literature.

It has been variously referred to by different scholars in Kiranti literature as compound verb (Ebert 1997; Tolsma 2006; Doornenbal 2009), aspectivised compound (van Driem 1993), bipartite (Bickel & Nichols 2007) motionalisers, and complex verbs (Opgenort 2002), aspectivisers (Lahaussois 2002; van Driem 1993). As discussed above, in Puma we shall use the term V1 (first verb) and V2 (second verb) in the verbal CV construction, and N (first entity) and V (second entity) in nominal CV construction.

### 5.9.2   Bipartite verbs

A bipartite stem is a single stem that is discontinuous or segmentable into two parts for certain morphological operations (Bickel & Nichols 2007). This terminology is first noted in Washo (Jacobsen 1980) and Klamath (DeLancey 1996), and other North American languages (e.g. Cree, Lakhota, Kutenai, Wichita). Latter, it was found in Nakh-Daghestanian (Nichols 2003), Oceanic/Asian languages (e.g. Kuot, Gooniyandi, Kewa, Paiwan, Ket, Dumo), African language Yoruba, and as quoted by Hildebrandt (2005), Sino-Tibetan/Tibeto-Burman languages such as Limbu, Belhare, Newar, Qiang, Kyirong Tibetan, Manange. Recently, it has been attested in more Kiranti languages such as Puma, Bantawa, and Yakkha.

Fabb (2001) defines bipartites as combination of two roots to create a new stem-word, with some stranding of morphology that applies to only one piece of the compound. Nevertheless, his definition fails to cover the properties of bipartite stems across Kiranti languages, as Kiranti languages involve inflection of both verbs. Table 105 presents Sino-Tibetan bipartites which is adapted from Hildebrandt (2005) with slightly updating data where the shaded areas show Himalaya Enclave.

**Table 105:** Sino-Tibetan bipartites

| Major sub-groups | Bipartites | No Bipartites |
|---|---|---|
| Sinitic | × | |
| Remnant Kamarupan | × | |
| Brahmaputran | × | |
| Himalayish | Puma, Bantawa, Belhare | Hayu, Kham, Kinnauri |
| Bodish | Manange, Kyirong Tib | Gurung, Tamang, Chantyal, Thakali, Lhasa Tibetan |
| Qiangic | Qiang | Pumi/Prinmi |
| Kuki-Chin | × | Meithei, Lai Chin |
| Karenic | × | Kayah-Li |
| Lolo-Burmese | × | Lahu |

## 5.10   Frequency of V2

In many languages the verb that appears in the V2 slot is from a small closed set of verbs. The frequency of occurrence of V2 in compound verbs varies from one language to another within and across the language families. In Puma most verbs that appear in the V2 slot are homophonous to main verbs, so they are not the same as main verbs. Like other languages, Puma has a small closed set of verbs that appear in the V2 slot. From the CV literature we can see that verbs like *go*, *come*, *give*, *take*, *bring*, *throw*, *keep* and *drop* are the classic V2s in many languages, and their Puma counterparts are no exception. Consider examples from three different languages, where Nepali (Dahal 1974) has 20 (but I do not find the whole list), and Marathi (Pardeshi 2001) and Bangla (Paul 2003) have 16 V2s each:

(344)      NEPALI V2s

*āu* 'come'      *di* 'give'      *lāg* 'touch'      *par* 'fall'

*hāl* 'put'      *raha* 'remain'      *rākh* 'put'      *lyāu* 'bring'

*gar* 'do'      *pug* 'reach'      *chaḍ* 'leave'      *pār* 'make'

*pāu* 'get'      *ho* 'be'      *meṭ* 'erase'      *sak* 'can'

*māg* 'beg'

(345)    MARATHI V2s

|            |              |              |                   |
|------------|--------------|--------------|-------------------|
| *ye* 'come' | *dzā* 'go'   | *cāl* 'walk'  | *pāh* 'want to'   |
| *rāh* 'stay' | *as* 'be'    | *lag* 'be stuck' | *pāhije* 'need' |
| *paḍ* 'fall' | *bas* 'sit'  | *de* 'give'   | *ghāl* 'put on'   |
| *thev* 'keep' | *ghe* 'take' | *soḍ* 'leave' | *kāḍh* 'take out' |

(346)    BANGLA V2s

|             |              |              |                 |
|-------------|--------------|--------------|-----------------|
| *aṣa* 'come' | *dāṛa* 'stand' | *rakha* 'keep' | *deoya* 'give'  |
| *ana* 'bring' | *pōra* 'fall' | *paṭha* 'send' | *bēṛano* 'roam' |
| *tola* 'lift' | *neoya* 'take' | *chaṛa* 'leave' | *phēla* 'drop'  |
| *bōsa* 'sit' | *oṭha* 'rise' | *moṛa* 'die'  | *jaoya* 'go'    |

Puma has altogether 32 V2s in which 22 V2s are more productive, while 10 V2s are idiosyncratic and not productive. We distinguish productive compound roots and idiosyncratic compound roots in the next section, however here I will give the whole list.

(347)    PUMA V2s

|              |            |               |                  |
|--------------|------------|---------------|------------------|
| *ca* 'eat'   | *cen* 'cut' | *coŋ* 'worship' | *dak* 'cover hole' |
| *itd* 'give' | *dha* 'fall' | *kess* 'throw' | *dhas* 'fall.off' |
| *la* 'search' | *ket* 'feel' | *pukd* 'carry' | *domt* 'wonder' |
| *ta* 'come'  | *li* 'be'  | *lokk* 'hold'  | *lotd* 'take.out' |
| *metd* 'do'  | *mu* 'do'  | *ŋes* 'put'    | *loss* 'take.out' |
| *puks* 'go'  | *si* 'die' | *set* 'kill'   | *lond* 'appear'  |
| *tat* 'bring' | *te* 'put' | *tas* 'uproot' | *-chod* 'TEL'    |
| *-land* 'TEL' | *-da* 'TEL' | *-dis* 'TEL'  | *-kon* 'TEL'     |

## 5.11   Permutation of V2s

Many languages exhibit an interesting composite of behaviour in permutation of V2s in CV constructions. It is possible to link up to ten vector verbs in a single string in Nepali like *khāi-dii-saki-hālne-garnu-pari-raheko-huna-sak-cha* 'eat' (cf. Pokharel 1991: 152). Languages like Hindi (Arora 1979), Tamil, Marathi (Dasgupta, Dhongde & Rajendran 1981) and Kannada (Bhat 1979) have two-member CV. Likewise, Bangla has three-member, and Loloish ( Matisoff 1985), spoken in Southern China has five-member CV constructions. Like many Kiranti languages, Puma has two-member (V1 and V2) CV constructions. Numbers of roots in different languages are shown in Figure 16:

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**Puma**

Hindi

Tamil

Marathi

Kannada   Bangla       Loloish                    Nepali



0 ⊢─────────┼─────────┼─────────┼──────────────────┤

                2               3               5                          10

## 5.11.1 Non-permutation of V1 and V2

Pokharel (1991), quoting Hook (1974), notes that in Hindi permutation of pole and vector is possible, as in:

(348)     HINDI

    (a)     POLE          VECTOR

           *mār*          *diyā*

           'kill.'

    (b)     VECTOR     POLE

           *de*            *mārā*

           'kill.'

However, such permutation is not possible in languages like Puma and Nepali:

(349)     PUMA

    (a)     POLE          VECTOR

           *itd-i*         *ŋess-i*
           give-3P        CONT-3P

           '(He) gives (her) (something).'

    (b)     VECTOR     POLE

           *ŋess-i*       *itd-i*
           keep-3P       BEN-3P

           '(He) keeps (something) for (her).'

(350)     NEPALI

    (a)     POLE          VECTOR

           *di-i*          *chāḍ-yo*
           give-PST      leave-3SG.MASC.PST

           '(He) gave it in anyway.'

(b)  VECTOR     POLE

*chāḍ-i*     *di-yo*
leave-PST  give-3SG.MASC.PST

'(He) already left.'

## 5.12   Nominal compounds vs. verbal compounds

Both nominal compound and verbal compound are found in Puma. Puma employs two
different types of verbal compounding. The first type is lexical compounding where
either a noun is incorporated into a verb or two verbs concatenate to create a new stem-
word for new meaning which cannot be retrieved from the single components. These
patterns are called bipartite verbs. The second type is derivational or inflectional
compounding in which both V1 and V2 combine to yield a new grammatical stem
whose meaning can be retained even from a single verb.

In the CV construction, the main verb (V1 or V2 or V$_{NML}$) gives the main
semantic content of the expression in which remaining parts either modifies the
meaning expressed by it or adds additional information. Pardeshi (2001) argues that the
so-called nominal compounds are nothing but morphologically complex simple verbs. I
reserve my views with respect to this concept, as nominal CV constructions show a
great degree of variation within Puma. One can argue that nominal CVs are not true
CVs, as they do not fulfill the first prerequisite for membership in the concatenation of
two verbs. Let us consider examples:

(351)     NOMINAL COMPOUND

(a)  *ŋa-a*        *khokku-lai*      ***som-tukd**-u-ŋ*
     1SG-ERG     3SG-DAT          love-love-3P-1SG.A

     'I love her.'

(b)  *khʌnna-a*  *ŋa-lai*     *som-*tʌ-***tuk**-ŋa*
     2SG-ERG     1SG-DAT   love-2-love-1SG.S/P.NPST

     'You love me.'

Perhaps the CV *somtukd* 'love' is believed to be a morphologically complex simple
verb, however the insertion of prefix *tʌ* in (351b) to mark the second person agreement
shows that *somtukd* 'love' cannot be considered as only a complex simple verb.

(352)     VERBAL COMPOUND

     *ŋa-a*        *khuksi-bo*  *kʌ-hãga*         *khokd-u-ŋ-dhas-u-ŋ*
     1SG-ERG     tree-GEN    3SG.POSS-branch   cut-3P-1SG.A-drop-3P-1SG.A
     'I cut down the branch of the *Khuksi* (tree).'

We see from (352) that both V1 *khokd* 'cut' and V2 *dhas* 'drop' are marked for tense and person agreement in the CV *khokddhas* 'cut and drop'.

## 5.13    Verbal compounds

In Puma compound verbs can be classified according to a verbal compound (root) and a nominal compound (stem). In compound verb constructions both pole (V1) and vector (V2) are inflected for tense, person and number where V1 governs the argument structure and V2 incorporates the meaning by giving additional information. Hence, compound verbs are special type of complex predicates consisting of a sequence of two or more verbs acting as a single verb and express a single expression of meaning (cf. Mukhopadhya et al. 2012). Syntactically compound verbs behave like simple verbs, as they can appear in the infinitive, imperative, transitive and antipassive constructions.

As already mentioned above, compound verbs in Puma can be divided according to their productivity: productive types and idiosyncratic types. I describe the more 'productive' types at the beginning and the 'idiosyncratic' types in Section 5.14.

### 5.13.1 The telic *ca*

The verb *eat* displays striking cross-linguistic variability within and across languages in the expression of the arguments of CV constructions, including across Kiranti languages in which it very often serves as a V2. Kiranti languages which have cognates to *ca* 'eat', typically collocate it with the verb *sleep* to express different semantics such as 'habitual', 'experience', 'continuity' and 'reflexive' within different languages.

The V2 *ca* 'eat' is used with *sleep* to denote 'habitual' in Puma, 'experience' in Bantawa (Doornenbal 2009), and 'continuity' in Kulung (Tolsma 2006), while the V2 *ca* 'eat' is conjugated with *laugh* to denote the semantics of 'experience' in Yamphu (Rutgers 1998), and with *kill* to denote 'reflexive' in Athpare (Ebert 1997a). The concept expressed by the verb *cama* 'eat' as V2 are expressed in these languages using root (V-V) combinations, as in:

(353)      PUMA

*lahure-ci-bo      kʌci-burī       ebdoŋ      ips-a-co-o*
army-NS-GEN    3NS.POSS-wife    always      sleep-PST-eat.TEL-PST
*mātrai*
EMPH

'Army's wives did nothing.' (Literally: 'Army's wives always ate and slept.')

(354)     BANTAWA

　　　*taŋkoŋ-da　　　i-taŋ　　　　　nant-u-ki*
　　　pillow-LOC　　　his/her-head　　lean.back-3P-SEQ
　　　*ima-a-ca-ϕ=ʔo　　　　　yuŋ-a-ŋ-a*
　　　sleep-PST-eat.TEL=NOM　　sit-PST-PROG-PST

　　　'Leaning his head on a pillow, he was fast asleep.' (Doornenbal 2009: 272)

(355)     YAMPHU

　　　*yit-cas-iŋ-ma*
　　　laugh-eat.TEL-EXPS-1/2NS

　　　'We laughed.' (Rutgers 1998)

(356)     KULUNG

　　　*am-im-ma-do　　　gundrī-pu　　　ims-ca-te!*
　　　your-sleep-INF-COND　straw.mat-LOC　sleep-eat.CONT-IMP

　　　'If you are[S] sleepy, sleep[S] on the straw mat.' (Tolsma 2006: 92)

(357)     ATHPARE

　　　*sed-u-ŋ-ca-ŋ-t-u-ŋ*
　　　kill-3P-1SG-eat.TEL:REFL-1SG-NPST-[copy]

　　　'I will kill myself.' (Ebert 1997: 75)

The V2 *ca* 'eat' in Puma is polysemous as it expresses 'experience', 'eat' and 'emphatic' depending upon the type of V1 to be conjugated, which is dealt below in (358) and (359). However, in (356) it denotes experience of the action as habitual. In (354), *ca* in Bantawa expresses experience, as in Puma, while in (355) Yamphu *ca* also denotes experience. Kulung *ca* in (356) expresses continuous action, while in (357), *ca* in Athpare codes reflexive. The distribution and semantics of *ca* 'eat' seem similar, while the terminology varies widely in the Kiranti literature. Presumably it is better, as suggested by Doornenbal (2009), to follow Rutger's (1998) terminology 'experience' as the verb denotes such kinds of actions, at least explicitly in Puma, Bantawa and Yamphu. More description and analysis of *ca* in Puma is found below.

　　In Puma *ca* 'eat' as V2 indicates the literal meaning *eat* but metaphorically the sense is different. The verb *ca* as V2 appears with both transitive and intransitive verbs. However, the conjugation with transitive verbs is quite productive, while it is not productive with intransitive verbs. The *ca* (*ce* in 358a and *co* on 358b) adds generally emphatic meaning, as in:

(358) (a)  *mu-ma*      *dorot=che*      *metdʌŋ*
      do-INF      what=ADD      NEG.EXIST.NPST
      *piss-i-ce-e=ŋi*      *mʌtrʌi*
      speak-3P- HABIT-3P=EMPH   only

      'Nothing to do just to speak.'

  (b)  *hari-lai*   *ram-a*   *majjāgarī*   *lid-i-co-o*
      Hari-DAT   Ram-ERG   nicely      tell-3P-HABIT-PST

      'Hari told Ram directly.'

The verb *ca* 'eat' appears in V2 slot to show a profession/job of an entity with certain verbs in which the telic verb *ca* appears with lexical meaning 'eat' rather than telic meaning. We can argue that it is a related sense to habitually, as his profession means he does it regularly, as in the following:

(359) (a)  *mʌnna-ci-lai*   *ṭom-a*   *ḍher-i-co-o*
      Man-NS-DAT      Tom-ERG   beat-3P-HABIT-PST

      'Tom beats people (for a living) (Intended: 'Tom (professionally) beats people (for a living).'

  (b)  *mʌnna-ci-lai*   *ṭom-a*   *ḍher-i*
      Man-NS-DAT      Tom-ERG   beat-3P

      'Tom beats people.'

The intended meaning in (359a) is that Tom gets money from a gangster job such as beating people. He survives on what wages he gets from it. Generally V2 adds additional meaning to V1 and the lexical meaning of V1 can be fulfilled without using V2. However, in (359b) if we use just main verb *ḍher* 'beat', the lexical meaning is distinct from (359a) where we have no information about Tom except his action. When the verb *ca* 'eat' as V2 appears with the V1 *ḍher* 'beat', as in (359a) it provides us new information about Tom's business. In fact, such expressions are not entailments, but are implicatures.

(360)  (a)  *john-a*   *mobāil*   *khus-i-co-o*
      John-ERG   mobile      steal-3P-HABIT-PST

      'John steals mobiles.' (Intended: 'John eats by stealing mobiles.')

  (b)  *john-a*   *mobāil*   *khus-i*
      John-ERG   mobile      steal-3P

      'John steals mobiles.'

The intended meaning in (360a) is that John's job is stealing mobiles and he earns money by selling these mobiles to others. His profession is pick pocketing. In (360b) if

we use just main verb *khus* 'steal', the lexical meaning is distinct from (360a) where we know nothing about John, whether he does it professionally or not and what job he has. When *ca* 'eat' appears as V2 with main verb *khus* 'steal', as in (360a), it does add not only additional meaning but also distinct meaning from where we can have knowledge of John's work. Among Tibeto-Burman languages, the auto benefactive use of *eat* is attested in other neighbouring Kiranti languages, Athpare (Ebert 1997a) and Bantawa (Rai 1985) where normal benefactive use occurs with *give*-type verb. In contrast, in Puma uses of *eat* as a V2 is habitual. The verb *ca* 'eat' has an irregular conjugation.

### 5.13.2 The reflexive *cen*

The verb *cenma* denotes the meaning as **'**cut to pieces or tear' whereas its V2 meaning is reflexive. Unlike other Kiranti languages, it is a very interesting feature of Puma that V1 can be used as a reflexive form (V2) (Balthasar Bickel, p.c.) (see Section 6.6.1 for detail). It occurs with both intransitive and transitive verbs.

(361) (a)   *ŋa*       *khula*    *koŋ-ya*       *mas-oŋ-cen-oŋ*
          1SG.ABS   forest    inside-LEVEL   lose-1SG.S/P.PST-REFL-1SG.S/P.PST

          'I was lost in the forest.' (Sharma 2006: 7)

     (b)   *coŋdhoŋcoŋma-bo*      *kʌ-tit-ci*        *hut-i-ci*
          Congdhongcongma-GEN   3SG.POSS-cloth-NS   put.off-3P-3NS.P
          *ki=ni*         *pʌŋ*      *chuppu-i*
          CONN=REP      CONN    tool.to.thrash.grain-DOWN.LOC
          *thuks-a-cen-a=ni*
          upside.down-PST-REFL-PST=REP

          'He took off Congdhongcongma's clothes and put her head upside down into the *Chuppu*[45].' (folk_tale_01:138)

### 5.13.3 The telic *dha*

*Dha* 'fall down' as V2 also retains its V1 meaning indicating downward movement. This verb only occurs intransitively and the CV is segmentable.

(362) (a)   *tʌkku*    *khim-dhuŋ-di=ku*      *wʌk*     *bhuks-a-dha-a*
          DEM      house-up-UP.LOC=NMLZ   farm     destroy-PST-TEL-PST

          'That farm which is above the house destroyed.'

     (b)   *luŋwa*    *dha-a*
          stone.ABS   fall-PST

          'The stone fell down.'

---

[45] A mortar in which rice is husked.

### 5.13.4 The telic *dhas*

*Dhas* 'bring down, drop down' as V2 also retains its V1 meaning indicating downward movement. *Dhas* only appears in transitive use. It cannot occur intransitively. Consider examples in the following:

(363) (a)  *khokku-a    luŋwa              lips-i-dhas-i*
         3SG-ERG    stone.ABS        turn.upside.down-3P-TEL-3P

         'He turned over the stone.'

    (b)  *ŋa-a        khuksi-bo   kʌ-hə̃ga          khokd-u-ŋ-dhas-u-ŋ*
        1SG-ERG    tree-GEN    3SG.POSS-branch    cut-3P-1SG.A-TEL-3P-1SG.A

        'I cut and dropped the branch of the *khuksi* tree.'

The telic verb *dhas* provides additional meaning in (363b) where the agent not only cut the branch of tree but also dropped down from the tree. This bipartite *khokmadhanma* 'cut and drop' is segmentable into main verbs *cut* and *drop*. However, there is no information on whether the agent only just cut the branch or that it also dropped down. It also lacks the information whether the agent cut the branch from the fallen tree or live tree, as in:

(364)  *ŋa-a        khuksi-bo      kʌ-hə̃gā            khokd-u-ŋ*
      1SG-ERG    tree-GEN      3SG.POSS-branch      cut-3P-1SG.A

      'I cut off the branch of the *khuksi*[46] (tree).'

### 5.13.5 The benefactive *itd*

In Puma, *itd* 'give' as V2  has a benefactive meaning. This compound verb construction is wide spread in the world's languages. Lyons (1968) notes that the benefactive is 'for benefit of someone or something'.

(365)  *cʌkrʌŋdhipma-lai      pʌrʌŋ        capca        masa*
      Cakrangdipma-DAT      TOP          tiger.ABS    bear.ABS
      *dhiwama          ŋanwa        pʌ-cupd-a-itd-a=ni*
      hornet.ABS        bee.ABS      3S/A-pack-PST-BEN-PST=REP

      'They gave a bundle of a tiger, a bear, hornets, and bees to Cakrangdhipma.'
      (folk_tale_01.231)

In (365) while the ditransitive of *itd* denotes 'give', here it has a benifactive meaning. It also occurs with intransitive verbs, as in (366a), however, V2 interestingly controls the verb agreement and the complex verb becomes transitive. What is really interesting here

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[46] Botanical name is *Ficus cunia* and Nepali name is *khasre khanyū*.

is the agreement rather than the tense-marking on both V1 and V2. The regular past marker for third person is -*a* as in (366b) while (366c) is ungrammatical because this regular past marker -*a* is not allowed with a benefactive compound verb. Hence, this is not the V1-V2-agreement but V2-V1-agreement.

(366) (a)  *khokku*      *khapd-i-itd-i*
     3SG.ABS    weep-3P[PST]-BEN-3P[PST]

     'S/he wept.'(Intended: 'S/he wept for somebody/ something.')

  (b)  *khokku*      *khap-a*
     3SG.ABS    weep-PST

     'S/he wept.'

  (c)  **khokku*      *khapd-a-itd-a*
     3SG.ABS    weep-PST-BEN-PST

     'S/he wept.'(Intended: 'S/he wept for somebody/ something.')

The verb *give* may express a more general meaning of affectedness, lending itself to malefactive interpretations, depending on the context, rather than a specifically benefactive meaning. Example (367) shows the malefactive meaning of *itd* in a CV construction.

(367) (a)  *poppy-a*        *kʌphekwa*        *khus-i-itd-i*
     Poppy-ERG      money.ABS      steal-3P-BEN-3P

     'Poppy stole the money (from someone).'

  (b)  *khimhoŋma-a*   *kʌ-burā-lai*                    *set-i-itd-i*
     wife-ERG      3SG.POSS-husband-DAT      kill-3P-BEN-3P

     'The wife killed her husband (for someone).'

However, the malefactive use of benefactive construction seems to be less common. An important observation concerning malefactives is that they are also found in Nepali, an Indo-Aryan language, as in:

(368)      NEPALI

     *nepāl-mā*      *rājā-le*      *janatā-lāī*      *dhokhā*      *di-e*
     Nepal-LOC      king-ERG    people-DAT      cheat      give-PST

     'The king betrayed the people in Nepal.'

Nepali has more malefactive pairs like *mārī dinu* 'kill.BEN', *ḍhaṭī dinu* 'lie.BEN', *corī dinu* 'steal.BEN' and so on. A similar phenomenon is found in Hindi, which has pairs of light verb constructions such as *dhokhā denā* 'cheat.BEN'> 'deceive' / *dhokhā khānā* 'cheat.BEN' > get deceived', in which the light verb 'eat' expresses passive diathesis.

Further illustrations of this use of 'give' in Hindi are for example *mār khānā* 'eat blow'> 'be beaten', *gālī khānā* 'eat insult'> 'be insulted', etc. (cf. Montaut 2004). In languages like Nepali and Hindi, we see the active/passive distinction by the use of *give* as a V2, however the active/passive distinction does not occur in Puma.

**(i) The distribution of *benefactive***

Creissels (2010) notes that the distribution of *benefactive* is extremely common among the verb-final languages of Asia, from Ainu, spoken in Japanese to the east, to Turkish to the west, and Tamil to the south. Benefactive compounds and derived benefactive verb forms originating from the *give* verb are also very common among the languages spoken in this area, while benefactive applicative periphrases of marked lexical verbs, outside this area, are only sporadic.

LaPolla (2003) notes that the grammaticalisation of a benefactive construction is a commonly found development among Tibeto-Burman languages. It takes the form of an auxiliary verb derived from a verb meaning *give*, as in Belhare (-*per*), Camling (*bi*), Tamang (*pín*), Tsangla (*bi*), Jinghpaw (-*ta*), and Lahu (*pî…*). He observes that as can be seen from these examples, the verb used in this construction is often the P[roto]-S[ino]-T[ibetan] verb *\*biy*, but the constructions themselves were innovated. Consider an example from Dolkha Newar, a Tibeto-Burman language spoken on Dolkha, Nepal.

(369)  DOLKHA NEWAR

| *janta* | *lukhā* | *khoŋ-an* | *bi-sin!* |
|---------|---------|-----------|-----------|
| 1SG.DAT | door | open-CVB | give-IMP |

'Open the door for me!' (Genetti 2007)

Creissels (2010) says that benefactive applicative periphrases of marked lexical verbs type occur not only among Tibeto-Burman languages, but also in Ainu, Japanese, Korean, and in languages belonging to the Mongolic, Turkic, Indo-Aryan and Dravidian families. An important observation concerning benefactive is that in (370) and in examples of other languages (see Creissels 2010), the benefactive verb *give* occurs as converb, while it is highly unusual in Puma where it occurs not as a converb but for the benefactive meaning, as in:

(370)  

| *ŋa-lai* | *laptilhoŋ* | *hott-oŋ-itd-oŋ!* |
|----------|-------------|-------------------|
| 1SG-DAT | door.ABS | open-1SG.IMP-give-1SG.IMP |

'Open the door for me!'

However, Alamblak, spoken in Papua New Guinea, has benefactive 'give' constructions identified by Bruce (1984) as verbal compounds (cf. Creissels 2010).

(371)     ALAMBLAK

  *Na    yawyt    yimam    wikna-ha-më-an-m*
  1SG   dog      people   buy-give-R.PST-A1SG-P3PL

  'I bought the dog for the people.'

Quigley (2002: 58–62), as quoted by Creissels (2010), describes benefactive 'give' compounds in Awara (Papuan) and discusses morphological evidence of the distinction between such compounds and biverbal constructions. However, the affix indexing the beneficiary occurs between the two verb roots which is unusual for compounds, and distinct from the Puma compound verb construction.

### 5.13.6 The telic *la*

The main verb *la* 'look for, pluck' as V2 occurs with both intransitive verbs and transitive verbs. It is very productive, in particular, with transitive verbs.

(372) (a)  *ŋa-a        ŋapoŋ-lai      asemʌŋ      bud-u-ŋ-lo-o-ŋ*
           1SG-ERG    priest-DAT     yesterday   call-3P-1SG.A-TEL-PST-1SG.A

  'I called the priest/healer yesterday.'

   (b)  *khokku-bo        kʌ-mesi                ram-e-bo*
        3SG-GEN          3SG.POSS-buffalo      Ram-TEK.GEN-GEN

        *kʌ-mesi-oŋ                  bet-i-lo-o*
        3SG.POSS-buffalo-COM₁       exchange-3P-TEL-PST

  'He and Ram exchanged their buffaloes.'

   (c)  *mona         lam-do            ips-a-lo-o*
        Mona.ABS     road-GEN.LOC      sleep-PST-TEL-PST

  'Mona slept on the road.'

### 5.13.7 The telic *kess*

The verb *kess* **'**throw away' as V2 meaning also denotes 'throw away' as in V1. *kess* occurs as V2 with a transitive verb in the V1 position.

(373) (a)  *pʌŋ        kʌ-roŋ          thok-kes-a=ni*
           CONN       3SG.POSS-rice   pour-TEL-PST= REP

  'And his rice spilled.' (folk_tale_01:137)

   (b)  *ʌkku        uŋ-ṭopī         he*
        DEM         1SG.POSS-cap    TAG

        *was-u-ŋ-kess-u-ŋ                    rʌichʌ*
        throw.away-3P-1SG.A-TEL-3P-1SG.A    MIR

  'Probably, this is my cap, I threw it away.' (khali_acheta:046)

The telic *kess* also conjugates with the word *mand* to form compound verb *mandkess* 'forget' where it is impossible to separate and both denote 'forget' as V1 and V2 (see Section 5.16).

(374)    *mand-a-kes-a*            *hola*
         forget-PST-forget-PST   INDSV

         'Probably (he) forgot.' (khali_acheta:080)

### 5.13.8 The telic *lond*

When the verb *lond* 'rise, appear' occurs as V2, it has the meaning of 'task of immediately completing something'. It also occurs with both transitive and intransitive verbs, as in:

(375) (a)    *tʌkku*        *cha-lai*            *ŋa-a*          *ɖher-u-ŋ*
             DEM          child-DAT          1SG-ERG     beat-3P-1SG.A
             *tʌna*          *khap-a-lond-a*
             PTCL          cry-PST-TEL-PST

             'That child started crying when I beat him.'

     (b)    *khipa-a*        *tuppasawa-lai*            *war-i-lond-i*
             dog-ERG     wild.cat-DAT            chase-3P-TEL-3P

             'The dog chased the wild cat.'

The verb *lond* occurs with verbs of bodily functions under the category of *psych*-verbs such as *belch*, *breathe*, *excrete*, *fart* and *urinate* (see Section 4.11).

### 5.13.9  The telic *lokk*

When *lokk* 'hold' occurs as V2 it has the meaning of immediate completion of something and occurs with both transitive and intransitive verbs.

(376) (a)    *haknuŋwa-a*        *si-ma-lok-ma-ŋa*                *lis-a*
             hot-ERG          die-INF-TEL-INF-EMPH          be-PST
             'Immediately, it was too hot.' (Intended: 'It was hot to die.')

     (b)    *thoroŋcha-ci-a*    *marchha-ci-lai*    *mʌ-khaŋŋ-i-ci*
             boy-NS-ERG          girl-NS-DAT          3PL.S/A-see-3P-DL
             *pʌŋ*          *mʌ-cutt-i-lokk-i-ci*
             CONN          3PL.S/A-tease-3P-TEL-3P-DL

             'The boys immediately tease the girls after they see them.'

     (c)    *melā-do*                 *nʌŋwa*        *tit-ci*        *khaŋŋ-i*
             market-GEN.LOC          new          cloth-NS     see-3P
             *pʌŋ*          *beli-a*         *hud-i-lokk-i-ci*
             CONN          Beli-ERG     buy-3P-TEL-3P-NS

             'Beli immediately buys the new clothes after she sees them.'

The verb *lokk* as V2 also carries a habitual meaning. (376b) and (376c) semantically provide old or shared information, as actions are habitual. The boys used to tease the girls in the past, and they even tease them in the present. The task of teasing is performed immediately. The use of *lokk* as V2 shows that whenever they see girls, the boys immediately tease them without any delay. Similarly, in (376c) *Beli* has the habit of buying new clothes when they are available in the market. She immediately buys them once she sees them at the market. She is fond of new fashion and she immediately purchases them. However, as can be seen from the above examples in (376b) and (376c), one thing that must be borne in mind is that the telic *lokk* as V2 has a immediate and habitual meaning.

### 5.13.10 The telic *loss*

When the verb *loss* **'take out'** occurs as V2 it has the meaning of 'immediate completion of something'. It also occurs with both intransitive and transitive verbs.

(377) (a)    *pʌŋ*        *na*          *cupd-i-loss-i-ci=ni*
         CONN      PTCL       bundle-3P-TEL-3P-NS=REP

         'Then he immeditely bundled them up.'

      (b)    *thoroŋcha-ci-a*        *marchha-ci-lai*        *mʌ-khaŋŋ-i-ci*
         boy-NS-ERG           girl-NS-DAT          3PL.S/A-see-3P-DL
         *pʌŋ*       *mʌ-cutt-i-loss-i-ci*
         CONN      3PL.S/A-tease-3P-TEL-3P-DL

         'The boys immediately tease the girls after they see them.'

### 5.13.11 The telic *lotd*

The verb *lotd* 'take out' as V2 has the movement meaning 'doing somthing'. It only occurs with transitive verb constructions.

(378) (a)    *tonpʌŋ=na*         *warr-i-lotd-i=ni*
         then.after=PTCL      strike-3P-MOV-3P=REP

         'So she leaps at him.' (folk_tale_01:179)

      (b)    *pat-ma-a*          *puss-i=ni*        *pat-a=ŋa*        *tana=ni*
         shout-INF-ERG       begin-3P=REP    shout-PST=EMPH     PTCL=REP
         *cʌkrʌŋdhipma*       *khups-i-lotd-i=ni*
         witch.ABS          wake.up-3P-MOV-3P=REP
         'He began to shout so much that the witch woke up and came out.'

         (folk_tale_01:176)

      (c)    *ahetmʌŋ*    *en-cha-ci*           *mʌ-pukd-i-lotd-i-ci*
         later       1PL.INCL.POSS-child-NS      3PL.S/A-carry-3P-MOV-3P-NS

         'Later they take away our children (daughters).' (coribiha:40)

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(d) *khokku-a*                *kʌ-sʌŋ-bhārī*                *khur-i-lotd-i*
      3SG-ERG            3SG.POSS-fire.wood-CLF      carry-3P-MOV-3P

      'He carried a bunch of firewood.'

## 5.13.12 The causative *metd*

While the lexical meaning of *metd* is 'do', it has the causative meaning when it occurs as V2. In Puma, it might be interesting that the polar verb (V1) must be in bare form where V1 remains unmarked and only V2 is marked in agreement. V1 doesn't play any role to govern the verb arguments. It is different types of compound verb where it violates the common assumption of equal marking of both V1 and V2. Since third person marker remains unmarked with non-past tense, it seems difficult to show whether V1 *lup* 'touch' in (379b) is marked or not while conjugating with *metd*. So, example (379c) is counterparts of (379b) where the verb is marked.

(379) (a) *coŋdhoŋcoŋma-o*          *ka-cʌkka*
        Congdhongcongma-VOC      2SG.POSS-mother's.younger.brother
        *ka-dikku-ci-lai*                     *sewa-metd-i-ci=ni*
        2SG.POSS-mother's.elder.brother-NS-DAT      greeting-CAUS-3P-NS=REP

        'Congdongcongma, greet your maternal uncles!' (folk_tale_01:151)

    (b) *unni=ni*    *lup-pʌ-met*
        little=REP   touch-3S/A-CAUS

        'They make her touch it a little.' (coribiha.05)

    (c) *unni=ni*    *lup-pʌ-metd-a*
        little=REP   touch-3S/A-CAUS-PST

        'They made her touch it a little.'

    (d) *roji-lai*    *wasup*     *duŋ-metd-i*
        Roji-DAT   local.beer   drink-CAUS-3P[PST]
        'S/he made Roji drink beer.'

## 5.13.13 The reciprocal *mu*

When the verb *mu* 'do' occurs as V2, it has the reciprocal meaning. Example (380a) shows the lexical use of *mu*, while (380b-c) show a reciprocal meaning.

(380) (a) *hai*      *nokkhen*    *mu-ma=cha*    *ma*
        FILLER    debt      do-INF=ADD    FILLER

        'Also to take a loan.' (hopmacham_05.154)

(b) *hai*        *anko=cha*              *mʌlʌ=na*          *māyā*      *pirtī=cha*
    FILLER     1PL.INCL.POSS=ADD     PTCL=EMPH       love        love=ADD
    *pakd-ma*          *pakd-mu-ma*
    offer-INF          offer-RECIP-INF

    'We two love each other.' (hopmacham_05.150)

(c) *keci*            *cet-mu-a-ci*
    1DL.INCL.ABS    beat-RECIP-PST-NS

    'We two fought each other.'

Like causative *metd* above, the polar verb (V1) must remain unmarked and only the V2 is marked.

### 5.13.14 The continuative *ŋess*

When the verb *ŋess* 'keep' occurs as V2, it has the continuative or progressive meaning. It occurs with both transitive verbs and intransitive verbs. However, the vector verb governs agreement, marking CV as transitive in (382a). (382b) is the regular past intransitive clause, while (382c) is ungrammatical because past marker *-a* is prohibited when intransitive verb *rima* 'laugh' conjugates with *ŋess* in the compound verb.

(381)    *tonpʌŋ*      *toŋwama*         *khiwama-ci*        *dok=ŋa*
         then.after   Tongwama.ABS    Khiwama-DL.ABS     loom=EMPH
         *pʌ-mu-a-ŋes-a-ci=ni=ku*
         3S/A-do-PST-CONT-PST-NS=REP=NMLZ

         'Tongwama and Khiwama used to weave.' (folk_tale_01: 07)

(382) (a) *khokku*      *ris-i-ŋes-i*
          3SG.ABS      laugh-3P[PST]-CONT-3P[PST]

          'S/he used to laugh.'

     (b) *khokku*      *ri-a*
         3SG.ABS      laugh-PST

         'S/he laughed.'

     (c) *\*khokku*     *ris-a-ŋes-a*
          3SG.ABS      laugh-PST-CONT-PST

          'S/he used to laugh.'

### 5.13.15 The telic *puks*

The verb *puks* 'go' as V2 has the meaning of 'motion' and occurs with both transitive and intransitive verbs where both V1 and V2 are marked.

(383) (a)   *ŋa-a*      *bakha-i*       *dha-a-puks-a=ku*      *pʌ-ca-nʌŋ*
             1SG-ERG    earth-DOWN.LOC   fall-PST-TEL-PST=NMLZ      NEG-eat-1SG.NEG

             'I do not eat (the banana) that has fallen on to the ground (because it is

             impure).' (folk_tale_01: 084)

      (b)   *pʌʌŋ*       *khur-aŋ=ku*       *mutdhi-a*      *war-i-puks-i=ni*
             CONN       carry-IPFV=NMLZ     ashes-ERG      strike-3P-TEL-3P=REP

             'Then (Hekchakupa) threw the ashes that he was carrying with him at her.'

             (folk_tale_01:102)

## 5.13.16 The telic *pukd*

When the verb *pukd* 'carry, take, bring' occurs as V2, it has the meaning of 'finish' and 'take'. It only occurs with transitive verbs.

(384) (a)   *tana*  *ʌk-le=na*        *cʌkrʌŋdhipma-a*     *dhit-i-pukd-i=ni*
             PTCL one-day=PTCL    Cakrangdhipma-ERG   find-3P-TEL-3P=REP

             'One day, Cakrangdhipma saw (found) him.' (folk_tale_01: 077)

      (b)   *kina*      *tʌkku khu-ma-bo*     *khu-ma*     *cha*     *abo=ni*
             CONN       DEM steal-INF-GEN   steal-INF    child.ABS   FILLER=REP
             *mʌ-khuss-i-pukd-i-ci*         *mʌ-mend-i-ci*
             3PL.S/A-steal-3P-TEL-3P-3NS.P     3PL.S/A-do-3P-3NS.P

             'Then, the girl is captured and wedded.' (coribiha: 42)

## 5.13.17 The desire *si*

The lexical meaning of *si* 'die' and 'want', and as V2 it has the meanings 'feel', 'like' and 'desire'. It occurs with both transitive and intransitive verbs. When *si* denotes a meaning other than 'die', it obligatorily takes a verbal complement. If the verbal complement is suspended, then the meaning appears to be 'die' rather than 'want', 'feel.like' or 'desire'. While in (385a) and (385c), verbal complements (infinitive forms) *sokwama* and *cama* are taken respectively to denote meaning of 'want' or 'desire', in (385b) and (385c), the meaning of *sima* is changed into its usual lexical meaning 'die' as verbal complements are suspended. Note that V1 should be in infinitive form where it also violates the equal-marking of V1 and V2.

(385) (a)   *nan-o*             *ŋa*      *sokwama-si-ŋa-ŋa*
             elder.sister-VOC       1SG.ABS    hunger-feel-1SG.S/P.NPST- IPFV

             'Elder sister, I am hungry.' (folk_tale_01: 013)

(b) *nan-o*        *ŋa*    (**sokwama*)    *si-ŋa-ŋa*
elder.sister-VOC    1SG.ABS    hunger    die-1SG.S/P.NPST-IPFV

'Elder sister, I am dying.'

(c) *ca-ci-ne!*    *ŋa*    *ca-ma-si-ŋa-ŋa*
eat-DL-OPT    1SG.ABS    eat-INF-feel.like-1SG.S/P.NPST-IPFV

'Let us eat! I feel like eating.' (folk_tale_01: 259)

(d) *ca-ci-ne!*    *ŋa*    (**ca-ma*)    *si-ŋa-ŋa.*
eat-DL-OPT    1SG.ABS    eat-INF    die-1SG.S/P.NPST-IPFV

'Let us eat! I am dying.'

When the verb *si* 'die' occurs as V2 to denote the meaning of 'feel', the verbal complement is obligatory and when the verb *si* 'feel' occurs as V2 to denote the meaning of 'die', the verbal complement is restricted. Hence, the behaviour of *si* 'die; want' can be summarised in Table 106.

**Table 106:** *Sima* 'die'; 'want'; 'feel'

| root | | verbal complement |
|---|---|---|
| *sima* 'die' | *sima* 'die' | restricted |
| *sima* 'feel' | *sima* 'feel' | obligatory |

**5.13.18 The telic *tat***

When the verb *tat* 'bring from level' occurs as V2, it has the durative meaning. It only occurs with transitive verbs. Puma has a class of motion verbs *come* vs *go* and *bring* vs *take*, which manifest a deictic opposition. This is frequently characterised as 'motion-towards-speaker' vs 'motion-away-from-speaker', following Talmy (1991), and Wilkins and Hill (1995). The Puma CV construction systematically codes a centripetal movement with *bring*. It occurs usually with those verbs which show centripetal movement. It prohibits conjugating with centrifugal movement verbs.

(386) (a) *en-sumtum-ci-a=ŋa*    *wasup*    *pʌ-duŋ-a-tat-a*
1PL.INCL.POSS-ancestor-NS-ERG=EMPH    liquor.ABS    3S/A-drink-PST-DUR-PST

'Our ancestors started to drink.'

(b) *iskulʌ-ya-ŋkʌŋ*    *ka-nicha-lai*    *titd-i-tat-i*
school-LEVEL-ABL    2SG.POSS-younger.brother-DAT    lead-3P-DUR-3P

'(You) lead your brother from school.'

### 5.13.19 Bound V2s

The Puma CV construction has some V2 roots that never appear in V1 or they cannot occur independently. Most of them have telic meaning, while only *da* denotes completive meaning. All V2 roots are productive as they occur with many verbs. Roots that can appear only in V2 slot are presented in Table 107.

**Table 107:** Bound V2s

| Stem | Lexical meaning | Vector meaning |
|------|-----------------|----------------|
| *-chod* | * | TEL |
| *-da* | * | COMP |
| *-dis* | * | TEL |
| *-land* | * | TEL |
| *-lass* | * | TEL |

### 5.13.20 The telic V2 *-chod*

The bound morpheme *-chod* has a benefactive meaning and also indicates a completive meaning. It also occurs with transitive and intransitive verbs.

(387) (a)  *chemba-dhuŋ-di-ŋkʌŋ=ŋa*          *watd-i-chod-i=ni!*
           Machan-up-UP.LOC-ABL=EMPH       throw-IMP-BEN-IMP=REP

       'And throw it from the *Machan*[47] (for me)!' (folk_tale_01:081)

    (b)  *ka-nicha-lai*               *uŋ-khim-ya-tni*              *chid-i-chod-i!*
           2SG.POSS-brother-DAT  1SG.POSS-house-LEVEL-ALL  send-IMP-BEN-IMP

       'Send your younger brother to my house (for me)!'

### 5.13.21 The perfective *-da*

The vector verb *da* is not attested as a full verb and only occurs as V2 has a meaning of already completed action. It also denotes the momentaneous meaning. van Driem calls it 'relinquitive' aspectiviser, as cited in Ebert (1994: 64). It expresses that the action is done far away and the referent of the patient comes back. This verb *da*  *<da ~ do>* never occurs independently. It indicates that the action expressed by the verb lasts for a short period or the action takes place immediately.

The meaning expressed by this V2 relates to what Tolsma (2006) calls 'momentaneous.' Sometimes, *dama* is glossed in Nepali with equivalents of 'to put'. It is a possible cognate of the Limbu root *<*ta ~ *da>* as in the example below and perhaps of the Proto-Tibeto-Burman **î-da* 'put/place' (Matisoff 2003: 586). *-Da* does

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[47] It is a kind of shelter giving temporary protection from bad weather or danger.

not seem to add any specific aspectual semantics to a verb form that is perfective anyway, but rather emphasises perfectivity of the verbal construction. In (388a), *da* characterises the perfective action of dying whereas (388b) signifies some information is left behind within the clause.

(388) (a)    *khoci-bo    kʌci-mapa-ci=cha    ʌrʌyui=ŋa*
              3PL-GEN    3NS.POSS-parents-NS=ADD    ago=EMPH
              *mʌ-si-a-da=ni=ku*
              3PL.S/A-die-PST-COML=REP=NMLZ

              'Their parents were already dead.' (folk_tale_01: 05)

      (b)    *hen  dem    dumsiwa-ci    dhas-do-m-cʌ-m-ka*
              now  how    talking.matter-NS  drop-COML-1/2PL.A-3NS.P-1/2PL.A-EXCL

              'Now we forgot many worth saying things.' (folk_tale_01: 275)

## 5.13.22 The telic *-dis*

When the root *-dis* only occurs as V2, it has the meaning of completion.

(389) (a)    *tana    mitampuluk    khak-i-dis-i=ni*
              PTCL    burning.firewood    step.on-3P-COMPL-3P=REP

              '(He) stepped on the burning firewood.' (folk_tale_01: 035)

      (b)    *wahut    lis-a=ki    chakd-i-dis-i=ni*
              river.ABS  be-PST=CONN    block-3P-COMPL-3P=REP

              'It turned into the river and blocked her (way).' (folk_tale_01:190)

## 5.13.23 The telic *-land*

The bound root *-land* never occurs independently. When it only occurs V2, it has the meaning of 'drop off and fall off'.

(390) (a)    *pʌŋ=na    hetchakuwa=cha    kʌ-mukwa-do*
              CONN=PTCL    Hetchakuwa=ADD    3SG.POSS-hair-GEN.LOC
              *chi-i=ki    kʌŋd-i-land-i=ni*
              tie-3P[PST]=CONN    hang-3P-TEL-3P=REP

              'Then Hetchakuwa tied it (the banana) into his hair and let it hang down.' (folk_tale_01:087)

      (b)    *ka-tunā-do    chi-i=ki*
              2SG.POSS-lace-GEN.LOC    tie-3P[PST]=CONN
              *kʌŋd-oŋ-land-oŋ!*
              hang-1SG.S/P.IMP-TEL-1SG.S/P.IMP

              'Drop down it by tying it to your lace!' (folk_tale_01:103)

## 5.14 Idiosyncratic types

Puma has some idiosyncratic compound verb constructions. Most of them are verbal compounds[48]. As mentioned above, Table 108 summarises productive compound roots and idiosyncratic compound roots of Puma.

**Table 108:** Productive and idiosyncratic compound roots

| Productive CV | | | | Idiosyncratic CV | |
|---|---|---|---|---|---|
| CV | GLOSS | CV | GLOSS | CV | GLOSS |
| *cama* | eat | *-land* | TEL | *coŋma* | worship |
| *cenma* | cut.into.pieces | *lokma* | hold | *dakma* | cover hole |
| *-chod* | TEL | *lonma* | take.out | *domma* | wonder |
| *-da* | TEL | *lotma* | take.out | *-kon* | TEL |
| *-dis* | TEL | *metma* | do | *lima* | be |
| *dhama* | fall down | *muma* | do | *setma* | kill |
| *dhanma* | drop down | *puŋma* | go | *tama* | come |
| *itma* | give | *pukma* | carry | *tanma* | fell |
| *kenma* | throw away | *sima* | die | *tema* | put |
| *lama* | search | *tatma* | bring | *waŋma* | enter |

## 5.15 Nominal (stem) compounds

Compound roots which can appear only in V1 slot, are presented in Table 98. CV formation in Puma is illustrated in Table 101 where both lexical meaning and vector meaning of the same root are given. It is interesting to notice that these compound verbs are segmentable into two parts for certain morphological operations. The meaning of many compound verb constructions is not predictable from V1 and V2, while a few compound verb constructions bear partial lexical meaning of either V1 or V2. The formation of this kind of CV construction is from either V+V or N+V. The N-V compound constructions do not show uniformity in morphology. The noun can be a monosyllabic or disyllabic stem which restricts any kind of inflectional morphology on noun parts. Only the verb part hosts inflectional morphology, as in:

(391) (a)　*khokku-a　ŋa-lai　　hewa-pʌ-letd-oŋ*
　　　　　3SG-ERG　1SG-DAT　mock-3S/A-mock-1SG.S/P.PST

　　　　'He mocked me.'

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[48] These idiosyncratic compound verbs are *coks* 'peak; worship', *dak* 'covered hole', *domt* 'wonder', *li* 'be', *set* 'shoot with a pellet-bow', *ta* 'be alive', *tas* 'uproot and fell', *te* 'bring', *waks* 'get in; climb'. The only bound V2 *-kon* denotes the ability to do something.

(b) *khʌnna-a  khokku-oŋ        ya-tʌ-yokd-i*
    2SG-ERG    3SG-COM₁         discuss-2-discuss-3P

    'You discussed with her.'

Most of the psych-verbs which are possessive experiencer verbs, such as *sukhalima* 'love', *mesuŋketma* 'get angry' *chepalonma* 'urinate' belong to this type of CV construction. These psych-verbs are distinct from regular (usual) verb agreement as they employ a possessive construction in Kiranti languages (see Section 4.11). As the scope of this dissertation is not a dictionary, we only summarise an overview of nominal compounds.

## *5.16    Lexical compounds*

Puma has two kinds of lexical compounds: segmentable and unsegmentable. However, they have a common feature that the meaning of the compound verb is distinct from V1 and V2. The meaning of the CV cannot be predicted from the lexical meaning of a word which occurs in the V1 slot and a word which occurs in the V2 slot. Lexical compounds are different from other CV compounds, in particular, in their productivity. Lexical compounds are limited, compared to other verbal compounds. The lexical meaning of CV is distinct from V1 and V2. However, we present only an overview of lexical compounds of Puma. An overview of CV constructions and nominal and lexical compounds are presented in Tables (109-110) and (111-112), respectively.

**Table 109:** An overview summary of compound verb constructions I

| ROOTS | GLOSS | SEMANTICS | TRANSITIVITY | NEXUS TYPES | NOTES |
|---|---|---|---|---|---|
| *cama* | eat | HABITUAL | $V_{INTRA}$, $V_{TRA}$ | V1-P-V2-P | |
| *cenma* | cut into pieces | REFLEXIVE | $V_{INTRA}$, $V_{TRA}$ | V1-P-V2-P | |
| *-chod* | TEL | TELICITY | $V_{INTRA}$, $V_{TRA}$ | V1-P-V2-P | |
| *coŋma* | peak | TELICITY | $V_{INTRA}$ | V-V-P | only 2 verbs as v1 |
| *-da* | TEL | PERFECTIVE | $V_{INTRA}$, $V_{TRA}$ | V1-P-V2-P | |
| *dakma* | close hole | TELICITY | $V_{INTRA}$, $V_{TRA}$ | V1-P-V2-P | not productive |
| *-dis* | TEL | COMPLETIVE | $V_{INTRA}$, $V_{TRA}$ | V1-P-V2-P | |
| *dhama* | fall down | MOVEMENT | $V_{INTRA}$ | V1-P-V2-P | |
| *dhanma* | drop down | MOVEMENT | $V_{TRA}$ | V1-P-V2-P | |
| *domma* | wonder | TELICITY | $V_{INTRA}$ | V-V-P | not productive |
| *itma* | give | BENEFACTIVE | $V_{INTRA}$, $V_{TRA}$ | V1-P-V2-P | |
| *-kon* | TEL | TELICITY | $V_{TRA}$ | V1-P-V2-P | not productive |
| *kenma* | throw away | TELICITY | $V_{TRA}$ | V1-P-V2-P | |
| *lama* | search | TELICITY | $V_{INTRA}$, $V_{TRA}$ | V1-P-V2-P | |
| *lima* | be | TELICITY | $V_{INTRA}$ | V1-P-V2-P | not productive |
| *lonma* | appear | COMPLETION | $V_{INTRA}$, $V_{TRA}$ | V1-P-V2-P | |

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**Table 110:** An overview summary of compound verb constructions II

| ROOTS | GLOSS | SEMANTICS | TRANSITIVITY | NEXUS TYPES | NOTES |
|-------|-------|-----------|--------------|-------------|-------|
| *lokma* | hold | IMMEDIATE COMPLETION | V$_{INTRA}$, V$_{TRA}$ | V1-P-V2-P | |
| *lonma* | take out | TELICITY | V$_{INTRA}$, V$_{TRA}$ | V1-P-V2-P | |
| *lotma* | take out | MOVEMENT | V$_{TRA}$ | V1-P-V2-P | |
| *-land* | TEL | MOVEMENT | V$_{TRA}$ | V1-P-V2-P | |
| *metma* | do | CAUSATIVE | V$_{INTRA}$, V$_{TRA}$ | V1-P-V2-P | V1 unmarked |
| *muma* | do | RECIPROCAL | V$_{INTRA}$, V$_{TRA}$ | V1-P-V2-P | |
| *ŋenma* | keep | CONTINUATIVE | V$_{INTRA}$, V$_{TRA}$ | V1-P-V2-P | |
| *puŋma* | go | CENTRIFUGUAL MOTION | V$_{INTRA}$, V$_{TRA}$ | V1-P-V2-P | V-V-P with v$_{TRA}$ |
| *pukma* | carry | COMPLETION | V$_{TRA}$ | V1-P-V2-P | |
| *sima* | die | DESIRE | V$_{INTRA}$, V$_{TRA}$ | V1-P-V2-P | V1 always infinitival |
| *setma* | kill | SHOOT | V$_{TRA}$ | V-V-P | only 1 verb as V1 |
| *tama* | come | TELICITY | V$_{TRA}$ | V1-P-V2-P | only 1 verb as V1 |
| *tatma* | bring | DURATIVE; CENTRIPITAL | V$_{TRA}$ | V1-P-V2-P | prohibits centrifugal |
| *tanma* | fell | TELICITY | V$_{TRA}$ | V1-P-V2-P | only 1 verb as V1 |
| *tema* | put | TELICITY | V$_{TRA}$ | V1-P-V2-P | only 1 verb as V1 |
| *waŋma* | enter | TELICITY | V$_{TRA}$ | V1-P-V2-P | only 1 verb as V1 |

**Table 111:** Nominal (stem) compounds

| STEM COMPOUNDS | GLOSS | ROOT1 | GLOSS | ROOT2 | GLOSS |
|---|---|---|---|---|---|
| *calamma* | harvest | *ca* | eat | *lam* | search |
| *chamuma* | babysit | *cha* | child | *mu* | do |
| *cʌnʌŋkhutma* | think evil | *cʌnʌŋ* | sin | *khut* | think |
| *hewaletma* | ridicule | *hewa* | ridicule | *letd* | release |
| *khoŋnima* | be good | *khoŋ* | stomach | *ni* | good |
| *khoŋinma* | be bad | *khoŋ* | *khoŋ* | *is* | be bad |
| *khʌliphenma* | worship | *khʌli* | ancestor | *phend* | worship |
| *khawayoŋma* | refrain | *khawa* | money | *yoŋ* | refrain |
| *koŋrʌkma* | jealous | *koŋ* | mind | *rʌk* | twist |
| *nʌŋkhepma* | hunt | *nʌŋ* | mind | *khepd* | attach |
| *nʌŋchima* | jealous | *nʌŋ* | mind | *chitd* | be congested |
| *nʌŋpuma* | hate | *nʌŋ* | mind | *pudh* | boil |
| *namyuŋma* | exist | *nam* | sun | *yuŋ* | sit |
| *nampima* | be late | *nam* | sun | *pis* | speak |
| *payananma* | rest | *paya* | ?[49] | *nant* | rest |
| *somtukma* | love | *som* | heart | *tukd* | hurt |
| *wacakma* | shower | *wa* | water | *cakd* | send ritual gift |
| *walʌkma* | swim | *wa* | water | *lʌk* | try |
| *wahopma* | soak | *wa* | water | *hops* | make drink |
| *walenma* | flow | *wa* | water | *lend* | flow |
| *wathepma* | float | *wa* | water | *theps* | float |
| *watepma* | exaggerate | *wa* | water | *tepd* | add |

**Table 112:** Lexical compounds

| lexical compounds | | root1 | | root2 | | note |
|---|---|---|---|---|---|---|
| *khenmawanma* | get hurt | *khen* | hurt | *was* | hit | segmentable |
| *khontama* | revive | *khont* | faint | *ta* | come | segmentable |
| *manmakenma* | forget | *mand* | finish | *kess* | throw | segmentable |
| *nampaŋma* | be late | *nam* | sun | *paks* | late | segmentable |
| *pompabhakma* | crawl | | | | | not segmentable |
| *tayatonma* | remove | | | | | not segmentable |
| *walulʌŋma* | sprinkle | | | | | not segmentable |

## 5.17 Compound verb formation

'Root + Root' compound is the most common in Puma where roots appear in both V1 slot and V2 slot. The compound verb formation is presented in Table 113.

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[49] This is not attested in Puma.

**Table 113:** Compound verb formation

| Compound | Gloss | Root 1 | Gloss | Root 2 | Gloss |
|---|---|---|---|---|---|
| *caitd* | eat | *ca* | eat | *itd* | give |
| *cetdhmu* | hit | *cetdh* | hit | *mu* | reciprocal |
| *copsi* | see | *cop* | see | *si* | desire |
| *cutŋess* | tease | *cut* | tease | *ŋess* | keep |
| *chapdkess* | write | *chapd* | write | *kess* | throw |
| *dhiscen* | slip | *dhis* | slip | *cen* | reflexive |
| *hudlok* | buy | *hud* | buy | *lokk* | hold |
| *kʌŋdland* | drop | *kʌŋd* | hang on | *land* | drop |
| *khaŋpuks* | see | *khaŋ* | see | *puks* | go |
| *khaplond* | weep | *khap* | weep | *lond* | appear |
| *khipdca* | eat | *khipd* | read | *ca* | eat |
| *lokkdhas* | drop | *lokk* | hold | *dhas* | drop |
| *mutat* | do | *mu* | do | *tat* | bring |
| *ŋipukd* | cook | *ŋi* | cook | *pukd* | carry |
| *pʌpdchotd* | kiss | *pʌpd* | kiss | *chotd* | TEL |
| *tuppda* | meet | *tupp* | meet | *da* | TEL |

The noun + root compound is also productive in Puma. They usually appear only in N slot, which are presented in Table 114.

**Table 114:** Noun-verb compounds

| Compound | Gloss | N | Gloss | Root | Gloss |
|---|---|---|---|---|---|
| *chamu* | take care | *cha* | child | *mu* | do |
| *somason* | breathe | *soma* | breathe | *son* | breathe |
| *somtukd* | love | *som* | mind | *tukd* | hurt |
| *watepd* | exaggerate | *wa* | water | *tepd* | put |

The data and analysis of CV constructions in Puma, as listed and discussed above, show various CV constructions. The analysis of CV can be discussed in different ways and can be extended across Kiranti languages. CV in the sense discussed here are a defining feature of Kiranti languages, though there is some morphological variation among Kiranti languages.

## 5.18   Logical possibilities of V1- V2 compounds

A concatenation of two verbs (V1 and V2) in Puma compound verb constructions reveals four logical possibilities, as in Marathi (Pardeshi 2001), which are listed as:

(392) (a)    Both V1 and V2 function as semantic heads (cf. 378)

   (b)    Only V1 functions as a semantic head and V2 modifies the meaning

expressed by V1 (cf. 336)

(c)     Only V2 functions as a semantic head and V1 modifies the meaning
        expressed by V2 (cf. 362)

(d)     Neither V1 nor V2 serves as semantic head, but the meaning expressed
        by the composition is idiosyncratic with the CV like *mandkess* 'forget'.

(393)     *ŋa-a*        *kho-lai*      *mand-u-ŋ-kess-u-ŋ*
          1SG-ERG       3SG-DAT        forget-3P-1SG.A-forget-3P-1SG.A
          'I forget her.'

## 5.19   *Compound verbs and agreement*

Verbal agreement system in a CV construction is relevant for the Puma language, as it is classified as the split 'ergative-absolutive' type (see Sections 3.8.1 and 6.4.1). As discussed above, a complex predicate is formed with the combination of V1 and V2 to form a single finite form. In a Puma CV construction, V1 and V2 employ a mixed type of inflectional morphology. As already discussed above, V1 appears in a bare root form and only V2 is inflected to express meaning of causativisation, while both V1 and V2 are inflected for tense, person, and agreement. In contrast, V1 mostly occurs in root form that generally does not bear inflectional morphology, and V2 contains the core meaning of the compound verb construction in Indo-Aryan languages such as Nepali (Pokharel 1991; Das 2006).

The Kiranti pattern of inflection differs from Indo-Aryan inflection, where the whole inflectional morphology applies only to V2. In other words, the semantics of the compound verb is derived from the main or polar verb in both Kiranti languages and Indo-Aryan languages. The second verb of the sequence is very often termed a 'vector verb' (V2) and is semantically delexicalised or grammaticalised (Das 2006). This V2 does not retain its lexical meaning and functions as a modifier, while some scholars treat this V2 as an auxiliary verb. However, we find in Kiranti languages that such a generalisation has exceptions.

As V2 plays an important role in explicating the meaning of V1, particularly the entire meaning of compound verb constructions across Kiranti languages, we think the treatment of V2 as an auxiliary verb is not possible, at least in Puma. Consider examples to observe the semantics of V2, inflectional morphology of V1 and V2, and transitive and intransitive conjugation.

(394) (a)  INTRANSITIVE + INTRANSITIVE *simadama* 'die'

       *khoci-bo*         *kʌci-mapa-ci=cha*        *ʌrʌyui=ŋa*

       3PL-GEN         3NS.POSS-parents-NS=ADD   ago=EMPH

       *mʌ-si-a-da=ni=ku*

       3PL.S/A-die-PST-TEL=REP=NMLZ

       'Their parents had already died.' (cf. 371a)

(b)  TRANSITIVE + TRANSITIVE *metmaitma* 'do'

       *roŋ*      *metd-oŋ-itd-oŋ=nʌŋ!*        *lid-i=ni*

       rice      do-1SG.P.IMP give-1SG.P.IMP=PTCL   tell-3P=REP

       'Cook the rice for me!', he said.'

(c)  INTRANSITIVE + TRANSITIVE *thokmakenma* 'spill'

       *pʌŋ*     *kʌ-roŋ*      *thokd-kess-a=ni*

       CONN    3SG.POSS-rice   pour-TEL-PST=REP

       'And his rice spilled.'

(d)  TRANSITIVE + INTRANSITIVE *ŋenmadama* 'keep'

       *mama-a*     *kʌ-cha-lai*     *ca*     *ŋes-i-do-o*

       mother-ERG  3SG.POSS-child-DAT   food   keep-3P-TEL-3P

       'The mother left food to her child.'

The transitivity status of root *-da* is unknown, as it is not attested as a full verb. It is difficult to categorise *da* whether it belongs to the intransitive or transitive verb class. However, we find that it explicitly shows its contribution to both intransitive and transitive verb classes. It seems that this root is common across Kiranti languages mostly retaining its perfective meaning. It can occur with both transitive and intransitive verbs. V2 usually conveys the same meaning whether it concatenates with transitive V1 or intransitive V1. However, it is interesting to notice that V2 *da* contributes different meaning while conjugating with transitive V1 or intransitive V1. When it appears with intransitive V1, as in (394a), it conveys perfective meaning. When V2 occurs with transitive V1, as in (394d), it expresses 'come' meaning.

In (394b) V2 *metd* occurs with *itd* 'give' to express benefactive meaning. Both verbs host the inflectional morphology. It is not clear whether V2 is just lexicalised or adds additional meaning other than causativisation. We see that the meaning of the compound verb construction frequently can be changed by a single verb. Hence, when V2 is combined with V1, V1 retains its lexical meaning and V2 simply adds additional meaning to a compound verb construction or modifies the meaning of V1, and usually V2 does not retain its lexical meaning.

Note that the meaning of causativisation cannot be replaced by a single verb

unless there is a lexical causativisation. It is not possible to replace the meaning of morphological causativisation by a single verb, as in (395). We argue here that V2 serves as a causativiser and reciprocal, it preserves lexical meaning rather than only a grammatical meaning, though it is not congruent but derivational.

(395)    *sita-lai*    *sunita-a*    *roŋ*    *ca-metd-i*
         Sita-DAT    Sunita-ERG    rice    eat-CAUS-3P

         'Sunita made Sita eat rice.'

In (395), V1 *ca* 'eat' conjugates with V2 *metd* 'do' to form the compound verb construction *camametma* 'make eat', in which V2 contributes meaning of causativisation and V1 also retains its lexical meaning. As a causativiser it also adds an argument and is therefore derivational. We see that both V1 and V2 retain their lexical meaning with respect to causativisation. It is not possible to replace the meaning of compound verb construction *camametma* with a single verb. We, of course, can replace *camametma* with a single verb, as in (396), but that verb *metd* 'do' cannot express meaning of *camametma*.

(396)    *sita-lai*    *sunita-a*    *roŋ*    *metd-i*
         Sita-DAT    Sunita-ERG    rice    make-3P

         'Sunita made rice for Sita.'

The main verb *metd* 'do, make' in (396) still seems to denote benefactive where *Sunita* cooks rice for *Sita*. However, it does not convey the causativisation meaning. It is not possible to retrieve the compound verb meaning of (395), if V2 is omitted from the compound verb, as in (396), however it is possible to omit V2 from the compound verb construction, as V1 can retain its lexical meaning and compound verb meaning as well.

(397)    *pʌŋ=na*    *bucha*    *lips-a=ni*
         CONN=PTCL    clay.pot.ABS    turn.upside.down-PST=REP

         'The cooking clay pot overturned.'

If we compare the compound construction like *lips-a-puks-a=ni* [turn.upside.down-PST-TEL-PST=REP] '(It) overturned' with (397), this is a compound verb construction, while (397) is not. We assume that V2 is omitted from a verbal compounding. V1 in both examples retains its lexical meaning, while it adds some semantics in the compound verb construction. There is not much difference in syntactic meaning even when V2 disappears from a compound verb construction. However, it is not possible in all compound verb constructions omitting V2 and retaining compound verb meaning by V1

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only, as shown above in (382).

## 5.20   Composition of verb sequences

As discussed many times above, two verbs V1 and V2 combine to yield a new meaning in compound verb construction. Puma exhibits four different patterns for verbal sequence in compound verb:

(398) (a)   V1 (transitive) + V2 (transitive) (cf. 380b)

    (b)   V1 (transitive) + V2 (intransitive) (cf. 380d)

    (c)   V1 (intransitive) + V2 (transitive) (cf. 380c)

    (d)   V1 (intransitive) + V2 (intransitive) (cf. 380a)

Note that the predicate *bhuŋmadhama* 'break' (cf. 362a in Section 5.13.3) takes only one argument. It is striking that *break* is a two place predicate which normally takes two arguments. However, when break is conjugated with the intransitive verb *dha* 'fall' to form a compound verb construction *bhuŋmadhama* 'break', *break* is no longer transitive in a compound verb construction.

It is highly unusual that V1 is inflected intransitively and it seems that V2 governs the inflectional morphology. Hence, V1 *break* also is inflected as V2 *dha* is inflected. Both transitive V1 and intransitive V2 equally and intransitively bear the inflectional morphology. It seems that it is the characteristics of compound verb that if a vector verb (V2) is an intransitive verb, a compound verb construction turns out to be an intransitive and functions as complex intransitive construction. It is interesting that such kinds of characteristics are found in Indo-Aryan languages like Nepali and Hindi. Consider examples from Nepali and Hindi below and observe the same characteristics as in Kiranti language Puma.

(399)      NEPALI

| *hāmī* | *dherai* | *kām* | *gar-ī* | *ā-ye-ũ* |
|---|---|---|---|---|
| 1PL-NOM | much | work | do-PST | come-PST-1PL |

      'We came doing a lot of work.'

(400)      HINDI

| *nilu* | | *sārā čāval* | *khā* | *ga-yi* |
|---|---|---|---|---|
| Nilu-3FEM.SG-NOM | all | rice-MASC-ACC | eat.V1 | go.V2-PERF.MASC |

      'Nilu ate all the rice.' (Das 2006: 6)

As we pointed out above, if V2 in the compound verb construction is intransitive, the whole compound verb construction functions as an intransitive verb phrase, as in (399)

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in Nepali and (400) in Hindi. Nepali morphology does not allow an ergative case *-le* with an intransitive verb. Likewise, Hindi morphology does not allow an ergative case *-ne* to be suffixed with an intransitive verb. We see that V2 in these examples agrees with its subject NP. Perhaps it is interesting to note here that ± transitivity of the compound verbs depends upon the ± transitivity of vector verb (V2). However, we notice above that there are also anomalous compound verb constructions in Puma.

In V1 (intransitive) + V2 (transitive) constructions, the complex predicate like *rimaŋenma* 'keep laugh' (cf. 382) takes one argument as in the standard agreement pattern. The S argument bears the absolutive. As we pointed out above, if V2 in the compound verb construction is transitive, the whole compound verb construction functions as transitive verb phrase. Puma morphology prohibits intransitive past marker *-a* with an intransitive verb *rima* 'laugh'. We see that the vector verb (V2) *ŋenma* 'keep' controls and governs the inflectional morphology. It is striking that as we noted above, V2 governs the inflectional morphology and even intransitive verbs receive transitive inflectional morphology. In contrast, the overall scenario of inflectional morphology is twisted and deviates from the generalisation of hosting inflectional morphology according to vector verb (V2) not as polar verb (V1).

(401)　　*gopal*　　*ropd-a-ŋa*　　*koina*　　*ai*　　*si-a-lok-a*
　　　　　Gopal　　be.ill-PST-IPFV　but　　today　die-PST-TEL-PST
　　　　　'Gopal was ill but today he died.'

V1 *sima* 'die' governs the inflectional morphology as transitive *lokk* 'hold' bears the intransitive inflection. It must be noted that the polar verb (V1) is intransitive and it turns the whole compound verb construction into an intransitive one. With *sima* 'die', the generalisation will be that if *sima* 'die' is a polar verb in the compound verb construction, the whole compound verb construction functions as an intransitive verb phrase and V1 governs the inflectional morphology.

In V1 (intransitive) + V2 (intransitive) constructions, both V1 and V2 equally host the inflectional morphology. The whole compound verb construction functions as an intransitive verb phrases, as both V1 and V2 are intransitive. Since both polar verbs and vectors verbs belong to intransitive verb classes and both of them host inflectional morphology, we find no confrontation in agreement pattern. It is common in the Kiranti languages that psych-verbs such as 'be hungry', 'feel headache', 'like', 'fear', which display the possessive experiencer construction (see section 4.11) usually occur in

imperfective inflectional morphology.

(402)   *ŋa*   *besarī*   *pat-si-ŋa-ŋa*
    1SG.ABS   loudly   cry-feel-1SG.S/P.NPST-IPFV

    'I want to cry loudly.' (Intended: 'I am feeling to cry loudly.')

On agreement patterns in compound verb construction, we note that the polar verbs usually play a crucial role in deciding the thematic roles, valency and the inflectional morphology of the whole compound verb constructions. They decide the semantics (±transitivity) of the whole compound verb constructions, and also decide whether the subject NP can occur with an overt case marker or not. Note that *besarī* 'loudly' is a loan from Nepali, which means both 'loudly' and 'a great deal' in Nepali.

It is interesting to notice that even if the vector verb (V2) gets semantically de-lexicalised or grammaticalised, it explicates the meaning of polar verb (V1) and it also decides whether the co-occurrence of a sequence is a compound verb construction or not. Nevertheless, there are some 'anomalous intransitive' verbs in Puma, as in Comrie (1973)'s term in which intransitive V1 decides the inflectional morphology and even transitive V2 triggers intransitively and bears an intransitive inflection which is contradiction of default transitive agreement pattern. If V2 inflects transitively in the inflection, the whole compound verb construction turns out to be ungrammatical.

## 5.21   *Syntactic constraint on verbal compounds*

From the examples discussed above, we can readily see that compound verbs as complex predicates constitute verbs in congruent forms. However, as the compound verbs are the head of a single clause which expresses a simplex verb, there are syntactic constraints. Doornenbal (2009: 251) summarises some formal properties in Bantawa, a neighbouring language of Puma, of the compound verb construction which are:

(403) (a)   there are no suffixes on V1 that are not present on V2;

   (b)   there are no clausal suffixes on V1;

   (c)   there are no prefixes on V2;

   (d)   there is agreement of valence: if V1 is transitive, then so is V2.

As can be seen from (403) there is no unique morphology between V1 and V2. Various types of morphological operations can be found. Doornenbal (2009) writes that V1 is not the head of a subordinated clause and is not nominalised, unless the vector verb is also marked in the same way. This corresponds to the monoclausal constraint on serial

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verb constructions.

Aikhenvald and Dixon (2006) say that there ought to be 'no syntactic linkage.' The second constraint (403b) can be found in Nepali compound verbs and relates to what Pokharel (1991) calls 'transitivity harmony.' In contrast, what Doornenbal (2009) proposes in (403) with respect to the features of compound verbs in Bantawa does not cover the types of compound verb constructions found in Puma.

The property described in (403a) is not true in Puma as only V2 is inflected in tense and person agreement with the causative *met* and the reciprocal *mu* in which there are no suffixes on V1 that are present on V2. Thus, these are different types. In addition, suffix/infix can be inserted between nominal compound ($N_{CV}$ $V_{NML}$) (cf. 351b in Section 5.12). Similarly, the next property (403b) also is not true as if V1 is transitive; it is not necessary for V2 to be transitive. In Puma, some transitive V1 can occur with V2 intransitive, such as *puks* 'go' and *si* 'feel'.

## 5.22    *Properties of Puma compound verbs*

Based on the above morphological and syntactic constraints in Puma, we propose the formal properties of Puma compound verb construction, as in:

(404) (a)    Both V1 and V2 function as semantic heads, if both of them are equally inflected (cf. 363).

(b)    Only V1 functions as a semantic head and V2 modifies the meaning expressed by V1, if V2 appears as benefactive or  momentaneous. (cf. 365 and 388).

(c)    Only V2 functions as a semantic head and V1 modifies the meaning expressed by V2, if V2 refers causativisation or reciprocality (cf. 379 and 380)

(d)    Neither V1 nor V2 serves as semantic head, but the meaning expressed by the composition is idiosyncratic with only two CV constructions (cf. 392d).

### 5.22.1 V1 and V2 as semantic head

Two lexical heads V1 and V2 are concatenated to be formally congruent. They can be easily distinguished from the CV and they are segmentable into two separate parts with their individual lexical meaning (cf. 390b). The CV *wanmakenma* 'throw' has two semantic heads V1 *wanma* and V2 *kenma* which are equally marked for tense and

person.

## 5.22.2 V1 as semantic head and V2 as modifier

Both V1 and V2 are equally inflected in agreement. The only difference is that the V1 retains its lexical meaning, while the V2 does not. The latter rather conveys a grammaticalised meaning in which it loses its lexical meaning, however we assume that in the following examples semantically there is a transfer of possession from the agent to the patient.

(405) (a)  *phulauro*          *ca-ma*      *itd-i=ni*         *kʌ-mokcha-lai*
           ground.pulse.cake  eat-INF      give-3P-REP        3SG.POSS-son-in-law-DAT

           'She gave her son-in-law the ground pulse cake to eat.' (myth_phuraulo:04)

      (b)  *pʌŋ=na*         *piṭho*      *hol=kina=ni*      *metd-i-itd-i=ni*
           CONN=PTCL        flour        mix=CONN=REP       do-3P-TEL-3P=REP

           'And she made it mixing flour for someone.' (myth_phuraulo:043)

(406) (a)  *hanumān-lai*   *rām-a*      *okhto*       *hud-i*      *kinan*      *itd-i*
           Hanuman-DAT     Ram-ERG      medicine      buy-3P      CONN         give-3P

           'Ram bought the medicine and gave it to Hanuman.'

      (b)  *hanumān-lai*   *rām-a*      *okhto*       *hud-i-itd-i*
           Hanuman-DAT     Ram-ERG      medicine      buy-3P-give-3P

           'Ram bought the medicine for Hanuman.'

It should be noted that the V2 *itd* 'give' in above examples retains its lexical meaning with conveying a grammaticalised meaning to do the action for someone else expressed by V1. However, this distinction is not clear always and sometimes it is difficult to draw a line between compound verb construction and serial verb construction.

## 5.22.3 V2 as a semantic head and V1 as modifier

Only V2 is marked for agreement and V1 remains unmarked. However, it is interesting that V1 retains its lexical meaning. This property is only available to causativisation and reciprocality. The distinction of marking is clear-cut when V2 is inflected and V1 is not (cf. 379, 380b).

(407)      *khʌnnanin*       *cet-tʌ-mu-e*
           2PL.ABS           beat-2-RECIP-1/2PL

           'You_PL beat each other.'

When intransitive *puks* 'go' occurs as V2 and V1 position is filled with a transitive verb, as in (408), V1 remains unmarked in bare form and only V2 *puks* 'go' is inflected for tense, number and agreement. V1 is obligatorily in bare form and V2 governs the

verbal agreement, as in:

(408)  *pʌŋ*      *khur-aŋ=ku*       *mutdhi-a*       *war-puks-i=ni*
      CONN       carry-IPFV=NMLZ    ashes-ERG        strike-TEL-3P=REP

      'Then (Hetchakupa) hit her with the ashes he was carrying.'
      (folk_tale_01:102)

Note that it is interesting V2 *puks* 'go' does not retain its lexical meaning in the compound verb construction *warpuks* 'strike' though it functions as a morphological head for inflection in agreement (cf. 383). In contrast, when V2 *puks* 'go' is concatenated with intransitive verbs, both V1 and V2 are marked (cf. 383a).

### 5.22.4 Neither V1 nor V2 as semantic head: idiosyncratic meaning

In Puma there are a few idiomatic compound verb constructions in which neither V1 nor V2 functions as a semantic head, but the CV construction itself functions as a semantic head. It is interesting to notice that both V1 and V2 are equally inflected for tense, person and number. However, their CV construction meaning is totally idiosyncratic, as neither of them retains their lexical meaning after concatenating with each other. The meaning they express is non-compositional. These types of V1 and V2 are lexical compounds (See Section 5.16).

### 5.23   Chapter summary

This chapter investigates compound verb (CV) constructions in Puma. Generally, verbal compounds consist of two verbs. The first is called V1 (pole) (Dasgupta 1977) and the second is called V2 (vector) (Hook 1974; Dasgupta 1977; Bhat 1979). In Kiranti compound verbs both V1 and V2 are inflected for tense and agreement, as are simple verbs. I distinguish between verbal compounds and lexical compounds. Puma is rich in compound verb constructions as it has twenty-two lexical verbs which appear as V2 and five bound V2 (these can appear only in V2 and do not have independent lexical meaning). In addition, Puma has noun-verb compounds. Some verbs resemble compounds but they are not segmentable.

It is difficult to distinguish compound verbs from serial verbs. In compound verb constructions, both V1 and V2 or only V2 is inflected for agreement. V1 appears in a bare root form and only V2 is inflected to express meaning of causativisation, while both V1 and V2 are inflected for agreement in other constructions. The Puma morphology of compound verbs denotes V2 is always inflected.

# Chapter 6

# Grammatical Relations (GR)

## *6.1    Background*

The preceding chapter investigated compound verb constructions in Puma in which multi-verb constructions were discussed, and the verbs that appear in V2 position and some bound V2 roots were identified. This chapter examines grammatical relations of core arguments, particularly subject and object, distinguishing them from semantic roles. The organisation of this chapter is as follows: Section 6.1 gives background on grammatical relations. A cross-linguistic perspective on grammatical relations in languages with ergative morphology is discussed in 6.2. Sections 6.3 to 6.5 look at properties of grammatical relations, coding properties, and behavioural properties, respectively. Section 6.6 presents intra-clausal syntax, while Section 6.7 overviews inter-clausal syntax. Finally, Section 6.8 sums up the chapter.

In the typological linguistic literature, while a significant amount of research has been carried out on grammatical relations, it has been widely assumed by many scholars that grammatical relations are universal, especially with respect to the notions of 'subject' and 'object' which are said to be found in all languages (cf. Dryer 1997). Grammatical relations that are considered as the most basic components of different types of grammars, both traditional and modern, are regarded, either explicitly or implicitly, as universal characteristics that manifest themselves or are realised in particular languages (Dryer 1996, 1997). Subjects and objects are taken to be discrete categories (cf. Perlmutter 1983), prototypes of which are realised in all languages (cf. Dryer 1997). However, the realisation in some languages deviates from the prototypes more than in other languages (Keenan 1976; Comrie 1989; Givón 1995), quoting Schachter (1976), notes that there are a number of scholars who have disputed the view that grammatical relation are universal cross-linguistically (for Tibeto-Burman in particular see La Polla 1990).

The term Grammatical Relation (GR) refers to the relationship contracted between arguments (typically represented by noun phrases) and predicates, such as *subject*, *object* (direct object and indirect object). While the term GR is used sometimes as synonymous to 'grammatical function' (GF) (see Bresnan 2001; Dalrymple 2001),

alternative terms include *syntactic function*s (Chomsky 1981), *syntactic relations* (Van Valin 2005), and *syntactic roles* (Pavey 2010).

While grammatical relations establish relationships between arguments and a predicate, one finds that a given argument can be the subject of a predicate, regardless of its semantic role. Hence, grammatical relations are distinct from semantic relations.

## *6.2    GR in ergative languages: cross-linguistic perspective*

Grammatical relations in languages with ergative morphology and languages with accusative morphology appear to be quite distinct, though a number of scholars have claimed that most morphologically ergative languages are in fact syntactically accusative (cf. Van Valin 1981). Dryer (1996) reports that ergative languages, in particular, syntactically ergative languages like Dyirbal (cf. Dixon 1972; Van Valin 1981), Philippine languages (Schachter 1976, 1977), and Algonquian languages (cf. Rhodes 1976; Dahlstrom 1991; Dryer 1996) have grammatical relations that resemble grammatical relations in European languages in some respects, but not in others.

Van Valin (1981) explores grammatical relations in ergative languages like Archi, a member of the Daghestan language family spoken in the Caucasus in Russia, Enga, a Papuan (non-Austronesian) language spoken in Papua New Guinea, Jacaltec, a Mayan language of Guatemala and Dyirbal, an Australian Aboriginal language spoken in northeast Queensland, and reports that each of these languages differs from the others both in syntactic organisation and the notion of subject.

A number of linguists like Anderson (1976), Comrie (1978), Dixon (1979), Chung (1978), Li and Lang (1979), among others hypothesise that from a syntactic point of view languages with ergative morphology are organised in the same way as languages with accusative morphology, and that the basic syntactic notion of 'subject' has essentially the same reference in both language types. Hence, most morphologically ergative languages are syntactically accusative. I clearly distinguish intra-clausal morphological and syntactic coding from inter-clausal function assignment (so-called 'syntactic ergativity' or 'syntactic accusativity') in the next sub-sections.

In this chapter, I look at the grammatical relations that arguments can have at the clausal level. Besides examining whether there are grammatical relations in Puma or not, I also discuss three major constructions that may affect syntactic status, namely antipassive, case-marking and relativisation. I explore the properties of two major

grammatical relations, SUBJECT and OBJECT. For this, we need to demonstrate that certain linguistic phenomena are best described in terms of 'subject' and 'object'. A number of scholars (Schachter 1977; Foley & Van Valin 1984; Bickel 2007) note that syntactic properties often do not converge on a single set of GRs in a language, as the syntactic status of an NP in a clause may differ in different languages.

The identification of grammatical relations is a fundamental analytic issue. Of the three relations *subject*, *direct object* and *indirect object*, *subject* is considered the most important, as more syntactic phenomena involve subjects than direct objects and indirect objects. Also predicates with an *object* must also take a *subject*, leading to a hierarchy of GRs SUBJ> OBJ> IO. These NP participants subject, direct and indirect object are known as *core arguments* (cf. Kroeger 2007). The subject relation is crucial cross-linguistically as subjects tend to control aspects of syntax in a number of ways, compared with objects, which will be discussed below. However, no single property is shared by all subjects in all languages (Keenan 1976; Tallerman 2007).

Van Valin (2003) notes that there is no single morphosyntatic phenomenon which uniquely and consistently identifies each of the grammatical relations cross-linguistically. The syntactic tests to identify properties of subject and object vary across languages. Nevertheless, there is a set of typical properties of subjects which are likely to be exhibited in every language. However, some scholars disagree, e.g. LaPolla (1990) claims that Chinese has no GRs.

There are many striking similarities among grammatical relations in different languages; however, languages that do have grammatical relations should not necessarily be identical to all other languages, as a grammatical relation identified as the subject in one language might have different properties than the subject in another language. Bickel (2011b) proposes that a particular GR is conditioned by predicate classes, referential properties, clausal properties, and construction types. I attempt to identify GRs in Puma on the basis of language-specific grammatical criteria, and invent labels for them, while considering similarities in behavior to other languages.

Our position is that this task of examining grammatical relations is independent of the process of identifying grammatical relations in Puma, which is a substantive one. The situation in Puma strongly resembles the situation in other Kiranti languages and most, if not all, characteristics of Kiranti languages are directly applicable to Puma.

Puma may be considered representative of the Kiranti language group, as it presents many of the syntactic and morphological features of other Kiranti languages.

## 6.3 Properties of grammatical relations

Identification of grammatical relations is a fundamental analytic issue. Of the four core relations (S, A, P and IO), subject (S/A) is the most important component in a clause, which usually involves more syntactic phenomena, at least in Puma, than direct object and indirect objects, but that may not be true in across languages.

Grammatical relations can be distinguished on the basis of their coding (Van Valin 2003; Andrews 2007) and their behavioural properties (Van Valin 2003). Coding properties are primarily morphological, while behavioural properties are syntactic. In English, there is a variety of coding features in a clause that distinguish A of transitive clauses and S of intransitive clauses from P of transitive clauses, and other grammatical functions such as obliques. In English grammatical relations treat A and S alike and P differently. The following examples are from Andrews (2007: 166):

(409) (a) *He        praise-s        them*
        3SG.NOM   praise-3SG     ACC.PL

      'He praises them.'

    (b) *He        sleep-s*
        3SG.NOM   sleep-3SG

      'He sleeps.'

While many scholars argue that using only traditional morphological criteria (such as case-marking, verb agreement) and constituent order to test for identification of grammatical relations in many languages appears to be unhelpful (cf. Anderson 1976; Van Valin 1981, 2003; Dryer 1996, 1997; Bickel 2011b; Witzlack-Makarevich 2013, among many others), we use morphological criteria (coding properties) (cf. Anderson 1976; Li 1976; Kibrik 1979; Plank 1979; Van Valin 1981; Dryer 1996; 1997; Andrews 2007; Tsunoda 2011, among others) to identify grammatical properties in Puma at first and then move to intra-clausal syntactic criteria, such as reflexivisation, switch reference, and Pro-drop, and inter-clausal syntactic rules, such as relativisation, equi-NP construction, control of zero-anaphora, sequential *kinan*, sequential *pʌʌŋ*, purposive *-si*, conditional *nalo*, adverbial *nʌmmakinan bhʌne*, and simultaneous *paa*.

We need to test with a variety of syntactic criteria, as there is no single consistent

morpho-syntactic phenomenon which cross-linguistically identifies each of the grammatical relations (cf. Van Valin 2003).

## *6.4   Coding properties*

Traditionally, coding properties, such as case-marking, agreement and word order, played a key role for identification of grammatical relations in different languages. These coding features have been used cross-linguistically to test grammatical relations in undescribed languages (cf. Dryer 1996, 1997; Van Valin 2003; Andrews 2007). The feature 'constituent order' is syntactic but one can identify the position of an argument bearing a particular grammatical relation only in languages with a very rigid word order like English. The first and second tests are morphological.

### 6.4.1   Case marking: split subject marking

At first glance it appears that Puma can be described as a morphologically ergative/absolutive language as the S argument of an intransitive clause and the P argument of a transitive clause are marked the same, i.e, absolutive case, while the subject (A) of a transitive clause is marked differently, i.e., ergative case (see Sections 2.26.1 and 3.8.1). The Puma verb agrees with the S argument of intransitive clauses, the A and P arguments of transitive clauses, and the A and G arguments of ditransitive clauses:

(410) (a)  *ŋa*        *puks-oŋ*
          1SG.ABS    go-1SG.S/P.PST

          'I went.'

    (b)  *ŋa-a*       *khim*        *hud-u-ŋ*
          1SG-ERG    house.ABS   buy-3P-1SG.A

          'I bought the house.'

    (c)  *khʌnna-a*  *ŋa-lai*     *kʌphekwa*      *tʌ-itd-oŋ*
          2sg -ERG   1SG-DAT    money.ABS       2-give-1SG.S/P.PST

          'You gave money to me.'

The single argument *ŋa* 'I' of the intransitive verb *puks-* 'go' in (410a) is morphologically unmarked (in absolutive case) and agrees with the verb, triggering the occurrence of the suffix *-oŋ* on the verb. In (410b) *ŋa* 'I' is the agent of the transitive verb *hud-* 'buy' and is inflected with the ergative suffix *-a*, while *khim* 'house', the patient, is unmarked in (410b) and is in the absolutive case. In addition, verb agreement is with both the agent and the patient. Example (410c) shows that agreement is

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unequivocally with arguments A and G. However, the situation is more complex than the picture presented so far. Higher animate patients require the dative case in Puma, not the absolutive, as in the following:

(411)     *ŋa-a*     *khokku-lai*     *khaŋ-u-ŋ*
          1SG-ERG    3SG-DAT     see-3P-1SG.A

          'I saw her.'

In (411) *ŋa* 'I' is the agent of the transitive verb *khaŋ-* 'see' and is inflected with the ergative suffix *-a*, while the patient, *khokku* 's/he', is not marked like an A-argument or an S-argument, but rather with the dative case suffix *-lai*. The semantic role of patient is the same but the morphological coding is different (coding of A with ergative and S with absolutive is invariant). Notice that agreement on the verb however is identical to that of other P, as shown above. We analyse this as variable case-marking of P depending on animacy of the P argument.

### 6.4.2  Verb agreement

Verb agreement, also called 'cross-referencing' (see Andrews 2007) refers to inflection on the verb which depends upon various grammatical properties of clausal arguments, such as person, number, and case. Puma employs cross-reference markers on verbs to encode person and number. Puma exhibits a three-way pattern in verb agreement (with some further differences depending in tense), as in the following:

(412) (a)   *ŋa*       *im-ŋa*
            1SG.ABS   sleep-1SG.S/P.NPST

            'I sleep.'

     (b)   *ŋa*       *ips-oŋ*
            1SG.ABS   sleep-1SG.S/P.PST

            'I slept.'

(413) (a)   *ŋa-a*    *khokku-ci-lai*    *ɖher-u-ŋ-cʌ-ŋ*
            1SG-ERG   3SG-NS-DAT     beat-3P-1SG.A-NS-1SG.A

            'I beat them.'

     (b)   *ŋa-a*    *khokku-ci-lai*    *ɖher-u-u-ŋ-cʌ-ŋ*
            1SG-ERG   3SG-NS-DAT     beat-3P-PST-1SG.A-NS-1SG.A

            'I beat_PST them.'

(414) (a)   *ŋa-lai*    *khokku-a*  *pʌ-ɖhe-ŋa*
            1SG-DAT    3SG-ERG   3S/A-beat-1SG.S/P.NPST

            'He beats me.'

(b)  *ŋa-lai*      *khokku-a*    *pʌ-ɖher-oŋ*
    1SG-DAT     3SG-ERG      3S/A-beat-1SG.S/P.PST

    'He beat me.'

In (412a) *ŋa* 'I' is the single argument of *ips* 'sleep' and triggers a first person non-past agreement suffix *-ŋa* on the verb which cross-references it as the single argument of an intransitive verb (S); example (412b) shows that the verb agrees with S in the past tense via the suffix *-oŋ*. Examples (413) and (414) show that the verb agrees with both agent (A) and the patient (P), where (b) examples are counterparts of (a), expressing past tense. In addition, the verb agrees in number in (413).

Note also in (412) and (414) that the S-argument and the P-argument have the same formal morpheme for agreement, both in past and non-past reference. The S-argument *ŋa* 'I' and P-argument *ŋa-lai* 'I' are cross-referenced with identical agreement suffixes (*-ŋa* in the non-past and *-oŋ* in the past). In addition, it is important to note that in Puma third person singular (3SG) subject of intransitive verbs and agent of transitive verbs are unmarked, or zero-marked), as in:

(415) (a)  *khokku*      *puks-a*
         3SG.ABS     [3SG.S]go-PST

         'S/he went.'

    (b)  *khokku-a*   *khokku-lai*     *khaŋ-i*
         3SG-ERG     3SG-DAT        [3SG.A]see-3P

         'He saw her.'

In example (415) neither S nor A is cross-referenced and hence the verb provides no information about the identity of the NPs. As Andrews (2007) notes, in many languages, it is the case that most clauses have no overt NPs, and this is true in Puma. The cross-reference markers can be used to code anaphoric reference in the absence of NP arguments. The primary function of cross-reference is to perform the function of pronouns in other languages (see Section 4.4.1 for Pro-drop).

It is interesting to note that Puma has dedicated A-marking for third person singular arguments (*pʌ-*), however it is restricted to constructions with first person P-arguments. The more general pattern aligns A with S-marking in the third person (cf. Bickel 2008). This feature of special marking for A with only certain P is common cross-linguistically and called a 'global animacy effect' or the 'great chain of being' (cf. Silverstein 1976). In Puma, we have 'global ergative' agreement marking in that A is

marked just when it is lower in animacy than P (i.e. 3$^{rd}$ person acting on 1$^{st}$ person). Note also that in Puma, pronominal agreement on the verb is controlled by grammatical relations and not the morphological form of the arguments: verbs agree with the subject of intransitive verbs, and the agent and patient of the transitive verbs, regardless of whether they are case-marked as absolutive or ergative or dative.

The verb primarily agrees with both ergative subject and absolutive/dative object in the transitive clause, and it agrees only with the absolutive subject in the intransitive clause. This type of agreement in ergative languages is reported in many Mayan languages (cf. Givón 1997). Thus, verb agreement appears to be helpful for identification of grammatical relations in Puma.

### 6.4.3 Constituent order

Puma does not have a rigid word order but is flexible in regards to the placement of S and the verb, and A and P and the verb, although there is a tendency for S (in the absolutive) and A (in the ergative) to occupy clause-initial position, as in SOV-ordered languages with ergative case-marking such as Basque, Eskimo or Nepali (cf. Givón 1997). However, word order is not grammaticalised in Puma, it tends to follow the pragmatics of topicality rather than the semantics/syntax of transitivity.

Givón (1997) argues that the absolutive subject of an intransitive clause and the ergative subject of a transitive clause are both topical, however Puma shows that any of S, A and P can be clause-initial and topical:

(416) (a)  *wasa*        *ŋa-a*        *sett-u-ŋ*
           bird.ABS     1SG-ERG     kill-3P-1SG.A
           'I killed the bird.'

      (b)  *ŋa-lai*      *khʌnna-a*   *tʌ-chʌk-oŋ*
           1SG-DAT      2SG-ERG      2-pinch-1SG.S/P.PST
           'You pinched me.'

Example (416) shows that the P argument is in clause-initial and topical in both clauses. In (416a) the clause denotes I killed just the bird but not others, like a man or an animal, while example (416b) indicates that you pinched me but not others like John and Mary. Similarly, in (417), the absolutive goal is topical and occupies the clause-initial position; note the alternative orders in examples (417b-e) which are all grammatical:

(417) (a)   *khim*              *ŋa*           *puks-oŋ*
            house.ABS           1SG.ABS        go-1SG.S/P.PST

            'I went house.'

      (b)   *puks-oŋ*    *khim*      *ŋa.*
      (c)   *khim*       *puks-oŋ*   *(ŋa).*
      (d)   *puks-oŋ*    *ŋa*    *khim.*
      (e)   *ŋa*    *khim*  *puks-oŋ.*

Like Nepali and other Kiranti languages, in Puma it is possible to topicalise a verb. Example (417d) illustrates this. Also, the S argument is optional when the goal is presented, as example (417c) shows. Since the verb agrees with the S, omission is possible, which is a form of pro-drop.

In languages with flexible word order like Puma, word order is not relevant for determining grammatical relations. In languages like Spanish and Biblical Hebrew (rigid VO, flexible S), word order is relevant only to the object but not the subject, while in languages like Papago, spoken primarily in southern Arizona (USA) and northern Sonora (Mexico), Walpiri, spoken in Australia, and Ute, spoken in Utah and Colorado (USA), word order is syntactically free and reflects pragmatic factors (cf. Givón 1997). Only in languages like Modern Hebrew that has rigid SVO order, are all three coding properties (word order, case-marking and agreement) relevant to grammatical relations.

In Puma, as mentioned above in (410-415), coding properties like case-marking and verb agreement taken together are very helpful to give a clear indication of grammatical relations. Puma NP-marking assigns ergative case to NPs with A function, absolutive to NPs with S function, absolutive to inaminate NPs with P function, and dative case to animate NPs with P function. Agreement ignores case-marking and encodes each of S, A and P (except for some third persons which do not show agreement).

## 6.5    *Behavioural properties*

Behavioural properties refer to syntactic distributions that uniquely target a specific term like A, S and P in a language; involvement in a given construction can thus be shown to be a property of the particular grammatical relation in that language (cf. Van Valin 2003). While there are no universal behavioural properties of grammatical relations, there are some major syntactic constructions such as EQUI-NP deletion,

raising, reflexivisation, and conjunction formation that allow us to test for GRs cross-linguistically (cf. Anderson 1976).

Behavioural properties contrast between subject and object or between direct and indirect object (Wierzbicka 1981). Givón (1997: 28), quoting Keenan (1976), lists behaviour-and-control properties. However the properties he lists fall into intra-clausal and inter-clausal types. Thus, I divide those properties into two groups to distinguish intra-clausal tests and inter-clausal tests, as in:

(418) (a)    Intra-clausal
             promotion to direct object (passive)
             demotion from direct object (antipassive)
             inversion
             reflexivisation
             causativisation
             possessor ascension
             filler-gap dependencies in WH-constructions
             cleft constructions

      (b)    Inter-clausal
             EQUI-NP construction
             raising
             anaphoric co-reference (sequential, purposive, conditional, simultaneous)
             relativisation

Many syntactic constructions on this list are not equally distributed across languages, as languages like Sherpa, Japanese, Hebrew, Ute (cf. Givón 1997), and Puma exhibit no morphological promotion to direct object. In addition, as in many Kiranti languages, Puma has no passivisation, just anti-passive. Finally, cross-linguistically, serial-verb languages such as Supyire, spoken in southeastern Mali in western Africa; Akan, in Ghana, and Miskitu, spoken in northeastern Nicaragua have no embedded complements, and thus no syntactic difference between equi and zero anaphora (cf. Givón 1997).

Scholars like Anderson (1976) and Comrie (1978) note that in most languages with ergative morphology, behavioural properties identify the same nominative-accusative NPs that are identified by them in languages with nominative-accusative morphology. The ergativity of such languages is thus purely morphological (cf. Dixon 1979).

## 6.6    Intra-clausal syntax

### 6.6.1    Control of reflexivisation

Reflexivisation is a syntactic process used to test grammatical relations cross-linguistically. Languages exhibit different kinds of reflexivisation constructions, with two being relatively common, namely NP-reflexives and verbal reflexives, schematised as (Geniusiene 1987; Lidz 1996; König & Siemund 2011):

(419)(a)    $NP_i$    V    $[NP_i$-SELF]

(b)    $NP_i$    $[V$-REFL$]_{intra}$

Puma reflexivisation involves the reflexive verb *cen* 'self' which must follow the main verb (which is obligatorily detransitivised using the *zero*-detransitivisation construction – see Section 3.17.1) and must be inflected in the same way as is the main verb. Note that unlike other Kiranti languages, the reflexive verb is homophonous with the main verb *cen* 'graze; feed; cut; tear'. It thus appears to be a compound verb construction in Puma, a cross-linguistically unusual means of encoding reflexive:

(420)    $NP_i$    $[_{\emptyset\text{-detra}}V\ _{serial}V]$

Consider these examples:

(421) (a)    *ŋa*    *khaŋ-oŋ*    *cen-oŋ*
1SG.ABS    see-1SG.S/P.PST    REFL-1SG.S/P.PST

'I saw myself.'

(b)    *marcha*    *set-a*    *cend-a*
woman.ABS    kill-PST    REFL-PST

'The woman killed herself'.

Puma reflexive clauses are structurally intransitive:

(422) (a)    TRANSITIVE CLAUSE

*ŋa-a*    *khokku-lai*    *bho-o-ŋ*
1SG-ERG    3SG-DAT    cut-3P-1SG.A

'I cut him.'

(b)    REFLEXIVE CLAUSE

*ŋa*    *bho-oŋ*    *cen-oŋ*
1SG.ABS    cut-1SG.S/P.PST    REFL-1SG.S/P.PST

'I cut myself.'

(423) (a)  TRANSITIVE CLAUSE

　　　　*khokku_i-a*　　　*khokku_j-lai*　　*ɖher-i*
　　　　3SG-ERG　　　　3SG-DAT　　　beat-3P

　　　　'He_i beat him_j.'

　　(b)  REFLEXIVE CLAUSE

　　　　*khokku*　　*ɖher-a*　　*cen-a*
　　　　3SG.ABS　　beat-PST　　REFL-PST

　　　　'He beat himself.'

Puma also has possessive reflexive anaphors. The simple prefixed possessive (see 2.26.3) can refer back to the S argument in an intransitive clause, contrasting with the non-anaphoric use of the genitive possessive construction:

(424) (a)  *ram_i*　　　*kʌ_i-khim-do*　　　　　*yuŋ-a*
　　　　　Ram.ABS　3SG.POSS-house-GEN.LOC　sit-PST

　　　　'Ram_i sat in his_i house.'

　　(b)  *ram_i*　　　*khokku_j-bo*　　*kʌ_j-khim-do*　　　　*yuŋ-a*
　　　　　Ram.ABS　3SG-GEN　　　3SG.POSS-house-GEN.LOC　sit-PST

　　　　'Ram_i sat in his_j house.'

In transitive clauses an anaphoric possessive can only refer back to the A (transitive subject) and never to the P (transitive object) as shown by the following contrast:

(425) (a)  *ram_i-a*　　[*khokku_i-bo*　　*kʌ-dum*]　　　　*hʌri-lai*　*sʌks-i*
　　　　　Ram-ERG　3SG-GEN　　　3SG.POSS(SELF)-talk　Hari-DAT　ask-3P

　　　　'Ram_i asked Hari about himself_i' (Literally: 'Ram asked Hari his own matter'.)

　　(b)  *ram-a*　　[*hʌri -bo*　　*kʌ-dum*]　　　　　　*hʌri-lai*　*sʌks-i*
　　　　　Ram-ERG　Hari-GEN　　3SG.POSS(SELF)-matter　Hari-DAT　ask-3P

　　　　'Ram asked Hari_i about himself_i' (Literally: 'Ram asked Hari_i his_i own matter.')

When an anaphoric possessive needs refer back to the P argument, as in (425b), nominal possessive should be used for distinguishing it from the agent anaphoric reference.

## 6.7　Inter-clausal syntax

Van Valin and LaPolla (1997), quoting Silverstein (1976) and Givón (1980), note that there is a fundamentally iconic relationship between the syntax and semantics of clause linkage. Tsunoda (2011) proposed to classify cross-clausal coreference patterns involving the A, P and S as follows (the formulation X=Y means that the NP with

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grammatical relation X in the first clause is understood as coreferential with the NP with grammatical relation Y in the second linked clause):

(426) (a)  S/P patterns: S=P, P=S

(b)  S/A patterns: S=A, A=S

(c)  Neutral patterns: S=S, A=A, P=P

(d)  Aberrant patterns: A=P, P=A

Syntactic ergativity and accusativity are characterised as follows:

(427) (a)  Ergativity (S/P vs. A) is manifested by:

(i)  S/P patterns (S=P, P=S)

(ii)  neutral patterns (S=S, A=A, P=P)

(b)  Accusativity (S/A vs. P) is manifested by:

(i)  S/A patterns (S=A, A=S)

(ii)  neutral patterns (S=S, A=A, P=P)

In Puma for intra-clausal syntax involving *kinan* 'perfective sequential', *pʌʌŋ* 'sequential', *-si* 'purposive', *nʌmmakinan bhʌne*[50] 'because', and *nalo* 'conditional', the first clause and the second clause can be either transitive or intransitive, independently of each other, so that there are four possibilities:

**Table 115:** Inter-clausal combination

| Clause 1 | Clause 2 |
|---|---|
| intransitive | intransitive |
| intransitive | transitive |
| transitive | intransitive |
| transitive | transitive |

### 6.7.1  Control of relativisation

In Puma, relativisation is a test for grammatical relations since A-arguments, S-arguments and P-arguments are relativised by different strategies. Puma relativises by a pre-head gap strategy and lacks relative pronouns.

The clitic *=ku* serves as a general nominaliser/relativiser for relativisation on S and P (and other grammatical relations) while the prefix *kʌ-* serves as an active participle (ACT.PTCP) (see Chapter 7 for detail) that is used for relativisation on A, and

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[50] In the term *nʌmmakinan bhʌne*, *bhʌne* is a loan from Nepali which is attached to *nʌmmakinan* 'why?' to form a reason connective *nʌmmakinan bhʌne* 'because'. I do not think the whole term *nʌmmakinan bhʌne* is a loan from Nepali *kinabhane*.

optionally for relativisation of S with human reference. This means that relativisation distinguishes between S, A and P, and is neither syntactically ergative-absolutive (treating S/P in one way and A another) nor syntactically nominative-accusative (treating S/A one way and P another). There are no case constraints on relativisation, as NPs in the ergative, absolutive, dative and locative cases can be relativised.

**Table 116:** Relativisation strategy

| GR | Relativisation strategy |
|----|------------------------|
| A | *kʌ*-V |
| S human | *kʌ*-V  or V=*ku* |
| S non-human | V=*ku* |
| P | V=*ku* |

Note that tense can be encoded in V=*ku* relative clauses but not in *kʌ*-V relative clauses. Consider these examples:

(428) (a)   INTRANSITIVE

    *mʌnna*    *puks-a*
    man.ABS    [3SG]go-PST

    'The man went.'

(b)   S REL-CLAUSE

    [*kʌ-puŋ*]$_{rel}$    *mʌnna*
    ACT.PTCP-go    man.ABS

    'The man who goes/went.'

(c)   S REL-CLAUSE

    [*puks-a=ku*]$_{rel}$    *mʌnna*
    go-PST=NMLZ    man.ABS

    'The man who went.'

There are semantic constraints on relativisation with *kʌ*-. The prefix *kʌ*- must occur with verbs whose S has a human NP referent (see Sections 7.7.1 and 7.12), consider ungrammatical examples with a non-human head:

(429) (a)   INTRANSITIVE CLAUSE
    *munima*    *si-a*
    cat.ABS    die-PST

    'The cat died.'

(b)   *S REL-CLAUSE₁
    *[*kʌ-si*]$_{rel}$    *munima*
    ACT.PTCP-die    cat.ABS

    'The cat that dies/died.'

(c)   S REL-CLAUSE₂

[*si-a=ku*]ᵣₑₗ     *munima*]
die-PST=NMLZ     cat.ABS

'The cat that died.'

(430) (a)   MONOTRANSITIVE WITH P IN ABSOLUTIVE

*tʌkku*       *cha-a*       *gilāsʌ*     *khet-i*
DEM          child-ERG   glass.ABS   break-3P

'The child broke the glass.'

(b)   AGENT REL-CLAUSE

[*gilāsʌ*       *kʌ-khet-pa*]ᵣₑₗ          *cha*
glass.ABS    ACT.PTCP-break-MASC   child

'The child who broke the glass.'

(c)   PATIENT REL-CLAUSE

[*cha-a*       *khet-i=ku*]ᵣₑₗ        *gilāsʌ*
child-ERG    break-3P=NMLZ        glass.ABS

'The glass that the child broke.'

(431) (a)   MONOTRANSITIVE WITH P IN DATIVE

*mʌnna-a*    *marcha-lai*     *ɖher-i*
man-ERG    woman-DAT     beat-3P

'The man beat the woman.'

(b)   AGENT REL-CLAUSE

[*marcha-lai*       *kʌ-ɖhe*]ᵣₑₗ        *mʌnna*
woman-DAT       ACT.PTCP-beat    man.ABS

'The man who beat the woman.'

(c)   PATIENT REL-CLAUSE

[*mʌnna-a*         *ɖher-i=ku*]ᵣₑₗ      *marcha*
man-ERG          beat-3P=NMLZ      woman.ABS

'The woman that the man beat.'

Note that the *=ku* relativiser is also used for obliques such as goals and locations:

(432) (a)   GOAL REL-CLAUSE

*ŋa*        *mela-ya*        *puks-oŋ*
1SG.ABS    market-LEVEL    go-1SG.S/P.PST

'I went to the market.'

(b)   LOCATIVE REL-CLAUSE

 [*ŋa*        *puks-oŋ=ku*]ᵣₑₗ          *melā*
1SG.ABS    go-1SG.S/P.PST=NMLZ    market.ABS

'The market that I went to.'

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The only syntactic constraint on relativisation is that it cannot apply to the detransitivised object argument of *kha*-antipassive. Note that *kha*- always entails a human P referent (cf. Sections 3.17.2, 7.13.5 and 7.13.6).

(433) (a)  MONOTRANSITIVE CLAUSE

*papa-a*      *mama-lai*      *phad-i*
father-ERG      mother-DAT      help-3P

'Father helped mother.'

(b)  *kha*-ANTIPASSIVE CLAUSE

*papa*      *kha-phad-a*
father.ABS      ANTIP-help-PST

'Father helped (people/ someone).'

(c)  \**kha*-ANTIPASSIVE PATIENT REL-CLAUSE

\*[[*papa*      *kha-phad-a=ku*]$_{rel}$      *mama*]      [*tʌkku*]
father.ABS      ANTIP-help-PST=NMLZ      mother.ABS      DEM

Intended: 'These are the kinds of mothers that father helped.'

(d)  *kha*-ANTIPASSIVE AGENT REL-CLAUSE

[[*kha-phad-a=ku*]      *papa*]$_{rel}$      [*tʌkku*]
ANTIP-help-PST=NMLZ      father.ABS      DEM

'This is the father who helped (people/ someone).'

The only possibility to relativise on the P is with an active transitive construction. When the pragmatics allow it, it is possible to relativise on both *zero*-detransitivised agent and patient arguments. While *kha*-detransitivisation and *zero*-detransitivisation are both used in Puma, *kha*-detransitivisation is limited in scope, compared with *zero*-detransitivisation in terms of relativisation of the detransitivised patient argument.

(434) (a)  MONOTRANSITIVE CLAUSE

*mʌnna-a*   *nokia*    *mobāil*      *hud-i*
man-ERG   Nokia    mobile.ABS      [3SG.A]buy-3P

'The man bought the Nokia mobile.'

(b)  *zero*-DETRANSITIVISED PATIENT REL-CLAUSE

[*mʌnna*      *hud-a=ku*      *mobāil*]$_{rel}$   [*nokia*]
man.ABS      [3SG.S]buy-PST=NMLZ   mobile      Nokia

'The kind of mobile the man bought is a Nokia.'

(c)  TRANSITIVISED PATIENT REL-CLAUSE

[*mʌnna-a*      *hud-i=ku*      *mobāil*]$_{rel}$   [*nokia*]
man-ERG      [3SG.A]buy-3P=NMLZ   mobile      Nokia

'The (specific) mobile the man bought is the Nokia.'

(d)  *zero*-DETRANSITIVISED AGENT REL-CLAUSE

[*nokia*   *hud-a=ku*]<sub>rel</sub>     *mʌnna*
Nokia    [3SG.S]buy-PST=NMLZ  man.ABS

'This is the man who bought a Nokia.'

(e)  TRANSITIVE AGENT REL-CLAUSE

[*nokia*   *kʌ-hu*]<sub>rel</sub>     *mʌnna*   *tʌkku*
Nokia    ACT.PTCP-buy   man.ABS  DEM

'The man who bought the Nokia.'

Example (434b) shows relativisation on a detransitivised patient, while (434d) shows relativisation on agent argument. Example (434c) illustrates relativisation on a transitive patient argument. As already mentioned above (Section 3.17.2), detransitivised agreement prohibits semantics as an individuated, enumerable patient referent. The meaning of the relative construction in (434b) refers to a 'kind of' notion, with generic reference. Example (434c) is the corresponding active transitive construction, where the relativised NP is understood as an individual existing referent. Example (434d) shows that the agent (now realised as an S argument, bearing absolutive case) can be relativised under detransitivisation.

Example (434e) is the corresponding active transitive construction, where the referential status of this argument does not differ from the one in the detransitivised clause in (434d). It is important to note that there is no 'kind of' relation with respect to the detransitivised agent argument as in detransitivised patient argument. Unlike some Kiranti languages like Chintang (Paudyal 2011), it is possible to relativise on all three arguments of ditransitive verbs (with V=*ku* for the G-argument and T-argument and *kʌ*-V for the A-argument), as in:

(435) (a)  DITRANSITIVE CLAUSE

*ŋa-a*    *cha-lai*   *kʌphekwa*    *itd-u-ŋ*
1SG-ERG  child-DAT  money.ABS    give-3P-1SG.A

'I gave the money to the child.'

(b)  THEME (T) REL-CLAUSE

[*ŋa-a*    *cha-lai*  *itd-u-ŋ=ku*]<sub>rel</sub>   *kʌphekwa*
1SG-ERG  child-DAT  give-3P-1SG.A=NMLZ  money.ABS

'The money that I gave.'

(c)     GOAL (G) REL-CLAUSE

[ŋa-a        kʌphekwa          itd-u-ŋ=ku]rel          cha
1SG-ERG    money.ABS        give-3P-1SG.A=NMLZ  child.ABS

'The child that I gave the money.'

(d)     AGENT (A) REL-CLAUSE

[cha-lai          kʌphekwa          kʌ-it]rel          mʌnna
child-DAT        money.ABS        ACT.PTCP-give    man.ABS

'The person who gave the money to the child.'

As mentioned above, it is possible to relativise the detransitivised object arguments in the antipassive construction of ditransitive verbs. Unlike *kha*-detransitivisation which restricts relativisation on G-arguments, *zero*-detransitivisation allows relativisation on a detransitivised G and T-arguments, as in the following:

(436) (a)    DITRANSITIVE CLAUSE

ŋa-a          cha-lai        kʌphekwa        itd-u-ŋ
1SG-ERG    child-DAT    money.ABS      give-3P-1SG.A

'I gave the money to the child.' (cf. 421a)

(b)    RELATIVISATION OF DETRANSITIVISED THEME (T)

[ŋa          itd-oŋ=ku]rel          kʌphekwa
1SG.ABS    give-1SG.S/P.PST=NMLZ    money.ABS

'The kind of money (generic) that I gave.'

(c)    RELATIVISATION OF DETRANSITIVISED GOAL (G)

*[ŋa          kʌphekwa          kha-itd-oŋ=ku]rel          cha
1SG.ABS    money.ABS        ANTIP-give-1SG.S/P.PST =NMLZ child

Intended: 'Children whom I gave money.'

(d)    RELATIVISATION OF DETRANSITIVISED AGENT

*[cha-lai    kʌphekwa          kha-itd-a=ku]rel          mʌnna
child-DAT  money.ABS        ANTIP-give-PST=NMLZ  man.ABS

Intended: 'The person who gave the money (to someone) (to the child).'

Relativisation on detransitivised T-argument, G-argument, and A-argument in example (436b-d) shows the relativised argument refers to a 'kind of' notion, with generic reference. It is important to note that distinguishing between relativisation using transitive clauses and antipassive constructions depends upon case-role and its verbal agreement. The A-argument in an antipassive construction is demoted to an S-argument which always bears an absolute case in (436b-d) and a verb agrees with an absolute. Consequently, verbal agreement is inflected intransitively in (436b-d).

All S-arguments, P-arguments, G-arguments and T-arguments can be relativised using V=*ku* in Puma. Only A-arguments and human S-arguments can be relativised using *kʌ*-V. Relativisation cannot apply to the detransitivised patient of a *kha*-antipassive construction.

### 6.7.2   The sequential *kinan*

The sequential linker *kinan* links fully inflected clause 1 to clause 2. It has phonologically reduced allomorphic forms, as in:

(437)        *kinan ~ kina ~ ki*

An NP in S or A function in the second clause is generally omitted with *kinan* linkage and understood as coreferential with an NP in S or A function in the first clause. This shows that this construction has a S/A=S/A pivot (Dixon 1994). It should be noticed that the Puma sequential *kina ~ ki* seems to be a loan from Nepali. It is not attested whether *ki* is a loan or indigenous form. However, we note that *ki* in Nepali is primarily conjunction, while it is used in Puma both as conjunction (NEP. *ani*) and participial form (NEP. *-era*). As Nepali counterparts of (438) do not allow Nepali *ki*, we suggest that this sequential *ki* is an indigenous term. Consider these examples:

(438) (a)    A=A

[*munima-lai*      *khipaᵢ-a*      *dhumt-i*]    *kinan* [*Øᵢ*  *koima-lai*       *tʌŋdh-i*]
cat-DAT           dog-ERG      follow-3P    CONN        mouse-DAT  chase-3P

'The dog followed the cat and chased the mouse.'

(b)    A=S

[*pujaᵢ-a*      *ŋa-lai*      *pʌ-tup-oŋ*]                  *kinan* [*Øᵢ*  *lipd-a*]
Puja-ERG    1SG-DAT    3S/A-meet-1SG.S/P.PST  CONN        return-PST

'Puja met me and returned.'

(c)    S=S

[*marchachaᵢ*      *wahit-i*              *chukd-a*] *kinan* [*Øᵢ*      *si-a*]
girl.ABS           river-DOWN.LOC jump-PST  CONN           die-PST

'The girl jumped in the river and died.'

(d)    S=A

*mamaᵢ*          *lipd-a*        *kinan* [*Øᵢ*  *kʌ-cha-lai*                *bud-i*]
mother.ABS    return-PST  CONN        3SG.POSS-child-DAT   call-3P

'Mother returned and called her child.'

### 6.7.3   The sequential *pʌʌŋ*

The connective *pʌʌŋ* links two or multiple clauses which are fully inflected. The S or A

of the second clause can be omitted and understood as coreferential with the S or A of the first clause. It is interesting that *pʌʌŋ* can be used in a clause-initial position as a continuative linker and in a clause-final position as a sequential linker. Thus, in Puma as in Kiranti languages, the particle *pʌʌŋ* is used in tail-head linkage (cf. Ebert 2003), where the previous clause or the verb is repeated as a topic, to build up continuity in a narration/ conversation.

(439)  *pʌʌŋ*      *tʌkku*     *naŋloŋ-do=ku*
      CONN       DEM         winnowing.basket-GEN.LOC=NMLZ
      *mahada*            *rʌ*        *rum*       *pʌ-ca-a-ci*       *pʌʌŋ*
      a.kind.of.fruit     CONN       salt        3S/A-eat-PST-DL   CONN

      'They ate *mahada* fruit on the winnowing basket.'

      *pʌ-ca-a-cil-a-ci*                      *pʌʌŋ*
      3S/A-eat-PST-finish-PST-DL            CONN

      And 'they ate and finished.'

      *pʌ-rʌŋ-a-ci*
      3S/A-say-PST-DL

      Then 'they said.' (myth_01:072, 073 and 074)

Consider these examples for coreferential with the S or A arguments in the clauses, using *pʌʌŋ*:

(440) (a)    S=S

      [*manrupā$_i$*  *khap-a*]   *pʌʌŋ*      [Ø$_i$   *ri-a*]
      Manrupa       weep-PST   CONN                laugh-PST

      'Manrupa wept and laughed.'

    (b)    A=S

      [*mama$_i$-a*       *papa-lai*     *cop-i*]    *pʌʌŋ* [Ø$_i$   *lipd-a*]
      mother-ERG        father-DAT    see-3P     CONN          return-PST

      'Mother looked at father and returned.'

    (c)    S=A

      [*mama$_i$*   *ta-a*]      *pʌʌŋ*      [Ø$_i$   *papa-lai*      *bud-i*]
      mother       arrive-PST   CONN               father-DAT     call-3P

      'Mother arrived and (she) called father.'

    (d)    A=A

      [*mama$_i$-a*     *ŋa-lai*   *pʌ-mitd-oŋ*]                 *pʌʌŋ*
      mother-ERG       1SG-DAT   3S/A-remember-1SG.S/P.PST   CONN
      [Ø$_i$   *ŋa-lai*   *pʌ-bud-oŋ*]
         1SG-DAT   3S/A-call-1SG.S/P.PST

      'Mother remembered me and called me.'

These examples show that the syntactic pivot S/A controls co-reference in *pʌʌŋ* sequential clauses. Note that grammatically the two connectives *kinan* and *pʌʌŋ* have the same pivots. The only semantic difference between them is that *kinan* has a meaning of participial, while *pʌʌŋ* has a meaning of connection like *and*, *then*.

### 6.7.4 The purposive *-si*

In order to expresses intention, volition, and purpose, Puma marks verbs with the suffix *-si* and then links them to a main clause. In complex sentences involving the purposive *-si* suffix, the clause 1 and the clause 2 can be either transitive or intransitive, independently of each other. The purposive is non-finite and requires arguments A or S and its co-reference is controlled by the main clause. Thus, it is possible to use purposive in both transitive clauses and intransitive clauses:

(441) (a)  TRANSITIVE [A=S]

[*rita$_i$*       *bhok*       *chelet*       *laŋ-si*]       [Ø$_i$   *puks-a*]
Rita.ABS       pig          kid.ABS      sell-PURP                 go-PST

'Rita went to sell the pig's offspring.'

(b)  P=A

*yoŋni$_i$-a*   *kʌ-cha-lai*                    *bākharā*   [Ø$_i$   *khaŋ-si*]   *chid-i*
friend-ERG  3SG.POSS-child-DAT     goat.ABS                see-PURP   send-3P

'The friend sent his child to herd the goats.'

(c)  S=S

[*kamalbahādur$_i$*       *lakmu-si*]       [Ø$_i$   *ta-a*]
Kamalbahadur.ABS     dance-PURP                 come-PST

'Kamalbahadur came to dance.'

(d)  S=A

[*rambaran$_i$*       *jʌpan*       *puŋ-\*si/ma-lai*]   [Ø$_i$   *kʌphekwa*   *dot-i*]
Rambaran.ABS    Japan        go-PURP/INF-DAT          money.ABS  beg-3P

'Rambaran begged money to go to Japan.'

### 6.7.5 The conditional *nalo*

The conditional linker *nalo* describes a condition while the adverbial marker *-lo* denotes semantic relations like condition, manner, cause, purpose or simultaneity. Schackow et al. (2012) argue that this *nalo* has most probably developed from a combination of *-lo* with the topic clitic *na*. The conditional conjunction *nalo* has limited semantic relations compared with the adverbial *-lo*. It can link both transitive and intransitive clauses:

(442) (a)    A=A

[*ŋaᵢ-a*      *khokku-lai*  *khaŋ-u-ŋ*]    *nalo*  [*Øᵢ*    *pʌ-sin-nʌŋ*]
1SG-ERG    3SG-DAT    see-3P-1SG.A  COND            NEG-recognise-1SG.NEG

'If I see you, I will not recognise you.'

(b)    S=S

[*daṇḍarājᵢ*      *ta*]          *nalo*          [*Øᵢ*  *khap*]
Dandaraj.ABS    arrive.NPST    COND            weep.NPST

'If Dandarajᵢ arrives, heᵢ will weep.'

(c)    A = S

[*ŋaᵢ-a/Ø*      *tv*      *pʌ-hu-nʌŋ*]      *nalo*  [*Øᵢ* *khim*  *pʌ-puŋ-nʌŋ*]
1SG-ERG/ABS  TV.ABS  NEG-buy-1SG.NEG COND    house    NEG-go-1SG.NEG

'If I do not buy the television, I will not go home.'

(d)    S=A

[*boltᵢ*      *onh*]      *nalo*      [*Øᵢ*  *kʌphekwa*  *tok-i*]
Bolt.ABS    run.NPST    COND            money        get-3P

'If Bolt runs, he will get money.'

### 6.7.6    The simultaneous *paa*

The particle *paa* can link both transitive and intransitive clauses to combine situations that occur simultaneously. *paa* denotes 'while, and when'. Etymologically it could have derived from a nominaliser *-pa* and an ergative *-a* (see Section 7.17.1). Perhaps phonologically it is a clitic, however very often we find the suffix *-pa* and the suffix *-a* are treated separately.

(443) (a)    S=S

[*devkotaᵢ*      *pis-a-ŋa*]=*paa*        [*Øᵢ*    *si-a*]
Devkota.ABS    speak-PST-IPFV=SIML            die-PST

'When Devkota was speaking, he died.'

(b)    S=A

[*ŋaᵢ*      *puŋ-ŋa*]=*paa*          [*Øᵢ* *mama-lai*    *kʌphekwa*    *itd-u-ŋ*]
1SG.ABS  go-1SG.S/P.NPST=SIML        mother-DAT  money          give-3P-1SG.A

'When I go to home, I give money to mother.'

(c)    A=S

[*ŋaᵢ-a*      *mama-lai*      *tup-u-ŋ*]=*paa*        [*Øᵢ*    *khap-oŋ*]
1SG-ERG    mother-DAT    meet-3P-1SG.A=SIML            weep-1SG.S/P.PST

'When I met my mother, I wept.'

(d)  A=A

[ŋa<sub>i</sub>-a       kʌphekwa        dot-u-ŋ]=paa
1SG-ERG    money              beg-3P-1SG.A]=SIML
[Ø<sub>i</sub>   kʌphekwa        pʌ-tok-nʌŋ]
          money              NEG-get-1SG.NEG

'When I begged for money, I did not get it.'

The overview summary of inter-clausal patterns in Puma is presented in Table 117.

**Table 117:** Summary of inter-clausal patterns in coreferential omission

| PATTERNS | CLAUSE TYPES | CLAUSE 1 | CLAUSE 2 | SEMANTICS |
|---|---|---|---|---|
| S/A | *kinan* | S<br>S<br>A<br>A | S<br>A<br>S<br>A | SEQUENCE ACTION |
| | *pʌʌŋ* | S<br>S<br>A<br>A | S<br>A<br>S<br>A | SEQUENTIAL;<br>TAIL-HEAD LINKER |
| | *nalo* | S<br>S<br>A<br>A | S<br>A<br>S<br>A | CONDITIONAL |
| | *-si* | S<br>P<br>A<br>A | S<br>A<br>S<br>A | PURPOSIVE |
| | *-paa* | S<br>S<br>A<br>A | S<br>A<br>S<br>A | SIMULTANEUS |

As Table 117 shows, where S/A patterns are concerned, coreferential omission is possible on *kinan*, *pʌʌŋ*, *nalo and paa* clauses when the coreference is the S/A pattern (S=A and A=S). This shows that S/A patterns of coreferential omission manifests accusativity (S/A vs. P), and not ergativity (S/P vs. A).

### 6.7.7  Equi-NP construction

The control of co-reference in embedded complement clauses is the next proposed inter-clausal test in Puma for identification of grammatical relations. Verbs like *want* and *begin*, are classic equi verbs in many languages (cf. Van Valin 1981), and their Puma counterparts, *si* 'want' and *pus* 'begin', are no exception. Omission of a coreferential NP is common in complement clauses. The equi-NP construction is sensitive to S-

argument and A-argument as a category in most languages (cf. Payne 2008). Note that in Dyirbal S/P is the controller and target for EQUI (Peter Austin, p.c.). Consider the following examples from Puma:

(444) (a)   INTRANSITIVE COMPLEMENT       S=S

*ke*             [*ip-ma*]     *si-e*
1PL.INCL.ABS    sleep-INF   want-1/2PL.NPST

'We want to sleep.'

(b)   TRANSITIVE COMPLEMENT        S=A

*pracaṇḍa*           [*rekhā-lai*      *tup-ma*]    *si*
Prachanda.ABS      Rekha-DAT     meet-INF    want

'Prachanda wants to meet Rekha.'

(445) (a)   INTRANSITIVE COMPLEMENT, NO COREFERENCE

*ŋa*            [*tʌkku cha*    *ip-ma*]    *si-ŋa*
1SG.ABS       DEM child.ABS   sleep-INF   want-1SG.S/P.NPST

'I want the child to sleep.'

(b)   TRANSITIVE COMPLEMENT S=P COREFERENCE, NO OMISSION

*pracaṇḍa*     [*rekhā-a*      *khokku-lai*     *pʌp-ma*]    *si*
Prachanda.ABS   Rekha-ERG     3SG-DAT      kiss-INF    want.NPST

'Prachanda wants Rekha to kiss him.'

Note that the P argument of (445b) cannot be omitted:

(446)    **pracaṇḍa*           [*rekhā-a*         *pʌp-ma*]    *si*
Prachanda.ABS      Rekha-ERG       kiss-INF    want.NPST

Intended: 'Prachanda$_i$ wants Rekha to kiss (him$_i$).'

However, the only alternative is:

(447)    *pracaṇḍa$_i$*    [*rekhā-a*      *pracaṇḍa$_i$-lai*   *pʌp-ma*]    *si*
Prachanda.ABS   Rekha-ERG     Prachanda.ABS    kiss-INF    want.NPST

'Prachanda wants Rekha to kiss Prachanda.'

This syntactic process treats S and A alike and P differently and thus manifests a nominative/accusative pattern.

The control of equi-NP coreference in complement clauses of the equi verb *pus* 'begin' exhibits different behaviours from the equi verb *si* 'want' above. The main verb *pus* 'begin' takes an ergative-marked A and a 3rd singular P. It controls S or A in the complement clause as we have for *si* 'want', regardless of whether the complement is transitive or intransitive:

(448) (a) INTRANSITIVE COMPLEMENT      A=S

    *ŋa-a*     [Ø   *iskul*     *puŋ-ma*]   *pus-u-ŋ*
    1SG-ERG      school.ABS     go-INF     begin-3P-1SG.A

    'I began to go to school.'

(b) TRANSITIVE COMPLEMENT      A=A

    *ŋa-a*     [Ø   *khokku-lai*   *ḍhe-ma*]   *pus-u-ŋ*
    1SG-ERG      3SG-DAT     beat-INF     begin-3P-1SG.A

    'I began to beat him.'

Note that the P of the complement cannot be controlled:

(449)     **ŋa-a*    [*rekha-a*  Ø  *pʌp-ma*]   *pus-u-ŋ*
    1SG-ERG   Rekha-ERG     kiss-INF     begin-3P-1SG.A

    INTENDED: 'I began to be kissed by Rekha.'

As in Khinalug (cf. Comrie 1977), a northeast Caucasian language spoken in Azerbaijan, modality verbs are intransitive in Puma and take an equi complement.

(450) (a) INTRANSITIVE COMPLEMENT

    *ŋa*     [Ø   *puŋma*]   *ri-ŋa*
    1SG.ABS      go-INF     can-1SG.S/A.NPST

    'I can go.'

(b) TRANSITIVE COMPLEMENT

    *ŋa*     [Ø   *pempak*    *muma*]   *ri-ŋa*
    1SG.ABS      bread.ABS     do-INF     can-1SG.S/A.NPST

    'I can bake the bread.'

(451) (a) INTRANSITIVE COMPLEMENT

    *ŋa*     [Ø   *khim*   *puks-a=ni*]   *min-ŋa*
    1SG.ABS      house.ABS  go-PST=REP     think-1SG.S/A.NPST

    'I wish to go home.'

(b) TRANSITIVE COMPLEMENT

    *ŋa*     [Ø   *khim*   *hud-a=ni*]   *min-ŋa*
    1SG.ABS      house.ABS  buy-IMP=REP    think-1SG.S/A.NPST

    'I wish to buy the house.'

The operation of equi-NP deletion does not depend on the transitivity of the matrix verb. Both transitive verbs, like *pus* 'begin' and intransitive verbs like *si* 'want' can control the co-referent:

(452) (a)  *ŋa*     [Ø  *pi-ma*]   *si-ŋa*
      1SG.ABS     speak-INF  want-1SG.S/P.NPST

    'I want to speak.'

(b) *ŋa* [Ø *nayā* *khim* *mu-ma*] *si-ŋa*
1SG.ABS      new     house    do-INF    want-1SG.S/P.NPST

'I want to build the new house.'

(c) *ŋa-a* [Ø *khim-do* *yuŋ-ma*] *puss-u-ŋ*
1SG-ERG     house-GEN.LOC   stay-INF    begin-3P-1SG.A

'I begin to stay in the house.'

(d) *ŋa-a* [Ø *nayā* *khim* *mu-ma*] *puss-u-ŋ*
1SG-ERG     new     house    do-INF    begin-3P-1SG.A

'I begin to build the new house.'

To be well formed with NP omission, both NP of matrix clause and complement clause of equi-NP constructions must be S arguments or A arguments. No omission of P arguments under co-reference with the A argument or S argument is possible. Thus we may conclude that the syntactic pattern for equi-NP construction in Puma is S/A.

### 6.7.8 Control of zero anaphora in chained clauses

Chained clauses involve conjoined or adjacent independent clauses that share coreferential arguments (cf. Givón 1997). Zero anaphora is a coreferential omission process in which an argument in clause 1 is coreferential with another in clause 2, and the coreferential argument in clause 2 is omitted. We provide the complete pattern for identification of GRs in Table 118.

**Table 118:** Coreference pattern for zero anaphora in chained clauses

| PATTERN | Clause 1 | Clause 2 | Examples |
|---------|----------|----------|----------|
| NOM PATTERN | S | S | *John$_i$ left and Ø$_i$ fell down.* |
|  | S | A | *John$_i$ left and Ø$_i$ saw Bill.* |
|  | A | S | *John$_i$ saw Bill and Ø$_i$ left.* |
|  | A | A | *John$_i$ saw Bill and Ø$_i$ met Mary.* |
| ERG PATTERN | S | S | *John$_i$ left and Ø$_i$ fell down.* |
|  | S | P | *John$_i$ left and Bill saw Ø$_i$.* |
|  | P | S | *John saw Bill$_i$ and Ø$_i$ left.* |
|  | P | P | *John saw Bill$_i$ and Mary met Ø$_i$.* |

Based on patterns presented in Table 118 and Cooreman et al. (1984) for zero anaphora in chained clauses, we conclude that the pattern is Puma is A/S = A/S. Consider these examples:

(453)      A=A

(a)  [ram$_i$-a      h$\Lambda$ri$_j$-lai    khaŋ-i]    p$\Lambda\Lambda$ŋ   [Ø$_i$ khokku$_j$-lai        ɖher-i]
    Ram-ERG   Hari-DAT    see-3P    CONN    3SG-DAT        beat-3P

    'Ram$_i$ saw Hari$_j$ and beat him$_j$.'

(b)  *[ram$_i$-a      h$\Lambda$ri$_j$-lai    khaŋ-i]    p$\Lambda\Lambda$ŋ     [khokku$_i$.a Ø$_j$ ɖher-i]
    Ram-ERG   Hari-DAT    see-3P    CONN    3SG-ERG        beat-3P

    'Ram$_i$ saw Hari$_j$ and he$_i$ beat.'

(454)      A=S

(a)  [ram$_i$-a      h$\Lambda$ri$_j$-lai    khaŋ-i]    p$\Lambda\Lambda$ŋ     [Ø$_i$   puks-a]
    Ram-ERG   Hari-DAT    see-3P    CONN        go-PST

    'Ram$_i$ saw Hari$_j$ and went.'

(b)  *[ram$_i$-a      h$\Lambda$ri$_j$-lai    khaŋ-i]    p$\Lambda\Lambda$ŋ     [Ø$_j$   puks-a]
    Ram-ERG   Hari-DAT    see-3P    CONN        go-PST

    'Ram$_i$ saw Hari$_j$ and went.'

(455)      S=S

[sarapova$_i$        puks-a]    p$\Lambda\Lambda$ŋ        [Ø$_i$   ips-a]
    Sarapova.ABS    go-PST    CONN        sleep-PST

    'Sarapova went and sleep.'

(456)      S=A

[maria$_i$        ta-a]    p$\Lambda\Lambda$ŋ [Ø$_i$   piʈ$\Lambda$r-lai        khaŋ-i]
    Maria.ABS        arrive-PST CONN    Peter-DAT        see-3P

    'Maria arrived and saw Peter.'

Examples (453-456) show that the anaphoric coreference pattern in Puma is A/S = A/S.

## 6.8 Chapter summary

This chapter examines grammatical relations in Puma, based on intra-clausal and inter-clausal syntactic tests. In many languages with split ergative morphology like Puma grammatical relations appear to follow a different pattern from that exhibited by the case-marking morphology. The S argument of intransitive clauses and the inanimate P argument of transitive clauses form a single morphological category (S/P) in absolutive case (contrasting with the A argument of transitive clauses in the ergative case. However, syntactically A is identified with S (yielding a syntactic pivot S/A) and not with P. Puma intra-clausal syntax treats S and A equally where we get controller S/A= target S/A to the exclusion of P. Similarly, inter-clausal syntax such as EQUI-NP constructions, zero-anaphora, sequential, purposive, conditional, simultaneous and adverbial clauses treat S/A as equivalent to S/A (S/A= S/A). Thus, the syntactic pivot

for inter-clausal and intra-clausal syntax in Puma is S/A.

For verb agreement Puma exhibits a three-way pattern because verbs agree with absolutive S arguments in intransitive clauses, but with ergative A arguments and all P arguments (regardless of their case-marking as absolutive/dative) in transitive clauses. In addition, in ditransitive clauses verbs agree with the ergative A argument and the dative G argument but never with the absolutive T argument. This chapter concludes that the P of monotransitive clauses behaves like the G of ditransitive clauses [P=G] but the P and G behave differently from the T of ditransitive clauses [P=G≠T] as verbs never agree with T. The overview summary of all five grammatical relations in Puma is presented in Table 119.

**Table 119:** Grammatical relations

| Arguments | Cases | | Agreement |
|---|---|---|---|
| | Inanimate | Animate | |
| S | ABSOLUTIVE | | ABSOLUTIVE |
| A | ERGATIVE | | ERGATIVE |
| P | ABSOLUTIVE | DATIVE | ABSOLUTIVE/DATIVE |
| T | ABSOLUTIVE | | * |
| G | DATIVE | | DATIVE |

# Chapter 7

# Nominalisation and Relativisation

## *7.1 Introduction*

This chapter examines a wide range of nominalisation and relativisation strategies found in Puma, and identifies multifunctional nominalisers. Puma possesses not only a single versatile nominaliser with multiple functions, but also possesses multiple nominalisers, each dedicated to a specific nominalisation function. The chapter also focuses on the extended uses of nominalisation constructions from referential to non-referential functions.

Section 7.1 gives background information on nominalisation. Nominalisation in Tibeto-Burman languages is discussed in Section 7.2. Section 7.3 describes nominalisation in Kiranti langauges. Sections 7.4 to 7.6 look at nominalisation in Puma, link between nominalisation, relativisation and genitivisation, and nominalisers and their distribution, respectively. Section 7.7 gives detail of nominaliser types, while Section 7.8 describes relativisation. Section 7.9 presents identical main clause and nominalised clause. Section 7.10 looks at participles types, while Section 7.11 deals with agent nominal types. Agent nominaliser and the general nominaliser are described in section 7.12 and 7.13. Section 7.14 deals with other functions of general nominaliser. Sections 7.15 to 7.17 describe instrument and non-instrument nominalisation, location nominalisation and adverbial nominalisers*,* respectively. Lexical vs. clausal nominalisation, stand-alone nominalisation, nominalisation and miratives, nominalisation and interrogatives, and headless relative clauses are described in Sections 7.18 to 7.22. Section 7.23 examines internal headed relative clauses and external headed relative clauses, and Section 7.24 sums up the chapter.

The functions and forms of nominalisers and nominalisation constructions are diverse and extensive. Nominalisers often extend beyond their core function of deriving nominal expressions. The phenomenon of deriving adjectives and relative clauses with the help of nominalisers is widespread in Tibeto-Burman languages and particularly the Kiranti sub-group. We can see there is also considerable diversity among nominalisation constructions in Kiranti languages. Across Kiranti languages nominalisation constructions are used as relative clauses, adverbial clauses, as well as

complement clauses and independent clauses. In fact, not only versatile and dedicated nominalisers can signal nominalisation constructions, they are often signaled by noun phrase markers such as demonstrative markers, case markers, possessive pronouns, genitive markers, plural markers, and classifiers (Yap, Grunow-Harsta & Wrona 2011). The Tibeto-Burman languages frequently rely on noun phrase markers to help identify not only noun phrases but also nominalised clauses.

Nominalisation refers to a general process of forming a nominal expression from another part of speech (verbs, adjectives, adverbs, clauses etc.) in which non-nominal elements become grammatical nominal (Watters 2002; Genetti et al. 2008; Yap, Grunow-Harsta & Wrona 2011). In fact, nominalisation is a derivational process by which different grammatical constituents are turned into nouns or noun phrases (NPs). It is the use of a verb, an adjective, or an adverb as the head of a noun phrase.

Comrie and Thompson (2007: 334) define the term nominalisation more narrowly as 'turning something into a noun'. This narrowly-defined notion of nominalisation as a derivational process which creates lexical nouns from words of other lexical categories, can be referred to as derivational nominalisation (cf. Genetti et al. 2008). Usually, as pointed out by Watters (2002: 199), nominalisations are derived from word classes other than nouns, but this is not necessarily other word classes, at least in English. Nouns can be nominalised as they are converted from one noun sub-class to another, as in English *brother → brotherhood*.

## 7.2    *Nominalisation in Tibeto-Burman languages*

Matisoff (1972) first recognised the relational phenomenon of nominalisation, relativisation and genitivisation in Sino-Tibetan languages for Lahu, a Tibeto-Burman language spoken in China, Thailand, Myanmar, and Laos  (cf. Mattisof 1972). Cross-linguistically the phenomenon of nominalisation is widespread across languages. The wide range of uses of nominalisations that are found in a range of languages have been described by linguists working on Tibeto-Burman (Matisoff 1972; Kölver 1977; DeLancey 1989; Genetti 1992; Ebert 1994; Noonan 1997; Bickel 1999; Watters 2008; Genetti et al. 2008). Yap et al. (2011) point out that the functions of nominalisation constructions in Tibeto-Burman languages are often quite diverse and extended. The scope of nominalisation in these languages is not restricted only to derivational nominalisation from non-nominal bases. It can be extended to clausal and sentence

level.

In some Tibeto-Burman languages such as Lahu, as described in detail by Matisoff (1972), the same morpheme, *ve*, functions as a genitive marker, relativiser, and nominaliser, while in others such as some dialects of Tibetan (DeLancey 1999) nominalisers are identical and co-occur with the genitive marker and relativiser in some constructions. This morphological congruence of syntactic functions has been referred to the 'Standard Sino-Tibetan Nominalisation' (SSTN) pattern (Bickel 1999).

This pattern is quite common across the Kiranti languages. DeLancey (1999) notes that a similar complex behaviour revolving around a single morpheme occurs in other Tibeto-Burman languages such as Jingphaw, mainly spoken in Myanmar and China (cf. DeLancey 2002), and Chantyal, spoken in Nepal (Noonan 1997), while a number of scholars have reported similar phenomena of SSTN in a number of languages (Kölver 1977; Herring 1991; Ebert 1994; Noonan 1997, 2008; Bickel 1999; DeLancey 2002; Lahaussois 2003; LaPolla 2006; Genetti et al. 2008; Watters 2008).

Nominalisation constructions often demonstrate a range of non-referential functions. This comprises adnominalisation (genitives and relative clauses) and subordination, two major functions that have been extensively discussed in the literature on Tibeto-Burman languages (Matisoff 1972; Genetti 1991). DeLancey (2002: 56) mentions that relativisation in Tibeto-Burman languages is a subspecies of clausal nominalisation. The modifying clause is nominalised, and then stands in either a genitive or an appositive relation to the head noun. A nominalised clause can be subordinated as a relative clause, as a temporal clause, and a complement clause (cf. Ebert 1972). There is another major construction of nominalisation which has received considerable attention in the literature on Tibeto-Burman syntax namely the 'stand-alone' nominalisation constructions. It is used to express meanings like miratives/exclamatives and other attitudinal stances (DeLancey 1997; Bickel 1999; Grunow-Harsta 2007; Yap & Matthews 2008; Watters 2008).

In fact, nominalisation constructions frequently take on attributive functions. They serve as the equivalent of finite verbs in main clauses, and take on other functions as well (cf. Noonan 1997). While such uses of nominalisations are not restricted to Tibeto-Burman, similar phenomena have been reported in other languages such as Chinese and Japanese (Matisoff 1972), Mongolian (Binnick 1979: 90), Quechua (Weber 1989: 9), and Papuan languages (Foley 1986: 204). Cross-linguistically, arguments of the

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nominalised verb are presented in different ways by different languages (Comrie & Thompson 2007; Koptjevskaja-Tamm 2005).

## 7.3    *Nominalisation in Kiranti languages*

While nominalisation is, generally, a pervasive feature of Tibeto-Burman languages, it is particularly highly productive and prominent in Kiranti languages such as Limbu (van Driem 1987), Athpare (Ebert 1997), Camling (Ebert 1997), Belhare (Bickel 1999), Kulung (Tolsma 1999), Kham (Watters 2002, 2008), Thulung (Lahaussois 2002), Bantawa (Doornenbal 2009), Chintang (Paudyal 2011) and Bodic languages such as Chantyal (Noonan 1997), Dolakha Newar (Genetti et al. 2008), Manange (Genetti et al. 2008), and Magar (Grunow-Harsta 2011). Individual Kiranti languages vary in the number of nominalisers they employ, and in the kinds of distinction they encode. The various nominalisers contribute their own semantics to person-marking constructions and TAM constructions formed with them.

## 7.4    *Nominalisation in Puma*

Kiranti languages differ in the number of morphological forms they employ to express distinct nominalisation constructions. Puma is rich in using various kinds of nominalisation constructions. In Puma nominalisations are used both in subordination and as stand-alone nominals (free-standing). In fact, Puma nominalised clauses have the ability to occur extensively as independent utterances like other Tibeto-Burman languages (Bickel 1999; Watters 2008; DeLancey 2011; Genetti 2011).

It is important to note that nominalisation, finiteness, and perfectivity are not contrastive with each other, at least in Kiranti languages. The relationship between nominalisation and finiteness is very common in Himalayish languages (Watters 2008). However, nominalisation does not necessarily indicate subordination, as nominalised sentences can be used as finite clauses, functioning as a main clause. Such nominalisations are referred as by Watters (2008) as free-standing, unembedded nominalisations. In this context, we can say that nominalisation is a versatile device because the same nominaliser contributes its own semantics to various clauses (relative clauses, nominalised clauses, finite clauses etc.).

It is important to stress the morphemes available for nominalisations are not limited. Puma, as in many Kiranti languages, has five distinct nominalisers and these nominalisers are multifunctional as they are used in more than one function. Among

them, the nominaliser =*ku* is the most productive clitic. It can be used with verbs, adjectives, clauses, common nouns, and adverbials. Similarly, =*kha* is a locational nominaliser which is also used extensively in location. There are two more nominalisers -*ma=yu* and -*ma=pa* which are used for instrument and non-instrument nominalisations. However, -*ma=yu* appears to be in limited use and is not productive compared with the other nominaliser -*ma=pa*.

Following the Kiranti fashion of active participle or agentive participle plus general nominaliser, Puma has a *kʌ*- prefix for an agentive or active nominalisation, and a clitic =*ku* for a general nominalisation. Besides this, the other suffix -*pa* is found extensively in Puma. This -*pa* nominaliser, which is derived from Proto-Tibeto-Burman (PTB) *\*pa* 'father'; 'masc' (Benedict 1972), is used in numerous functions (DeLancey 2002; Watters 2008; LaPolla 2008). The nominaliser -*pa* is the oldest Tibeto-Burman nominaliser, and is associated with perfectivity in most Bodish languages (DeLancey 2002, 2011). The scope and distribution of -*pa* is not limited only to Bodish but extends into other Kiranti languages as well. This nominaliser also encodes perfectivity in Puma.

The -*pa* nominaliser, which is also a masculine marker in the case of Puma, often requires an active participle *kʌ*- in a sequence of *kʌΣpa* where Σ indicates the affix attaches to stems, as in *kʌ-ɖhe-pa* [ACT.PTCP-beat-MASC] 'the man who beats'. So it gives agentive nominal such as -*er* in English like teacher, builder, baker, beater etc. This is particularly true for relativisation and sometimes stands on its own for nominalisation constructions. This =*pa* nominaliser occurs independently as well, referring to time adverbial nominalisation. However, it is important to contrast active participle nominalisation (relativisation nominalisation) with general nominalisation (clausal nominalisation).

As in many Kiranti languages, Puma makes extensive use of clausal nominalisation, a syntactic process where a whole clause can function as a noun or noun phrase and be an adnominal modifier. It is interesting to note that the only way in which some nominalised clauses differ from an independent clause is in the English translation, as the verb morphology is similar for both constructions in Puma. So, there is no morphological nominaliser in these types of clausal nominalisations. The nominalised verb, however, could still be negated, or carry the genitive suffix, ergative suffix, comitative suffix etc.

## 7.5 Link between nominalisation, relativisation and genitivisation

Relativisation nominalisation is a ubiquitous phenomenon among Tibeto-Burman languages, including the sub-branch of Kiranti languages. Many scholars (DeLancey 1989; Herring 1991; Bickel 1999; Watters 2002; Lahaussois 2003; LaPolla 2008; Noonan 2008; Genetti 2011, amomg others) cite the seminal work of Matisoff (1972) in Lahu in which same particle *ve* is used for nominalisation, relativisation, and genitivisation, as in the following:

(457)   LAHU

    (a)   GENITIVE

        *ŋà*   **ve**   *mí-chɔ*
        I           shoulder-bag

        'My shoulder-bag.'

    (b)   RELATIVISATION

        *vàʔ*  *qhe*  *chu* **ve**   *Pîchɔ-pā*  *ô*   *tê*   *γâ*
        pig   as    fat      Shan        that one  person

        'That Shan over there who's fat as a pig.'

    (c)   NOMINALISATION

        *ɔ-šɨ*      *tɔʔ*     *la*  **ve**  *thàʔ*    *nɔ*  *mâ* *γa*  *mɔ*  *lâ?*
        blood    emerge  come    ACC     you  NEG get  see   Q

        'Did not you see that blood was coming out?'(Matisoff 1972)

While all of these constructions show the link between genitive, relativisation and nominalisation and share the same marker in Lahu, Puma shows an interesting distinction between nominalisation, relativisation and possessive which is slightly different from Lahu. This pattern is not as neat as in Lahu, but the prefix *kʌ-* relates to the three functions of nominalisation, relativisation, and possessive in Puma.

We argue that the prefix *kʌ-* often participates in more than one function and it serves as a nominaliser, relativiser (with the combination of *-pa*) and possessiviser. However, it is important to note that such a relationship functions only with third person possession construction, as first person and second person uses different possessive markers. Puma, as mentioned above, has an active nominaliser *kʌ-* which is employed in a diversity of functions: nominalisation (to derive nouns from verbs), relativisation (to link subordinate relative clauses to a nominal head) and possessive construction (to derive third person possession), as in (458). *kʌ-* is prefixed directly onto the verb, or onto the possessed constituent. In fact, structural and semantic factors help to

distinguish between these functions in actual contexts of use.

(458) (a)  NOMINALISATION

[*kʌ-ca*]        *ta-a*
ACT.PTCP-eat     come-PST

'The eater came.'

(b)  RELATIVISATION

[*gilasʌ*     *kʌ-khet-pa*]        *cha-lai*       *bud-i!*
glass        ACT.PTCP-break-MASC   child-DAT       call-IMP

'Call the boy who broke the glass!'

(c)  POSSESSIVE

*kʌ-bo*          *kʌ-marchacha*
3SG.POSS-GEN     3SG.POSS-daughter

'His/her daughter.'

## 7.6    *Nominalisers and their distribution*

Many Kiranti languages have more than one nominaliser with multiple functions. It is important to note that there is variation in the number of nominalisers which have developed in Kiranti languages. Languages like Kulung, Limbu, Camling, and Athpare have two basic nominalisers (cf. Watters 2008: 2), while Puma has five distinct nominalisers with different functions for each. Table 120 lists the nominalisers found in the Puma language.

**Table 120:** Nominalisers

| Nominaliser | Gloss | Structural form | Function |
|---|---|---|---|
| *kʌ-* | ACT.PTCP | *kʌ-Σ-* | active participle |
| *-pa₁* | MASC | *kʌ-Σ-(pa)* | masculine |
| *-ma* | FEM | *kʌ-Σ-(ma)* | feminine |
| *=pa₃* | NMLZ | *pa* or *paa* | time adverbial |
| *-ma=pa₂* | INSTR.NMLZ | *Σ-ma=pa* | instrument entity |
| *=ku* | NMLZ | *V=ku* | general nominaliser |
| *kʌ-* | 3SG.POSS | *kʌ-* | 3rd person possessive |
| *-ma=yu* | NON.INSTR.NMLZ | *(kʌ-)Σ-ma=yu* | non-instrument entity |
| *=kha* | LOC.NMLZ | *Σ=kha* | location |

The distribution of multiple functions of a single nominaliser and multiple nominalisers in semantic level in Table 121, morphological level in Table 122, and syntactic level in Table 123, is captured, respectively.

**Table 121:** Distribution of nominalisers in semantic level

| Nominalisers → / Functions ↓ | kʌ-Σ(pa) | kʌ-Σ-(ma) | Σ-ma-pa | V=ku | V-Σ-pa | kʌ- | (kʌ-)Σ-ma-yu | Σ=kha |
|---|---|---|---|---|---|---|---|---|
| Agent | + | + | | | | | | |
| Patient | | | | + | | | | |
| Subject | + | + | | + | | | | |
| Instrument | | | + | | + | | | |
| Object | | | | | | | + | |
| Modifier | | | | + | | | | |
| Adverb | | | | + | | | | |
| Noun | | | | + | | | | |
| Masculine | + | | | | | | | |
| Feminine | | + | | | | | | |
| Demonstrative | | | | + | | | | |
| Location | | | | | | | | + |

**Table 122:** Distribution of nominaliser in morphological level

| Nominalisers → / Morphological level ↓ | | kʌ-Σ(pa) | kʌ-Σ-(ma) | Σ-ma=pa | V=ku | V-Σ-pa | kʌ- | (kʌ-)Σ- | Σ=kha |
|---|---|---|---|---|---|---|---|---|---|
| Grammatical case | Ergative | + | | | + | + | | | |
| | Dative | + | | | + | | | | |
| | Possessive | + | | | | | | | |
| | Genitive | | | | + | + | | | |
| Semantic case | Locative | | | | + | | | | |
| | Ablative | | | | + | | | | |

**Table 123:** Distribution of nominalisers in syntactic level

| Nominalisers → / Syntactic level ↓ | kʌ-Σ(pa) | kʌ-Σ-(ma) | Σ-ma=pa | V=ku | V-Σ-pa | kʌ- | (kʌ-)Σ-ma=yu | Σ=kha |
|---|---|---|---|---|---|---|---|---|
| Negative particle | | | | + | + | | | |
| Numeral | | | | + | | | | |

## 7.7    *Nominaliser types*

I introduce and give the Puma nominaliser types at the beginning of this section and the detailed description of each nominaliser in the next section.

### 7.7.1 Active participle *kʌ-*

Many Kiranti languages such as Puma, Camling (Ebert 1997b) (Ebert 1997), Athpare (Ebert 1997), Bantawa (Doornenbal 2009), Limbu (van Driem 1987), Kulung (Tolsma 1999), Thulung (Ebert 1997), Chintang (Ebert 1997), Koyi (Ebert 1997) have two basic nominalisers- one that has been variously called an 'active participle', an 'agentitive participle', or an 'agentive noun' (Watters 2008), and the other 'general' nominaliser used in multiple functions. For the purpose of this dissertation, we use the term 'active participle (ACT.PTCP)'. As mentioned above, Puma has both an active nominaliser and another general nominaliser. Across Kiranti languages, cognates of the Puma active participle *kʌ-* are found in the nominalisation constructions that relativise S/A arguments of a modified clause, and makes use of a *-pa₁* masculine marker. The *kʌ-* nominaliser in this function often stands on its own, in particular, to derive nouns from verbs (*ca-ma* 'eat' → *kʌ-ca* 'the one who eats' ~ 'an eater'), and often occurs in combination with a suffix *-pa₁*, particularly in relativisation. Likewise, the suffix *-pa₂* in the nominalisation constructions often stands on its own to signal mainly adverbial nominalisation, and often occurs in combination with a prefix *kʌ-* with other than adverbial nominalisation, eg. nominal events and relativisation nominalisation. Similarly, cognates of the Puma *-pa₁* for masculine and *-ma* for feminine are found in many Tibeto-Burman languages.

Kiranti languages demonstrate diverse behaviours for using active participles. The *-pa₁* nominaliser in some languages such as Kulung and Thulung stands on its own as a primary nominaliser, while it occurs in other languages like Puma, Bantawa, and Limbu in combination with a cognate *kʌ-*, *ka-* or *kɛ-* as a secondary nominaliser. There are some languages like Camling and Athpare in which the nominaliser *-pa* is optional. However, the active participle requires only prefix *kʌ-* in the formation of nouns from verb roots. The paradigms in Table 124 demonstrate distinct active participles and nominalisers in some Kiranti languages.

**Table 124:** Active participles and nominalisers in Kiranti languages

| Languages | Active participles | General nominalisers |
|---|---|---|
| Puma | *kʌ-Σ-pa₁/ma* | *=ku* |
| | *kʌ-Σ* | *=pa₂* |
| Bantawa | *ka-Σ-pa* | *-ʔo* |
| Chintang | *ka-Σ-pa* | *-go* |
| Camling | *ka-Σ-(pa)* | *-ko* |
| Athpare | *ka-Σ-(pa)* | - |
| Limbu | *kɛ-Σ-pa* | *ba/bɛ* |
| Dumi | *kpɨ ~ -pɨ / -kpa* | *-m* |
| Kulung | *-pa / -p* | *-kə* |
| Thulung | *-pa* | *-M* |
| Belhare | ?[51] | (*k*) *ha* (*k*) |

Consider the following examples, in which, in particular, we can see the uses of *kʌ-* where it distinctly functions as the possessiviser and the active participle in (459a) and the active participle in (459b), respectively.

(459) (a)  [*kʌ-burā-lai*          *sukhā*      *kʌ-li-ma*]
        3SG.POSS-husband-DAT      love      ACT.PTCP-be-FEM
        *kʌ-burī*    *puks-a*
        3SG.POSS    go-PST

        'Husband-lover wife went.'

   (b)  [*ase*      *kʌ-puŋ-pa₁*]          *cha*  *si-a*
        yesterday  ACT.PTCP-go-MASC      boy  die-PST

        'The boy who went yesterday died.'

The Puma language has one active participle *kʌ-* that usually makes specific reference to the agent in agent nominalisation constructions. Watters (2008) notes that participles in the Kiranti languages are first and foremost nominalisations. As in many Kiranti languages, Puma employs an active participle (agent nominaliser) which is a basic criterion in distinguishing an agent nominalisation from general nominalisation, and other kinds of nominalisation.

In (459a) the prefix *kʌ-* obligatorily is used to express nominalisation on A(gent). We do not find any exceptional nominalised constructions in which agent nominalisation is not marked with the active participle, while all subjects and patients are marked with *=ku* on subject and patient nominalisation. However, in (459b) the subject uses *kʌ-* on subject nominalisation instead of *=ku* that is extensively used on

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[51] To my knowledge, there is no equivalent morpheme in Belhare.

most of the subject and patient nominalisation. It is interesting to note that the general nominaliser also can be used in (459b).

### 7.7.2 The general nominaliser =*ku*

Puma relies on one highly versatile nominaliser, namely =*ku* which is used in the formation of subject, patient and event nominals. The Puma nominaliser =*ku* occurs not only in familiar nominalisation contexts, but also marking relative clauses, and non-subordinated main clauses. All intransitives, transitives, antipassives and adjectives take the nominaliser =*ku*.

In transitive clauses the agentive marker generally appears on the NP representing the A argument. Puma possesses both S=P type and S=A type nominalisation constructions. With the S=P type, both S and P take the general nominaliser -*ku*, while with the S=A type, the active nominaliser *kʌ*- should be used. These types refer to the single argument of the intransitive use of the verb which corresponds to the A(gent) argument or the P(atient) argument of the transitive use in the nominalisation constructions.

(460) (a)  [*ai*          *si-a=ku*]       *mʌnna*       *kʌnnimak*   *pee*
           today         die-PST=NMLZ    man.ABS       good         NEG

           'The person who died today is not good.'

      (b)  [*kʌ-mma-a*              *khurr-aŋ-i=ku*]
           3SG.POSS-mother-ERG    carry-IPFV-3P=NMLZ
           *uŋ-bo*                 *uŋ-marcha-cha*
           1SG.POSS-GEN           1SG.POSS-girl-child.ABS

           'The baby whom the mother is carrying is my daughter.'

The nominalising suffix =*ku* in (460a) attaches to the verb *si* 'die' to modify the subject *mʌnna* 'man', while in (460b) it attaches to verb *khur* 'carry' to modify the patient *cha* 'baby'. The distinction between the subject relative clause and the patient relative clause in (460a-b) is in the differential syntax. In (460a) the subject *mʌnna* 'man' has been made the head of the NP and missing from the nominalised clause, while in (460b) the patient *cha* 'baby' has been made the head of the NP and missing from the nominalised clause.

### 7.7.3 The instrument nominaliser Σ-*ma=pa₃*

In Puma the instrumental clitic -*ma=pa₃* particularly refers to instruments. In the formula Σ-*ma=pa₃*, -*ma* indicates infinitive form while -*pa₃* functions as a generator of

deriving instruments from infinitives. The instrument nominaliser *=pa₃* obligatorily attaches to infinitival forms.

(461) (a)    *ŋa-a*      *chaplawa*      *chapd-oŋ*
            1SG-ERG    letter.ABS         write-1SG.S/P.PST

            'I wrote the letter.'

     (b)    [*ŋa-a*      *hud-u-ŋ=ku*]          [*chap-ma=pa₃*]     *ompʌcima*
            1SG-ERG    buy-3P-1SG.A=NMLZ    write-INF-INSTR.NMLZ   white
            *ket-yaŋ*
            look.like-IPFV

            'The writing implement that I bought looks white.'

We see the verb *chapd* 'write' in (461a), and in (461b) the suffix *-pa₃* marks a derivational process to derive instruments related to writing. The suffix *-pa₃* is very productive as intransitive and transitive verbs allow *-ma-pa₃* marked objects/things to be derived but still it has some restrictions as such deverbal instruments cannot be derived from all verbs like *itd* 'give', *chid* 'send', and *baŋ* 'talk' etc (See Section 7.15, Table 113 for details).

### 7.7.4   The non-instrument nominaliser Σ-*ma=yu*

The clitic *=yu* is used with infinitives, like *=pa₃* does, in limited environments. The combination of morphemes in the order of *-ma-pa₃* particularly identifies objects. The clitic *=yu* serves only in the formation of object nominalisations from infinitives. The object nominaliser *=yu* obligatorily attaches to infinitival forms, as does the instrument nominaliser *=pa₃*. However, the only way in which it differs from *=pa₃* is in the ability of *=yu* to appear with the active participle/ third person possessive marker *kʌ*:

(462) (a)   *pʌŋ*   *jhuttā*   *mu-ma*    [*kʌ-ŋen-ma=yu*]            *ŋen-ma*
            SEQ   bunch   do-INF      ACT.PTCP-keep-INF=N.INSTR.NMLZ    KEEP-INF

            'Making bunches, and keeping those which should be kept.'
            (plant_crop_01:25)

     (b)   *pʌŋ*      *doro*     *doro*     *mʌ-mu*     [*ca-ma=yu*]?
            SEQ        what     what     3PL.S/A-do   eat-INF=N.INSTR.NMLZ

            'What of those stuff do they prepare for food?' (children_02:095)

From examples above, we can readily see that the instrument nominaliser *-ma=pa₃* is critically distinct from the object nominaliser *-ma=yu* in denoting instruments as opposed to objects.

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### 7.7.5 The adverbial nominaliser =pa₂

Puma extensively makes use of a clitic *=pa₂* particularly in adverbial nominalisations. It can also take an ergative suffix *-a*. The clitic *=pa₂* functions only in adverbial nominalisations, with or without suffixing *-a*. Its main function is to express the meaning 'while' in nominalised constructions. The adverb nominaliser *=pa₂* in Puma is very likely functionally related to the Nepali word *=kheri* 'during, as both are used primarily to reference time in general for the same reference which shows simultaneous action.

(463) (a)  *ai-sʌmmʌ*    *keka*    [*nʌŋnima loktama hʌtni*
     today-PP    1PL.EXCL.ABS    happy    pleasure    in.this.way
     *ben=pa₂*]    *bihā*    *ben*
     come.level=SIML    marriage    come.level

     'In this way, till now it is the happy and pleasurable marriage which is coming to us.' (myth_orph_01:002)

   (b)  [*ka-dikku*    *itd-i-ni-pa₂-a*]
     2SG.POSS-mother's.elder.brother.ABS    give-IMP-REP-SIML-ERG
     *kʌ-cʌkka*    *itd-i-da-a=ni*    *rʌchʌ*
     3SG.POSS-mother's.younger.brother.ABS  give-3P-TEL-PST-REP    MIR

     'He gave (food) to elder maternal uncle while asking to give (it) to younger maternal uncle.' (myth_orphan_01:114)

### 7.7.6 The locative nominaliser =kha

The morpheme *=kha* functions in locational marking in Puma, as in many Kiranti languages. It is used particularly in the formation of places or locations from verbs. Puma also possesses a prefix *kha-* which is extensively used to denote antipassive constructions (see Section 3.17.2).

(464) (a)  *ca=kha*
     eat=LOC.NMLZ

     'Place for eating/ dining room; restaurant.'

   (b)  *im=kha*
     sleep=LOC.NMLZ

     'Place for sleeping, bedroom.'

(465) (a)  [*ŋa*    *yuŋ-ŋa=kha-do*]    *tʌkku*
     1SG.ABS    stay-1SG.S/P.NPST=LOC.NMLZ-GEN.LOC    DEM
     *marit*    *pʌ-yuŋ-nin*
     woman.ABS    NEG-stay-NEG

     'That woman doesn't stay where I stay.'

(b)  [*uŋ-bo*        *uŋ-yayok=kha*]        *ʌphis*
     1SG.POSS-GEN    1SG.POSS-discuss=LOC.NMLZ    office.ABS

'The office where I discuss/discussed.'

(c)  [*uŋ-yuŋ=kha*]      *khim*
     1SG.POSS-stay= LOC.NMLZ   house.ABS

'The house where I stay/stayed.'

As mentioned above, the function of locative nominaliser is to derive locations from verbs. We see in examples (464-465) that all locations are derived from verbs. Such derivation of locations from the verbs is very productive in Puma. The locational nominaliser requires bare verbal forms (without infinitives). However, there are some expectional derivations which either are not derived properly from verbs or the derived locations and no more carry the essence of a verb. For example, *buŋwa=kha* 'place to flower, garden' is derived from the noun *buŋwa* 'flower', and not from a verb. In fact, Puma does not have a verb like *buŋwa*, instead it possesses  a verb *bet* 'sprout'. Without any question, the derivation of *ni=kha* 'place of euphemism' is from the verb *ni*. The derived noun no longer carries the meaning of the verb 'be well; be nice; get better etc'.

Perhaps semantically it can be argued that this derived location is carrying the essence of the verb *ni* 'be well', as the location of euphemism always should be in a hygienic condition. If not, we will have a problem and we need to see a doctor for treatment. Therefore, those places should be kept well in a better condition, we can say that the derivative noun *ni=kha* 'place of euphemism' somehow has a relation with a verb *ni* 'be well.' The other derivative location *maŋ=kha* 'remote place' is also found in Puma. We are not able to say whether it is a lexical or derived noun, as *maŋ* is not attested, either as a verb or a noun or any particle.

### 7.8    *Relativisation*

The intimate relationship between nominalisation and relativisation has been extensively discussed in the Tibeto-Burman literature as well as in Japanese and Korean, where the same morpheme is used to construct nominalisation and relative clauses (Matisoff 1972; Genetti 1992; Noonan 1997; Horie 1998; Bickel 1999; DeLancey 1999; Zeitoun 2002; Genetti et al. 2008; Rhee 2008; Yap & Matthews 2008; Simpson 2008; Shibatani 2009; Yap, Grunow-Harsta & Wrona 2011, and among others). The use of nominalised clause constructions in a range of syntactic structures to form relative clauses is characteristic of Kiranti languages. These languages make

extensive use of clausal nominalisation strategies. DeLancey (2002) states that relativisation in Tibeto-Burman is a subspecies of clausal nominalisation.

Like many neighbouring Kiranti languages, one of the most important features of nominalised clauses in Puma is their ability to be embedded into noun phrases and their use as modifiers of nouns. Such a feature extends beyond Kiranti syntax to Tibeto-Burman syntax and as a result this phenomenon is very widespread in Tibeto-Burman languages (Genetti 2011). The Puma language consistently shows the Kiranti association in terms of relativisation and nominalisation. Hence, nominalisation is a main device to form relative clauses in Puma.

Puma exemplifies a very complex relativisation pattern. In Puma relative clauses are formed from a finite or non-finite verb form plus an agent nominaliser, optionally followed by gender markers, and a general nominaliser. Thus, the general nominaliser =*ku*, and the agent nominaliser *kʌ*- optionally followed by a male gender marker -*pa₁* and its counterpart female gender -*ma,* serve as the relative marker in Puma. The nominalising prefix *kʌ*- and suffix =*ku* are used quite productively to form nominals in Puma. It is important to note here that under no circumstances can the agent marker and general marker be dropped in relativisation, while a male gender marker -*pa₁* and its counterpart female gender -*ma* which usually follow the agent marker are dropped. Thus, nominalisers evolve into relativisers in the construction of relative clauses.

Comrie and Wildgen (1998) argue that modifying clauses in Asian languages are qualitatively different from those in European languages like English. He further claims that Asian languages do not have relative clauses with a gap but, rather, have attributive clauses. This is an areal characteristic of Asian languages in which attributive clauses involve simply attaching modifying clauses to the head noun.

On the other hand, Genetti (2011) argues that in Tibeto-Burman languages, the co-referential argument in the relative clause is necessarily unexpressed, leaving a gap in the relative clause in which an obligatory relationship holds between the head noun and that gap. While the identity of relativisation with nominalisation constructions is widespread in Tibeto-Burman, Burmese is a prima facie exception to the claim that relative clauses are universally nominalisations in Tibeto-Burman (DeLancey 2002: 56). The Puma examples of relative clauses are discussed in section 7.13 and their types are presented in sections 7.18-7.23.

## 7.9 Identical main clause and nominalised clause

A main clause will generally end in a fully inflected verb form. It marks person, number, tense and aspect etc., as in (466a). Meanwhile, a relative clause or a noun complement may also have the identical form as a main clause, as in (466b). The nominalised constructions in (466a) do not differ from the main clauses in (466b) in terms of inflectional morphology.

(466) (a) [*ma-a*       *dhit-aŋ=ku*]       *cha*      *asemʌŋ*   *si-a*
           fever-ERG       get-IPFV=NMLZ      boy.ABS    yesterday die-PST

          'The fevered boy died yesterday.' (Literally: 'The boy got fever.')

    (b) [*ma-a*       *dhit-aŋ=ku*]       *cha*      *asemʌŋ*   *si-a*
           fever-ERG       get-IPFV=NMLZ      boy.ABS    yesterday die-PST

          'The boy who had fever died yesterday.'

## 7.10 Participles types

There are only a few Kiranti languages such as Yamphu and Wambule which are reported to have a plethora of nominalisers with multiple functions (Watters 2008). Watters (2008) provides examples from Yamphu, representing all active participles, patient participles, object participles, and locative participles. Puma employs all these participles, as in (467), though we would like to name them differently like agent nominalisations, patient nominalisations, object nominalisations, and locative nominalisations in the remainder of this chapter. However, in this section we use the term 'participle' for all possible nominalisation types. Besides this, Puma also exhibits an interesting phenomenon in nominalising objects, in particular, P-type object nominalisation which we discuss in Sections 7.19 and 7.20.

When we go one step ahead, beyond the Kiranti sub group, in Himalayish and Bodic languages, we find there is a range in the numbers of nominalisers, such as only one nominaliser in Cepang (Caughley 1982), Chantyal (Noonan 1997), and Manange (Genetti et al. 2008), two nominalisers in Kham (Watters 2008), and five nominalisers in Magar (Grunow-Harsta 2011).

(467) (a) ACTIVE PARTICIPLE

      [*sʌŋpwa*   *kʌ-bha=pa₁*]         *uŋ-pa*
      tree.ABS   ACT.PTCP-cut=MASC    1SG.POSS-father.ABS

      'The tree cutter is my father.' or 'The man who cut the tree is my father.'

(b)  SUBJECT PARTICIPLE

[*ase*        *puks-a=ku*]           *thoroŋcha*        *si-a*
yesterday     go-PST=NMLZ            boy.ABS            die-PST

'The boy who went yesterday died.'

(c)  PATIENT PARTICIPLE

[*ŋa-a*       *dher-u-ŋ=ku*]         *marcha*           *puks-a*
1SG-ERG       beat-3P-1SG.A=NMLZ     woman.ABS          go-PST

'The woman whom I beat went.'

(d)  THING/INSTRUMENT PARTICIPLE

[*ŋa-a*       *hud-u-ŋ=ku*]          [*bha-ma=paɜ*]      *mʌjʌbo*
1SG-ERG       buy-3P-1SG.A=NMLZ      cut-INF=INSTR.NMLZ  nice

'The knife that I bought is nice.'

(e)  OBJECT PARTICIPLE

*kʌ-ŋa-do*                  [*ca-ma=yu*]            *it-ma-dot*          *tʌllʌ*
3SG.POSS-mouth-GEN.LOC      eat-INF=N.INSTR.NMLZ    give-INF-OBLG        PTCL

'The food that should be given in the mouth.'

(f)  LOCATIVE PARTICIPLE

[*uŋ-hu-kha*]               *khim*        *kʌheppaŋ*
1SG.POSS-buy=LOC.NMLZ       house         big

'The house I will buy will be big.'

## 7.11   Agent nominalisation types

Watters (2008: 9) reports that some Kiranti languages like Yamphu distinguish between two kinds of agent/active participle/nominalisation, where one agent nominalisation is marked by *-khu ~ -khus* and the other is marked by *-yaŋ*.

(468)    YAMPHU

(a)  *yok-æk-khuba-ji*
seek-bring-ACT.PTCP-NS

'The ones who search and bring.' (single-action attribute)

(b)  *na*        *seʔ-yaŋ-ji*
fish        kill-ACT.PTCP-NS

'Fishermen (those who kill fish).'  (time-stable attribute)

However, the Puma language distinguishes between three kinds of agent nominalisation, where one agent nominalisation is marked by *kʌ-* and the other two are marked by *=ku*. Though their marker is identical, the way the subject nominalisers mark is distinct. The first type of subject nominalisation occurs with fully inflected verb

forms, in particular with subjunctive forms, as *V-a=ku*, while the second type of subject nominalisation occurs only with bare verb root, as Σ=*ku* (see 6.7.1 for reltivisation strategy).

Puma makes a distinction between agent and subject nominalisations which is based on different syntactic structures. The two subject nominalisations, the one suffixing directly to the bare verb root and the other one prefixing to the bare verb root, are uninflected for person and number, as an agent nominalisation is. However, these types of subject nominalisations refer to both non-past and past tense, as in *kʌ-puŋ* [ACT.PTCP-go] 'the one who goes/went' or *puŋ=ku* [go=NMLZ) 'the one who goes/*went'. Both nominalisation constructions indicate the same meaning. Nevertheless, the other subject nominalisation which is inflected for tense using the subjunctive form particularly, only refers to past tense, as in *puks-a=ku* [go-PST=NMLZ] 'the one who went/*goes'.

Puma is actually rather unusual cross-linguistically in using three types of agent/subject nominalisations. It is fairly unusual in Kiranti languages to use three types of S/A nominalisations, where two of them, marked by =*ku*, make reference to the S and P as well, while the other one, marked by *kʌ-*, makes reference to only the A and S human arguments.

## 7.12 Agent nominaliser *kʌ-*

The use of active participle (active nominaliser) to form an agent nominalisation, as occurs in Puma with the prefix *kʌ-*, is widely attested in other Kiranti languages (Ebert 1997; Bickel 1999; Genetti et al. 2008; Watters 2008, and among others), though the number and the functions do vary.

The active nominaliser *kʌ-*Σ(*-pa*/*-ma*) is prefixed to a stem and constructs active nominals where the person (doer) involved normally does the action as a daily business, job or regular activity. Hence, the active nominaliser normally expresses the meaning 'one who does' or makes a profession of it. For example, *chap* 'write'→ *kʌ-chap* [ACT.PTCP-write] 'the person who writes ~ the writer' and *kʌ-yuŋ mʌnna* [ACT.PTCP-stay person] 'the person who stays ~ the sitter'. Relativisation of agents (A) in finite constructions and subjects (S) in non-finite constructions requires *kʌ-*, with or without subsequent gender markers *-pa₁* (masculine) or *-ma* (feminine) ending. It should to be noted that while grammatical marking of gender is not widespread in Kiranti languages,

Puma does not distinguish genders in person marking except by lexical nouns such as *pa* 'father', *ma* 'mother', *dipa* 'grandfather', and *dima* 'grandmother.'

### 7.12.1 Gender marker drop

Puma possesses gender markers *-pa* (masculine) and *-ma* (feminine) but these markers play no role in inflectional morphology, unlike Nepali where gender-marking system is very complex and forms are inflected differently in agreement, as in *keṭo ro-yo* 'the boy cried', *keṭī ro-ī* 'the girl cried', *unī ro-e* 'the boy$_{LOW.HON}$ cried, and *unī ro-i-n* 'the girl$_{LOW.HON}$ cried', *unī-haru ro-e* 'they$_{LOW.HON}$ cried', *wahā̃-haru ru-nu-bha-yo* 'they$_{MEM.HON}$ cried', and *mausāph-haru ro-i-baks-yo* 'they$_{HIGH.HON}$ cried'.

Active participle *kʌ-* without the masculine suffix *-pa₁* and feminine suffix *-ma* also functions as an independent head noun, either in main clauses or nominalised clauses. The active participle usually occurs with gender markers *-pa₁* and *-ma*. It is interesting to note that the active participle in Puma is never dropped in nominalised constructions which have a lexical meaning. In contrast, it is possible to drop masculine and feminine suffixes *-pa₁* and *-ma*, instead.

(469) (a)    [*ŋa-lai*     *kʌ-khaŋ*]     *marchacha-a*    *puchap*     *set-i*
          1SG-DAT    ACT.PTCP-see   girl-ERG      snake.ABS    kill-3P
          'The girl who saw me killed the snake.'

       (b)    [*tv*    *kʌ-khet*]         *thoroŋcha-lai*    *bud-i!*
          tv    ACT.PTCP-break     boy-DAT       call-IMP
          'Call the boy who broke the television!'

In (469a-b) the masculine nominaliser *-pa*, and the feminine nominaliser are dropped, respectively. The only the active nominaliser *kʌ-* is attached (prefixed) to the stem *khaŋ* 'see' which expresses a lexicalised meaning. These utterances are fully grammatical. We need markers where there is not an inflected nominal – maybe a pronominal. Thus the masculine or feminine nominaliser is needed to distinguish gender.

In Puma it is also possible to drop common nouns like *boy* and *girl* when the suffixes *-pa₁* and *-ma* attach to a stem or when the active nominaliser occurs in combination with *-pa₁/-ma*. If we use just *kʌ-khaŋ-cha* or *kʌ-khet-cha* in the above examples, the use of *cha* 'child' indicates neutral and we do not know whether it is a male or a female. When *-ma/-pa₁* is used, *cha* becomes optional, though we can use *mʌnna* 'man' instead of *cha* 'child' in a natural conversation. However, it is important to note that *cha* cannot be optional with feminine head nouns. In Puma pragmatically it

can be argued that girls are considered obedient and do not do inappropriate tasks compared with the boys. When they do, that should be fully specified. Such an alternation does not play any significant role in the syntax.

We find no distinct inflectional morphology as well with such an alternation. However, pragmatically, even such a little alternation makes a lot of sense in Puma. It is important to explore the semantics of agent which can be fully logical. The head noun *marchacha* 'girl' cannot be dropped in (470b) and the example is considered pragmatically ill-formed because such behaviour is not expected in the community of girls beating other people. Girls are considered to be more responsible and it is expected that girls do only appropriate business. Nevertheless, when they are involved in such kinds of culturally inappropriate tasks, they should be fully marked, as in (470a), and pragmatically they cannot be dropped, as in (470b) which is a ill-formed utterance. However, (471b) is a well-formed utterance because such behaviour is expected from boys. The noun head *throŋcha* 'boy' is dropped and it is understood from the presence of *-pa*. This example is pragmatically ill-formed, compared with (470a) in terms of the case of girls.

(470) (a)  [*khokku-lai*      *kʌ-ɖhe-ma*]          *marchacha*      *si-a*
             3SG-DAT          ACT.PTCP-beat-FEM      girl.ABS          die-PST

         'The girl who beat him died.'

      (b)  [*\*khokku-lai*      *kʌ-ɖhe-ma*]                  *si-a*
             3SG-DAT          ACT.PTCP-beat-FEM.ABS        die-PST

         Intended: 'The girl who beat him died.'

(471) (a)  [*khokku-lai*      *kʌ-ɖhe-pa₁*]          *thoroŋcha*      *si-a*
             3SG-DAT          ACT.PTCP-beat-MASC    boy.ABS          die-PST

         'The boy who beat him died.'

      (b)  [*khokku-lai*      *kʌ-ɖhe-pa₁*]          *si-a*
             3SG-DAT          ACT.PTCP-beat-MASC    die-PST

         'The boy who beat him died.'

As mentioned above, *-pa₁/-ma* optionally occurs with the active nominaliser. Sometimes they are unmarked and often marked by lexical noun rather than by gender. In the large corpus (ELDP[52] 2010; CPDP 2004), we find very few nominalised nouns marked by *-pa₁*, followed by a noun, and among them, *-ma* is hardly used. The modifying nominals usually follow nouns. On the basis of such data we can argue that

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[52] Endangered Languages Documentation Programme, SOAS, U.K.

those agent nominalisations are unmarked for gender unless they are required to be marked in a particular situation. The agent nominalisation construction becomes neutral when it is unmarked for gender. The nominalising prefix *kʌ-* can relativise not only A arguments, but also S arguments. The nominaliser *kʌ-* has been extended even to take on the third person possessive function and default determiner function in some adjectives and time adverbs. We begin with nominalisation of A arguments, and move to S arguments, and P arguments, respectively.

### 7.12.2 A argument nominalisation

The active nominaliser *kʌ-* functions only in active nominalisation constructions, referring to S and A arguments. It is important to note that whether the agent nominaliser is used to refer an A argument or an S argument in the relative clauses, it is not inflected for person and number. The main purpose of these examples is to show the relativisation particularly on A arguments, where relativised heads is followed by head nouns in (472b).

(472) (a)    [*kʌ-ki*]          [*khan*     *kʌ-ŋi*]
          ACT.PTCP-cook    curry     ACT.PTCP-cook
          [*wa*        *kʌ-it*]         [*khan*     *kʌ-it*]
          water      ACT.PTCP-give    curry     ACT.PTCP-give

          'All who cook/cooked food and curry, and who serve/served food and water.' (wed_cakkai: 096)

     (b)   *thʌtni-ŋe*         [*kʌ-thapsʌŋ*       *kʌ-hili*
          in.that.way-EMPH    3SG.POSS-custom     3SG.POSS-custom
          *kʌ-ŋen*]         *nāgʌ*         *rʌichʌ*
          ACT.PTCP-keep    holy.snake     MIR

          'Our custom is like that, it is the holy snake who raised us.'
          (bulu_batuko_02:16)

     (c)   [*tʌkku*     *narak*      *kʌ-mu-pa₁-a*]       *āṭh*
          DEM       delinquency    ACT.PTCP-do-MASC-ERG    eight
          *paisā*      *kʌ-ḍanḍa*      *loss-i*        *pʌŋ*
          paisa      3SG.POSS-fine    take.out-3P    CONN

          'That one who raped paid his fine of eight paisa.' (DA_tanglan: 50)

### 7.12.3 S argument nominalisation

The active nominaliser also serves as a relativiser on S arguments. Relativisation on intransitive subjects (S) requires *kʌ-*. As in relativisation on A, the gender markers *-pa* and *-ma* optionally follow.

(473)(a) [*keka-lai*      *kʌ-puŋ*]      *ʌphsʌr=ku*      *rʌchʌ*
            1PL.EXCL-DAT    ACT.PTCP-go     officer=NMLZ      MIR

         'The (old) man who was an officer came to take us.'(LH_M_01: 520)

    (b) *onni*        *rʌŋ-yaŋ-so*       *jʌmmʌi*       *ʌ̃*
            this.much     say-IPFV-CVB       all              FILLER

         [*belāyet-ya-ŋkʌŋ*        *kʌ-ta*]
         UK-LEVEL.LOC-ABL       ACT.PTCP-come

         'Having talked much, the one who came from the U.K.'

         (intro_Mauwa:154)

The examples in (473) illustrate how the active nominaliser marks the subject to form relative clauses. Moreover, the other general nominaliser *=ku* occurs in (473a). We discuss the functions of the suffixes *=ku* and *=pa* in the next session.

### 7.12.4 A argument nominalisation in antipassive

Like many Kiranti languages, two-place and three-place argument verbs in Puma can be expressed intransitively, using the antipassive marker *kha-* (see Section 3.17.2 for details) where *kha-* always entails a human P. It is interesting to note that it is possible to relativise the detransitivised (demoted) object argument where an overt object is prohibited. Note that (474a) is an example of relativisation on P in the transitive nominalised construction, while (474b) is its counterpart in an antipassive construction.

(474) (a) [*ŋa-a*      *ɖher-u-ŋ=ku*]      *mʌnna*
         1SG-ERG    beat-3P-1SG.A=NMLZ   person

         'The person whom I beat.'

    (b) *[ŋa*      *kha-ɖher-a=ku*]     *mʌnna*
         1SG.ABS    ANTIP-beat-PST=NMLZ  person

         '(Someone) whom I beat_PST.'

Here, we can see that both arguments of the nominalised constructions do not retain the same case marking, and they also do not have the same person marking. In (474a) the argument *ŋa* 'I' bears the ergative suffix, while in (474b) it is in the absolutive case. Similarly, the general nominalised verb agrees with person in (474a), but such an inflection lacks in (474b), as case assignment and agreement follow the syntax of intransitive clauses with detransitive constructions (Bickel et al. 2007). *Kha-* always refers to a generic person rather than a definite or specific. Likewise, it is possible to relativise on the nominalised detransitivised subject/agent argument.

(475) (a)  [*marchacha       kʌ-cet*]        *mʌnna*
           girl.ABS          ACT.PTCP-hit     person

           'The person who hit the girl.'

     (b)   [*kha-kʌ-cet*]        *mʌnna*
           ANTIP-ACT.PTCP-hit    person

           'The person who hit (someone).'

The syntax of P relativisation is not as complex as the syntax of A relativisation. We see that the syntax of relativisation on the A argument in both transitive and antipassive constructions is very simple, as there is neither case assignment nor agreement. Not surprisingly, overt object *marchacha* 'girl' of example (475a) is prohibited in (475b) with the use of *kha-* which entails, as usual, someone in generic reference. It is possible to relativise on detransitivised subject in optative nominalised constructions, as in (476).

(476)     Relativisation of A in optative antipassive construction

          [*kha-kʌ-ca*]              [*kha-kʌ-duŋ-a-i*]
          ANTIP-ACT.PTCP-eat         ANTIP-ACT.PTCP-drink-ERG-FOC
          *uŋ-ko*          *dip-ma*                 *duŋ*        *dit-nʌŋ-ne!*
          1SG.POSS-GEN     cover.up-INF             age          get-1SG.NEG-OPT

          'May the one who eats and drinks not obstruct me!' (hopmacham_01: 125)

In Puma the relativisation process does not distinguish between indicative constructions and optative constructions, except using optative marking, following a stem. As *kha-* bans an overt object, we do not have any overt object in (476). It is interesting to note that in normal transitivisation constructions *kʌ-ca* [ACT.NMLZ-eat] refers to 'the one who eats'. Here, the agent is detransitivised by the antipassive morpheme *kha-* as the subject, and then it is relativised using the agent nominaliser *kʌ-*, where the referent of the headless relative noun does the task of eating human beings and maybe of drinking human blood. We can assume from this example that *kha-* denotes the headless relative noun that must be a kind of demon.

### 7.12.5 Semantic restriction on *kʌ-*

Puma relative clauses on active nominalisations are restricted to humans. *kʌ-* refers to humans in all the examples (472-473) illustrated above of active nominalisation with the exception in (472b), where it refers to a living referent/animate *nagʌ* 'holy snake.' The 'holy snake' often is considered as a creator or protector of human beings in Nepal.

People usually worship *nāga* twice a year in *Nāga Panchamī*[53] and *Basanta Panchamī*[54]. Hence, presumably, it might be the reason that (472b) is acceptable using *kʌ*- with the *nagʌ* 'holy snake', as it is considered like a human in the form of a goddess. The fact that the active nominaliser *kʌ*- only expresses a human referent can be seen in the following examples:

(477) (a)    *[*kʌ-pan*]        *mʌnna*
       ACT.PTCP-fly      person

       Intended: 'The person who flies.'

    (b)    [*pilen        kʌ-pan*]
           plane        ACT.PTCP-fly

           'The one who flies a plane.' ~ 'a pilot.'

Example in (477a) is not grammatical because a human being cannot fly. However, (477b) is acceptable as a pilot can fly an airplane (cf. Rai et al. 2007). The relative head *kʌ-pan* takes as an object *pilen* 'airplane' which can fly. The word order in this nominalised construction is so rigid that if we swap position, the construction becomes ungrammatical, as in (478) because *kʌ*-, as already mentioned above, obligatorily requires a human referent.

(478)      *[*kʌ-pan*]        *pilen*
       ACT.PTCP-fly      plane

       Intended: 'The plane which flies.'

The active nominaliser normally does not entertain living referents other than humans, as in (479), where it refers to a non-human animate *khipa* 'dog' rather than a human, though semantically this construction makes sense as the dog does run.

(479)      *[*kʌ-onh*]        *khipa*
       ACT.NMLZ-run      dog

       Intended: 'The dog which runs/ ran.'

However, while *kʌ*- prohibits non-human and just permits humans, non-human animate nouns can be relativised in three distinct ways. In general, subject nominalisations in Puma are formed by suffixing a general nominaliser, either with the verb stem (Σ=*ku*) or

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[53] *Nāga Panchamī* usually is observed after the completion of plantation of rice in the months of July-August, welcoming the spring season after the end of the monsoons.
[54] *Basanta Panchamī* usually is observed after the completion of harvesting in the months of January-February, welcoming the monsoon seasons after the end of spring. The *Laxmi* 'goddess of knowledge' is also worshipped on this day. This day is considered as auspicious time to start teaching the *ka, kha, ga* etc. writing system to children.

inflected verb forms (V=*ku*):

(480) (a)    [*onh-a=ku*]    *khipa*
          run-PST=NMLZ   dog

          'The dog that ran.'

    (b)    [*onh-yaŋ=ku*]    *khipa*
          run-IPFV=NMLZ  dog

          'The dog that is/was running.'

    (c)    [*onh=ku*]  *khipa*
          run-NMLZ  dog

          'The dog that runs.'

In Puma the general nominaliser can occur with any verbal forms. Actually the general nominaliser does not indicate distinctions like past, non-past and imperfective but the tense markers do, such as past inflection in (480a), imperfective inflection in (480b) and bare verbal forms in (480c). It is interesting to note that in the syntax of two-argument verbs of Puma, instruments also can play a role of agent and take an ergative suffix -*a*.

(481) (a)    *tana*       *wahut-a*       *patd-i-pukḍ-i*      *ni*
          PTCL       river-ERG     flow.down-3P-TEL-3P  REP

          'The river flowed (him).' (dimahongma_01: 16b)

    (b)    *aci-cha-lai*        *pakkā=cha*  *wahut-a=ŋa*    *patd-i*
          1DL.INCL.POSS-child-DAT sure=ADD    river-ERG=EMPH  flow.down-3P

          'The river flowed our child.' (dimahongma_01: 21a)

It is not surprising that the instrument *wahut* 'river' which can play the agent role, cannot be relativised using *kʌ-*, as in (482a) referencing an agent because the agent nominaliser obligatorily requires a human referent. However, interestingly, that construction can be relativised, as in (482b), where antipassive marker *kha-* is used to make a relative clause.

(482) (a)    *[kʌ-pat-puk]*       *wahut*
          ACT.NMLZ-flow-TEL    river

          'The river which flows/ causes flow.'

    (b)    [*kha-pat(-puk)=ku*]      *wahut*
          ANTIP-flow-TEL=NMLZ    river

          'The flowing river.' or 'The river which flows/ causes flow.'

Likewise, we see that =*ku* refers to both human and non-human referents and it serves as a general nominaliser as shown in the examples above. It is interesting to note that the critical feature of a general nominaliser is its ability to refer to both subject

nominalisation and patient nominalisation. When the general nominaliser attaches to verbal forms, it demonstrates a patient object nominalisation and a subject nominalisation, as already illustrated in (480). In fact, one of the most important features of the antipassive marker *kha-* is its ability to create animate experiencer arguments:

(483) (a)    [*kin=ku*]          *khipa*
              fear=NMLZ       dog

              'The dog that is afraid of (something).'

     (b)    [*kha-kin=ku*]       *khipa*
              ANTIP-fear=NMLZ    dog

              'The dog that frightens.'

     (c)   *[*kha-kin=ku*]      *mʌnna*
              ANTIP-fear=NMLZ    person

              'The person who frightens.'

     (d)    [*kʌ-kin*]      *mʌnna*
              ACT.PTCP-fear    person

              'The person who frightens.'

### 7.12.6 Active participle: comparative perspective

Many Kiranti languages have different nominalisers that make a specific reference to the A and the S of the verb. Puma also possesses the A nominaliser *kʌ-* and S nominaliser *=ku*. However, Puma also appears to be unusual in that the active participle *kʌ-* can also mark the S of some intransitive verbs, unlike the other neighbouring Kiranti languages. Likewise but differently, Watters (2008) reports that Athpare, another Kiranti language, appears to be unusual in the sense that the active participle also marks the patient, as in (484). In contrast, Puma is not like Athpare in terms of A and P marking as Puma distinguishes between an A nominalisation and an S nominalisation.

The agent nominaliser *kʌ-* is used for nominalising agent and the general nominaliser *=ku* is used for nominalising P and S in general (cf. 459a-b). Consider examples from Athpare:

(484) (a)   ATHPARE

        *a-ka-lem*
        1PL-ACT.PTCP-beat

        'One who beats me.'

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(b) *yaŋ-ka-lem*
INDEF-ACT.PTCP-beat

'One who beats someone.' (Watters 2008: 7)

Likewise, the general nominaliser *=ku* in Puma is also used as the regular marker to derive adjectives from verbs (See Section 2.20 for details).

(485) (a) *si-a=ku* [die-PST=NMLZ] 'dead'

     (b) *tu-ma=ku* [ripe-INF=NMLZ] 'ripening'

     (c) *khʌk=ku* [bitter=NMLZ] 'bitter'

It is important to note that adjectives in Puma primarily are marked either with the general nominaliser *=ku*, as in (485), or with the active participle *kʌ-*, as in *kʌ-heppaŋ* 'big', or with the infinitive marker *-ma*, as in *ompʌci-ma* 'white.'

## 7.13 The general nominaliser *=ku*

Like many Kiranti languages, Puma distinguishes between A-nominalisation and P-nominalisation. In Puma the most general nominaliser *=ku*, though it is not quite as versatile as the nominaliser *-wa* in Chantyal (Noonan 1997), used for nominalised clauses, sentence nominalisation, and clause nominalisation. While Puma and other Kiranti languages like Yamphu, Wambule, Kulung, Dumi and Limbu employ two distinct nominalisers- agent-nominaliser and general nominaliser, they differ significantly in that none appear to have object or locative nominalisers (Watters 2008), Puma possesses a locative nominaliser and two types of object nominalisers. However, it is important to note that Puma distinguishes between two types of subject nominalisation in non-finite constructions. We find the other subject nominalisation type marked by fully inflected verbs plus *=ku* as *puks-a=ku* [go-PST=NMLZ) *mʌnna* 'the person who went' which is the same as the nominalisers used to construct P-nominalisation in finite constructions like (*ŋa-a*) *ɖher-u-ŋ=ku mʌnna* [(1SG-ERG) beat-3P-1SG.A=NMLZ] 'the person whom I beat.'

The basic distinction between A-nominalisation and P-nominalisation depends on the perfectivity of an utterance. An A-nominalisation and a P-nominalisation occur when intransitive verbs are in nonpast and perfective form, respectively. As many Kiranti languages, a feature of person-number marking on relativisation/nominalisation occurs in Puma.

**7.13.1 Relativisation of S**

In Puma, relativisation on intransitive subjects arguments (S) and transitive patients (P) requires *=ku*. The general nominaliser *=ku* is the most versatile nominaliser which can be used in multiple functions like relative clauses, nominalisations, adjectives, sentence nominalisation etc.:

(486) (a)  [*si-a-d-a=ku*]           *mʌnna       kʌnnimak  pee*
           die-PST-TEL-PST=NMLZ      person.ABS good       NEG

           'The person who died was not good.'

   (b)  [*som-tuk-ma-do           waŋ-a=ku*]           *marchacha*
        love-love-INF-GEN.LOC      get.in-PST=NMLZ      girl
        *uŋ-bo           uŋ-nicha*
        1SG-GEN          1SG.POSS-younger sister

        'The girl who fell in love is my sister.'

As can be seen from above examples the general nominaliser *=ku* can be attached with any type of verbal inflection such as a past reference, an imperfective reference, and non-past reference. The most striking feature of the Puma general nominaliser is its ability to create relative clauses that are parallel to those formed by the A-nominaliser. Note that the derived relative clauses using general nominaliser do not have the same semantic scope in terms of expressing TAM contrasts:

(487) (a)  [*yuŋ-a=ku*]           *cha*
           stay-PST=NMLZ          child

           'The child who stayed.'

   (b)  [*yuŋ-yaŋ=ku*]           *cha*
        stay-IPFV=NMLZ          child

        'The child who is staying.'

   (c)  [*yuŋ=ku*]           *cha*
        stay=NMLZ           child

        'The child who stays.'

   (d)  [*kʌ-yuŋ*]           *cha*
        ACT.PTCP-stay       child

        'The child who stays/stayed/is staying.'

In subject nominalisation constructions, the general nominaliser can derive three relative clauses, as in (487a-c) where these clauses demonstrate three time references– past, imperfective and non-past. Actually, these nominalised constructions are parallel to a single active nominalised construction, as exemplified in (487d). We can argue that

the *kʌ-* nominaliser has no time reference and is context dependent. On the other hand, the general nominaliser can derive relative clauses, distinguishing all three time references (past, non-past and imperfective).

### 7.13.2 Relativisation of P

Relativisation of transitive patients, both human and non-human, requires *=ku*. In P-nominalisation constructions, the A argument agrees with the verb in person and number. The derived verbal adjectives (participles) bear agreement with the arguments A and P.

(488) (a)　[*asemʌŋ　khaŋ-u-ŋ=ku*]　　　　*mʌnna　　ai=chaŋ*
　　　　　　yesterday　see-3P-1SG.A=NMLZ　person　　today=ADD
　　　　　　*khaŋ-u-ŋ*
　　　　　　see-3P-1SG.A

　　　　　　'I saw the person today whom I saw yesterday.'

　　　(b)　[*khʌnna-a　tʌ-cet-i=ku*]　　*marchacha*
　　　　　　2SG-ERG　　2-hit-3P=NMLZ　girl

　　　　　　'The girl whom you hit.'

### 7.13.3 Relativisation of G

Relativisation of G arguments in three-argument verbs bears *=ku,* regardless of whether they are human or non-human. As in Section 7.13 the general nominaliser *=ku* can relativise any human or non-human goals, as in (489a-b), respectively:

(489) (a)　[*ŋa-a　　　　kʌphekwa　　itd-u-ŋ=ku*]　　　*cha*
　　　　　　1SG-ERG　　money.ABS　　give-3P-1SG.A=NMLZ　child

　　　　　　'The child that I gave the money to.'

　　　(b)　[*ŋa-a　　　　kʌphekwa　　itd-u-ŋ=ku*]　　　*iskul*
　　　　　　1SG-ERG　　money.ABS　　give-3P-1SG.A=NMLZ　school

　　　　　　'The school that I gave the money to.'

### 7.13.4 Relativisation of T

Like the G argument in three-argument verb constructions, the T argument also can be relativised with the general nominaliser.

(490)　　　[*ŋa-a　　　cha-lai　　itd-u-ŋ=ku*]　　　　*kʌphekwa*
　　　　　　1SG-ERG　　child-DAT　give-3P-1SG.A=NMLZ　money.ABS

　　　　　　'The money that I gave to the child.'

### 7.13.5 Relativisation of G in antipassive

The general nominaliser *=ku* relativises detransitivised G argument, as in (491) in which

the verb is detransitivised by *kha-*:

(491) (a)  *[*ŋa* *kʌphekwa* *kha-itd-oŋ=ku*]    *cha*
    1SG.ABS money ANTIP-give-1SG.S/P.PST=NMLZ child

    'The money that I gave to some chidren.'

 (b) [*ŋa*  *kʌphekwa* *itd-oŋ=ku*]    *cha*
    1SG.ABS money give-1SG.S/P.PST=NMLZ child

    'The money that I gave to some chidren.'

### 7.13.6 Relativisation of T in antipassive

In Puma it is possible to relativise a detransitivised T argument in which the verb is detransitivised by *zero*. It is important to note that a detransitivised T argument can only be relativised if it is a non-human, as in (492b), however it cannot be relativised if it is a human, as in (492c). Example (492c) is ungrammatical because the antipassive marker *kha-* always prohibits overt objects, referring to human beings with definite reference.

(492) (b) [*ŋa*  *itd-oŋ=ku*]    *kʌphekwa*
    1SG.ABS give-1SG.S/P.PST=NMLZ money

    'The money (generic) that I gave.'

 (c) *[*ŋa*  *kha-itd-oŋ=ku*]    *chetkuma*
    1SG.ABS ANTIP-give-1SG.S/P.PST =NMLZ clan-sister

    Intended: 'The sister that I gave to (someone in marriage).' (see

    Section 3.17.2)

### 7.13.7 Relativisation of experiencer A

The general nominaliser can relativise on experiencer arguments. In experiencer nominalisation constructions, we see also that the verb agrees with 3P.

(493) (a) [*khipa-do-ŋkʌŋ*  *kin=ku*]  *marchacha*
    dog-GEN.LOC-ABLT fear=NMLZ girl

    'The girl that is afraid of a dog.'

 (b) [*wasup-a* *sett-i=ku*]    *mʌnna*
    beer-ERG intoxicate-3P=NMLZ person

    'The person whom alcohol intoxicated.'

 (c) [*hotd-i-*a=ku*]  *mʌnna*
    tire-3P-PST=NMLZ person

    'The person who is tired.'

Let us observe another example in (494) which is similar in construction as (493a) with different meaning:

(494)   [*marchacha-do-ŋkʌŋ*   *kin=ku*]         *khipa*
        girl-GEN.LOC-ABL       fear=NMLZ          dog

        'The dog that is afraid of the girl.'

Example (494) Shows that *khipa* 'dog' is an experiencer which is afraid of *marchacha* 'girl'. The nominaliser relativises it as an experiencer because the stimulus is *marchacha* 'girl' in this construction. Surprisingly, it is interesting to note that this experiencer can be relativised by the general marker *=ku*, also taking the prefixed *kha-* antipassive marker on *kin* 'afraid of' to derive the experiencer type agent:

(495)   [*kha-kin=ku*]          *khipa*
        ANTIP-fear-NMLZ         dog

        'The dog that frightens.'

It is important to note that the antipassive marker *kha-*, as mentioned above, always bans overt objects in the syntax of detransitivisation. The syntax of antipassive in relative clauses is also parallel, as it restricts the use of overt objects. In (495) the antipassive marker *kha-* indicates an agent relativised by *=ku*, referring an experiencer agent.

### 7.13.8 Relativisation of possessors

Both the general nominaliser *=ku* and A-nominaliser *kʌ-* can relativise possessors. The relative clauses *kʌ-chi tuk-yaŋ=ku mʌnna* 'the person whose hand hurts.' and *chi kʌ-tuk mʌnna* 'the person whose hand hurts.' are synonymous as they express the same meaning. The A-nominaliser restricts the use of possessor because it is not allowed with the possessors. When a possessive form is used with the A-nominaliser as a modifier, as in (496c), the construction becomes ungrammatical. The third person possessive marker *kʌ-* is also a kind of determiner, and on the other hand, the active participle *kʌ-* cannot relativise possession if it is already possessed.

(496) (a)   *kʌ-chi*            *tuk*
            3SG.POSS-hand       hurt

            'His hand hurts.'

      (b)   [*kʌ-chi*            *tuk-yaŋ=ku*]       *mʌnna*
            3SG.POSS-hand       hurt-IPFV=NMLZ      person

            'The person whose hand hurts.'

      (c)   *[*kʌ-chi*           *kʌ-tuk*]           *mʌnna*
            3SG.POSS-hand       ACT.PTCP-hurt       person

            Intended: 'The person who hurts his hand.'

(d)   [*chi*      *kʌ-tuk*]      *mʌnna*
      hand      ACT.PTCP-hurt   person

'The person whose hand hurts.'

(e)   *[*chi*      *tuk-yaŋ=ku*]   *mʌnna*
      'hand      hurt-IPFV=NMLZ person

'The person whose hand hurts.'

Puma distinguishes between relativisation of possessor experiencer arguments and relativisation of possessor arguments. The A-nominaliser allows relativisation on possessors if they are experience arguments, while it restricts relativisation on possessors if they are other than experience arguments or in other cases.

(497) (a)  *kʌ-takhi*      *pet*
           3SG.POSS-cap   tear

'His cap is torn.'

(b)   [*kʌ-takhi*      *pet-a=ku*]     *mʌnna*
      3SG.POSS-cap   tear-PST=NMLZ   person

'The person whose cap is torn.'

(c)   [*kʌ-takhi*      *kʌ-pet*]      *mʌnna*
      3SG.POSS-cap   ACT.PTCP-tear   person

'The person who tore his cap.', not *'The person whose cap is torn.'

(d)   [*takhi*      *kʌ-pet*]      *mʌnna*
      cap        ACT.PTCP-tear   person

'The person who tore the cap.', not *'The person whose cap is torn.'

The agent nominaliser *kʌ-* can relativise on possessors if they are experiences, as in (496c-d). However, the agent nominaliser cannot relativise on possessors in other cases, as in (497c).

### 7.13.9 Double marking on A and P

As can be seen from examples illustrated above, Puma uses an active nominaliser *kʌ-* to form both A and S arguments, while the general nominaliser *=ku* is employed to form S arguments and P arguments. The active nominaliser *kʌ-* usually requires a human referent and this active nominalisation construction is never marked for tense. Since it is unmarked for tense, it can make reference to any non-past, past or imperfective. In contrast, the general nominaliser *=ku* forms human S/A arguments and any kind of P arguments in which the verbs are marked for tense. All examples illustrated above are not double marked except marking for gender, otherwise each nominalised head gets a single nominaliser in the nominalised constructions, either *kʌ-* or *=ku*. It should be noted

that we find some examples in Puma, though they are limited in scope, which are marked twice, for example, they bear both agent nominaliser (active participle) and general nominaliser.

We find such double marking occurs not only on the A argument but also on the P argument, as in (482). Puma appears to be unusual in terms of double marking on both A arguments and P arguments, referencing an A argument and a P argument respectively, as none of the other Kiranti languages have been reported to exhibit such a characteristic. The following section looks at this phenomenon.

(498)    *tʌkku*      *dʌbʌluŋ-ŋe*        *thapsʌŋ*
        DEM      Dabalung-EMPH      custom.ABS
        [*kʌ-mu-ŋa=ku*]          *rʌichʌ*    *kʌ-pʌkka=ŋe*
        ACT.PTCP-do-IPFV=NMLZ     MIR       3SG.POSS-elder brother=EMPH

        'That Dabalung who is doing the ritual is his brother.'

Example (498) shows that the nominalised agent is marked by both active participle *kʌ-* and the general nominaliser *=ku*. Perhaps the function of the second nominaliser *=ku* is to focus the agent than to nominalise it, as agents bear *kʌ-* with most transitive verbs.

The general nominaliser *=ku* can have case markers and plural markers added. It allows relativisation on S/P marking with distinct cases. The following sections discuss nominalised constructions with cases.

### 7.13.10 Relativisation of COM

In Puma, as mentioned above, relativisation and nominalisation overlap in many examples, while sometimes we can distinguish between relativisation and nominalisation. Consider the following examples:

(499) (a)   *ʌkku thoroŋcha* [[*yuŋ-lat=ku-oŋ*    [*koshī-i=ku*
         DEM son.ABS     stay-TEL=NMLZ-COM$_1$  Koshi-DOWN.LOC=NMLZ
         *mʌhi-pʌ-mu-a=ku*]]        *marcha*
         churn-3S/A-do-PST=NMLZ    woman

         'This son stays with the girl, who was created by churning in the
          Koshī river.' (myth_sumni_05:147)

      (b)    [*mʌhi-pʌ-mu-a-loss-a=ku-oŋ*]           *sokbhok*
          churn-3S/A-do-PST-TEL-PST=NMLZ-COM$_1$     intercourse
          *pʌ-mu-a-ci=ki=na*
          3S/A-do-PST-DL =CONN=PTCL

          'That one, who had intercourse with (the woman), was created by
          churning.' (myth_sumni_05:148)

### 7.13.11 Relativisation of LOC

Like other Kiranti languages, it is interesting to note that Puma distinguishes four levels of locative expressions like GENERAL LOCATIVE, UP LOCATIVE, DOWN LOCATIVE, and LEVEL LOCATIVE. The general nominaliser can be used to create locative expressions in all four levels, general locative expression, up locative expression and down locative, and level locative in the following, respectively:

(500) (a)  *pʌŋ*     *tʌkku*     [*naŋloŋ-dhuŋ-do=ku*]
         CONN     DEM     winnowing.basket-UP-GEN.LOC=NMLZ
         *mahada*     *rʌ*     *rum*     *pʌ-ca-a-ci*
         sour     and     salt     3NS.S/A-eat-PST-DL

         'Then they ate sour and salt of that flat basket.' (myth_01: 72)

     (b)     *khoci*     [*khula-ya=ku-ci-ŋa=ku*]     *rʌchʌ*
         3NS     jungle-LEVEL.LOC=NMLZ-NS-EMPH=NMLZ     MIR

         'They are the inhabitants of the jungle.'

Example (500) shows that the general nominaliser =*ku* immediately follows the locative suffixes. In (500b) the general nominaliser is used twice in the locative phrase in which perhaps the use of second nominaliser is to focus the location. It is also possible to relativise of locative, as in the following:

(501) (a)  *kʌ-ma-a*     *marchacha-lai*     [*tan-do*]     *itd-i*
         3SG.POSS-mother-ERG  daughter-DAT  village-GEN.LOC  give-3P

         'Mother gave her daughter in the village (in marriage).'

     (b)     [*marchacha-lai*  *itd-i=ku*]     *tan*
         daughter-DAT     give-3P=NMLZ     village

         'The village that (Mother) gave her daughter (in marriage).'

### 7.13.12 Nominalisation of ALL

Like comitative and locative, the general nominaliser =*ku* can be used with the allative case. However, the function of =*ku* with the allative case is to emphasise rather than nominalising a verb.

(502)     [*en-bo-di-tni=ku-ci=cʌhi*]     *bhartī*
         1PL.INCL-GEN-UP.LOC-ALL=NMLZ-NS=TOP     recruit
         *mʌ-li*     *nalo*     *malāya*     *mʌ-puŋ*
         3PL.S/A-be     COND     Malaya.ABS     3PL.S/A-go

         'People of our parts go to Malaya for recruitment.' (LH_M_01: 449)

### 7.13.13 Nominalisation of F/S

The general nominaliser =*ku* can be used with the dative, expressing the meaning 'for

the sake of', as *-ma-bo-lāgi* [INF-GEN=F/S] in which the suffix *-lāgi* 'for' is borrowed from Nepali:

(503) (a)  *tana*        [*ca-ma-bo-lāgi=ku*]              *rʌchʌ*
           PTCL          eat-INF-GEN=F/S=NMLZ              MIR

           'It was for eating.' (myth_orph_01: 074)

     (b)   *tʌkku-ci*        *jʌmma*      *en-moŋchama*
           DEM-NS           all          1PL.INCL.POSS-goddess.of.wealth
           [*ŋen-ma-bo-lāgi=ku*]
           keep-INF-GEN-F/S=NMLZ

           'They are all for keeping our wealth goddess (Sumnima).'

           (DA_samkha_03: 28)

The formula for 'for the sake of' construction is Σ-*ma-bo-lāgi* [Σ-INF-GEN=F/S]. Example (503) shows that the 'for the sake of' construction can be relativised. The dative case *-lai* can be used in conjunction with an infinitival form in which the dative is inside the nominalised clause.

(504)     *tʌkku*        [*ca-ma-lai*      *tat-ma-yaŋ=ku*]
          DEM            eat-INF=DAT       bring-INF-IPFV=NMLZ

          'That (Hekchakupa) was brought to eat.' (myth_orph_01:116a)

Example (504) is crucially different from (503a-b) because the nominaliser *-ku* directly follows *-lagi*, while it is not occur with *-lai*.

### 7.13.14 Relativisation of INSTR

Instrument arguments can be also relativised, as in:

(505) (a)  [*khokku-a*  *ŋa-lai*    *phon*  *pʌ-mu-ŋa=ku*]              *mobāil*
           3SG-ERG     1SG-DAT     phone   3S/A-do-1SG.S/P.NPST=NMLZ   mobile

           'The mobile with which he called me.'

     (b)   [*ŋa-a*      *sʌŋpwa*    *bho-o-ŋ=ku*]              *bhetti*
           1SG-ERG     tree.ABS    cut-3P-1SG.A=NMLZ          axe

           'The axe that I cut the tree with.'

Example (505) shows that like S, A, P arguments, the instrument argument can be relativised by the general nominaliser =*ku*.

### 7.13.15 Relativisation of ABL

As in locative and instrumental expressions above, it is possible to relativise ablative expressions.

(506) (a)  [*khʌnna-a himālʌ   khaŋ-ma   tʌ-ri-i=ku*]          *thāũ*
           2SG-ERG   himal    see-INF   2-can-3P=NMLZ          place

'The place from which you can see the Himalayas.'

(b)  [*ta-a=ku*]              *khim*      *tʌkku*
     come-PST=NMLZ            house       DEM

'The house he came from.'

**7.13.16 Relativisation of P in antipassive**

Puma makes extensive use of antipassive constructions with the antipassive marker *kha-*
and without an antipassive marker (*zero*-detransitiviser). The construction marked by
*kha-* is typologically closer to antipassivisation in other languages while the other
(unmarked) is the general Kiranti model (see Section 3.17).

It is interesting to note that if pragmatics allows it, it is possible to relativise the
detransitivised P argument, which would be unexpected under classical incorporation
(Bickel et al. 2007). Mapudungun, spoken in south-central Chile and west-central
Argentina, appears to be unusual in relativising the detransitivised object argument
under classical incorporation (Hermelink 1992). Bickel et al. (2007: 8) provide the
following Puma examples that demonstrate relativisation of detransitivised object, on T
argument of transtitive object and on A argument of a detransitivised clause.

(507) (a)  *uŋ-yoŋni-a*          *kitāp*       *khipd-i*
           1SG.POSS-friend-ERG   book.ABS      read-3SG.P

'My friend reads a book.'

(b)  [[*uŋ-yoŋni*        *khip=ku*]          *kitāp*]       [*novel*]
     1sh.POSS-friend  [3SG.S-]read=NMLZ    book          novel

'The kind of book my friend reads is some novels.'

(c)  [[*uŋ-yoŋni-a*          *khipd-i=ku*]         *kitāp*]       [*novel*]
     1SG.POSS-friend-ERG  [3SG.A-]read-3SG.P=NMLZ   book          novel

'The (specific) book my friend reads is a novel.'

(d)  [[*novel*      *khip=ku*]          *uŋ-yoŋni*]       [*tʌkku*]
     novel      [3SG.S-]read=NMLZ   1SG.POSS-friend   DEM

'This is my friend who reads novels.'

Example (507b) shows the relativisation on a detransitivised P argument which is not
specific or definite but simply indicates novels in general, while (507c) illustrates
relativisation on Theme (T) argument in which the book is definite or specific. In
addition, (507c) exemplifies relativisation on the A argument of a detransitivised clause.

It is important to note that ergative marking with an A argument plays a significant role in agreement from where we can have information on whether the P is detransitivised or not, and whether the argument is A or S. In fact, in (507b) the A is now realised as an S argument because it bears no ergative case and it is in absolutive case. As a result, it signals a 'kind of' notion, with generic reference. In (507c) the A bears an ergative suffix that means the P is specific or definite in reference. In (507d) under detrasitivisation, the A is now realised as an S argument, but interestingly, it does not contrast the referential status of the argument with that in a transitive clause, as in (507c).

We find that in *zero*-detransitivisation while it is possible to relativise on a detransitivised objects, as in (507b), this is impossible in *kha*-detransitivisation because *kha*- prohibits overt objects.

(508) (a)    *uŋ-bʌŋŋa-a*          *marcha*      *tupp-i*
            1SG.POSS-uncle-ERG    woman        meet-3P

            'My uncle meets/met the woman.'

      (b)    *[uŋ-bʌŋŋa      kha-tup=ku]*                *marcha*
            1SG.POSS-uncle   ANTIP-[3SG.S-]meet=NMLZ    woman

            'These are the kind of women that my uncle meets.'

      (c)    *[uŋ-bʌŋŋa-a          tupp-i=ku]*              *marcha*
            1SG.POSS-friend-ERG   [3SG.A-]meet-3SG.P=NMLZ  woman

            'This is the woman that my uncle meets.'

      (d)    *[kha-tup=ku]*                *uŋ-bʌŋŋa*
            ANTIP-[3SG.S-]meet=NMLZ    1SG.POSS-uncle

            'This is my uncle who meets (people).'

Example (508b) shows relativisation on a detransitivised object, however, it is ungrammatical as *kha*- obligatorily bans overt object. While (508c) illustrates relativisation on a transitive object (P), (508d) demonstrates relativisation on A argument of a detransitive clause.

### 7.13.17 Functional overview of *=ku*

The nominaliser *=ku* is a clitic in Puma that can be attached to verbs, adjectives, adverbs, demonstratives etc. to perform multiple functions. Its main functions can be summarised, as in the following:

(509) (a)    *=ku* as an agent nominaliser

      (b)    *=ku* as a subject nominaliser

(c)　　=*ku* as a patient nominaliser

(d)　　=*ku* as a G and T nominaliser

(e)　　=*ku* as an experiencer nominaliser

(f)　　=*ku* as a time adverbial nominaliser

(g)　　=*ku* as a case marking nominaliser

(h)　　=*ku* as an antipassive nominaliser

(i)　　=*ku* as a relativiser

## 7.14　=ku as a focus/emphasis

As already mentioned above, the general nominaliser =*ku* has multiple functions. Its main function is to mark general nominalisation. Besides this, it has other functions other than general nominalisation which are discussed in the next sub-section.

### 7.14.1 Focus on adjectives

It is not surprising that the general nominaliser is found with adjectives. Using nominalisers to form adjectives is not only widespread in Kiranti languages but also more generally in Tibeto-Burman languages. Tibeto-Burman languages exhibit strong parallels in the use of a single nominaliser to derive both lexical adjectives and relative clauses (Genetti et al. 2008; Grunow-Harsta 2011).

(510) (a)　*tʌna*　　*beŋ-pʌṭṭi*　　*ʌk-ta*　　[*makcʌkcʌk=ku*]
　　　　　PTCL　　left-side　　one-CLF　　black-NMLZ
　　　　　*ʌklo*　　*burākhokwa*　　*yuŋ-a-ŋa*
　　　　　tall　　old.man　　stay-PST-IPFV

　　　　'I saw a black, tall old man sitting on the left.' (LH_M_01: 407)

(b)　*khon=paa*　　*doro*　　[*acamma=ku*]!
　　　there=SIML　　what　　surprising=NMLZ

　　　'At that time, what a surprise!' (LH_M_01: 482)

(c)　*pʌŋ=na*　　*ʌk=chem*　　*pʌŋ=na*　　*rāto=na*
　　　CONN=PTCL　　one=CLF$_{13}$　　CONN=PTCL　　red=FOC
　　　[*rāto=ku*]　　*mʌnna-ci*　　*tat-ci*
　　　red=NMLZ　　person-NS　　bring-NS

　　　'Then a moment later, (they) bring the ones who are red.'

　　　(LH_M_01: 399)

It is interesting to note that Puma identically treats borrowed adjectives as well, as the adjective *rāto* 'red' and *acamma* 'surprising' are borrowed from Nepali which receive =*ku* like *makcʌkcʌk* 'black'.

### 7.14.2 Focus on personal names

It is interesting to note that in Puma personal names can be nominalised by *=ku* to emphasise names or perhaps to topicalise names, as in the following:

(511) (a)  *kʌ-nʌŋ*          [*kʌmpoj=ku*]          *rʌchʌ*
           3SG.POSS-name   Kampos=NMLZ          MIR

   'His name is Kampos.'~ 'That person whose name is Kampos.'

   (LH_M_01: 583)

   (b)  [*sumni=ku-bo*]           *sʌlappa-bo*          *kho-bo*
        Sumnima=NMLZ-GEN       Paruhang-GEN         3SG-GEN
        *riti*            *yʌŋ-mu-ŋ-yaŋ*         *kanei*
        custom.ABS     say-do-1SG.A-IPFV      VOC

   'I am calling out the custom, which of Sumnima and Paruhang.'

   (c)  *en-tan-bo*              *kʌ-nʌŋ*                [*bʌŋsila=ku*]
        1PL.POSS-village-GEN   3SG.POSS-name        Bangsila=NMLZ

   'Our village which is Bangsila.'  (myth_tiger: 70)

### 7.14.3 Focus on interrogative words

In Puma it is possible to nominalise interrogative words as well. The function of nominalisation of interrogative words is to topicalise or emphasise them. The general nominaliser is used to nominalise a question word or interrogative word, as in (512). Other WH-words like *khakku* (*kha+ku*) 'which', *khado* (*kha+do*) 'where' also are attested marked with *=ku*. Actually, examples (512a) and (512b) are cited from a text in which we can see that question words are marked by *=ku* but perhaps it is difficult to understand the syntax of these examples, unless there is detailed description of the context. In (512a) there is a conversation in which the addressee asks the speaker when the speaker goes to Arab countries for labour work. It has been institutionalised that many Nepalese youths go to Arab countries to work as labourers.

(512) (a)  *ʌrʌp=na*   *tʌkku* [*demkha=ku*]    *demkha=i*   *ʌrʌp=ni=ku*
           Arab=PTCL DEM   when=NMLZ        when=EMPH Arab=REP=NMLZ

   'To Arab countries, when?' (convers_02: 22)

   (b)  *en-pa*                  *he  en-dippa*                  *en-bʌŋŋa*                   *he*
        1PL.INCL.POSS-father TAG 1PL.INCL.POSS-grandpa 1PL.INCL.POSS-uncle TAG
        *en-tuppa*                  *he*  [*doro=ku-e*]          *sa-e*              *todho?*
        1PL.INCL.POSS-uncle    TAG  what=NMLZ-TEK.GEN  who-TEK.GEN   there

   'Who is there?, what is there?, whether our father, grandfather or

   uncle?' (DA_dabalung: 102)

(c) *ram-a      doro=ku        khaŋ-i?*
    Ram-ERG   what=NMLZ       see-3P

    'What did Ram see?'

## 7.14.4 Focus on negative particles

The general nominaliser *=ku* can be used with the negative particles such as *metdʌŋ*, and its past counterpart *metdʌŋyaŋ*, and the other identificational negative particle *pee*. We can see that very often the morpheme *cha ~ che* 'ADD' follows the general nominaliser (*=ku=cha*) but the sequence of (*\*=cha=ku*) is not acceptable as it attaches directly to an inflectional verbal form, as in (513c) or sometimes to indexed number markers, as in (513b).

(513) (a) *wa        kʌ-be          mʌnna=cha*
          water     ACT.PTCP-fill   man=ADD
          [*metdʌŋ=ku*]              *nihi*
          NEG.EXIST.NPST=NMLZ        TOP

          'This is not also the person who fills water.' (convers_01: 130)

    (b) *uile      odho mʌnna-ci bʌɖɖhe    [metdʌŋ-yaŋ-ci=ku]*
        long.ago   here person-NS many      NEG.EXIST-IPFV.PST-NS=NMLZ

        'Long ago, many people who are not here.' (myth_tiger_01: 02)

    (c) *bhartī    lis-i      i-oŋ=ku=cha*              [*pee=ku*]
        recruit    be-3P      come-1SG.S/P.PST=NMLZ=ADD   NEG=NMLZ

        'Also I did not come to get recruited.' (LH_M_01: 333)

## 7.15   Instrument and non-instrument nominalisation

As already mentioned above, Puma makes a distinction between instrument nominalisation and non-instrument nominalisation. Two distinct nominalisers *-ma=pa₃* and *-ma=yu* are used to nominalise instruments and non-instruments, respectively. However, the verbs with these nominialisers *-ma=pa₃* and *-ma=yu* are not indexed for person, number or any verbal agreement. Sometimes the phenomenon of nominalisation by *-ma=pa₃* and *-ma=yu* in Puma becomes obscure when we find contradictions between the texts we collected and direct elicitation with the speakers, in particular, the semantics of *-ma=pa₃* and *-ma=yu*. So far as we are aware about the use of these nominalisers, we see a clear distinction between elements nominalised by *-ma=pa₃* and *-ma=yu*. For example, the instrumental nominalisers *-ma=pa₃* and non-instrument nominaliser *-ma=yu* are very likely related to the Nepali word *cīj* 'thing' and are used primarily to reference instruments as in *bha-ma=pa₃* [cut-INF=INSTR.NMLZ] 'instrument with which to cut'/ 'cut-thing', and *bha-ma=yu* [cut-INF=N.INSTR.NMLZ] 'entity to be

cut'/ 'to be cut-thing'. *cīj* 'thing' in Nepali can be used to express active instrument/object as in *kaṭ-ne cīj* 'cut-thing' and patient entity as in *kaṭ-i-ne cīj* 'to be cut-thing'. In these examples, *bha-ma=pa₃* refers to the instruments with which we cut like knife, sickle, cutter and blade. Likewise, *bha-ma=yu* refers to the nominals to be cut such as vegetables and trees. Watters (2008) reports that some Kiranti languages like Yamphu have so-called 'object participle' or 'object nominaliser' as well.

It is important to note that Puma appears to have the versatility required to refer to instrument entity and non-instrument entity, as both can be derived from the same verb. Nevertheless, these nominalisers restrict the scope of formation of objects from all types of verbs (see Table 125). They limit the creation of instruments and non-instruments. The instrument nominaliser and non-instrument nominaliser share the common characteristic that both of them attach to the infinitive form of verbs. Instrument nominaliser and non-instrument nominaliser in Puma occur with *-ma=pa₃* and *-ma=yu* respectively, which is not widely attested in neighbouring Kiranti languages. Hence, Puma appears to be unusual here in that it employs two instrument nominalisers, like it has two subject nominalisers in agent/subject nominalisation constructions. On the basis of such data and analysis we can argue that Puma is actually rather unusual cross-linguistically in using two types of instrument nominalisers in distinguishing agent-type instrument entities and patient-type entities.

### 7.15.1 Instrument nominaliser *-ma=pa₃*

The instrumental nominaliser *-ma=pa₃* is used primarily in creating reference instruments from verbs. The examples given below are for nominalisation by *-ma=pa*.

(514) (a) *pʌŋ       ki    he   ciṭhī he   men-ci    [chap-ma=pa]*
        CONN      or   TAG  letter TAG  do-NS     write-INF= INSTR.NMLZ
        *samān    medʌŋ=ni                  rʌŋ-a*
        stuff     NEG.EXIST.NPST=REP        say-PST

        'Do you not have writing materials? He asked.'

   (b) *kina     hen=ku-ci=na=e                   mʌ-tup        pʌŋ=na*
        CONN     now=NMLZ-3NS.P=PTCL=FOC         3PL.S/A-meet   CONN=PTCL
        *kho-ci=ŋa        [wat-ma=pa]              [kham-ma=pa]*
        3SG-NS=EMPH       put.on-INF= INSTR.NMLZ   wear-INF= INSTR.NMLZ
        *nʌmma    lis-a*
        what     be-PST

        'Nowadays, after they meet, (they asked) what was about the ornaments and clothes.' (coribiha: 47)

(c)   [*ghāsa*    *dʌk-ma=pa*]      *uŋ-dabe*        *oṭ-kes-a*
        grass     cut-INF= INSTR.NMLZ   1SG.POSS-khukuri   break-TEL-PST

'My *khukurī*[55] that cut grass broke.'

### 7.15.2 Non-instrument nominaliser *-ma=yu*

The non-instrument nominaliser *-ma=yu* is used primarily in creating reference non-instrument entity from verbs. Note that Rai et al. (2007) treat *=yu* as a single object nominaliser in Puma, however it never occurs with other than infinitival form *-ma*, and it always attaches to *-ma*. Hence, we need to deal with its combinatorial form *-ma=yu* rather than just *=yu*. While Puma makes no distinction between active and passive with respect to agents and subjects, we find that Puma explicitly distinguishes between instruments and non-instruments. It would be really complex and difficult to identify nominalised entities in Puma if it did not make a clear distinction between them. The examples given below are for nominalisation by *-ma=yu*.

(515) (a)   [*kʌ-duŋ-ma=yu*]          *onda*
           ACT.PTCP-drink= N.INSTR.NMLZ   average
           *capcapcipcip*    *duŋ-ma=cha=i*
           IDEOPH          drink-INF=ADD=EMPH

'To drink a drink in moderation.' (plant_crop_01: 043)

(b)   *kʌ-ŋa-do*               [*ca-ma=yu*]
        3SG.POSS-mouth-GEN.LOC   eat-INF= N.INSTR.NMLZ
        *it-ma-dot*      *tʌllʌ*
        give-INF-OBLG   PTCL

'The edible thing should be given in the mouth.' (sayacongma_01: 30)

We see that the nominals which are marked by *-ma=pa₃* and *-ma=yu* lack of case and agreement marking in these construction types, have distinct meaning. It should be noted that Puma has more than ten types of 'cut' (see Section 4.5.3 for details). What we use here *bha* 'cut' is only for general reference of cutting. Pragmatically *bha-ma=pa₃* could also have other instrument reference than described here.

### 7.15.3 Semantic restriction on instrumental nominalisation

Puma makes selection and restriction of verbs that can be involved in nominalised constructions with instrument and non-instrument nominalisers *-ma=pa₃* and *-ma=yu*, respectively. With some exceptions of intransitive verbs, particularly transitive verbs allow to form nominals *-ma=pa₃* and *-ma=yu*. Among transitive verbs, few verbs can

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[55] A curved knife carried by the Nepalese, used as both a tool and weapon which often appears in Nepalese heraldry.

create both types of nominals, and the remainder verbs allow either to create *-ma=pa₃* or *-ma=yu*. Note that though we can derive many *-ma=yu* nominals, we find that *-ma=yu* is not so productive and is not found very often in the corpus, compared to *-ma=pa₃*. Table 125 lists the tokens that are nominalised by *-ma=pa₃* and *-ma=yu*.

**Table 125:** List of instrument and non-instrument entities

| Σ-*ma=pa₃* | Gloss | Σ-*ma=yu* | Gloss |
|---|---|---|---|
| *ban-ma=pa* | INSTR with which to wander | *ban-ma=yu* | N.INSTR to be wandered |
| *\*baŋ-ma=pa* | | *baŋ-ma=yu* | N.INSTR to be talked about |
| *ca-ma=pa* | INSTR with which to eat, spoon | *ca-ma=yu* | N.INSTR to be eaten, food |
| *chap-ma=pa* | INSTR with which to write, pen | *chap-ma=yu* | N.INSTR to be written, poem |
| *chi-ma=pa* | INSTR with which to tie | *chi-ma=yu* | N.INSTR to be tied |
| *\*chi-ma=pa* | | *chi-ma=yu* | N.INSTR to be sent |
| *duŋ-ma=pa* | INSTR with which to drink, eg. bowl | *duŋ-ma=yu* | N.INSTR to be drunk, milk |
| *haŋ-ma=pa* | INSTR with which helps to send | *haŋ-ma=yu* | N.INSTR to be sent |
| *hu-ma=pa* | INSTR with which to buy, eg. money | *hu-ma=yu* | N.INSTR to be bought |
| *\*it-ma=pa* | | *it-ma=yu* | N.INSTR to be given |
| *kʌŋ-ma=pa* | INSTR with which to hang | *kʌŋ-ma=yu* | N.INSTR to be hung |
| *ket-ma=pa* | INSTR with which to fear | *ket-ma=yu* | N.INSTR to be feared |
| *kham-ma=pa* | INSTR with which to wear, clothes | *kham-ma=yu* | N.INSTR to be worn, shirt |
| *khaŋ-ma=pa* | INSTR with which to see, glass | *khaŋ-ma=yu* | N.INSTR to be seen |
| *khip-ma=pa* | INSTR with which to count, money | *khip-ma=yu* | N.INSTR to be counted |
| *khut-ma=pa* | INSTR with which to bring | *khut-ma=yu* | N.INSTR to be brought |
| *mu-ma=pa* | INSTR with which helps to do, roof | *mu-ma=yu* | N.INSTR to be done |
| *ŋen-ma-pa* | INSTR with which to keep, bag | *ŋen-ma=yu* | N.INSTR to be kept |
| *pi-ma=pa* | INSTR with which to speak, radio | *pi-ma=yu* | N.INSTR to be spoken |
| *puŋ-ma=pa* | INSTR with which to go, bazar | *\*puŋ-ma=yu* | |
| *set-ma=pa* | INSTR with which to kill, gun | *set-ma=yu* | N.INSTR to be killed |
| *wat-ma=pa* | INSTR which to put.on, ornament | *wat-ma=yu* | N.INSTR to be put on |
| *waŋ-ma=pa* | INSTR with which to enter, door | *\*waŋ-ma=yu* | |
| *yuŋ-ma=pa* | INSTR with which helps to sit | *yuŋ-ma=yu* | N.INSTR to be sat |

## 7.16    Location nominaliser =kha

Relativisation of locations is a common feature of Kiranti languages. However, their scope and productivity varies greatly between languages. Many Kiranti languages like Puma, Bantawa, Camling, and Chintang have one nominaliser for locative nominalisation, while languages like Thulung have two nominalisers. It is interesting to note that Kiranti languages like Puma, Bantawa, Camling, and Chintang use *=kha* to create locative nouns. In contrast, the other Kiranti languages like Thulung uses *=khom* and *=khop* as a locative nominaliser (Lahaussois 2002). Hence, relativisation of locations in Puma requires the locative nominaliser *=kha*. The relativised locative

nominal occurs with possessors followed by a bare verbal root.

As mentioned above, the nominal nominalisers -*ma=pa* and -*ma=yu* obligatorily suffix to an infinitive form, while the locative nominaliser =*kha* never attaches with the infinitive form but with bare roots to create a locational noun, and nouns. The combination of a bare root with the nominaliser =*kha*, in particular, should occur with possessors.

(516)(a)   [*to-dho*　　　*kʌ-im=kha*]　　　　　　*rʌchʌ*
　　　　　DEM-GEN.LOC　3SG.POSS-sleep=LOC.NMLZ　MIR

　　　　　'There is the place where the tiger sleeps/slept.' (myth_tiger_01: 06)

　　(b)　*devisthan-do=ku*　　　*mʌnna-ci-bo*　　[*ca=kha*]
　　　　Devisthan-GEN.LOC=NMLZ　person-NS-GEN　eat=LOC.NMLZ
　　　　[*duŋ=kha*]　　　　　[*yuŋ=kha*]
　　　　drink=LOC.NMLZ　　　stay=LOC.NMLZ
　　　　*tiwa-do*　　　　　　*ŋa*　　　*pi-ŋa-ŋa*
　　　　place.to.sit.work-GEN.LOC　1SG.ABS　speak-1SG.S/P.NPST-IPFV

　　　　'I am speaking about the place where Devisthan people eat, drink and stay.' (devisthan_01: 002)

Puma employs two types of nominalisation of locative expressions with =*kha*. In type 1, as in (516a-b) the nominal locative clause is linked to the head NP located at the left side of the relativised NP. In type 2, as in (517a-b), the nominal locative clause is linked to the head NP located at the right side of the relativised NP:

(517)(a)　[*tonni*　　　*kʌ-ccʌ*　　　*ta=kha*]　　　　　*ʈhāũ*
　　　　　that.much　3SG.POSS-NS　come-LOC.NMLZ　　place

　　　　　'The place where they come/came much.' (pum_people_02: 232)

　　(b)　[*kho-bo*　　　*kʌ-yuŋ=kha*
　　　　3SG-GEN　　　3SG.POSS-stay=LOC.NMLZ
　　　　*kʌ-ta=kha-ya-sʌmmʌ*]　　　　　　　*choŋ-ma-da-ma*
　　　　3SG.POSS-come=LOC.NMLZ-LEVEL.LOC-till　deliver-INF-TEL-INF
　　　　*pʌ-ri-in*　　　*nalo*
　　　　NEG-can-NEG　COND

　　　　'If (it) cannot be delivered to the place where she stayed and came,'
　　　　 (wed_balam: 053)

Usually, the locative nominaliser =*kha* is used to create locative nominalisations except (517a), where the locative nominal *ta=kha* [come=LOC.NMLZ] 'the place to come' follows other locative nominaliser *ʈhaũ* 'place' which is borrowed from Nepali. In Puma the locative nominaliser =*kha* is restricted to only locative nominalisation which are not

indexed for person, number and tense marking. It is possible to relativise an unspecified location where it does not make any reference to who else is involved in that place. However, it should be important to note that we do not find any examples that are nominalised by the locative nominaliser without any reference of possessors in the corpus, as in (518). This generalisation suggests that in Puma there should be locative reference.

(518)     [*im=kha*]
          sleep=LOC.NMLZ
          'The place (where people) to sleep.'

Example (518) is fully grammatical utterance but there should be obligatorily possessor reference while it is used in the context.

## *7.17    Adverbial nominalisers*

### 7.17.1 Adverbial nominaliser =*pa₂*, =*paa*

In Puma one important feature of the nominaliser =*pa₂* is its ability to occur sometimes in combination with *kʌ-Σ(-pa)*, referring to masculine gender, and *Σ-ma=pa*, referring to instrument nominalisation, and sometimes it stands on its own, as in =*pa₂* or =*paa*, referring to adverbial clauses like *while*, *when* etc. The use of the adverbial nominaliser to denote time adverbials, as in *ca=pa* 'the time to eat'/ 'while eating'.  Whether to use =*pa₂* or =*paa* depends on the speaker's personal choice, and Puma does not distinguish very often between =*pa₂* and   =*paa*. Thus, *paa* is just *pa*, with ergative marking, unless we need to refer also ergative (cf. see Section 6.7.6 for the detailed use of *paa*)

(519) (a)   [*pʌ-ta-a-ci=pa₂-a*]
            3S/A-come-PST-NS=(SIML-ERG) ~ while
            'While they came,' (bulu_batuko_02: 015a)

      (b)   [*khap-yaŋ=pa*]
            weep-IPFV=SIML
            'While she was weeping,' (bulu_batulo_02: 078)

Nevertheless, there are some restrictions on -*pa₂* and -*paa*. If another morpheme like =*ku, -bo* follows -*pa*, then *-*paa* is disallowed.

(520) (a)   [*si-e=pa/*paa=ku*]
            die-1/2PL=SIML=NMLZ
            'One who at the time of  death.'

(b)   *duī*   *kisim*     [*poll-u-m=ku=pa\*paa-bo*]     *li*
      two   type     touch-3P-1/2PL.A=NMLZ=SIML-GEN     be.NPST

      'The second type is touching it (woman's breast).' (DA_tanglang: 07)

If *=pa₂* is the final ending and there is nothing to follow it, then both *=pa₂* or *=paa* are acceptable.

(521)     *uile=na*       *dipa*       *dima-ci-bo*       *kʌ-cʌ*
          long.ago=PTCL   grandfather     grandmother-NS-GEN   3NS.POSS-NS
          *sʌmʌy*     *kʌ-cʌ*       [*mʌ-yuŋ-aŋ=paa/pa*]
          time       3NS.POSS-NS   3PL.S/A-stay-IPFV=SIML

          'While staying at the time of grand-parents,' (basket: 01)

We discuss the multiple functions of the nominaliser *=pa* in this section. The nominaliser *=pa₂* can occur only with an interrogative word *khʌsʌŋ/(ni)* 'how'.

(522)     [*khʌsʌŋ=pa*]     *hʌtni*     *lis-a=ku?*
          how=NMLZ     such     be-PST=NMLZ

          'How did it happen?' (folk_tale_01:127)

Like the general nominaliser *=ku*, the nominaliser *=pa₂* also occurs with the negative particle, as in (523). When using the nominalisers with negative particles, their functions are distinct. *=ku* functions as a emphatic, while *=pa₂* functions for time reference like *while*, *when* etc.:

(523)     [*pee=paa/pa₂*]   *ni-puŋ-nin=paa/pa₂,*     *ni-pʌ-puŋ-nin*
          NEG=SIML     NS.S/A-go-NEG=SIML     NS.S/A-NEG-go-NEG

          'Isn't it? While they do not go, they do not go.' (intro_dwarima: 17b)

The nominaliser *=pa₂* can be used with experiencer arguments.

(524)     [*uŋ-ris-a-ket-aŋ=paa*]              *to-bela-a*
          1SG.POSS-anger-V.NATIV-feel-IPFV=SIML     DET-time-ERG
          *uŋ-mesuŋ-a*           *khon-do-ŋkʌŋ*
          1SG.POSS-anger-ERG       there-GEN.LOC-ABL

          'At the time when I was angry, my anger (made me forget what he had
           said).' (LH_M_01: 181)

The nominaliser *=pa* primarily occurs with imperfective, reported, past reference, and non-past reference. However, it is not restricted to only these verbal inflectional forms. We find there are a few examples where it is also used with a bare root form:

(525) (a)    *sĩdur*      *pote*      [*mʌ-mu=paa*]
           vermilion    small.shinning beads    3PL.S/A-do=SIML
           *beulā-a*      *sidur*      *pakd-i*
           bride.groom-ERG    vermilion      offer-3P

           'While offering *Sindur* and *Pote*, the groom offers vermilion to the bride.'

           (magibiha: 099)

     (b)    [*lak-mʌ-met=pa*]      *roduŋ*      *a-bo*
           dance-3PL.S/A-do=NMLZ    Kirant Rai      1PL.EXCL.POSS-GEN
           *puma-bo*      *caṇḍināc*      *mʌ-mu*
           Puma-GEN      Candi.dance      3PL.S/A-do

           'Rai-Kiranti people dance our Puma's *Candi dance*[56] while they dance.'

           (magibiha: 115)

The general nominaliser *=ku* and the other nominaliser *=pa₂* can be used in the same clause structure. However, these nominalisers function distinctly and the meaning of the clause is changed accordingly.

(526) (a)    *ʌk-le*      *bākrā*      *khaŋ-si*    [*pʌ-puks-a-ci=paa=ni*]
           one-day      goat      look-PURP    3S/A-go-PST-NS=SIML=REP

           'One day while they went to graze goats,' (myth_goat: 03a)

     (b)    *ʌk-le*      *bākrā*      *khaŋ-si*    [*pʌ-puks-a-ci-ku=ni*]
           one-day      goat      look-PURP    3S/A-go-PST-NS-PERF=REP

           'One day they went to graze goats.' (myth_goat: 03b)

In (526a) when the clause is nominalised by *=pa₂*, it becomes a dependent subordinate clause rather than a main clause. We can expect more information after the utterance of that clause. Without the main clause, the meaning of that subordinate clause remains incomplete. The meaning of the clause with *=ku* is complete on its own without any other clause. On the basis of this analysis, we can argue that the constructions nominalised by the general nominaliser *=ku* have perfective meaning, while constructions nominalised by the nominaliser *=pa₂* have only perfective meaning with the help of another main clause. It is important to stress that Puma makes extensive use of both the general nominaliser *=ku* and the other nominaliser *=pa₂*. These nominalisers can distinguish the status of a nominalised verbal construction whether it is a main clause or a dependent clause. The distinction that *=ku* and *=pa₂* make in the nominalised constructions can be explicitly exemplified, as in the following:

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[56] It is the greatest festival of the Kiranti people.

(527)      *ma*        *pa*        *pʌ-tok-en=ku*           *rʌichʌ*

| *ma* | *pa* | *pʌ-tok-en=ku* | *rʌichʌ* |
|------|------|----------------|---------|
| mother | father | NEG-get-NEG.PST=NMLZ | MIR |

| *ma* | *pa* | [*pʌ-tok-en=paa*] |
|------|------|-------------------|
| mother | father | NEG-get-NEG.PST=NMLZ |

'The one who did not have parents' ~ 'he did not have parents', while he did not have parents,' (myth_hetch_01: 50)

Example (527) shows that both nominalisers are used to nominalise the verb phrase. The general nominaliser =*ku* and =*pa* are used for simultaneous events.

### 7.17.2 Adverbial nominaliser *belā*

Puma appears to use two different nominalisers to express time reference, particularly duration of time. The speakers have two options to use *belā* 'while, when', borrowed from Nepali, or =*paa* or =*pa* [SIML-/ERG]. The use of word *belā* 'time' or *paa* 'while, when' is just the personal choice of the speakers. The important thing to note is that either *belā* or *pa-a* functions for the same time reference.

(528)     *sokwama*   *si-a-ŋa=ku*,

| *sokwama* | *si-a-ŋa=ku*, |
|-----------|---------------|
| hunger | feel-PST-1SG.S/P.NPST-IPFV=NMLZ |

| [*si-a-ŋa=ku* | *belā=do*] |
|---------------|------------|
| feel-PST-1SG.S/P.NPST-IPFV=NMLZ | while=GEN.LOC |

'At the time when he was hungry.' (folk_tale_01: 075)

Though Puma shares many common features with neighbouring Kiranti languages, it also preserves many features which are quite distinct from other languages.

### 7.17.3 Double nominalisation with =*ku* and =*pa*₂

Unlike other Kiranti languages, Puma makes use of double nominalisation particularly in the sequence -*ku*=*pa* or -*ku*-*pa*-*a*. Sometimes we find the reverse order in the form -*pa*=*ku*, which is very limited in frequency.

(529)(a)  *keka*    [*hʌŋ-aŋ-ka-ku-pa*₂-*a*]     *ni-tʌ-itd-aŋ-i*

| *keka* | [*hʌŋ-aŋ-ka-ku-pa*₂-*a*] | *ni-tʌ-itd-aŋ-i* |
|--------|--------------------------|------------------|
| 1PL.EXCL | alive-IPFV-EXCL-PERF-SIML-ERG | NS.A/S-2-give-IPFV-1/2PL.NPST |

'We_PL.EXCL who are alive, are giving to you_PL.' (ancestors_02: 009)

(b)  [*kathā*    *en-u-ŋ-ku-pa*₂-*a*]

| [*kathā* | *en-u-ŋ-ku-pa*₂-*a*] |
|----------|----------------------|
| story | hear-3P-1SG.A-PERF-SIML-ERG |

'At that time I heard the story.' (bulu_batuko_02: 007)

As mentioned above, As the function of the time nominaliser is extended, it is very likely related to the Nepali word *kherī* 'at the time of' and is used primarily to reference 'at the time of, while, when'. Consider the following example (530) from Nepali that is

the Puma counterpart of (529b).

(530)    NEPALI

    (a)   [(*mai-le*)   *kathā*     *sun-dā=kheri*]
            1SG-ERG   story     hear-IPFV=SIML

        'At that time I heard the story.'

    (b)   [(*mai-le*)   *kathā*     *sun-ne=belā*]
            1SG-ERG   story     hear-INF=while

        'At that time I heard the story.'

Note that in Nepali *belā* and *kheri* are synonymous, though, *belā* can attach only to the infinitive form, while *kheri* can attach only to the imperfective form. It is not easy to distinguish the functions of the nominalisers in examples like (529), where =*ku* may be a primary nominaliser or secondary nominaliser. We can also argue that =*pa₁* is a primary nominaliser which relativises the entire relative clause. The =*pa* nominaliser, which we refer to as a 'time adverbial' (SIML/while), demonstrates its precedence as it bears the ergative morpheme. It means that the time nominaliser relativises the whole clause which has already been nominalised by the general nominaliser =*ku*. Puma employs both lexical and clausal nominalisation and I describe it in the next section.

### 7.18    *Lexical vs. clausal nominalisation*

Like relative clauses, Puma makes extensive use of clausal nominalisation. Nominalisation functions on both lexical and clausal levels. Genetti (2011) observes that one of the reasons that nominalisation is so pervasive in Tibeto-Burman is that it applies at clausal and derivational level. Nominalisation functions on both lexical and clausal levels are observed not only in Kiranti languages but also across the Tibeto-Burman languages (Bickel 1999; Noonan 2008; Watters 2008; Genetti et al. 2008; Grunow-Harsta 2011; Genetti 2011). Lexical nominalisations have the same morphosyntatic characteristics as non-derived nouns (Comrie & Thompson 2007: 334).

(531)    *ʌk-ta=ni*               *pakkā-ŋa=ku=ni*
        one-CLF-REP          confirm-EMPH=NMLZ=REP
        [*chant-en-cen-nen-ŋa=ku-bo=ni*]
        pile.up-REFL.PST-REFL-REFL.PST-EMPH=NMLZ-GEN=REP

        'Definitely the one which is the up-down (intercourse) position.'

        (DA_tanglan: 24)

In (531) the lexical nominalisation *chant-en-cen-nen-ŋa=ku* 'the one who is in up-down position' bears the genitive case-marker -*bo*. Lexical nominalisation is often analysed to

be historically prior to clausal nominalisation (Yap, Grunow-Harsta & Wrona 2011). In many Kiranti-languages, the nominaliser =*pa* (<PTB ***pa*** 'father'>), which also occurs in Puma, derives lexical nominals. In Kiranti languages like in Limbu (Watters 2008) =*pa* is a general nominaliser, an adjectiviser, and an agent nominaliser in combination with *kɛ-*. While the meanings encoded by the general nominaliser in Puma is quite diverse, =*ku* is a general nominaliser, a subject nominaliser, as in *si-a=ku* [die-PST=NMLZ] 'the one who died', and an adjectivizer, as in *makʌcʌkcʌk=ku* [black=NMLZ] 'the black one'.

In contrast, the nominaliser =*pa₁* serves in Puma as an agent nominaliser (masculine) in combination with *kʌ-* as in *kʌ-set-pa₁* [ACT.NMLZ-kill-MASC] 'the one who kills' though =*pa₁* is optional, as in *chap-ma=pa₂* [write-INF=NMLZ] 'the thing with which to write' and a time reference nominaliser, as in *puks-a=pa₃* [go-PST=NMLZ] 'while going'. Likewise, in Puma *kʌ-* is an agent nominaliser, in *kʌ-chap* 'writer', a third person possessiviser, as in *kʌ-pa* 'his father', and a determiner in some adjectives, as in *kʌ-heppaŋ* 'big' and temporal nominal, as in *kʌ-setlam* 'morning'. In fact, suffixes =*pa*, and =*ku*, and the prefix *kʌ-* are polysemous in Puma.

On the basis of this kind of analysis we can argue that lexical nomialisation constructions can emerge from clausal nominalisations. For example, in Puma relative clause structures likely give rise to derived lexical adjectives. Relative clauses (verbal adjectives) and derived adjectives are structurally and functionally parallel, resulting in a single-word relatives clauses being reanalysed as adjectival.

(532)  [*kʌ-burā*          *si-a=ku*]        *marcha*     *ta-a*
       3SG.POSS-husband   die-PST=NMLZ    woman       arrive-PST
       'The woman whose husband died arrived.' ~ 'The widow woman
       arrived.'

Genetti (2011) notes that the essence of clausal nominalisation is [clause$^n$]$_{NP}$, a combination of clauses into a broader syntactic structure which functions as a noun phrase. Clausal nominalisation is a highly flexible and powerful syntactic device that allows an unrestricted number of embedded clauses. In Puma, a whole clause can be nominalised by the general nominaliser =*ku* which then modifies the entire clause to function as a noun phrase, as in (533) which actually is factive.

(533)  [*khokkuci-a    nayā      khim     bʌn-a-pʌ-mu-a=ku*]
      3NS-ERG      new       house    build-V.NATIV-3S/A-do-PST=NMLZ
      *ŋa-a      khaŋ-u-ŋ*
      1SG-ERG    see-3P-1SG.A

      'I saw that they have built the new house.'

Example (533) demonstrates that a dependent clause which is nominalised with *=ku* primarily precedes the matrix clause. It is interesting to note that the agreement in this example is very striking. The 3P agrees with the whole nominalised clause. The nominalised clause is the P argument of the main clause. Dependent clauses employ adverbial, complement, and converbal clauses. While relative clauses are also dependent, the distinction between dependent clauses and relative clauses is that relative clauses are embedded into the noun phrase. As temporal clauses in Puma are nominalised by the nominaliser *=paa*, these types of temporal clauses are often found with clausal nominalisation.

(534) (a)  [*pʌŋ wahut-i-tni       tʌ-puŋ=paa*]  *wa-do       ma    tʌ-ci?*
          CONN rivulet-DOWN.LOC-ALL 2-go=NMLZ    water-GEN.LOC what 2-do

          'What do you do when you go to the rivulet?' (children_02: 102)

    (b)  [[*chetkuma la=si*]      *puks-i=paa          na     abo*]
          lass           search=PURP    go-1/2PL.NPST=NMLZ PTCL    FILLER
          *tonpʌŋ      saimundro             cah-a-lis-a*
          CONN        calabash.and.bronze.bowl   need-V.NATIV/PST-be-PST

          'The calabash and the bronze bowl are needed while going to look for a lass.' (convers_16: 107)

Here in (534b) two clauses *chetkuma la=si* 'to look for a young girl' and *puks-i=paa* 'while going' are embedded to form the adverbial NP. The adverbial NP is embedded with the main clause *tonpʌŋ saimundro cāh-a-lis-a* 'the calabash and the bronze bowl are needed'.

### 7.19 *Stand-alone nominalisation*

The nominalisation of independent, non-embedded, and non-subordinated clauses is a common phenomenon that has been cross-linguistically observed in the Tibeto-Burman languages. It has been often referred to as a non-embedded nominalisation in the literature on Tibeto-Burman nominalisation (Bickel 1999; Genetti 2011). We use the terminology stand-alone or free-standing, following Watters (2008), to describe such independent and non-embedded nominalisations in Puma.

A stand-alone nominalised clause which is not syntactically or functionally an element of any higher matrix clause functions as a complete and independent utterance, while relative clauses always bear a specific function in a matrix clause (Matisoff 1972; Hargreaves 1991; Noonan 1997; Bickel 1999; Genetti 2011). Stand-alone nominalisations are alike with respect to their non-nominalised counterparts. Matisoff (1972) was the first to describe this phenomenon as integral in Tibeto-Burman nominalisation patterns when he first described such clauses in Lahu. Matisoff (1972: 246) writes:

> The verbal event is being objectified, reified, viewed as an independent fact, endowed with a reality like that inhering in physical objects – in short, nominalised. It is standing on its own, and is not a constituent of any sentence higher than the one to which it belongs itself.

Stand-alone nominalisation constructions, as they occur in Puma, are found in many Kiranti languages like Belhare (Bickel 1999), Camling (1997b), Athpare (Ebert 1997a), Yamphu (Rutgers 1998), and Wambule (Opgenort 2004). These constructions are attested in other Tibeto-Burman languages such as Dolakha Newar (Hargreaves 1991; Genetti 2011), Manange (Hildebrandt 2004; Genetti 2011), Chantyal (Noonan 2008), Kham (Watters 2008). In Puma, stand-alone nominlaisations are found primarily in indicative, narrative and interrogative clauses where the nominalised verb functions like a finite verb.

(535) (a)  [*ai   ŋa      na    kopī      khan      ŋi-oŋ=ku*]
           today 1SG.ABS  PTCL cauliflower curry     cook-1SG.S/P.PST=NMLZ

           'Today, I am cooking the cauliflower.' (convers_01: 016)

      (b)  [*uŋ-bo         uŋ-ip-ma         cup-ŋes-a-ŋa=ku*]         *rʌichʌ*
           1SG.POSS-GEN    1SG.POSS-sleep-INF asleep-keep-PST-EMPH=NMLZ MIR

           'I had enough sleep.' (LH_M_01: 518)

      (c)  *lʌ          lʌ          sānim-o                    kha*
           FILLER      FILLER      mother's younger.sister-VOC FS
           [*khatni     tʌ-puks-a=ku*]  *khʌnna?*
           where.to    2-go-PST=NMLZ    2SG.ABS

           'Auntie, where did you go?' (convers_01: 010)

In (535a) the indicative construction has been nominalised by the general nominaliser =*ku* which attaches to the inflected form for past reference. In (535b), the mirative particle *rʌchʌ* ~ *rʌichʌ* is preceded by the nominalised clause marked by the general

nominaliser =*ku*, in (535c), the clause is nominalised by =*ku* and serves as an interrogative question.

It is important to note that =*ku* is usually a clause final marker in Puma. However, we find either some restrictions, as in (535b) where a particle *rʌchʌ ~ rʌichʌ* must be preceded by a nominalised verb or some free word order constructions, as in (535c) where the nominalised verb should be preceded by the subject. However, this is not rigid as Puma has free word order. Hence, in all three of these examples, the clause is syntactically independent. There is no higher structure in the background context that they are related to syntactically. Each one also is followed by a sentence-final suffix, indicating that they are syntactically complete.

Nominalisations on interrogative are widespread not only in Kiranti languages but also more generally in Tibeto-Burman languages. Hargreaves (2005) observes in Newar that non-nominalised forms are considered disrespectful and accusatory, but if the same question is nominalised, it expresses greetings or polite inquiry. Likewise, Ebert (1997a) notes that all questions in Athpare are nominalised, though it is not so in the case of Puma. Bickel (1999) describes for Belhare that nominalised questions are focus constructions. Thus, stand-alone nominalised constructions have a socio-pragmatic function.

Stand-alone nominalisations are found in many Tibeto-Burman languages but their function in each language is distinct. Stand-alone nominalisations in Chantyal (Noonan 2008) are described as mirative, surprising, and contrary to expectation, in Camling (Ebert 1997b) as mirative, in Yamphu (Rutgers 1998) and Wambule (Opgenort 2004) as setting and marking background events. Similarly, Bickel (1999) notes for Belhare that stand-alone nominalised constructions are used to mark a particular instantiation of a variable that competes with other possible variables as a contrastive focus construction, and that such sentences have 'an intrinsic potential for controversy'. This is the exact opposite of the back grounding function found in Yamphu, Wambule and Kham with its strong overtones of presupposition (Watters 2008). In Camling, Ebert (1997b) says, the function of stand-alone nominalisation is to focus on the whole utterance. Likewise, stand-alone nominalisation constructions in Manange (Hildebrandt 2004; Genetti 2011) are interpreted as future tense in the absence of evidential morphology. In fact, stand-alone constructions are subject to pragmatic conversational implicatures in Grice's (1981) sense.

## 7.20   Nominalisation and miratives

The use of miratives in independent clause nominalisation constructions is widely attested in Tibeto-Burman. It has also been observed in Kiranti languages that the sentence-final mirative particle '*rʌichʌ ~ rʌchʌ*' is borrowed from Nepali (Ebert 1997a; Bickel 1999; Watters 2008, and among others). Bickel (1999) points out for Belhare that nominalised verbs can be followed by the particle that expresses mirativity as it does in Nepali. Ebert (1997) describes that a mirative particle in Camling is preceded only by nominalised verbs. Noonan (2008) notes that stand-alone nominalisations most commonly signal a mirative sense. Watters (2008) reports nominalisation is compatible with mirativity in many Bodic languages, into which the Nepali mirative particle has been borrowed. As already mentioned above, like many other neighbouring Kiranti languages Puma uses the mirative particle '*rʌichʌ ~ rʌchʌ*'. This particle, in Puma, is preceded by nominalised verbs; nevertheless, the verbs do not necessarily have to be nominalised, as in the case of Camling. The mirative in Puma can be preceded by both nominalised and non-nominalised verbs, as in the following:

(536) (a)   [*pʌŋ=na      kʌdaŋ=na     laḍāī  li-ma       mu-a-ŋa=ku*]          [*rʌchʌ*]
            CONN=PTCL  back=PTCL  fight    be-INF    do-PST-IPFV=NMLZ    MIR

            '(The training started and) the war was about to begin.' (LH_M_01: 495)

      (b)   *ʌk-ta          lʌŋpa-a              sat-loss-i          *[*rʌchʌ*]
            one-CLF       Kshetri-ERG        pull-TEL-3P        MIR

            'One Kshetri pulled her out.' (myth_kanya_01: 072)

Likewise, consider the following examples from Camling and Wambule, as cited in Watters (2008: 26), and Bantawa (Doornenbal 2009: 204).

(537) (a)   CAMLING

            [*i-ra         mina        jāl    am-si            khata-ko*]  [*rʌichʌ*]
            one-CLF    man         net   throw-PURP      go-NMLZ    REP

            'A man went fishing, (it is told).'

      (b)   WAMBULE

            *jʌmma       gipt-u-ø-me                *[*rʌichʌ*]!
            in.all          roll.up-3NP.A-23S-AFF  MIR

            'It had fully wrapped him up!'

      (c)   BANTAWA

            [*am-cha      baddhe    i-kharu              mett-u-ŋ-ʔo*]           [*rʌchʌ*]
            yourˢ-child    very         his/her-mind    apply-3P-PROG-3P-NOM  MIR
            'Your son appears to be very clever.'

Ebert (1997) notes that the mirative particle in Camling 'characterises narrative texts and can be repeated sentence after sentence'. This appears to be true with the Puma mirative, with the exception that it is not necessarily preceded by a nominalisation. Likewise, Watters (2002: 295) shows the same to be true of the Kham mirative. In Puma, the mirative particle is reinterpreted in many texts to signal a reported sense. Paudyal (2011) notes that it is not very common to nominalise mirative constructions in Chintang where out of 593 mirative clauses, there are only 10 clauses marked by the mirative particle *rʌichʌ*. In contrast, Puma makes extensive use of the mirative particle *rʌchʌ ~ rʌichʌ,* preceding by nominalised verbs and non-nominalised verbs.

### 7.21 *Nominalisation of interrogatives*

The use of nominalisation in interrogative constructions, as already mentioned, is a widely attested phenomenon in Tibeto-Burman languages. However, the functions that the interrogatives carry in nominalisation constructions are quite distinct. Watters (2008) assumes whether this may or may not be a reflex of the politeness principle of Newar in Camling. In contrast, in Puma interrogative constructions with nominalisation we can argue that this so-called principle of politeness appears not to apply as both non-nominalised and nominalised questions can occur in the same setting of a conversation.

(538) (a) | *en* | *goru-ci* | *dem* | *kʌ-ra* | *lʌ* |
|---|---|---|---|---|
| 1PL.INCL.POSS | bullock-NS | how.many | ACT.PTCP-CLF | PTCL |
| *jammā-bo* | *en-goru-ci?* | | | |
| total-GEN | 1PL.INCL.POSS-bullock-NS | | | |

'How many are our bullocks?' (children_03: 069)

(b) *khoi   kontʌ.*
INDSV   INDSV

('I do not know!') (Not sure about the number!)

(c) *tʌ-sind-in-yen?*
2-know-NEG-NEG.IPFV

'You do not know?'

(d) *ʌhʌ̃.*
no

'No.'

(e) [*tʌ-sind-in-yen=ku*]?
2-know-NEG-NEG.IPFV=NMLZ

'You do not know?' ('You should know, why do not you know?')

Example (538) is part of a conversation taking place between an adult and two children.

At the beginning of the conversation, the question is asked whether a child knows how many bullocks are there in his house, without using the nominaliser =*ku*, as in (538a). But the answer is not 'no' though he does not know the number of bullocks. The child is hesitant about that. Then in the next turn, the adult speaker again puts the question to the child addressee whether the child does not know the number of bullocks, again without using the nominaliser =*ku*, as in (538c). The child answers 'no'. This means that at this moment the child gives his definite answer that he does not know the number of bullocks. Now, interestingly, the conversation continues and the adult presumably feels embarrassed by the answer of the child. Then, the adult speaker most probably gets angry with the child and he again asks the same question, but this time using the nominaliser =*ku*, as in (538e). After his nominalised question, the child remains silent and his friend replies. Eventually, his friend knows the number of bullocks. Apparently, this is not so much a matter of politeness as in Newar, but simply a matter of focus, as Bickel (1999) notes in Belhare. We cannot say that this repeated inquiring question, using a nominalised verb is not so much a matter of the opposite phenomenon to the politeness principle in Newar, claiming that a non-nominalised question signals polite inquiry and nominalised question functions as less polite or disrespectful. We may suggest that what Bickel observes for Belhare appears to be true for a somewhat distantly related Puma.

We see that some Tibeto-Burman languages employ nominalised questions as polite greetings, much as in Newari. For example, as cited by Watters (2008), Rutgers (Rutgers 1998: 240) reports for Yamphu that 'one of the everyday greetings used among the Yamphu is the following utterance containing a factitive verb form in the perfect: *Have you had your meal*?' Actually the speaker is not inquiring about what happened, but rather 'whether a situation is the case or not.' It is interesting to note that such phenomena are found in a very wide range in Nepali. Three questions that are not actually questions though they are in the question form are very popular among Nepali people. They are: *sancai hunuhuncha?* 'how are you?', *ciyā khānu bhayo?* 'have you had your tea?', and *khānā khānu bhayo?* 'have you had your meal?'

The question *sancai hunuhuncha*? 'how are you?' can be asked of anyone who is an intimate. It is just a kind of greeting where people truly are not concerned about the actual health of the person they ask. Actually they are not asking whether s/he has any problems with her/him. It is more like a formality. This type of question is used at any

time. In contrast, the other two *ciyā khānu bhayo?* 'have you had your tea?', and *khānā khānu bhayo?* 'have you had your meal?' should be used at a specific time. These types of expressions are 'phatic communion' in Malinowski (1936)'s sense because phatic communion is free, aimless social intercourse, mentioning 'inquiries about health, comments on weather, and greeting formulae. Likewise, such kind of questions in the form of greetings like *sancai yuŋyaŋ?* 'how are you?' and *roŋ tʌca?* 'have you had your meal?' are also available in Puma where the context appears to be the same as in Nepali or Yamphu.

Watters (2008) reports for Kham that though there are contrasts between nominalised and non-nominalised constructions, non-nominalised forms are not inherently impolite. He also provides nominalised forms of the imperative, which have the softened force of an optative. However, Puma makes no use of nominalised constructions for imperative, hortative or optative, as in the following:

(539) (a)   IMPERATIVE

    *walʌks-i*          *kina*       *sett-i*      *ŋi-i!*
    take.shower-IMP      CONN      kill-IMP    cook-IMP

    'Take a shower, then kill and cook (him)!' (folk_tale_01: 111)

    (b)   HORTATIVE

    *lu*    *nalo*     *hen*     *melā-i-tni*         *puks-i-ne!*
    VOC   COND    now     bazar-DOWN.LOC-ALL   go-1/2PL-OPT

    'If not, let us go down to the market!'

    (c)   OPTATIVE

    *jātī=ŋe*    *sarasatī*   *ka-ŋa-do*              *yuŋ-ne=nʌŋ!*
    fine=FOC   Saraswati   2SG.POSS-mouth-GEN.LOC      stay-OPT=POL.PTCL
    *tʌllʌ*        *haina*
    PTCL        NEG.CONF

    'It is good, may the goddess Saraswati stay in your mouth!'

    Intended: 'It is good, may the god fulfill my wishes!' (convers_06: 063)

### 7.22   Headless relative clauses

As in many Kiranti languages, Puma has headless relative clauses. Many of our examples above are of this type. Relative clauses are formed either with an A-nominaliser or a general nominaliser, without being in construction with a head noun. Headless noun phrases are possible in most of the Kiranti languages. Genetti (2011) notes that if the noun phrase is headless, the final element may be a member of any

number of lexical classes, e.g. a demonstrative, a numeral, or an adjective.

Puma relative clauses are not restricted to subjunctive mood in the past tense as in the neighbouring languages like Belhare and Chintang (Balthasar Bickel, p.c.). Relative clauses are subspecies of attributive (adjective) clauses and their core function is to restrict the reference of a head noun. But though headless relative clauses have no head, they share the syntax and semantics function of headed relative clauses. The syntax of relative clauses holds noun phrase positions within a larger noun phrase or clause. Headless relative clauses appear to exist in many Kiranti languages (van Driem 1987; 1993; Ebert 1997; Bickel 1999; Watters 2008, and among others). Like other Kiranti languages, Puma makes extensive use of headless relative clauses, as in where like other attributes derived by the nominaliser, relative clauses do not need a head noun.

(540) (a)  [*gahanā*     *men-itd=ku-bo=cha*]                    *ṭhūlo-ṭhūlo*
           jewellry     NEG.IMP-give=NMLZ-GEN=ADD               big-big
           *mʌ-li=ŋa*
           3PL.S/A-be=EMPH

           'Even the children of those parents who do not offer dowry, they become prominent persons.' (tongmalung_01: 40)

(b)  [*ka-khim-do*            *ta-a=ku*]
     2SG.POSS-house-GEN.LOC    come-PST=NMLZ

     'The person who came to your house.'

These headless relative clauses are used in negative constructions where the agent nominalisers appear themselves as the negative agent nominalisers by the use of negative morpheme -*men* in nominalised constructions (541a-b), while in (541c) a negative morpheme attaches to a bare verb root to make negative reference in nominalised constructions. The negative morpheme -*men* occurs directly with the agent nominaliser or attaches to a bare verbal root, followed by a general nominaliser. It should be noted that this negative morpheme never follows the bare verbal root. It always precedes the verbal form. Actually, the negative morpheme -*men* functions as an imperative negative while it occurs with a verb. While the negative -*men* can be combined with the nominaliser -*pa* in Puma, Ebert (1993) notes that the prefix *men*-does not combine with other converbal or infinitival affixes in many Kiranti languages (cf. Schackow et al. 2012). However, this is not true in the case of Puma, as in:

(541) (a)  [*kʌ-men-lit-lai*]
           ACT.PTCP-NEG.IMP-plant-DAT

           'For those who do not plant.' (myth_phagu_02: 042)

(b) *lak*      [*men-metd-kʌ-da-a*]
candi.dance    NEG.IMP-play-ACT.PTCP-TEL-ERG
*cop-u-m-ne,*        *cop-u-m-ne!*
look-3P-1/2PL.A-OPT  look-3P-1/2PL.A-OPT

'Those who do not dance, let's watch!' (pum_song_07: 41a)

(c) *ŋa-a*    *ʌkku*    [*men-en=cha=ku*]
1SG-ERG  DEM    NEG.IMP-hear=ADD=NMLZ

'That I have also not heard this.' (bulu_batuko_02: 074)

## 7.23    *Internal headed relative clauses vs. external headed relative clauses*

Puma has external headed relative clauses (EHRC), though it also has internal headed relative clauses which are very limited in distribution. Bickel (1999: 2) provides examples of external headed relative clauses (EHRC) from Belhare, Limbu and Athpare and their paraphrasing examples of internal headed relative clauses (IHRC) and convincingly reports that unlike EHRC (prenominal relative clauses), IHRCs (circumnominal clause) have a fully saturated valence structure (there is no element missing from them), though the verbal and nominal inflection is the same. He also describes that the head noun undoubtedly belongs to the relative clause and plays no role whatsoever in the matrix. This kind of paraphrase is also possible in Puma.

(542) (a) *ŋa-a*    *ase*    [*hud-u-ŋ=ku*    *pempak*]  *cil-a*
1SG-ERG  yesterday  buy-3P-1SG.A=NMLZ  bread    finish-PST

(b) *ŋa-a*    *ase*    [*pempak*  *hud-u-ŋ=ku*]  *cil-a*
1SG-ERG  yesterday  bread    buy-3P-1SG.A=NMLZ  finish-PST

'The bread I bought yesterday is used up.'

The information Bickel (1999) provides for Belhare, Limbu, and Athpare appears to be true in Puma as well. However, we can argue that these examples show freedom of word order, not internal vs. external headed clause. Though we can interpret or paraphrase internal headed relative clauses from external headed relative clauses, such internal headed relative clauses illustrated in (542b) are very rare in Puma, as in:

(543)    *saĩla*    [*demkha*  *bʌrsʌ betd-aŋ=pa₃*]  *bhartī*  *lis-a?*
third.born.male  which    year  bring-IPFV=NMLZ recruit  be-PST
'Which year did *Sahĩla* get recruited?' (tikamaya: 026)

In IHRCs, the head noun appears to be embedded within the relative clause, while in EHRCs, the head noun appears outside the relative clause. Hence EHRCs are prenominal relative clauses, whereas IHRCs are circumnominal clauses. As already mentioned, like

in other Kiranti languages, Puma derives restricted IHRC from EHRC, through paraphrase. Consider examples:

(544) (a)  [ŋa-lai       kʌ-khaŋ]        marcha-a        puchap      set-i
           1SG-DAT      ACT.PTCP-see     woman-ERG       snake       kill-3P

      (b)  *[kʌ-khaŋ         marcha-a]       ŋa-lai       puchap      set-i
           ACT.PTCP-see      woman-ERG       1SG-DAT      snake       kill-3P

           'The girl who saw me killed the snake.'

(545) (a)  [puchap        kʌ-set]      marcha-a        ŋa-lai       pʌ-khaŋ-oŋ
           snake          ACT.PTCP     woman-ERG       1SG-DAT      3S/A-see-1SG.S/P.PST

      (b)  ŋa-lai         [puchap       kʌ-set]       marcha-a        pʌ-khaŋ-oŋ
           1SG-DAT        snake         ACT.PTCP      woman-ERG       3S/A-see-1SG.S/P.PST

           'The girl who killed the snake saw me.'

## 7.24  Chapter summary

This chapter gives an overview of nominalisation and relativisation in Puma which appears to be multifunctional, as in other Kiranti languages. A number of different types of nominalisers and their functions are described. The *kʌ-* and *=ku* nominalisation constructions serve a large number of grammatical functions as nominals, adjectivals, participles, demonstratives, relative clauses, complement clauses, and stand-alone clauses which show contextual interpretations. Puma distinguishes between transitive and intransitive nominalisations and person, number, tense are fully indexed with finite nominalisations.

Relative clauses that are embedded in a noun phrase typically precede the head. Puma appears to be unusual among Kiranti languages in that it contrasts nominals that can be used as instruments, relativised by *-ma=pa₂* and nominals that can be used as non-instrument, relativised by *-ma=yu*. The active participle *kʌ-* relativises only human A arguments, while the general nominaliser *=ku* can relativise all S human as well as non-human and P arguments, and G and T arguments. The nominaliser *=paa or =pa₃* primarily appears with adverbial nominalisation, whereas *=kha* is used with locatives. All nominalisers serving as A arguments are marked with *kʌ-*, while all S and P are coded with *=ku*. Puma possesses both S=P type and S=A type nominalisation constructions. With the S=P type, both S and P take the general nominaliser *=ku*, while with the S=A type, the active nominaliser *kʌ-* should be used. Note that *kʌ-* obligatorily requires a human referent. In this chapter six types of nominalisers identified and described.

# Chapter 8

# Conclusion

This thesis describes the morphosyntax of Puma, a minority Tibeto-Burman language spoken in Nepal, focusing on phonology, morphology and syntax. Chapter 1 introduces the Puma language, its classification within the Kiranti subgroup of Tibeto-Burman, its speakers, cultural background, ritual and agriculture cycle, life cycle and its rites, fieldwork and corpus data, and research methodology, and the main research questions of this thesis. Chapter 2 gives an overview of phonology and morphology. The morphology part comprises a description of both nominal and verbal morphology. Chapter 3 discusses clause structures, concentrating on verbal and non-verbal predicates, intransitive clauses with a split-S pattern, transitive clauses, imperatives, negatives and questions. Chapter 4 describes transitivity alternations, elaborating on eight criteria to establish verb classes. Chapter 5 explores compound verb constructions, while Chapter 6 investigates grammatical relations to test for a syntactic pivot. Finally, Chapter 7 examines nominalisation and relativisation strategies, where nominalisation is the main device to form relative clauses.

This chapter has three sections. Section 8.1 summarises the main findings of the research. Section 8.2 discusses the contribution that this research makes to linguistic description. Finally, Section 8.3 indicates possible topics for further study.

## 8.1    Research summary

Chapter 1 introduces the language, its classification, its speakers, cultural background, rites and rituals, research methodology, and the main research questions of this thesis. This chapter also gives background information on the language situation of Nepal and the Puma-speaking area and some socio-linguistic observations made during fieldwork.

Chapter 2 presents an overview of the phonology and morphology of Puma, based on primary fieldwork data. Part I proposes that Puma has thirty-two consonant phonemes and six vowel phonemes. All consonant phonemes occur in word-initial position, while vowel phonemes occur in word-initial, word-medial and word-final positions. Unlike neighbouring and closely related Tibeto-Burman languages such as Bantawa and Camling, Puma has retroflex and dental sounds which are inherited from Proto-Tibeto-Burman. The distribution of consonants in different positions is discussed

according to their manner of articulation: word-initial, word-medial (intervocalic) and word-final, and the possibility of gemination of consonants, and the distribution of consonant clusters word-initially, word-medially and word-finally is described. The syllable can be formulated minimally and maximally. In Puma the minimal syllable is V and the maximum syllable is (C) (G) V (C) (C), where 'G' is a glide. Puma allows syllables with initial consonant clusters of the form N C V C, where 'N' is a nasal. Like in many Tibeto-Burman languages spoken in Nepal, there are numerous loanwords in Puma and most of them (approximately 15% of the total Puma lexicon) are borrowed from Nepali. There is a high degree of borrowing from Nepali. Those words that are borrowed have been nativised by adding -a at the end of words.

Part II presents an overview of Puma morphology, including details of nominal and verbal morphology. Transitive verbs show agreement in person and number with their arguments. Puma has a split case-marking system that mixes nominative-accusative and ergative-absolutive-dative, and shows a highly unusual system of ergativity termed 'upside-down split ergativity' (Bickel et al. 2005) where intransitive subjects are marked in the same way as transitive objects for the first person singular and plural, while transitive subjects are marked in the same way as intransitive subjects but differently from transitive objects for the third person. Puma morphemes which have clear Proto-Kiranti cognates are discussed. The Puma reflexes which are identical to their Proto-Kiranti cognates are the Puma first person singular non-past morpheme, dual suffix, third person non-singular suffix, first person agent morpheme and third person patient morpheme. The Puma first/second person plural morpheme, third person plural morpheme and first person exclusive morpheme -ka are cognate with the Proto-Kiranti reflexes. Puma makes an inclusive and exclusive distinction in the first person non-singular pronouns, where non-singular includes dual and plural. The features of personal pronouns, case-marking, possessive constructions, demonstratives, affixes and word templates are also discussed.

Chapter 3 describes clause structure, including types of predicates, basic and derived clauses, and valency-increasing and valency-decreasing constructions. Puma distinguishes one-place, two-place and three-place predicates on the basis of the number of arguments they require. Puma has differential object marking (DOM) as it marks some P arguments with dative and some with absolutive. One-place predicates take a single argument in absolutive case and two-place predicates in monotransitive clauses take two

arguments marked as ergative and absolutive, or ergative and dative, depending on animacy and definiteness of the Patient arguments. There is verbal agreement with both Agent (A) and Patient (P) arguments. Three-place predicates take three arguments marked for ergative, absolutive and dative cases, where we find that Goal (G) arguments are always marked with dative, while Theme arguments (T), even if human, are always morphologically unmarked. In addition, Puma exhibits characteristics of a split-S case-marking pattern because some intransitive verbs take P agreement while most take Subject (S) agreement. Puma case-marking for three-place predicates cannot be categorised as either a fully direct object type or a fully primary object type (Dryer 1986, 2007) since the constructions share characteristics of both patterns. Inanimate P and T are marked in the same way, and G is treated differently (the direct object type) but animate and definite P and G are treated in the same way, and T is marked differently (as in the primary object type).

Derived clauses with a verbal predicate show two versions of valency-decreasing constructions: *kha*-detransitivisation, which follows the typical pattern of the Kiranti subgroup of Tibeto-Burman, and *zero*-detransitivisation, which is typologically closer to detransitivisation constructions in other languages around the world (cf. Bickel et al. 2007). For *kha*-antipassive constructions, the affected object must be human.

Puma verb sub-classes are then discussed. As in other Kiranti languages (Bickel 1997), the expression of experiential states of affairs is formed in parallel to all other bodily feeling or experiential expressions, using a possessive of experience construction. Dative case-marked subjects are used with a class of verbs expressing certain physical, mental and emotional states in Nepali, however, in Puma genitive constructions are used to express the experiencers of these verbs. Puma distinguishes adjectival and locative predicates that occur with a copula verb from nominal predicates which occur without a copula in the present tense. Negative existential clauses distinguish between non-past and past tense, while negative identificational clauses do not. The same negative particle occurs in both past and non-past negative identificational clauses.

Chapter 4 investigates transitivity alternations exploring their syntactic and semantic properties. Twenty-four verb classes are distinguished and their individual transitivity alternations are presented and described. Intransitive clauses have only a grammatical subject but this can carry various semantic roles. The subject normally has

control over agreement but sometimes it does not, as some subjects trigger P agreement on the verb. A striking characteristic of Kiranti languages like Puma is that transitive verbs can occur intransitively. A verb may participate in transitivity alternations, and each verb in Puma falls into classes that show a distinct pattern of behaviour with respect to different alternations. The members of verb classes share certain aspects of meaning as well as common syntactic and semantic properties. Eight criteria to establish the verb classes are discussed: pro-drop, antipassive, middle, causative, body-part possessor ascension, reflexive object, reciprocal object and locative alternations.

Change-of-state is shown by causative verbs that do not alternate, such as *bha* 'cut' which cannot occur in the *kha*-antipassive and only the *zero*-antipassive. An overview of transitivity alternations in Puma is presented in Tables 90 and 91, however this area needs further research.

Chapter 5 describes compound verb (CV) constructions. Generally, verbal compounds consist of two verbs: the first is called V1 (pole) (Dasgupta 1977) and the second is called V2 (vector) (Hook 1974; Dasgupta 1977; Bhat 1979). In Kiranti languages, including Puma, in compound verbs both V1 and V2 are inflected for tense and agreement, just like simple verbs. Verbal compounds and lexical compounds are distinguished. Puma is rich in compound verb constructions, as it has twenty-two lexical verbs which appear as V2 and five bound V2 (these can appear only in V2 and do not have independent lexical meaning). In addition, there are noun-verb compounds. Some verbs resemble compounds but they are not segmentable.

It is difficult to distinguish compound verbs from serial verbs. In compound verb constructions, both V1 and V2 or only V2 is inflected for agreement. V1 appears in a bare root form and only V2 is inflected to express the meaning of causativisation, while both V1 and V2 are inflected for agreement in other constructions.

Chapter 6 investigates grammatical relations using intra-clausal and inter-clausal syntactic tests. In many languages with split ergative morphology, grammatical relations appear to follow a different pattern from that exhibited by the case-marking morphology. In Puma the S argument of intransitive clauses and the inanimate P argument of transitive clauses form a single morphological category (S/P) in the absolutive case (contrasting with the A argument of transitive clauses which is in the ergative case). However, syntactically A is identified with S (yielding a syntactic pivot

S/A) and not with P. Puma intra-clausal syntax treats S and A equally since the controller S/A= the target S/A to the exclusion of P in sequential constructions. Similarly, inter-clausal syntax such as EQUI-NP constructions, zero-anaphora, sequential, purposive, conditional, simultaneous and adverbial clauses treat S/A as equivalent to S/A (S/A= S/A). Thus, the syntactic pivot for both inter-clausal and intra-clausal syntax in Puma is S/A.

For verb agreement Puma exhibits a three-way pattern because verbs agree with absolutive S arguments in intransitive clauses, but with ergative A arguments and all P arguments (regardless of their case-marking as absolutive/dative) in transitive clauses. In addition, in ditransitive clauses verbs agree with the ergative A argument and the dative G argument but never with the absolutive T argument. We conclude that the P of monotransitive clauses behaves like the G of ditransitive clauses [P=G] but the P and G behave differently from the T of ditransitive clauses [P=G≠T] as verbs never agree with T. The overview summary of all five grammatical relations in Puma is presented in Table 119.

Chapter 7 gives an overview of nominalisation and relativisation which appears to be multifunctional, as in other Kiranti languages. A number of different types of nominalisers and their functions are described. The *kʌ-* and *=ku* nominalisation constructions serve a large number of syntactic functions as nominals, adjectivals, participles, demonstratives, relative clauses, complement clauses, and stand-alone clauses. These show contextual interpretations. Puma distinguishes between transitive and intransitive nominalisations and person, number, and tense are fully indexed with finite nominalisations.

Relative clauses are embedded in noun phrases and typically precede the head. Nominalisation is a main strategy to form relative clauses in Puma. Puma appears to be unusual among Kiranti languages in that it contrasts nominals that can be used as instruments, relativised by *-ma=pa₂* and nominals that can be used as non-instruments, relativised by *-ma=yu*. The active participle *kʌ-* relativises only human A arguments, while the general nominaliser *=ku* can relativise all S arguments, human as well as non-human, and P, G and T arguments. The nominaliser *=paa or =pa₃* primarily appears with adverbial nominalisation, whereas *=kha* is used with locatives. All nominalisers serving as A arguments are marked with *kʌ-*, while all S and P are coded with *=ku*. Puma possesses both S=P type and S=A type nominalisation constructions. With the

S=P type, both S and P trigger the general nominaliser =*ku*, while with the S=A type, the active nominaliser *kʌ*- is used. Note that *kʌ*- obligatorily requires a human referent. Six types of nominalisers are identified and described.

In conclusion, this thesis presents a detailed investigation of Puma morphosyntax. In the process of describing the morphosyntax which accounts for the core grammar, issues concerned with phonology, morphology, clause structures, grammatical relations, and nominalisation and relativisation are examined. In addition, transitivity alternations and compound verb constructions are described to highlight other syntactic functions.

The research questions which motivates this thesis are:

(546) (a)    What are the clause structures of Puma predicates?

(b)    What are grammatical relations in Puma?

(c)    Why is the Nepali dative marker '-*lai*' obligatory in Puma, while optional in other neighbouring Kiranti languages?

(d)    What are transitivity alternations in Puma?

(e)    What are the conditions for *zero*-detransitivisations and *kha*-antipassivisations?

(f)    Can Puma be categorised as a primary object type or a direct object type (Dryer 1986, 2007) language? If not, why? (cf. 2)

This thesis has responded to these and other issues concerning the morphosyntax of Puma, however a number of other questions have not yet been addressed and await further research (see Section 8.3).

## 8.2    *Contribution to linguistic description*

This thesis represents a contribution to the description of Puma, an endangered Tibeto-Burman language of the Kiranti group, spoken in eastern Nepal. It is based on a transcribed, translated and annotated corpus submitted to the Endangered Languages Archive at SOAS which includes twelve hours of audiovisual recordings of the language. This corpus comprises fifty sessions of time-aligned glossed texts, with almost 7,100 lexical items. This electronic corpus proved to be indispensable for both descriptive work, and for theoretical and typological study of Puma morphosyntax. In addition to this documentary and descriptive work, the main theoretical contribution of this study is to increase understanding of split-ergativity, upside down ergativity, split-S construction marking, and Dryer's (1986, 2007) typology of primary vs secondary and direct vs

indirect languages. Puma neither employs fully direct object marking nor fully primary object marking, rather it shows characteristics of both patterns.

The main contributions that this thesis makes for linguistic description and for typological study are, as follows:

(547) (a)   Unlike other Kiranti languages, Puma preserves Tibeto-Burman retroflex and dental sounds.

(b)   Puma is a postpositional language, and exhibits verb-final syntax.

(c)   Puma is a polysynthetic and complex pronominalised language where words can consist of a series of morphemes.

(d)   The system of verbal agreement, where verbs agree with subjects and objects, is very complex.

(e)   The case marking system is split between nominative-accusative and ergative-absolutive-dative and shows a highly unusual system of ergativity (where intransitive subjects are marked the same way as some transitive objects and differently from transitive subjects).

(f)   The case marking system shows a highly typologically unusual system of ergativity (split-ergativity, upside-down ergativity) and split-S pattern (unergative intransitive and unaccusative intransitive).

(g)   Puma lacks passive constructions, but has two antipassive constructions (where transitive verbs can be detransitivised with a *kha-* prefix or with no change in the verb root). Interestingly, the demoted object for *kha-* detransitivisation must be human, which is typologically unusual, but is a characteristic of many Kiranti languages.

(h)   There are number of verb classes which show different transitivity alternations (e.g. pro-drop, antipassive, causative, reflexive, middle, body-part, and locative)

(i)   Puma distinguishes inclusive/exclusive in the first person plural pronouns.

(j)   Most verbs have stem alternations which makes for very complex inflectional morphology.

(k)   Puma has verbal, nominal and lexical compound verb constructions which are between serial verb constructions and bipartite verbs.

(l)   Puma exhibits a typologically unusual characteristic in reflexive constructions, where the reflexive root, is homophonous with the main verb,

which is inflected detransitively.

(m)   Morphologically, Puma is a split ergative language, while syntactically it is a nominative-accusative language where the syntactic pivot is the category of 'subject', comprising the single argument of intransitive verbs and the agent-like argument of transitive verbs.

(n)   Puma employs different nominalisation and relativisation strategies on A arguments, S human arguments, S non-human arguments, P arguments, instrument entities and non-instrument entities.

(o)   Like many Kiranti languages, Puma exhibits four-way spatial reference (up, down, neutral and level).

(p)   Unlike many Kiranti languages, Puma distinguishes between visible and invisible comitatives and possesses two types of comitatives (-*oŋ* and *pʌ*-LOC).

## 8.3   *Areas for further study*

With the completion of this thesis the core grammar of Puma might be considered relatively well documented, compared to other Kiranti languages of which only one-fifth are well documented and described. However, in many ways this work only scratches the surface, compared to research on the neighbouring and related languages Bantawa and Camling, which have more extensive literature on them. For Puma there is a great deal of work still to be done describing the language, and there is a need for further analysis of many areas of the grammar, particularly, argument structure, information structure, discourse structure, child language acquisition, and language contact. Such research will contribute to better understanding of proto-Tibeto-Burman and proto-Kiranti, as well as the typology of this language group.

A number of the topics touched on in this thesis warrant further research. Just a few that stand out are alternate suffix ordering of imperfective clauses and their negative counterparts (Section 3.14), the behavior of Nepali loanwords with respect to phonology and its implications for syllable patterns (Section 2.14), the syntax of three-argument verbs, triplication and idiophones, semantic distinctions between human S arguments triggered by the active participle *kʌ-* and the general nominaliser *=ku* in agentive and subjective nominalisations. Further experiments could also be conducted testing semantic differences. Similarly, an area described in Chapter 4 that requires further investigation is verb classes, as many verbs within the same class show distinct

characteristics and some intransitive verbs are triggered transitively, demonstrating P agreement on the verb. In addition, investigation into the semantics of V1 and V2 in complex predicates needs further research on the semantic predictability of each V2. Argument structure (Section 3.5) is a promising topic for further work as verbs within the same classes show distinct argument structures in Puma.

There are of course many areas that have been left untouched. The main topics for further research include phonetics, lexical semantics (with particular attention to how semantic features of verbs are associated with grammatical patterns[57]), propositional semantics, narrative discourse structure in multiple situational and cultural settings from informal-intimate to institutional, and the pragmatics of euphemisms, proverbs, conversational implicatures and deictic categories. Similarly, more work could be done on linguistic anthropology and ethnography of communication, sociolinguistics and language contact[58], code-switching among children and adults, child language acquisition, and oral ritual texts and tradition.

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[57] Each verb is different from the others with respect to its syntactic behavior in different constructions such as conative, middle, part-whole, and inchoative.

[58] Most (if not all) adult Puma speakers are bilingual or multilingual.

# Appendices

# Appendix A: Verb paradigms

## (I)  Intransitive verb paradigms

(1a)  *puŋma*, *puks* 'go'

| INTRANSITIVE INDICATIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
| | NPST | PST | NPST | PST |
| 1SG | *puŋŋa* | *puksoŋ* | *pʌpuŋnʌŋ* | *pʌpuŋnʌŋ* |
| 1DL.INCL | *puŋci* | *puksaci* | *pʌpuŋcʌmin* | *pʌpuksacimin* |
| 1PL.INCL | *puksika* | *puksanin* | *pʌpuksʌmin* | *pʌpuksanimin* |
| 1DL.EXCL | *puŋcika* | *puksacika* | *pʌpuŋcʌminka* | *pʌpuksaciminka* |
| 1PL.EXCL | *puksika* | *puksaninka* | *pʌpuksʌminka* | *pʌpuksaniminka* |
| 2SG | *tʌpuŋ* | *tʌpuksa* | *tʌpuŋnin* | *tʌpuksen* |
| 2DL | *tʌpuŋci* | *tʌpuksaci* | *tʌpuŋcʌmin* | *tʌpuksacimin* |
| 2PL | *tʌpukse* | *tʌpuksanin* | *tʌpuksʌmin* | *tʌpuksanimin* |
| 3SG | *puŋ* | *puksa* | *pʌpuŋnin* | *pʌpuksen* |
| 3DL | *pʌpuŋci* | *pʌpuksaci* | *pʌpuŋcʌmin* | *pʌpuksacimin* |
| 3PL | *mʌpuŋ* | *mʌpuksa* | *nipʌpuŋnin* | *nipʌpuksen* |

(1b)  *puŋma*, *puks* 'go'

| INTRANSITIVE IMPERFECTIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
| | NPST | PST | NPST | PST |
| 1SG | *puŋŋaŋa* | *puksoŋyaŋ* | *pʌpuŋnʌŋyaŋ* | *pʌpuŋnʌŋyaŋ* |
| 1DL.INCL | *puŋcaŋci* | *puksaŋci* | *pʌpuŋcaŋcimin* | *pʌpuksaŋcimin* |
| 1PL.INCL | *puksaŋi* | *puksaŋnin* | *pʌpuksaŋnimin* | *pʌpuksaŋnimin* |
| 1DL.EXCL | *puŋcaŋcika* | *puksaŋcika* | *pʌpuŋcaŋciminka* | *pʌpuksaŋciminka* |
| 1PL.EXCL | *puksaŋika* | *puksaŋninka* | *pʌpuksaŋniminka* | *pʌpuksaŋniminka* |
| 2SG | *tʌpuŋyaŋ* | *tʌpuksaŋa* | *tʌpuŋninyen* | *tʌpuksenyen* |
| 2DL | *tʌppuŋcaŋci* | *tʌpuksaŋci* | *tʌppuŋcaŋcimin* | *tʌpuksaŋcimin* |
| 2PL | *tʌpuksaŋi* | *tʌpuksaŋnin* | *tʌpuksaŋnimin* | *tʌpuksaŋnimin* |
| 3SG | *puŋyaŋ* | *puksaŋa* | *pʌpuŋninyen* | *pʌpuksenyen* |
| 3DL | *pʌpuŋcaŋci* | *pʌpuksaŋci* | *pʌpuŋcaŋcimin* | *pʌpuksaŋcʌmin* |
| 3PL | *mʌpuŋyaŋ* | *mʌpuksaŋa* | *nipʌpuŋninyen* | *nipʌpuksenyen* |

(2a)  *pima*, *pis* 'speak'

| INTRANSITIVE INDICATIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
| | NPST | PST | NPST | PST |
| 1SG | *piŋa* | *pisoŋ* | *pʌpinʌŋ* | *pʌpinʌŋ* |
| 1DL.INCL | *pici* | *pisaci* | *pʌpicimin* | *pʌpisacimin* |
| 1PL.INCL | *pissi* | *pisanin* | *pʌpissimin* | *pʌpisanimin* |
| 1DL.EXCL | *picika* | *pisacika* | *pʌpiciminka* | *pʌpisaciminka* |
| 1PL.EXCL | *pissika* | *pisaninka* | *pʌpissiminka* | *pʌpisaniminka* |
| 2SG | *tʌpi* | *tʌpisa* | *tʌpinin* | *tʌpisen* |
| 2DL | *tʌpici* | *tʌpisaci* | *tʌpicimin* | *tʌpisacimin* |
| 2PL | *tʌpisi* | *tʌpissanin* | *tʌpisimin* | *tʌpissanimin* |
| 3SG | *pi* | *pisa* | *pʌpinin* | *pʌpissen* |
| 3DL | *pʌpici* | *pʌpisaci* | *pʌpicimin* | *pʌpisacimin* |
| 3PL | *mʌpi* | *mʌpisa* | *nipʌpinin* | *nipʌpisen* |

(2b)  *pima*, *pis* 'speak'

| INTRANSITIVE IMPERFECTIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
| | NPST | PST | NPST | PST |
| 1SG | *piŋaŋa* | *pisoŋyaŋ* | *pʌpinʌŋyaŋ* | *pʌpinʌŋyaŋ* |
| 1DL.INCL | *picaŋci* | *pisaŋci* | *pʌpicaŋcimin* | *pʌpisaŋcimin* |
| 1PL.INCL | *pissaŋi* | *pisaŋnin* | *pʌpisaŋnimin* | *pʌpissaŋnimin* |
| 1DL.EXCL | *picaŋcika* | *pisaŋcika* | *pʌpicaŋciminka* | *pʌpisaŋciminka* |
| 1PL.EXCL | *pissŋika* | *pisaŋninka* | *pʌpissaŋniminka* | *pʌpisaŋniminka* |
| 2SG | *tʌpiyaŋ* | *tʌpisaŋa* | *tʌpininyen* | *tʌpisenyen* |
| 2DL | *tʌpicaŋci* | *tʌpisaŋci* | *tʌpicaŋcimin* | *tʌpisaŋcimin* |
| 2PL | *tʌpisaŋi* | *tʌpisaŋnin* | *tʌpisaŋnimin* | *tʌpisaŋnimin* |
| 3SG | *piyaŋ* | *pisaŋa* | *pʌpininyen* | *pʌpisenyen* |
| 3DL | *pʌpicaŋci* | *pʌpisaŋci* | *pʌpicaŋcimin* | *pʌpisaŋcimin* |
| 3PL | *mʌpiyaŋ* | *mʌpisaŋa* | *nipʌpininyen* | *nipʌpisenyen* |

(3a)  *ipma*, *ips* 'sleep'

| INTRANSITIVE INDICATIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
| | NPST | PST | NPST | PST |
| 1SG | *imŋa* | *ipsoŋ* | *pʌimnʌŋ* | *pʌimnʌŋ* |
| 1DL.INCL | *imci* | *ipsaci* | *pʌimcʌmin* | *pʌipsacʌmin* |
| 1PL.INCL | *ipse* | *ipsanin* | *pʌipsʌmin* | *pʌipsanʌmin* |
| 1DL.EXCL | *imcika* | *ipsacika* | *pʌimcʌminka* | *pʌipsacʌminka* |
| 1PL.EXCL | *ipseka* | *ipsaninka* | *pʌipsʌminka* | *pʌipsanʌminka* |
| 2SG | *tʌim* | *tʌipsa* | *tʌimnin* | *tʌipsen* |
| 2DL | *tʌimci* | *tʌipsaci* | *tʌimcʌmin* | *tʌipsacʌmin* |
| 2PL | *tʌipse* | *tʌipsanin* | *tʌipsemin* | *tʌipsanʌmin* |
| 3SG | *im* | *ipsa* | *pʌimnim* | *pʌipsen* |
| 3DL | *pʌimci* | *pʌipsaci* | *pʌimcʌmin* | *pʌipsacʌmin* |
| 3PL | *mʌim* | *mʌipsa* | *nipʌimnin* | *nipʌipsen* |

(3b)  *ipma*, *ips* 'sleep'

| INTRANSITIVE IMPERFECTIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
| | NPST | PST | NPST | PST |
| 1SG | *imŋaŋa* | *ipsoŋyaŋ* | *pʌimnʌŋyaŋ* | *pʌimnʌŋyaŋ* |
| 1DL.INCL | *imcaŋci* | *ipsaŋci* | *pʌimcaŋcʌmin* | *pʌipsaŋcʌmin* |
| 1PL.INCL | *ipsaŋi* | *ipsaŋnin* | *pʌipsaŋnʌmin* | *pʌipsaŋnʌmin* |
| 1DL.EXCL | *imcaŋcika* | *ipsaŋcika* | *pʌimcaŋcʌminka* | *pʌipsaŋcʌminka* |
| 1PL.EXCL | *ipseŋka* | *ipsaŋninka* | *pʌipseŋnʌminka* | *pʌipsaŋnʌminka* |
| 2SG | *tʌimyaŋ* | *tʌipsaŋa* | *tʌimninyen* | *tʌipsenyen* |
| 2DL | *tʌimcaŋci* | *tʌipsaŋci* | *tʌimcaŋcʌmin* | *tʌipsaŋcʌmin* |
| 2PL | *tʌipsaŋi* | *tʌipsaŋnin* | *tʌipsaŋnʌmin* | *tʌipsaŋnʌmin* |
| 3SG | *imyaŋ* | *ipsaŋa* | *pʌimninyen* | *pʌipsenyen* |
| 3DL | *pʌimcaŋci* | *pʌipsaŋci* | *pʌimcaŋcʌmin* | *pʌipsaŋcʌmin* |
| 3PL | *mʌimyaŋ* | *mʌipsaŋa* | *nipʌimninyen* | *nipʌipsenyen* |

(4a)  *ima*,  *i* 'come down'

| INTRANSITIVE INDICATIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
|  | NPST | PST | NPST | PST |
| 1SG | *iŋa* | *ioŋ* | *pʌinʌŋ* | *pʌinʌŋ* |
| 1DL.INCL | *ici* | *iaci* | *pʌicʌmin* | *pʌiacʌmin* |
| 1PL.INCL | *ie* | *ianin* | *pʌiemin* | *pʌianʌmin* |
| 1DL.EXCL | *icika* | *iacika* | *pʌicʌminka* | *pʌiacʌminka* |
| 1PL.EXCL | *ieka* | *ianinka* | *pʌieminka* | *pʌianʌminka* |
| 2SG | *tʌi* | *tʌia* | *tʌinin* | *tʌien* |
| 2DL | *tʌici* | *tʌiaci* | *tʌicʌmin* | *tʌiacʌmin* |
| 2PL | *tʌie* | *tʌianin* | *tʌiemin* | *tʌianʌmin* |
| 3SG | *i* | *ia* | *pʌinin* | *pʌien* |
| 3DL | *pʌici* | *pʌiaci* | *pʌicʌmin* | *pʌiacʌmin* |
| 3PL | *mʌi* | *mʌia* | *nipʌinin* | *nipʌien* |

(4b)  *ima*,  *i* 'come down'

| INTRANSITIVE IMPERFECTIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
|  | NPST | PST | NPST | PST |
| 1SG | *iŋaŋa* | *ioŋyaŋ* | *pʌinʌŋyaŋ* | *pʌinʌŋyaŋ* |
| 1DL.INCL | *iaŋci* | *iaŋci* | *pʌicaŋcʌmin* | *pʌiaŋcʌmin* |
| 1PL.INCL | *iaŋi* | *iyaŋka* | *pʌiaŋnʌmin* | *pʌiaŋnʌminka* |
| 1DL.EXCL | *iaŋcika* | *iaŋcika* | *pʌiyaŋcʌminka* | *pʌiaŋcʌminka* |
| 1PL.EXCL | *iaŋninka* | *iyaŋninka* | *pʌiaŋnʌminka* | *pʌiaŋnʌminka* |
| 2SG | *tʌiyaŋ* | *tʌiyaŋa* | *tʌininyen* | *tʌienyen* |
| 2DL | *tʌicaŋci* | *tʌiyaŋci* | *tʌicaŋcʌmin* | *tʌiyayaŋcʌmin* |
| 2PL | *tʌiyaŋi* | *tʌiyayaŋnin* | *tʌiyaŋnʌmin* | *tʌiyayaŋnʌmin* |
| 3SG | *iyaŋ* | *iaŋa* | *pʌininyen* | *pʌiyenyen* |
| 3DL | *pʌiyaŋci* | *pʌiyayaŋci* | *pʌicaŋcʌmin* | *pʌiyayaŋcʌmin* |
| 3PL | *mʌiyaŋ* | *mʌiyaŋa* | *nipʌininyen* | *nipʌinyen* |

(5a)  *yuŋma*,  *yuŋ* 'sit'

| INTRANSITIVE INDICATIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
| | NPST | PST | NPST | PST |
| 1SG | *yuŋŋa* | *yuŋoŋ* | *pʌyuŋnʌŋ* | *pʌyuŋnʌŋ* |
| 1DL.INCL | *yuŋci* | *yuŋci* | *pʌyuŋcʌmin* | *pʌyuŋcʌmin* |
| 1PL.INCL | *yuŋŋe* | *yuŋnin* | *pʌyuŋnʌmin* | *pʌyuŋnʌmin* |
| 1DL.EXCL | *yuŋcika* | *yuŋcika* | *pʌyuŋcʌminka* | *pʌyuŋcʌminka* |
| 1PL.EXCL | *yuŋŋeka* | *yuŋninka* | *pʌyuŋnʌminka* | *pʌyuŋnʌminka* |
| 2SG | *tʌyuŋ* | *tʌyuŋa* | *tʌyuŋnin* | *tʌyuŋen* |
| 2DL | *tʌyuŋci* | *tʌyuŋci* | *tʌyuŋcʌmin* | *tʌyuŋcʌmin* |
| 2PL | *tʌyuŋŋe* | *tʌyuŋnin* | *tʌyuŋnʌmin* | *tʌyuŋnʌmin* |
| 3SG | *yuŋ* | *yuŋa* | *pʌyuŋnin* | *pʌyuŋen* |
| 3DL | *pʌyuŋci* | *pʌyuŋci* | *pʌyuŋcʌmin* | *pʌyuŋcʌmin* |
| 3PL | *tʌyuŋ* | *tʌyuŋa* | *nipʌyuŋnin* | *nipʌyuŋen* |

(5b)  *yuŋma*,  *yuŋ* 'sit'

| INTRANSITIVE IMPERFECTIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
| | NPST | PST | NPST | PST |
| 1SG | *yuŋŋaŋa* | *yuŋoŋyaŋ* | *pʌyuŋnʌŋyaŋ* | *pʌyuŋnʌŋyaŋ* |
| 1DL.INCL | *yuŋcaŋci* | *yuŋaŋci* | *pʌyuŋcaŋcʌmin* | *pʌyuŋaŋcʌmin* |
| 1PL.INCL | *yuŋŋaŋi* | *yuŋaŋnin* | *pʌyuŋyaŋnʌmin* | *pʌyuŋaŋnʌmin* |
| 1DL.EXCL | *yuŋcaŋcika* | *yuŋaŋcika* | *pʌyuŋcaŋcʌminka* | *pʌyuŋaŋcʌminka* |
| 1PL.EXCL | *yuŋŋaŋika* | *yuŋaŋninka* | *pʌyuŋyaŋnʌminka* | *pʌyuŋaŋnʌminka* |
| 2SG | *tʌyuŋyaŋ* | *tʌyuŋaŋa* | *tʌyuŋninen* | *tʌyuŋeŋŋen* |
| 2DL | *tʌyuŋcaŋci* | *tʌyuŋaŋci* | *tʌyuŋcaŋcʌmin* | *tʌyuŋaŋcʌmin* |
| 2PL | *tʌyuŋaŋi* | *tʌyuŋyaŋnin* | *tʌyuŋaŋnʌmin* | *tʌyuŋaŋnʌmin* |
| 3SG | *yuŋyaŋ* | *yuŋaŋa* | *pʌyuŋninyen* | *pʌyuŋeŋŋen* |
| 3DL | *pʌyuŋcaŋci* | *pʌyuŋaŋci* | *pʌyuŋcaŋcʌmin* | *pʌyuŋaŋcʌmini* |
| 3PL | *tʌyuŋyaŋ* | *tʌyuŋaŋa* | *nipʌyuŋninyen* | *nipʌyuŋŋenyen* |

(6a)  *phinma*,  *phind* 'jump'

| INTRANSITIVE INDICATIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
| | NPST | PST | NPST | PST |
| 1SG | *phinŋa* | *phindoŋ* | *pʌphinnʌŋ* | *pʌphinnʌŋ* |
| 1DL.INCL | *phinci* | *phindaci* | *pʌphincimin* | *pʌphindacimin* |
| 1PL.INCL | *phindi* | *phindanin* | *pʌphindimin* | *pʌphindanimin* |
| 1DL.EXCL | *phincika* | *phindacika* | *pʌphinciminka* | *pʌphindaciminka* |
| 1PL.EXCL | *phindika* | *phindaninka* | *pʌphindiminka* | *pʌphindaniminka* |
| 2SG | *tʌphin* | *tʌphinda* | *tʌphinnin* | *tʌphinden* |
| 2DL | *tʌphinci* | *tʌphindaci* | *tʌphincimin* | *tʌphindacimin* |
| 2PL | *tʌphindi* | *tʌphindanin* | *tʌphindimin* | *tʌphindanimin* |
| 3SG | *phin* | *phinda* | *pʌphinnin* | *pʌphinden* |
| 3DL | *pʌphinci* | *pʌphindaci* | *pʌphincimin* | *pʌphindacimin* |
| 3PL | *mʌphin* | *mʌphinda* | *nipʌphinnin* | *nipʌphinden* |

(6b)  *phinma*,  *phind* 'jump'

| INTRANSITIVE IMPERFECTIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
| | NPST | PST | NPST | PST |
| 1SG | *phinŋaŋa* | *phindoŋyaŋ* | *pʌphinnʌŋyaŋ* | *pʌphinnʌŋyaŋ* |
| 1DL.INCL | *phincaŋci* | *phindaŋci* | *pʌphincaŋcimin* | *pʌphindaŋcimin* |
| 1PL.INCL | *phindaŋi* | *phindaŋnin* | *pʌphindiminyen* | *pʌphindaŋnimin* |
| 1DL.EXCL | *phincaŋcika* | *phindaŋcika* | *pʌphincaŋciminka* | *pʌphindaŋciminka* |
| 1PL.EXCL | *phindaŋika* | *phindaŋninka* | *pʌphindiminyenka* | *pʌphindaŋniminka* |
| 2SG | *tʌphinyaŋ* | *tʌphindaŋa* | *tʌphinninyen* | *tʌphindenyen* |
| 2DL | *tʌphincaŋci* | *tʌphindaŋci* | *tʌphincaŋcimin* | *tʌphindaŋcimin* |
| 2PL | *tʌphindaŋi* | *tʌphindaŋnin* | *tʌphindaniminyen* | *tʌphindaŋnimin* |
| 3SG | *phinyaŋ* | *phindaŋa* | *pʌphinninyen* | *pʌphindenyen* |
| 3DL | *pʌphincaŋci* | *pʌphindaŋci* | *pʌphincaŋcimin* | *pʌphindaŋcimin* |
| 3PL | *mʌphinyaŋ* | *mʌphindaŋa* | *nipʌphinninyen* | *nipʌphindenyen* |

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(7a)  *bhima*,  *bhis* 'fart'

| INTRANSITIVE INDICATIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
| | NPST | PST | NPST | PST |
| 1SG | *bhiŋa* | *bhisoŋ* | *pʌbhinʌŋ* | *pʌbhinʌŋ* |
| 1DL.INCL | *bhici* | *bhisaci* | *pʌbhicimin* | *pʌbhisacimin* |
| 1PL.INCL | *bhissi* | *bhisanin* | *pʌbhissimin* | *pʌbhisanimin* |
| 1DL.EXCL | *bhicika* | *bhisacika* | *pʌbhiciminka* | *pʌbhisaciminka* |
| 1PL.EXCL | *bhissika* | *bhisaninka* | *pʌbhissiminka* | *pʌbhisaniminka* |
| 2SG | *tʌbhi* | *tʌbhisa* | *tʌbhinin* | *tʌbhisen* |
| 2DL | *tʌbhici* | *tʌbhisaci* | *tʌbhicimin* | *tʌbhisacimin* |
| 2PL | *tʌbhisi* | *tʌbhisanin* | *tʌbhisimin* | *tʌbhisanimin* |
| 3SG | *bhi* | *bhisa* | *pʌbhinin* | *pʌbhisen* |
| 3DL | *pʌbhici* | *pʌbhisaci* | *pʌbhicimin* | *pʌbhisacimin* |
| 3PL | *mʌbhi* | *mʌbhisa* | *nipʌbhinin* | *nipʌbhisen* |

(7b)  *bhima*,  *bhis* 'fart'

| INTRANSITIVE IMPERFECTIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
| | NPST | PST | NPST | PST |
| 1SG | *bhiŋaŋa* | *bhisoŋyaŋ* | *pʌbhinʌŋyaŋ* | *pʌbhinʌŋ* |
| 1DL.INCL | *bhicaŋci* | *bhisaŋci* | *pʌbhicaŋcimin* | *pʌbhisaŋcimin* |
| 1PL.INCL | *bhissaŋi* | *bhisaŋnin* | *pʌbhissaŋnimin* | *pʌbhisaŋnimin* |
| 1DL.EXCL | *bhicaŋcika* | *bhisaŋcika* | *pʌbhicaŋciminka* | *pʌbhisaŋciminka* |
| 1PL.EXCL | *bhissaŋika* | *bhisaŋninka* | *pʌbhissaŋniminka* | *pʌbhisaŋniminka* |
| 2SG | *tʌbhiyaŋ* | *tʌbhisaŋa* | *tʌbhininyen* | *tʌbhisenyen* |
| 2DL | *tʌbhicaŋci* | *tʌbhisaŋci* | *tʌbhicaŋcimin* | *tʌbhisaŋcimin* |
| 2PL | *tʌbhisaŋi* | *tʌbhisaŋnin* | *tʌbhissininyen* | *tʌbhisaŋnimin* |
| 3SG | *bhiyaŋ* | *bhisaŋa* | *pʌbhininyen* | *pʌbhisenyen* |
| 3DL | *pʌbhicaŋci* | *pʌbhisaŋci* | *pʌbhiciminyen* | *pʌbhisaŋcimin* |
| 3PL | *mʌbhiyaŋ* | *mʌbhisaŋa* | *nipʌbhininyen* | *nipʌbhisenyen* |

## (II) Unaccusative intransitive verb paradigms

(8a) *dhunma*, *dhund* 'shiver'

| INTRANSITIVE INDICATIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
| | NPST | PST | NPST | PST |
| 1SG | *pʌdhunŋa* | *pʌdhundoŋ* | *pʌdhunnʌŋ* | *pʌdhunnʌŋ* |
| 1DL.INCL | *khadhun* | *khadhunda* | *khapʌdhunnin* | *khapʌdhunden* |
| 1PL.INCL | *khadhun* | *khadhunda* | *khapʌdhunnin* | *khapʌdhunden* |
| 1DL.EXCL | *pʌdhuncika* | *pʌdhundacika* | *pʌdhunciminka* | *pʌdhundaciminka* |
| 1PL.EXCL | *pʌdhundika* | *pʌdhundaninka* | *pʌdhundiminka* | *pʌdhundaniminka* |
| 2SG | *tʌdhun* | *tʌdhunda* | *tʌdhunnin* | *tʌdhunden* |
| 2DL | *tʌdhunci* | *tʌdhundaci* | *tʌdhuncimin* | *tʌdhundacimin* |
| 2PL | *tʌdhundi* | *tʌdhundanin* | *tʌdhundimin* | *tʌdhundanimin* |
| 3SG | *dhundi* | *dhundi* | *pʌdhundin* | *pʌdhundin* |
| 3DL | *dhundici* | *dhundici* | *pʌdhundincin* | *pʌdhundincin* |
| 3PL | *dhundici* | *dhundici* | *pʌdhundincin* | *pʌdhundincin* |

(8b) *dhunma*, *dhund* 'shiver'

| INTRANSITIVE IMPERFECTIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
| | NPST | PST | NPST | PST |
| 1SG | *pʌdhunŋaŋa* | *pʌdhundoŋyaŋ* | *pʌdhunnʌŋyaŋ* | *pʌdhunnʌŋyaŋ* |
| 1DL.INCL | *khadhunyaŋ* | *khadhunda* | *khapʌdhunninyen* | *khapʌdhunden* |
| 1PL.INCL | *khadhunyaŋ* | *khadhundaŋa* | *khapʌdhunninyen* | *khapʌdhundenyen* |
| 1DL.EXCL | *pʌdhuncaŋcika* | *pʌdhundaŋcika* | *pʌdhunciminyenka* | *pʌdhundaŋciminka* |
| 1PL.EXCL | *pʌdhundaŋika* | *pʌdhundaŋninka* | *pʌdhundiminyenka* | *pʌdhundaŋniminka* |
| 2SG | *tʌdhunyaŋ* | *tʌdhundaŋa* | *tʌdhunninyen* | *tʌdhundenyen* |
| 2DL | *tʌdhuncaŋci* | *tʌdhundaŋci* | *tʌdhuncaŋcimin* | *tʌdhundaŋcimin* |
| 2PL | *tʌdhundaŋi* | *tʌdhundaŋnin* | *tʌdhundiniminyen* | *tʌdhundaŋnimin* |
| 3SG | *dhundaŋi* | *dhundaŋi* | *pʌdhundinyen* | *pʌdhundinyen* |
| 3DL | *dhundaŋci* | *dhundaŋci* | *pʌdhundinyencin* | *pʌdhundinyencin* |
| 3PL | *dhundaŋci* | *dhundaŋci* | *pʌdhundinyencin* | *pʌdhundinyencin* |

(9a)  *hotma*,  *hotd* 'tire'

| INTRANSITIVE INDICATIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
| | NPST | PST | NPST | PST |
| 1SG | *pʌhotŋa* | *pʌhotdoŋ* | *pʌhotnnʌŋ* | *pʌhotnnʌŋ* |
| 1DL.INCL | *pʌhotnʌŋ* | *pʌhotnʌŋ* | *khapʌhotnin* | *khapʌhotden* |
| 1PL.INCL | *khahotci* | *khahotda* | *khapʌhotnin* | *khapʌhotden* |
| 1DL.EXCL | *khapʌhotcimin* | *khapʌhotden* | *pʌhotciminka* | *pʌhotdaciminka* |
| 1PL.EXCL | *khahot* | *khahotda* | *pʌhotdiminka* | *pʌhotdaniminka* |
| 2SG | *tʌhot* | *khapʌhotden* | *tʌhotnin* | *tʌhotden* |
| 2DL | *tʌhotnin* | *pʌhotdacika* | *tʌhotcimin* | *tʌhotdacimin* |
| 2PL | *tʌhotci* | *pʌhotdaciminka* | *tʌhotdimin* | *tʌhotdanimin* |
| 3SG | *hotdi* | *pʌhotdaninka* | *pʌhotdin* | *pʌhotdin* |
| 3DL | *pʌhotdin* | *pʌhotdaniminka* | *pʌhotdincin* | *pʌhotdincin* |
| 3PL | *hotdici* | *tʌhotda* | *pʌhotdincin* | *pʌhotdincin* |

(9b)  *hotma*,  *hotd* 'tire'

| INTRANSITIVE IMPERFECTIVE | | | | |
|---|---|---|---|---|
| PRONOUNS | AFFIRMATIVE | | NEGATIVE | |
| | NPST | PST | NPST | PST |
| 1SG | *pʌhotŋaŋa* | *pʌhotdoŋyaŋ* | *pʌhotnʌŋyaŋ* | *pʌhotnʌŋyaŋ* |
| 1DL.INCL | *khahotyaŋ* | *khahotda* | *khapʌhotninyen* | *khapʌhotden* |
| 1PL.INCL | *khahotyaŋ* | *khahotdaŋa* | *khapʌhotninyen* | *khapʌhotdenyen* |
| 1DL.EXCL | *pʌhotcaŋcika* | *pʌhotdaŋcika* | *pʌhotciminyenka* | *pʌhotdaŋciminka* |
| 1PL.EXCL | *pʌhotdaŋika* | *pʌhotdaŋninka* | *pʌhotdiminyenka* | *pʌhotdaŋniminka* |
| 2SG | *tʌhotyaŋ* | *tʌhotdaŋa* | *tʌhotninyen* | *tʌhotdenyen* |
| 2DL | *tʌhotcaŋci* | *tʌhotdaŋci* | *tʌhotcaŋcimin* | *tʌhotdaŋcimin* |
| 2PL | *tʌhotdaŋi* | *tʌhotdaŋnin* | *tʌhotdiniminyen* | *tʌhotdaŋnimin* |
| 3SG | *hotdaŋi* | *hotdaŋi* | *pʌhotdinyen* | *pʌhotdinyen* |
| 3DL | *hotdaŋci* | *hotdaŋci* | *pʌhotdinyencin* | *pʌhotdinyencin* |
| 3PL | *hotdaŋci* | *hotdaŋci* | *pʌhotdinyencin* | *pʌhotdinyencin* |

## (III) Psyche verb paradigms

(10a)    *sokma ketma*,  *sokma ket* 'lazy'

| PRONOUNS | AFFIRMATIVE | |
|---|---|---|
| | NPST | PST |
| 1SG | *uŋbo uŋ sokma ket* | *uŋbo uŋ sokma keta* |
| 1DL.INCL | *encibo enci sokma ket* | *encibo enci sokma keta* |
| 1PL.INCL | *enbo en sokma ket* | *enbo en sokma keta* |
| 1DL.EXCL | *acibo aci sokma ket* | *acibo aci sokma keta* |
| 1PL.EXCL | *abo a sokma ket* | *abo a sokma keta* |
| 2SG | *kabo ka sokma ket* | *kabo ka sokma keta* |
| 2DL | *kencibo kenci sokma ket* | *kencibo kenci sokma keta* |
| 2PL | *kenbo ken sokma ket* | *kenbo ken sokma keta* |
| 3SG | *khobo kʌ sokma ket* | *khobo kʌ sokma keta* |
| 3DL | *khocibo kʌci sokma ket* | *khocibo kʌci sokma keta* |
| 3PL | *khocibo kʌci sokma ket* | *khocibo kʌci sokma keta* |

(10b)    *sokma ketma*,  *sokma ket* 'lazy'

| PRONOUNS | NEGATIVE | |
|---|---|---|
| | NPST | PST |
| 1SG | *uŋbo uŋ sokma pʌketnin* | *uŋbo uŋ sokma pʌketen* |
| 1DL.INCL | *encibo enci sokma pʌketnin* | *encibo enci sokma pʌketen* |
| 1PL.INCL | *enbo en sokma pʌketnin* | *enbo en sokma pʌketen* |
| 1DL.EXCL | *acibo aci sokma pʌketnin* | *acibo aci sokma pʌketen* |
| 1PL.EXCL | *abo a sokma pʌketnin* | *abo a sokma pʌketen* |
| 2SG | *kabo ka sokma pʌketnin* | *kabo ka sokma pʌketen* |
| 2DL | *kencibo kenci sokma pʌketnin* | *kencibo kenci sokma pʌketen* |
| 2PL | *kenbo ken sokma pʌketnin* | *kenbo ken sokma pʌketen* |
| 3SG | *khobo kʌ sokma pʌketnin* | *khobo kʌ sokma pʌketen* |
| 3DL | *khocibo kʌci sokma pʌketnin* | *khocibo kʌci sokma pʌketen* |
| 3PL | *khocibo kʌci sokma pʌketnin* | *khocibo kʌci sokma pʌketen* |

(11a)     *hakluwa lonma, hakluwa lond* 'sweat'

| PRONOUNS | AFFIRMATIVE | |
|---|---|---|
| | NPST | PST |
| 1SG | *uŋbo uŋhakluwa lonyaŋ* | *uŋbo uŋhakluwa londaŋa* |
| 1DL.INCL | *encibo encihakluwa lonyaŋ* | *encibo encihakluwa londaŋa* |
| 1PL.INCL | *enbo enhakluwa lonyaŋ* | *enbo enhakluwa londaŋa* |
| 1DL.EXCL | *acibo acihakluwa lonyaŋ* | *acibo acihakluwa londaŋa* |
| 1PL.EXCL | *abo ahakluwa lonyaŋ* | *abo ahakluwa londaŋa* |
| 2SG | *kabo kahakluwa lonyaŋ* | *kabo ka hakluwa londaŋa* |
| 2DL | *kencibo kencihakluwa lonyaŋ* | *kencibo kenci hakluwa londaŋa* |
| 2PL | *kenbo kenhakluwa lonyaŋ* | *kenbo ken hakluwa londaŋa* |
| 3SG | *khobo kʌhakluwa lonyaŋ* | *khobo kʌ hakluwa londaŋa* |
| 3DL | *khocibo kʌcihakluwa lonyaŋ* | *khocibo kʌci hakluwa londaŋa* |
| 3PL | *khocibo kʌcihakluwa lonyaŋ* | *khocibo kʌci hakluwa londaŋa* |

(11b)     *hakluwa lonma, hakluwa lond* 'sweat'

| PRONOUNS | NEGATIVE | |
|---|---|---|
| | NPST | PST |
| 1SG | *uŋbo uŋhakluwa pʌlonninen* | *uŋbo uŋhakluwa pʌlondenen* |
| 1DL.INCL | *encibo encihakluwa pʌlonninen* | *encibo encihakluwa pʌlondenen* |
| 1PL.INCL | *enbo enhakluwa pʌlonninen* | *enbo enhakluwa pʌlondenen* |
| 1DL.EXCL | *acibo acihakluwa pʌlonninen* | *acibo acihakluwa pʌlondenen* |
| 1PL.EXCL | *abo ahakluwa pʌlonninen* | *abo ahakluwa pʌlondenen* |
| 2SG | *kabo kahakluwa pʌlonninen* | *kabo kahakluwa pʌlondenen* |
| 2DL | *kencibo kencihakluwa pʌlonninen* | *kencibo kencihakluwa pʌlondenen* |
| 2PL | *kenbo kenhakluwa pʌlonninen* | *kenbo kenhakluwa pʌlondenen* |
| 3SG | *khobo kʌhakluwa pʌlonninen* | *khobo kʌhakluwa pʌlondenen* |
| 3DL | *khocibo kʌcihakluwa pʌlonninen* | *khocibo kʌcihakluwa pʌlondenen* |
| 3PL | *khocibo kʌcihakluwa pʌlonninen* | *khocibo kʌcihakluwa pʌlondenen* |

## (IV) Transitive verb paradigms[59]

(12a)  *manmakenma*, *mandkess* 'forget' NON-PAST INDICATIVE

| | 1sg | 1di | 1pi | 1de | 1pe | 2sg | 2dl | 2pl | 3sg | 3ns | ANTIPASSIVE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1sg | A → P | | | | | *mannakenna* / *pʌmannenkennen* | *Mannakennaci* / *pʌmannakennacimin* | *mannakennanin* / *pʌmannakennanimin* | *manduŋkessuŋ* / *pʌmannʌŋkennʌŋ* | *manduŋkessuŋcʌŋ* / *pʌmannʌŋkennʌŋcʌŋ* | *khamanŋakenŋa* / *khapʌmannʌŋkennʌŋ* |
| 1di | | | | | | | | | *mancikenci* / *pʌmancikencimin* | *mancikencici* / *pʌmancikencicimin* | *khamancikenci* / *khapʌmancikencimin* |
| 1pi | | | | | | | | | *mandumkessum* / *pʌmandumkessummin* | *mandumkessumcʌm* / *pʌmandumkessumcʌmmin* | *khamandikessi* / *khapʌmandikessimin* |
| 1de | | | | | | *nitʌmanken* / *nitʌmanninkennin* | *nitʌmancikenci* *nitʌmancikencimin* | *nitʌmandikessi* | *mancikencika* / *pʌmancikenciminka* | *mancikencicika* / *pʌmancikenciciminka* | *khamancikencika* / *khapʌmancikenciminka* |
| 1pe | | | | | | | *nitʌmandikessi* *nitʌmandikessimin* | *nitʌmandikessimin* | *mandumkessumka* / *pʌmandumkessumminka* | *mandumkessumcʌmka* / *pʌmandumkessumcʌmminka* | *khamandikessika* / *khapʌmandikessiminka* |
| 2sg | *tʌmanŋakenŋa* / *tʌmannʌŋkennʌŋ* | | *khatʌmanken* *khatʌmanninkennin* | | | | | | *tʌmandikessi* / *tʌmandinkessin* | *tʌmandikessici* / *tʌmandinkessincin* | *khatʌmanken* / *khatʌmanninkennin* |
| 2dl | *tʌmanŋakenŋacʌŋ* / *tʌmannʌŋkennʌŋcʌmʌŋ* | | *khatʌmancikenci* *khatʌmancikencimin* | | | | | | *tʌmancikenci* / *tʌmancikencimin* | *tʌmancikencici* / *tʌmancikencimin* | *khatʌmancikenci* / *khatʌmancikencimin* |
| 2pl | *tʌmanŋakenŋanʌŋ* / *tʌmannʌŋkennʌŋnʌmʌŋ* | | *khatʌmandikessi* *khatʌmandikessimin* | | | | | | *tʌmandumkessum* / *tʌmandumkessumin* | *tʌmandumkessumcʌm* / *tʌmandumkessumcʌmmin* | *khatʌmandikessi* / *khatʌmandikessimin* |
| 3sg | *pʌmanŋakenŋa* / *pʌmannʌŋkennʌŋ* | *khamanken* *khapʌmanninkennin* | *pʌmancikencika* *pʌmancikenciminka* | *pʌmandikessika* *pʌmandikessimika* | | *tʌmanken* *tʌmanninkennin* | *tʌmancikenci* *tʌmancikencimin* | *tʌmandikessi* *tʌmandinkessin* | *mandikessi* / *pʌmandinkessin* | *mandikessici* / *pʌmandinkessincin* | *khamanken* / *khapʌmanninkennin* |
| 3dl | *pʌmanŋakenŋacʌŋ* / *pʌmannʌŋkennʌŋcʌmʌŋ* | *khapʌmancikenci* *khapʌmancikencimin* | *nipʌmancikencika* *nipʌmancikenciminka* | | | *nitʌmanken* *nitʌmanninkennin* | *nitʌmancikenci* *nitʌmancikencimin* | *nitʌmandikessi* | *pʌmancikenci* *pʌmancikencimin* | *pʌmancikencici* *pʌmancikencicimin* | *khapʌmancikenci* / *khapʌmancikencimin* |
| 3pl | *nipʌmanŋakenŋa* / *nipʌmannʌŋkennʌŋ* | *khamʌmanken* *khanipʌmanninkennin* | *nipʌmandikessika* *nipʌmandikessiminka* | | | | *nitʌmandikessi* *nitʌmandikessimin* | *nitʌmandikessimin* | *pʌmanken* *nipʌmandinkessin* | *mʌmandikessici* *nipʌmandinkessincin* | *khamʌmanken* *khanipʌmanninkennin* |

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[59] In this table, upper case denotes affirmative and lower case denotes negative forms.

(12b)  *manmakenma*, *mandkess* 'forget' PAST INDICATIVE

| | 1sg | 1di | 1pi | 1de | 1pe | 2sg | 2dl | 2pl | 3sg | 3ns | ANTIPASSIVE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1sg | A  P → | | | | | *mannakenna* <br> *pʌmannenkennen* | *mannakennaaci* <br> *pʌmannakennacimin* | *mannakennanin* <br> *pʌmannakennanimin* | *manduuŋkesuuŋ* <br> *pʌmannʌŋkennʌŋ* | *mandunŋkesuuŋcʌŋ* <br> *pʌmannʌŋkennʌŋcʌŋ* | *khamandoŋkesoŋ* <br> *khapʌmannʌŋkennʌŋ* |
| 1di | (↓) | | | | | | | | *mandakesaci* <br> *pʌmandakesacimin* | *mandakesacici* <br> *pʌmandakesacicimin* | *khamandakesaci* <br> *khapʌmandakesacimin* |
| 1pi | | | | | | | | | *manduumkesuum* <br> *pʌmandumkesummin* | *mandumkesuumcʌm* <br> *pʌmandumkesumcʌmmin* | *khamandakesanin* <br> *khapʌmandakesanimin* |
| 1de | | | | | | *nitʌmandakesa* <br> *nitʌmandenkesen* | *nitʌmandakesaci* <br> *nitʌmandakesacimin* | *nitʌmandakesanin* | *mandakesacika* <br> *pʌmandakesaciminka* | *mandakesacicika* <br> *pʌmandakesaciciminka* | *khamandakesacika* <br> *khapʌmandakesaciminka* |
| 1pe | | | | | | | *nitʌmandakesanin* <br> *nitʌmandakesanimin* | *nitʌmandakesanimin* | *manduumkesuumka* <br> *pʌmandumkesumminka* | *mandumkesuumcʌmka* <br> *pʌmandumkesumcʌmminka* | *khamandakesanimka* <br> *khapʌmandakesaniminka* |
| 2sg | *tʌmandoŋkesoŋ* <br> *tʌmannʌŋkennʌŋ* | | | *khatʌmandakesa* <br> *khatʌmandenkesen* | | | | | *tʌmandikesi* <br> *tʌmandinkesin* | *tʌmandikesici* <br> *tʌmandinkesincin* | *khatʌmandakesa* <br> *khatʌmandenkesen* |
| 2dl | *tʌmandoŋkesoŋcʌŋ* <br> *tʌmannʌŋkennʌŋcʌŋ* | | | *khatʌmandakesaci* <br> *khatʌmandakesacimin* | | | | | *tʌmandakesaci* <br> *tʌmandakesacimin* | *tʌmandakesacici* <br> *tʌmandakesacicimin* | *khatʌmandakesaci* <br> *khatʌmandakesacimin* |
| 2pl | *tʌmandoŋkesoŋnʌŋ* <br> *tʌmannʌŋkennʌŋnʌŋ* | | | *khatʌmandakesanin* <br> *khatʌmandakesanimin* | | | | | *tʌmanduumkesuum* <br> *tʌmandumkesumin* | *tʌmandumkesuumcʌm* <br> *tʌmandumkesumcʌmin* | *khatʌmandakesanin* <br> *khatʌmandakesanimin* |
| 3sg | *pʌmandoŋkesoŋ* <br> *pʌmannʌŋkennʌŋ* | *khamandakesa* <br> *khapʌmandenkesen* | *pʌmandakesacika* <br> *pʌmandakesaciminka* | *pʌmandakesaninka* <br> *pʌmandakesanimika* | | *tʌmandakesa* <br> *tʌmandenkesen* | *tʌmandakesaci* <br> *tʌmandakesacimin* | *tʌmandakesanin* <br> *tʌmandakesanimin* | *pʌmandoŋkesoŋ* <br> *pʌmanʌŋkennʌŋ* | *khamandakesa* <br> *khapʌmandenkesen* | *pʌmandakesacika* <br> *pʌmandakesaciminka* |
| 3dl | *pʌmandoŋkesoŋcʌŋ* <br> *pʌmannʌŋkennʌŋcʌmʌŋ* | *khapʌmandakesaci* <br> *khapʌmandakesacimin* | *nipʌmandakesacika* <br> *nipʌmandakesaciminka* | | | *nitʌmandakesa* <br> *nitʌmandenkesen* | *nitʌmandakesaci* <br> *nitʌmandakesacimin* | *nitʌmandakesanin* | *pʌmandakesaci* <br> *pʌmandakesacimin* | *pʌmandoŋkesoŋcʌŋ* <br> *pʌmannʌŋkennʌŋcʌmʌŋ* | *khapʌmandakesaci* <br> *khapʌmandakesacimin* |
| 3pl | *nipʌmandoŋkesoŋ* <br> *nipʌmannʌŋkennʌŋ* | *khamʌmandakesa* <br> *khanipʌmandenkesen* | *nipʌmandakesaninka* <br> *nipʌmandakesaniminka* | | | | *nitʌmandakesanin* <br> *nitʌmandakesanimin* | *nitʌmandakesanimin* | *pʌmandakesa* <br> *pʌmandenkesen* | *nipʌmandoŋkesoŋ* <br> *nipʌmannʌŋkennʌŋ* | *khamʌmandakesa* <br> *khanipʌmandenkesen* |

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(13a) *itma*, *itd* 'give' NON-PAST INDICATIVE

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| | 1sg | 1di | 1pi | 1de | 1pe | 2sg | 2dl | 2pl | 3sg | 3ns | ANTIPASSIVE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1s | A ——→ P | | | | | *itna* / *pʌitnen* | *itnaci* / *pʌitnacimin* | *itnanin* / *pʌitnanimin* | *itduŋ* / *pʌitnʌŋ* | *itduŋcʌŋ* / *pʌitnʌŋcʌŋ* | *khaitŋa* / *khapʌitnʌŋ* |
| 1di | | | | | | | | | *itci* / *pʌitcimin* | *itcici* / *pʌitcicimin* | *khaitci* / *khapʌitcimin* |
| 1pi | | | | | | | | | *itdum* / *pʌitdummin* | *itdumcʌm* / *pʌitdumcʌmmin* | *khaitdi* / *khapʌitdimin* |
| 1de | | | | | | *nitʌit* | *nitʌitci* / *nitʌitcimin* | *nitʌitdi* | *itcika* / *pʌitciminka* | *itcicika* / *pʌitciciminka* | *khaitcika* / *khapʌitciminka* |
| 1pe | | | | | | *nitʌitnin* | *nitʌitdi* / *nitʌitdimin* | *nitʌitdimin* | *itdumka* / *pʌitdumminka* | *itdumcʌmka* / *pʌitdumcʌmminka* | *khaitdika* / *khapʌitdiminka* |
| 2sg | *tʌitŋa* / *tʌitnʌŋ* | | | *khatʌit* / *khatʌitnin* | | | | | *tʌitdi* / *tʌitdin* | *tʌitdici* / *tʌitdincin* | *khatʌit* / *khatʌitnin* |
| 2dl | *tʌitŋacʌŋ* / *tʌitnʌŋcʌmʌŋ* | | | *khatʌitci* / *khatʌitcimin* | | | | | *tʌitci* / *tʌitcimin* | *tʌitcici* / *tʌitcicimin* | *khatʌitci* / *khatʌitcimin* |
| 2pl | *tʌitŋanʌŋ* / *tʌitnʌŋnʌmʌŋ* | | | *khatʌitdi* / *khatʌitdimin* | | | | | *tʌitdum* / *tʌitdummin* | *tʌitdumcʌm* / *tʌitdumcʌmmin* | *khatʌitdi* / *khatʌitdimin* |
| 3sg | *pʌitŋa* / *pʌitnʌŋ* | *khait* / *khapʌitnin* | | *pʌitcika* / *pʌitciminka* | *pʌitdika* / *pʌitdiminka* | *tʌit* / *tʌitnin* | *tʌitci* / *tʌitcimin* | *tʌitdi* / *tʌitdimin* | *itdi* / *pʌitdin* | *itdici* / *pʌitdincin* | *khait* / *khapʌitnin* |
| 3dl | *pʌitŋacʌŋ* / *pʌitnʌŋcʌmʌŋ* | *khapʌitci* / *khapʌitcimin* | | *nipʌitcika* / *nipʌitciminka* | | *nitʌit* | *nitʌitci* / *nitʌitcimin* | *nitʌitdi* / *nitʌitdimin* | *pʌitci* / *pʌitcimin* | *pʌitcici* / *pʌitcicimin* | *khapʌitci* / *khapʌitcimin* |
| 3pl | *nipʌitŋa* / *nipʌitnʌŋ* | *khamʌit* / *khanipʌitnin* | | *nipʌitdika* / *nipʌitdiminka* | | *nitʌitnin* | *nitʌitdi* / *nitʌitdimin* | | *pʌit* / *nipʌitdin* | *mʌitdici* / *nipʌitdincin* | *khamʌit* / *khanipʌitnin* |

(13b)   *itma*, *itd* 'give' PAST INDICATIVE

| | 1sg | 1di | 1pi | 1de | 1pe | 2sg | 2dl | 2pl | 3sg | 3ns | ANTIPASSIVE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1s | A   P → (A→ horizontal, P↓ vertical) | | | | | *itna*<br>*pʌitnen* | *itnaci*<br>*pʌitnacimin* | *itnanin*<br>*pʌitnanimin* | *itduuŋ*<br>*pʌitnʌʌŋ* | *itduuŋcʌŋ*<br>*pʌitnʌŋcʌʌŋ* | *khaitdoŋ*<br>*khapʌitnʌʌŋ* |
| 1di | | | | | | | | | *itdaci*<br>*pʌitdacimin* | *itdacici*<br>*pʌitdacicimin* | *khaitdaci*<br>*khapʌitdacimin* |
| 1pi | | | | | | | | | *itduum*<br>*pʌitduummin* | *itduumcʌm*<br>*pʌitduumcʌmmin* | *khaitdanin*<br>*khapʌitdanimin* |
| 1de | | | | | | *nitʌitda*<br>*nitʌitden* | *nitʌitdaci*<br>*nitʌitdacimin* | *nitʌitdanin* | *itdacika*<br>*pʌitdaciminka* | *itdacicika*<br>*pʌitdaciciminka* | *khaitdacika*<br>*khapʌitdaciminka* |
| 1pe | | | | | | | *nitʌitdanin*<br>*nitʌitdanimin* | *nitʌitdanimin* | *itduumka*<br>*pʌitduumminka* | *itduumcʌmka*<br>*pʌitduumcʌmminka* | *khaitdaninka*<br>*khapʌitdaniminka* |
| 2sg | *tʌitdoŋ*<br>*tʌitnʌʌŋ* | | | *khatʌitda*<br>*khatʌitden* | | | | | *tʌitdi*<br>*tʌitdin* | *tʌitdici*<br>*tʌitdiincin* | *khatʌitda*<br>*khatʌitden* |
| 2dl | *tʌitdoŋcʌŋ*<br>*tʌitnʌŋcʌmʌʌŋ* | | | *khatʌitdaci*<br>*khatʌitdacimin* | | | | | *tʌitdaci*<br>*tʌitdacimin* | *tʌitdacici*<br>*tʌitdacicimin* | *khatʌitdaci*<br>*khatʌitdacimin* |
| 2pl | *tʌitdoŋnʌŋ*<br>*tʌitnʌŋnʌmʌʌŋ* | | | *khatʌitdanin*<br>*khatʌitdanimin* | | | | | *tʌitduum*<br>*tʌitduummin* | *tʌitduumcʌm*<br>*tʌitduumcʌmmin* | *khatʌitdanin*<br>*khatʌitdanimin* |
| 3sg | *pʌitdoŋ*<br>*pʌitnʌʌŋ* | *khaitda*<br>*khapʌitden* | *pʌitdacika*<br>*pʌitdaciminka* | *pʌitdaninka*<br>*pʌitdaniminka* | | *tʌitda*<br>*tʌitden* | *tʌitdaci*<br>*tʌitdacimin* | *tʌitdanin*<br>*tʌitdanimin* | *itdi*<br>*pʌitdin* | *itdici*<br>*pʌitdincin* | *khaitda*<br>*khapʌitden* |
| 3dl | *pʌitdoŋcʌŋ*<br>*pʌitnʌŋcʌmʌʌŋ* | *khapʌitdaci*<br>*khapʌitdacimin* | *nipʌitdacika*<br>*nipʌitdaciminka* | | | *nitʌitda*<br>*nitʌitden* | *nitʌitdaci*<br>*nitʌitdacimin* | *nitʌitdanin* | *pʌitdacimin*<br>*pʌitdacimin* | *pʌitdacici*<br>*pʌitdacicimin* | *khapʌitdaci*<br>*khapʌitdacimin* |
| 3pl | *nipʌitdoŋ*<br>*nipʌitnʌʌŋ* | *khamʌitda*<br>*khanipʌitden* | *nipʌitdaninka*<br>*nipʌitdaniminka* | | | | *nitʌitdanin*<br>*nitʌitdanimin* | *nitʌitdanimin* | *pʌitda*<br>*nipʌitdin* | *mʌitdici*<br>*nipʌitdincin* | *khamʌitda*<br>*khanipʌitden* |

(14a)     *copma*, *copp* 'see' NON-PAST INDICATIVE

| | 1sg | 1di | 1pi | 1de | 1pe | 2sg | 2dl | 2pl | 3sg | 3ns | ANTIPASSIVE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1sg | A →P ↓ | | | | | copna<br>pʌcopnen | copnaci<br>pʌcopnacimin | copnanin<br>pʌcopnanimin | coppuŋ<br>pʌcopnʌŋ | coppuŋcʌŋ<br>pʌcopnʌŋcʌŋ | khacopŋa<br>khapʌcopnʌŋ |
| 1di | | | | | | | | | copci<br>pʌcopcimin | copcici<br>pʌcopcicimin | khacopci<br>khapʌcopcimin |
| 1pi | | | | | | | | | coppum<br>pʌcoppummin | coppumcʌm<br>pʌcoppumcʌmmin | khacoppi<br>khapʌcoppimin |
| 1de | | | | | | nitʌcop<br>nitʌcopnin | nitʌcopci<br>nitʌcopcimin | nitʌcoppi | copcika<br>pʌcopciminka | copcicika<br>pʌcopciciminka | khacopcika<br>khapʌcopciminka |
| 1pe | | | | | | | nitʌcoppi<br>nitʌcoppimin | nitʌcoppimin | coppumka<br>pʌcoppumminka | coppumcʌmka<br>pʌcoppumcʌmminka | khacoppika<br>khapʌcoppiminka |
| 2sg | tʌcopŋa<br>tʌcopnʌŋ | | | khatʌcop<br>khatʌcopnin | | | | | tʌcoppi<br>tʌcoppin | tʌcoppici<br>tʌcoppincin | khatʌcop<br>khatʌcopnin |
| 2dl | tʌcopŋacʌŋ<br>tʌcopnʌŋcʌmʌŋ | | | khatʌcopci<br>khatʌcopcimin | | | | | tʌcopci<br>tʌcopcimin | tʌcopcici<br>tʌcopcicimin | khatʌcopci<br>khatʌcopcimin |
| 2pl | tʌcopŋanlʌŋ<br>tʌcopnʌŋnlʌmʌŋ | | | khatʌcoppi<br>khatʌcoppimin | | | | | tʌcoppum<br>tʌcoppummin | tʌcoppumcʌm<br>tʌcoppumcʌmmin | khatʌcoppi<br>khatʌcoppimin |
| 3sg | pʌcopŋa<br>pʌcopnʌŋ | khacop<br>khapʌcopnin | pʌcopcika<br>pʌcopciminka | pʌcoppika<br>pʌcoppiminka | | tʌcop<br>tʌcopnin | tʌcopci<br>tʌcopcimin | tʌcoppi<br>tʌcoppimin | coppi<br>pʌcoppin | coppici<br>pʌcoppincin | khacop<br>khapʌcopnin |
| 3dl | pʌcopŋacʌŋ<br>pʌcopnʌŋcʌmʌŋ | khapʌcopci<br>khapʌcopcimin | nipʌcopcika<br>nipʌcopciminka | | | nitʌcop<br>nitʌcopnin | nitʌcopci<br>nitʌcopcimin | nitʌcoppi<br>nitʌcoppimin | pʌcopci<br>pʌcopcimin | pʌcopcici<br>pʌcopcicimin | khapʌcopci<br>khapʌcopcimin |
| 3pl | nipʌcopŋa<br>nipʌcopnʌŋ | khamʌcop<br>khanipʌcopnin | nipʌcoppika<br>nipʌcoppiminka | | | | nitʌcoppi<br>nitʌcoppimin | nitʌcoppimin | pʌcop<br>nipʌcoppin | mʌcoppici<br>nipʌcoppincin | khamʌcop<br>khanipʌcopnin |

(14b)  *copma*, *copp* 'see' PAST INDICATIVE

| | 1sg | 1di | 1pi | 1de | 1pe | 2sg | 2dl | 2pl | 3sg | 3ns | ANTIPASSIVE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1s | A → P | | | | | copna<br>pʌcopnen | copnaci<br>pʌcopnacimin | copnanin<br>pʌcopnanimin | copuuŋ<br>pʌcopnʌŋ | copuuŋcʌŋ<br>pʌcopnʌŋcʌŋ | khacopoŋ<br>khapʌcopnʌŋ |
| 1di | | | | | | | | | copaci<br>pʌcopacimin | copacici<br>pʌcopacicimin | khacopaci<br>khapʌcopacimin |
| 1pi | | | | | | | | | copuum<br>pʌcopuummin | copuumcʌm<br>pʌcopuumcʌmmin | khacopanin<br>khapʌcopanimin |
| 1de | | | | | | nitʌcopa<br>nitʌcopen | nitʌcopaci<br>nitʌcopacimin | nitʌcopanin | copacika<br>pʌcopaciminka | copacicika<br>pʌcopaciciminka | khacopacika<br>khapʌcopaciminka |
| 1pe | | | | | | | nitʌcopanin<br>nitʌcopanimin | nitʌcopanimin | copuumka<br>pʌcopuumminka | copuumcʌmka<br>pʌcopuumcʌmminka | khacopaninka<br>khapʌcopaniminka |
| 2sg | tʌcopoŋ<br>tʌcopnʌŋ | | | khatʌcopa<br>khatʌcopen | | | | | tʌcopi<br>tʌcopin | tʌcopici<br>tʌcopincin | khatʌcopa<br>khatʌcopen |
| 2dl | tʌcopoŋcʌŋ<br>tʌcopnʌŋcʌmʌŋ | | | khatʌcopaci<br>khatʌcopacimin | | | | | tʌcopaci<br>tʌcopacimin | tʌcopacici<br>tʌcopacicimin | khatʌcopaci<br>khatʌcopacimin |
| 2pl | tʌcopoŋnʌŋ<br>tʌcopnʌŋnʌmʌŋ | | | khatʌcopanin<br>khatʌcopanimin | | | | | tʌcopuum<br>tʌcopuummin | tʌcopuumcʌm<br>tʌcopuumcʌmmin | khatʌcopanin<br>khatʌcopanimin |
| 3sg | pʌcopoŋ<br>pʌcopnʌŋ | khacopa<br>khapʌcopen | pʌcopacika<br>pʌcopaciminka | pʌcopaninka<br>pʌcopaniminka | | tʌcopa<br>tʌcopen | tʌcopaci<br>tʌcopacimin | tʌcopanin<br>tʌcopanimin | copi<br>pʌcopin | copici<br>pʌcopincin | khacopa<br>khapʌcopen |
| 3dl | pʌcopoŋcʌŋ<br>pʌcopnʌŋcʌmʌŋ | khapʌcopaci<br>khapʌcopacimin | nipʌcopacika<br>nipʌcopaciminka | | | nitʌcopa<br>nitʌcopen | nitʌcopaci<br>nitʌcopacimin | nitʌcopanin | pʌcopaci<br>pʌcopacimin | pʌcopacici<br>pʌcopacicimin | khapʌcopaci<br>khapʌcopacimin |
| 3pl | nipʌcopoŋ<br>nipʌcopnʌŋ | khatʌcopa<br>khanipʌcopen | nipʌcopaninka<br>nipʌcopaniminka | | | | nitʌcopanin<br>nitʌcopanimin | nitʌcopanimin | pʌcopa<br>nipʌcopin | mʌcoppici<br>nipʌcopincin | khamʌcopa<br>khanipʌcopen |

(15a)  *ḍhema*, *ḍher* 'beat' NON-PAST INDICATIVE

| | 1sg | 1di | 1pi | 1de | 1pe | 2sg | 2dl | 2pl | 3sg | 3ns | ANTIPASSIVE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1sg | A → P | | | | | ḍhena<br>pʌḍhenen | ḍhenaci<br>pʌḍhenacimin | ḍhenanin<br>pʌḍhenanimin | ḍheruŋ<br>pʌḍhenʌŋ | ḍheruŋcʌŋ<br>pʌḍhenʌŋcʌŋ | khaḍheŋa<br>khapʌḍhenʌŋ |
| 1di | | | | | | | | | ḍheci<br>pʌḍhecimin | ḍhecici<br>pʌḍhecicimin | khaḍheci<br>khapʌḍhecimin |
| 1pi | | | | | | | | | ḍherum<br>pʌḍherummin | ḍherumcʌm<br>pʌḍherumcʌmmin | khaḍheri<br>khapʌḍherimin |
| 1de | | | | | | nitʌḍhe<br>nitʌḍhenin | nitʌḍheci<br>nitʌḍhecimin | nitʌḍheri | ḍhecika<br>pʌḍheciminka | ḍhecicika<br>pʌḍheciciminka | khaḍhecika<br>khapʌḍheciminka |
| 1pe | | | | | | | nitʌḍheri<br>nitʌḍhemin | nitʌḍhemin | ḍherumka<br>pʌḍherumminka | ḍherumcʌmka<br>pʌḍherumcʌmminka | khaḍherika<br>khapʌḍheriminka |
| 2sg | tʌḍheŋa<br>tʌḍhenʌŋ | | | khatʌḍhe<br>khatʌḍhenin | | | | | tʌḍheri<br>tʌḍherin | tʌḍherici<br>tʌḍherincin | khatʌḍhe<br>khatʌḍhenin |
| 2dl | tʌḍheŋacʌŋ<br>tʌḍhenʌŋcʌmʌŋ | | | khatʌḍheci<br>khatʌḍhecimin | | | | | tʌḍheci<br>tʌḍhecimin | tʌḍhecici<br>tʌḍhecicimin | khatʌḍheci<br>khatʌḍhecimin |
| 2pl | tʌḍheŋanʌŋ<br>tʌḍhenʌŋnʌmʌŋ | | | khatʌḍheri<br>khatʌḍherimin | | | | | tʌḍherum<br>tʌḍherummin | tʌḍherumcʌm<br>tʌḍherumcʌmmin | khatʌḍheri<br>khatʌḍherimin |
| 3sg | pʌḍheŋa<br>pʌḍhenʌŋ | khaḍhe<br>khapʌḍhenin | pʌḍhecika<br>pʌḍheciminka | pʌḍherika<br>pʌḍheriminka | | tʌḍhe<br>tʌḍhenin | tʌḍheci<br>tʌḍhecimin | tʌḍheri<br>tʌḍherimin | ḍheri<br>pʌḍherin | ḍherici<br>pʌḍherincin | khaḍhe<br>khapʌḍhenin |
| 3dl | pʌḍheŋacʌŋ<br>pʌḍhenʌŋcʌmʌŋ | khapʌḍheci<br>khapʌḍhecimin | nipʌḍhecika<br>nipʌḍheciminka | | | nitʌḍhe<br>nitʌḍhenin | nitʌḍheci<br>nitʌḍhecimin | nitʌḍheri | pʌḍheci<br>pʌḍhecimin | pʌḍhecici<br>pʌḍhecicimin | khapʌḍheci<br>khapʌḍhecimin |
| 3pl | nipʌḍheŋa<br>nipʌḍhenʌŋ | khamʌḍhe<br>khanipʌḍhenin | nipʌḍherika<br>nipʌḍheriminka | | | | nitʌḍheri<br>nitʌḍhemin | nitʌḍhemin | pʌḍhe<br>nipʌḍherin | mʌḍherici<br>nipʌḍherincin | khamʌḍhe<br>khanipʌḍhenin |

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(15b)   *ḍhema*, *ḍher* 'beat' PAST INDICATIVE

| | 1sg | 1di | 1pi | 1de | 1pe | 2sg | 2dl | 2pl | 3sg | 3ns | ANTIPASSIVE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1sg | A → P | | | | | *ḍhena* / *pʌḍhenen* | *ḍhenaci* / *pʌḍhenacimin* | *ḍhenanin* / *pʌḍhenanimin* | *ḍheruuŋ* / *pʌḍhenʌŋ* | *ḍheruuŋcʌŋ* / *pʌḍhenʌŋcʌŋ* | *khaḍheroŋ* / *khapʌḍhenʌʌŋ* |
| 1di | | | | | | | | | *ḍheraci* / *pʌḍheracimin* | *ḍheracici* / *pʌḍheracicimin* | *khaḍheraci* / *khapʌḍheracimin* |
| 1pi | | | | | | | | | *ḍheruum* / *pʌḍheruummin* | *ḍheruumcʌm* / *pʌḍheruumcʌmmin* | *khaḍheranin* / *khapʌḍheranimin* |
| 1de | | | | | | *nitʌḍhera* | *nitʌḍheraci* / *nitʌḍheracimin* | *nitʌḍheranin* | *ḍheracika* / *pʌḍheraciminka* | *ḍheracicika* / *pʌḍheraciciminka* | *khaḍheracika* / *khapʌḍheraciminka* |
| 1pe | | | | | | *nitʌḍheren* | *nitʌḍheranin* / *nitʌḍheranimin* | *nitʌḍheranimin* | *ḍheruumka* / *pʌḍheruumminka* | *ḍheruumcʌmka* / *pʌḍheruumcʌmminka* | *khaḍheraninka* / *khapʌḍheraniminka* |
| 2sg | *tʌḍheroŋ* / *tʌḍhenʌʌŋ* | | | *khatʌḍhera* / *khatʌḍheren* | | | | | *tʌḍheri* / *tʌḍherin* | *tʌḍherici* / *tʌḍherincin* | *khatʌḍhera* / *khatʌḍheren* |
| 2dl | *tʌḍheroŋcʌŋ* / *tʌḍhenʌŋcʌmʌŋ* | | | *khatʌḍheraci* / *khatʌḍheracimin* | | | | | *tʌḍheraci* / *tʌḍheracimin* | *tʌḍheracici* / *tʌḍheracicimin* | *khatʌḍheraci* / *khatʌḍheracimin* |
| 2pl | *tʌḍheronʌ* / *tʌḍhenʌŋnʌmʌŋ* | | | *khatʌḍheranin* / *khatʌḍheranimin* | | | | | *tʌḍheruum* / *tʌḍheruummin* | *tʌḍheruumcʌm* / *tʌḍheruumcʌmmin* | *khatʌḍheranin* / *khatʌḍheranimin* |
| 3sg | *pʌḍheroŋ* / *pʌḍhenʌŋ* | *khaḍhera* / *khapʌḍheren* | *pʌḍheracika* / *pʌḍheraciminka* | *pʌḍheraninka* / *pʌḍheraniminka* | | *tʌḍhera* / *tʌḍheren* | *tʌḍheraci* / *tʌḍheracimin* | *tʌḍheranin* / *tʌḍheranimin* | *ḍheri* / *pʌḍherin* | *ḍherici* / *pʌḍherincin* | *khaḍhera* / *khapʌḍheren* |
| 3dl | *pʌḍheroŋcʌŋ* / *pʌḍhenʌŋcʌmʌŋ* | *khapʌḍheraci* / *khapʌḍheracimin* | *nipʌḍheracika* / *nipʌḍheraciminka* | | | *nitʌḍhera* | *nitʌḍheraci* / *nitʌḍheracimin* | *nitʌḍheranin* | *pʌḍheraci* / *pʌḍheracimin* | *pʌḍheracici* / *pʌḍheracicimin* | *khapʌḍheraci* / *khapʌḍheracimin* |
| 3pl | *nipʌḍheroŋ* / *nipʌḍhenʌŋ* | *khamʌḍhera* / *khanipʌḍheren* | *nipʌḍheraninka* / *nipʌḍheraniminka* | | | *nitʌḍheren* | *nitʌḍheranin* / *nitʌḍheranimin* | *nitʌḍheranimin* | *pʌḍhera* / *nipʌḍherin* | *mʌḍherici* / *nipʌḍherincin* | *khamʌḍhera* / *khanipʌḍheren* |

(16a)  *cinma*, *cind* 'teach' NON-PAST INDICATIVE

| | 1sg | 1di | 1pi | 1de | 1pe | 2sg | 2dl | 2pl | 3sg | 3ns | ANTIPASSIVE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1sg | A → P | | | | | *cinna* / *cinnen* | *cinnaci* / *pʌcinnacimin* | *cinnanin* / *pʌcinnanimin* | *cinduŋ* / *pʌcinnʌŋ* | *cinduŋcʌŋ* / *pʌcinnʌŋcʌŋ* | *khacinŋa* / *khapʌcinnʌŋ* |
| 1di | | | | | | | | | *cinci* / *pʌcincimin* | *ɖhecici* / *pʌɖhecicimin* | *cinci* / *pʌcincimin* |
| 1pi | | | | | | | | | *cindum* / *pʌcindummin* | *cindumcʌm* / *pʌcindumcʌmmin* | *cindum* / *pʌcindummin* |
| 1de | | | | | | *nitʌcin* / *nitʌcinnin* | *nitʌcinci* / *nitʌcincimin* | *nitʌcindi* / *nitʌcindimin* | *cincika* / *pʌcinciminka* | *cincicika* / *pʌcinciciminka* | *khacincika* / *khapʌcinciminka* |
| 1pe | | | | | | | *nitʌcindi* / *nitʌcindimin* | | *cindumka* / *pʌcindumminka* | *cindumcʌmka* / *pʌcindumcʌmminka* | *khacindika* / *khapʌcindiminka* |
| 2sg | *tʌcinŋa* / *tʌcinnʌŋ* | | | *khatʌcin* / *khatʌcinnin* | | | | | *tʌcindi* / *tʌcindin* | *tʌcindici* / *tʌcindincin* | *khatʌcin* / *khatʌcinnin* |
| 2dl | *tʌcinŋacʌŋ* / *tʌcinnʌŋcʌmʌŋ* | | | *khatʌcinci* / *khatʌcincimin* | | | | | *tʌcinci* / *tʌcincimin* | *tʌcincici* / *tʌcincicimin* | *khatʌcinci* / *khatʌcincimin* |
| 2pl | *tʌcinŋanʌŋ* / *tʌcinnʌŋnʌmʌŋ* | | | *khatʌcindi* / *khatʌcindimin* | | | | | *tʌcindum* / *tʌcindummin* | *tʌcindumcʌm* / *tʌcindumcʌmmin* | *khatʌcindi* / *khatʌcindimin* |
| 3sg | *pʌcinŋa* / *pʌcinnʌŋ* | *khacin* / *khapʌcinnin* | *pʌcincika* / *pʌcinciminka* | *pʌcindika* / *pʌcindiminka* | | *tʌcin* / *tʌcinnin* | *tʌcinci* / *tʌcincimin* | *tʌcindi* / *tʌcindimin* | *cindi* / *pʌcindin* | *cindici* / *pʌcindincin* | *khacin* / *khapʌcinnin* |
| 3dl | *pʌcinŋacʌŋ* / *pʌcinnʌŋcʌmʌŋ* | *khapʌcinci* / *khapʌcincimin* | *nipʌcincika* / *nipʌcinciminka* | | | *nitʌcin* / *nitʌcinnin* | *nitʌcinci* / *nitʌcincimin* | *nitʌcindi* / *nitʌcindimin* | *pʌcinci* / *pʌcincimin* | *pʌcincici* / *pʌcincicimin* | *khapʌɖheci* / *khapʌɖhecimin* |
| 3pl | *nipʌcinŋa* / *nipʌcinnʌŋ* | *khamʌcin* / *khanipʌcinnin* | *nipʌcindika* / *nipʌcindiminka* | | | | *nitʌcindi* / *nitʌcindimin* | *nitʌcindimin* | *pʌcin* / *nipʌcindin* | *mʌcindici* / *nipʌcindincin* | *khamʌɖhe* / *khanipʌɖhenin* |

(16b)     *cinma*, *cind* 'teach' PAST INDICATIVE

The cell in the 1sg row / 1sg column contains an orientation diagram: **A** with a horizontal arrow (→) pointing right across the columns, and **P** with a vertical arrow (↓) pointing down the rows — i.e. rows = A (agent), columns = P (patient).

| | 1sg | 1di | 1pi | 1de | 1pe | 2sg | 2dl | 2pl | 3sg | 3ns | ANTIPASSIVE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1sg | A → / P ↓ | | | | | *cinna* / *cinnen* | *Cinnaci* / *pʌcinnacimin* | *cinanin* / *pʌcinnanimin* | *cinduuŋ* / *pʌcinnʌŋ* | *cinduuŋcʌŋ* / *pʌcinnʌŋʌʌŋ* | *khacindoŋ* / *khapʌcinnʌʌŋ* |
| 1di | | | | | | | | | *cindaci* / *pʌcindacimin* | *cindacici* / *pʌcindacicimin* | *cindaci* / *pʌcindacimin* |
| 1pi | | | | | | | | | *cinduum* / *pʌcinduummin* | *cinduumcʌm* / *pʌcinduumcʌmmin* | *cinduum* / *pʌcinduummin* |
| 1de | | | | | | *nitʌcinda* / *nitʌcinden* | *nitʌcindaci* / *nitʌcindacimin* | *nitʌcindanin* / *nitʌcindanimin* | *cindacika* / *pʌcindaciminka* | *cindacicika* / *pʌcindaciciminka* | *khacindacika* / *khapʌcindaciminka* |
| 1pe | | | | | | | *nitʌcindanin* / *nitʌcindanimin* | | *cinduumka* / *pʌcinduumminka* | *cinduumcʌmka* / *pʌcinduumcʌmminka* | *khacindaninka* / *khapʌcindaniminka* |
| 2sg | *tʌcindoŋ* / *tʌcinnʌŋ* | | | *khatʌcinda* / *khatʌcinden* | | | | | *tʌcindi* / *tʌcindin* | *tʌcindici* / *tʌcindincin* | *khatʌcinda* / *khatʌcinden* |
| 2dl | *tʌcindoŋcʌŋ* / *tʌcinnʌŋcʌmʌŋ* | | | *khatʌcindaci* / *khatʌcindacimin* | | | | | *tʌcindaci* / *tʌcindacimin* | *tʌcindacici* / *tʌcindacicimin* | *khatʌcindaci* / *khatʌcindacimin* |
| 2pl | *tʌcindoŋnʌŋ* / *tʌcinnʌŋnʌmʌŋ* | | | *khatʌcindanin* / *khatʌcindanimin* | | | | | *tʌcinduum* / *tʌcinduummin* | *tʌcinduumcʌm* / *tʌcinduumcʌmmin* | *khatʌcindanin* / *khatʌcindanimin* |
| 3sg | *pʌcindoŋ* / *pʌcinnʌʌŋ* | *khacinda* / *khapʌcinden* | *pʌcindacika* / *pʌcindaciminka* | | *pʌcindaninka* / *pʌcindaniminka* | *tʌcinda* / *tʌcinden* | *tʌcindaci* / *tʌcindacimin* | *tʌcindanin* / *tʌcindanimin* | *cindi* / *pʌcindin* | *cindici* / *pʌcindincin* | *khacinda* / *khapʌcinden* |
| 3dl | *pʌcindoŋcʌŋ* / *pʌcinnʌŋcʌmʌŋ* | *khapʌcindaci* / *khapʌcindacimin* | *nipʌcindacika* / *nipʌcindaciminka* | | | *nitʌcinda* / *nitʌcinden* | *nitʌcindaci* / *nitʌcindacimin* | *nitʌcindanin* / *nitʌcindanimin* | *pʌcindaci* / *pʌcindacimin* | *pʌcindacici* / *pʌcindacicimin* | *khacindaci* / *khapʌcindacimin* |
| 3pl | *nipʌcindoŋ* / *nipʌcinnʌŋ* | *khamʌcinda* / *khanipʌcinden* | *nipʌcindaninka* / *nipʌcindaniminka* | | | | *nitʌcindanin* / *nitʌcindanimin* | | *pʌcinda* / *nipʌcindin* | *mʌcindici* / *nipʌcindincin* | *khamʌcinda* / *khanipʌcinden* |

(17a)  *bhama*, *bha* 'cut' NON-PAST INDICATIVE

| | 1sg | 1di | 1pi | 1de | 1pe | 2sg | 2dl | 2pl | 3sg | 3ns | ANTIPASSIVE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1sg | A →→→ P | | | | | *bhana* *pʌbhanen* | *bhanaci* *pʌbhanacimin* | *bhananin* *pʌbhananimin* | *bhaaŋ* *pʌbhanʌŋ* | *bhaaŋcʌŋ* *pʌbhanʌŋcʌŋ* | *khabhaŋa* *khapʌbhanʌŋ* |
| 1di | ↓ | | | | | | | | *bhaci* *pʌbhacimin* | *bhacici* *pʌbhacicimin* | *khabhaci* *khapʌbhacimin* |
| 1pi | ↓ | | | | | | | | *bhaam* *pʌbhaammin* | *bhaamcʌm* *pʌbhaamcʌmmin* | *khabhee* *khapʌbheemin* |
| 1de | | | | | | *nitʌbha* *nitʌbhanin* | *nitʌbhaci* *nitʌbhacimin* | *nitʌbhee* *nitʌbheemin* | *bhacika* *pʌbhaciminka* | *bhacicika* *pʌbhaciciminka* | *khabhacika* *khapʌbhaciminka* |
| 1pe | | | | | | | *nitʌbhee* *nitʌbheemin* | | *bhaamka* *pʌbhaamminka* | *bhaamcʌmka* *pʌbhaamcʌmminka* | *khabheeka* *khapʌbheeminka* |
| 2sg | *tʌbhaŋa* *tʌbhanʌŋ* | | *khatʌbha* *khatʌbhanin* | | | | | | *tʌbhaa* *tʌbhain* | *tʌbhaaci* *tʌbhaincin* | *khatʌbha* *khatʌbhanin* |
| 2dl | *tʌbhaŋacʌŋ* *tʌbhanʌŋcʌmʌŋ* | | *khatʌbhaci* *khatʌbhacimin* | | | | | | *tʌbhaci* *tʌbhacimin* | *tʌbhacici* *tʌbhacicimin* | *khatʌbhaci* *khatʌbhacimin* |
| 2pl | *tʌbhaŋanʌŋ* *tʌbhanʌŋnʌmʌŋ* | | *khatʌbhee* *khatʌbheemin* | | | | | | *tʌbhaam* *tʌbhaammin* | *tʌbhaamcʌm* *tʌbhaamcʌmmin* | *khatʌbhee* *khatʌbheemin* |
| 3sl | *pʌbhaŋa* *pʌbhanʌŋ* | *khabha* *khapʌbhanin* | *pʌbhacika* *pʌbhaciminka* | *pʌbheeka* *pʌbheeminka* | | *tʌbha* *tʌbhanin* | *tʌbhaci* *tʌbhacimin* | *tʌbhee* *tʌbheemin* | *bhaa* *pʌbhain* | *bhaaci* *pʌbhaincin* | *khabha* *khapʌbhanin* |
| 3dl | *pʌbhaŋacʌŋ* *pʌbhanʌŋcʌmʌŋ* | *khapʌbhaci* *khapʌbhacimin* | *nipʌbhacika* *nipʌbhaciminka* | | | *nitʌbha* *nitʌbhanin* | *nitʌbhaci* *nitʌbhacimin* | *nitʌbhee* *nitʌbheemin* | *pʌbhaci* *pʌbhacimin* | *pʌbhacici* *pʌbhacicimin* | *khapʌbhaci* *khapʌbhacimin* |
| 3pl | *nipʌbhaŋa* *nipʌbhanʌŋ* | *khamʌbha* *khanipʌbhanin* | *nipʌbheeka* *nipʌbheeminka* | | | *nitʌbha* *nitʌbhanin* | *nitʌbhee* *nitʌbheemin* | | *mʌbhaaci* *nipʌbhaincin* | *mʌbhaaci* *nipʌbhaincin* | *khamʌbha* *khanipʌbhanin* |

(17b)  *bhama*, *bha* 'cut' PAST INDICATIVE

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| | 1sg | 1di | 1pi | 1de | 1pe | 2sg | 2dl | 2pl | 3sg | 3ns | ANTIPASSIVE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1sg | A ————→ P | | | | | bhana<br>pʌbhanen | Bhanaci<br>pʌbhanacimin | bhananin<br>pʌbhananimin | bhooŋ<br>pʌbhanʌŋ | bhooŋcʌŋ<br>pʌbhanʌŋcʌŋ | khabhaoŋ<br>khapʌbhanʌŋ |
| 1di | ↓ | | | | | | | | bhaaci<br>pʌbhaacimin | bhaacici<br>pʌbhaacicimin | khabhaaci<br>khapʌbhaacimin |
| 1pi | | | | | | | | | bhoom<br>pʌbhoommin | bhoomcʌm<br>pʌbhoomcʌmmin | khabhaanin<br>khapʌbhaanimin |
| 1de | | | | | | nitʌbhaa<br>nitʌbhaen | nitʌbhaaci<br>nitʌbhaacimin | nitʌbhaanin<br>nitʌbhaanimin | bhaacika<br>pʌbhaaciminka | bhaacicika<br>pʌbhaaciciminka | khabhaacika<br>khapʌbhaaciminka |
| 1pe | | | | | | | nitʌbhaanin<br>nitʌbhaanimin | | bhoomka<br>pʌbhoomminka | bhoomcʌmka<br>pʌbhoomcʌmminka | khabhaaninka<br>khapʌbhaaniminka |
| 2sg | tʌbhaoŋ<br>tʌbhanʌŋ | | khatʌbhaa<br>khatʌbhaen | | | | | | tʌbhoo<br>tʌbhoin | tʌbhooci<br>tʌbhooincin | khatʌbhaa<br>khatʌbhaen |
| 2dl | tʌbhaoŋcʌŋ<br>tʌbhanʌŋcʌmʌŋ | | khatʌbhaaci<br>khatʌbhaacimin | | | | | | tʌbhaaci<br>tʌbhaacimin | tʌbhaacici<br>tʌbhaacicimin | khatʌbhaaci<br>khatʌbhaacimin |
| 2pl | tʌbhaoŋnʌŋ<br>tʌbhanʌŋnʌmʌŋ | | khatʌbhaanin<br>khatʌbhaanimin | | | | | | tʌbhoom<br>tʌbhommin | tʌbhoomcʌm<br>tʌbhoomcʌmmin | khatʌbhaanin<br>khatʌbhaanimin |
| 3sg | pʌbhaoŋ<br>pʌbhanʌŋ | khabhaa<br>khapʌbhaen | pʌbhaacika<br>pʌbhaaciminka | pʌbhaaninka<br>pʌbhaaniminka | | tʌbhaa<br>tʌbhaen | tʌbhaaci<br>tʌbhaacimin | tʌbhaanin<br>tʌbhaanimin | bho<br>pʌbhoin | bhoci<br>pʌbhoincin | khabhaa<br>khapʌbhaen |
| 3dl | pʌbhaoŋcʌŋ<br>pʌbhanʌŋcʌmʌŋ | khapʌbhaaci<br>khapʌbhaacimin | nipʌbhaacika<br>nipʌbhaaciminka | | | nitʌbhaa<br>nitʌbhaen | nitʌbhaaci<br>nitʌbhaacimin | nitʌbhaanin<br>nitʌbhaanimin | pʌbhaaci<br>pʌbhaacimin | pʌbhaacici<br>pʌbhaacicimin | khapʌbhaaci<br>khapʌbhaacimin |
| 3pl | nipʌbhaoŋ<br>nipʌbhanʌŋ | khamʌbhaa<br>khanipʌbhaen | nipʌbheeka<br>nipʌbheeminka | | | | nitʌbhaanin<br>nitʌbhaanimin | | mʌbhoci<br>nipʌbhoincin | mʌbhoci<br>nipʌbhoincin | khamʌbhaa<br>khanipʌbhaen |

# Appendix B: Texts

## (1) *song_bidesh* (Ms. Pabita Rai)

*ben-a        siboŋ            hen=na    ben-a      ʌpna bobbi      saptan!* 2
come-IMP   third.born.male   now=PTCL  come-IMP   own  area       village

'Hi beloved! Come on to our own place!'

*dem-e           tʌ-yuŋ       hen=che  siboŋ              si-so        ni-tan?* 2
how.long-EMPH  2-stay       now-ADD  third.born.male   change-CVB  other-village

'Still how long will you stay at aboard?'

*ben-a        siboŋ            hen=na            ben-a         ho!*
come-IMP   third.born.male   now=PTCL         come.level-IMP  VOC

'Hi beloved, come on now!'

*doŋ  wasa-a=cha      khʌnna-lai    tʌ-lam-yaŋ.*
year  bird-ERG=ADD    2SG-DAT       2-search.for-IPFV

'The seasonal bird is also looking for you.'

*bobbi-hon        mu-ma ka-ci       ka-chi-do=ŋa                      yokyaŋ.*
area-habitat     do-INF 2SG.POSS-NS 2SG.POSS-hand-GEN.LOC=EMPH      NPST.EXIST

'Ruling over the country is on your shoulder.'

*doŋ  wasa-a=cha      khʌnna-lai    tʌ-lam-yaŋ.*
year  bird-ERG=ADD    2SG-DAT       2-search.for-IPFV

'The seasonal bird is also looking for you.'

*bobbi-hon        mu-ma ka-ci       ka-chi-do=ŋa                      yokyaŋ.*
area-habitat     do-INF 2SG.POSS-NS 2SG.POSS-hand-GEN.LOC=EMPH      NPST.EXIST

'Ruling over the country is on your shoulder.'

*ben-a        siboŋ            hen=na    ben-a      ʌpna-bo     lam  yuŋ=kha!*
come-IMP   third.born.male   now=PTCL  come-IMP   own-GEN    path  sit=LOC.NMLZ

'Hi beloved! come on to our own place!'

*ben-a        siboŋ            hen=na    ben-a      ʌpna-bo     lam  yuŋ=kha!*
come-IMP   third.born.male   now=PTCL  come-IMP   own-GEN    path  sit=LOC.NMLZ

'Hi beloved! come on to our own place!'

*nihona      ninlo       bʌɖhe      kʌnimak   ka-bo=ŋa                ka-bakkha.*
aboard      COMPAR     very       good      2SG.POSS-GEN=EMPH      2SG.POSS-soil

'Your motherland is far better than the foreign country.'

*nihona*　　*ninlo*　　*bʌɖhe*　　*kʌnimak*　　*ka-bo=ŋa*　　　　*ka-bakkha.*
aboard　　COMPAR　　very　　good　　2SG.POSS-GEN=EMPH　　2SG.POSS-soil

'Your motherland is far better than the foreign country.'

*ben-a*　　*siboŋ*　　　　*hen=na*　　　*ben-a*　　　　*ho!*
come-IMP　third.born.male　now=PTCL　　come.level-IMP　VOC

'Hi beloved, come on now!'

*ca,*　　*sʌŋ-si,*　　　*hʌk,*　　*wa,*　　*jhara*　*ohya*　*yuŋ-yaŋ.*
grain　fruits-CLF　　wind　water　all　　here　NPST.EXIST-IPFV

'All cereal, fruits, wind, water is available here.'

*ka-ci*　　*luŋ*　*khʌnna-lai*　　*chʌp-ma*　　　*bʌɖhe*　*tohya*　*yuŋ-yaŋ.*
work-NS　price　2SG-DAT　　press.down-INF　very　　there　NPST.EXIST-IPFV

'You will not get proper salary there.'

*por-a*　　*kʌ-luŋ*　　　*dha-a*　*tok-ma*　*luŋ*　*lipd-a*　　*hen=na*　　*siboŋ!*
grow-PST　ACT.PTCP-price　drop-PST　get-INF　price　return-PST　now=EMPH　3ʳᵈborn male

'Hey beloved! Get back now! The price is hiked but the salary is cut.'

*por-a*　　*kʌ-luŋ*　　　*dha-a*　*tok-ma*　*luŋ*　*lipd-a*　　*hen=na*　　*siboŋ!*
grow-PST　ACT.PTCP-price　drop-PST　get-INF　price　return-PST　now=EMPH　3ʳᵈborn male

'Hey beloved! Get back now! The price is hiked but the salary is cut.'

*nihona*　　　　*tʌ-yuŋ*　　*kʌcup-poŋ*　　*khʌnna*　　　*ohya=na*　　*kʌheppaŋ.*
aboard　　　　2-live　　small-CLF　　2SG.ABS　　　here=PTCL　　big

'You are living in foreign land, being neglected but here you are most respected.'

*nihona*　　　　*tʌ-yuŋ*　　　　*kʌcup-poŋ*　　*khʌnna*　　　*ohya=na*　　*kʌheppaŋ.*
aboard　　　　2-live　　　　small-CLF　　2SG.ABS　　　here=PTCL　　big

'You are living in foreign land, being neglected but here you are most respected.'

*ben-a*　　*siboŋ*　　　　*hen=na*　　　*ben-a*　　　　*ho!*
come-IMP　third.born.male　now=PTCL　　come.level-IMP　VOC

'Hi beloved, come on now!'

## (2) *myth_diplung* (Ms. Kalpana Rai)

| *tʌkku* | *dipluŋ=ni=ku* | *a-bo* | *a-ṭhāu* | *pʌrʌŋ* |
|---------|----------------|--------|----------|---------|
| DEM | Diplung=REP=NMLZ | 1PL.POSS-GEN | 1PL.POSS-place | FOC |

| *ekdʌm=ni* | *ciso=cha* | *kuiro=cha* | *lagali* | *ekdʌm* |
|------------|-----------|------------|---------|---------|
| too=PTCL | cold=ADD | cloud=ADD | appear | too |

'Our place Diplung is too cold and cloudy.'

| *pʌŋ* | *uile* | *uile=na* | *suru* | *suru-do* | *bastī* |
|-------|--------|-----------|--------|-----------|---------|
| CONN | before | before=PTCL | beginning | beginning-GEN.LOC | village |

| *mʌ-yuŋ-a=pa* | *mʌnna-ci* | *abo* | *khatni* | *yuŋ-ma* | *thoŋ-ma* |
|---------------|-----------|-------|----------|----------|-----------|
| 3P-stay-PST=NMLZ | man-NS | CONN | where.to | stay-INF | be-INF |

| *sʌjilo* | *todho-tni* | *mʌ-yuŋ-a* |
|----------|-------------|------------|
| easy | there-ALL | 3PL-stay-PST |

'At the beginning, people used to live wherever it was easy for them.'

| *todho* | *tʌkku* | *ṭhāu=cha* | *khub* | *pharākilo* | *rʌichʌ* |
|---------|---------|------------|--------|-------------|----------|
| there | DEM | place=ADD | too | wide | MIR |

'That place was very wide.'

| *kheti* | *mu-ma* | *ca-ma-bo-lagi* | *wa=cha* | *nikʌi* | *yuŋ-yaŋ* |
|---------|---------|-----------------|----------|---------|-----------|
| farm | do-INF | eat-INF-GEN-F/S | water=ADD | much | EXIST.NPST-IPFV |

'There was a lot of water to farm for eating.'

| *abo* | *wahut=cha* | *yuŋ-yaŋ* |
|-------|------------|-----------|
| CONN | rivulet=ADD | EXIST.NPST-IPFV |

'There is also a rivulet.'

| *pʌŋ* | *todho* | *mʌnna-ci* | *mʌ-mu-a-ca-aŋ=ku* | *rʌichʌ* |
|-------|---------|-----------|---------------------|----------|
| CONN | there | man-NS | 3PL-do-PST-eat-IPFV=NMLZ | MIR |

'The people kept working and eating there.'

| *je hos* | *a-bo* | *a-dājubhāī-ci* | *bhʌnuŋ=nʌ* |
|----------|--------|-----------------|-------------|
| anyway | 1PL.POSS-GEN | 1PL.POSS-brother-NS | say=PTCL |

'Anyway, let's say our brothers!'

| *pʌŋ* | *ʌkku* | *ṭhāu-bo* | *kʌ-nʌŋ* | *doro=ku* | *doro=ku* |
|-------|--------|-----------|----------|-----------|-----------|
| CONN | DEM | place-GEN | 3SG.POSS-name | what=NMLZ | what=NMLZ |

'What's the name of this place?'

| *thwaŋa* | *mʌ-yuŋ-a-ŋa* | *mʌ-mu-a-ca-a-ŋa* |
|----------|----------------|--------------------|
| in that way | 3PL-stay-PST-IPFV | 3PL-do-PST-eat-PST-IPFV |

'In that way, people used to work, eat and live.'

*pʌŋ*    *todho-tni*    *to*    *bhandā*    *aḍhi-tni*    *aḍhi-tni=ku*
CONN    there-ALL    DEM    COMPR    up-ALL    up-ALL=NMLZ
*mʌnna-ci*    *rum*    *khun*    *ca-si*    *mʌ-dha-a=ku*    *rʌchʌ*
man-NS    salt    carry    eat-PURP    3PL-come.down-PST=NMLZ    MIR

'While people from upside come down to carry (buy) salt for eating,'

*pʌŋ*    *rum*    *la-si*    *mʌ-dha-a-ŋa=pa*
CONN    salt    search-PURP    3PL-come.down-PST-IPFV=NMLZ

'At the time when (they) come down for looking salt,'

*ʌsʌ-poŋ=ni*    *mʌnna-ci*    *baŋ-so*    *baŋ-so*    *tʌppʌ*    *lam*    *lam*
two-CLF=REP    man-NS    talk-CVB    talk-CVB    DET    path    path
*pʌ-ti-aŋ-ci=ni*
3S/A-walk-IPFV-DL=REP

'Two men kept walking and talking on the way.'

*pʌ-puks-aŋ-ci=ni*    *pʌŋ*    *ʌkku*    *ṭhāu*    *pʌrʌŋ*    *dem*
3S/A-go-IPFV-dl=REP    CONN    DEM    place.ABS    FOC    how
*dipd-i-ŋess-i=ku*    *khali*    *dipd-i-ŋess-i=ni*    *pʌ-rʌŋ-ci=ni*
cover-3P-TEL-3P=NMLZ    always    cover-3P-TEL-3P=REP    3S/A-say-DL=REP

'(They) were going and kept saying how this place was always covered by cloud.'

*tʌkku-ci*    *sāyed*    *bantawa-ci*    *he*    *doro-ci=ku=e*
DET-NS    perhaps    Bantawa-NS    INDSV    what-NS=NMLZ=EMPH

'Perhaps they were Bantawa.'

*dipd-i-ŋess-i=ni*    *pʌrʌŋ*    *bantawa-ci*    *mʌ-pi=ku*
cover-3P-TEL-3P    FOC    Bantawa-NS    3PL-speak=NMLZ

'The person who spoke the term 'covering all the time' was Bantawa.'

*pʌŋ*    *tʌkku*    *tan-do=ku*    *mʌnna-ci*    *pʌrʌŋ*    *todho-tni*
CONN    DET    village-GEN.LOC=NMLZ    man-NS    FOC    there-ALL
*cheuchau*    *kam-a*    *mʌ-mu-a-ŋa=ni*
near by    work-N.NATIVIZ    3PL-do-IPFV=REP

'The people of that village were working near by.'

*ṭhyākkai*    *tʌkku-ci*    *pʌ-baŋ-aŋ-ci=ku*    *ʌru-ci-a*
IDEOPH    DET-NS    3S/A-talk-IPFV-NS=NMLZ    other-NS-ERG
*mʌ-en-ci=ni*
3PL-listen-NS=REP

'At the same the villagers listened their talk.'

*pʌŋ*    *e*    *mʌrʌna*    *ʌkku*    *ṭhāu-bo*    *kʌ-nʌŋ=na*
CONN    EXCL    FILLER    DET    place-GEN    3SG.POSS-name=PTCL

*dipd-i-ŋess-i=ku=ni*        *mʌ-rʌŋ=ku*    *rʌchʌ*
cover-3P-TEL-3P=NMLZ=REP        3PL-say=NMLZ    MIR

*nikina=ni*        *min-a=ni*
because=REP        think-PST=REP

'And they said and thought that the name of this place was 'kept covering'.'

*pʌŋ*    *khoci=ni*    *mʌ-baŋ-a=ni*    *thʌtni*    *tʌkku*
CONN    3PL=REP    3PL-talk-PST=REP    in that way    DET

*tan-do=ku*    *mʌnna-ci*
village-GEN.LOC    man-NS

'In that way the people of that village talked.'

*ʌppʌ*    *ṭhāu-bo*    *kʌ-nʌŋ*    *pʌrʌŋ*    *dipd-i-ŋess-i=ku=ni*
DET    place-GEN    3SG.POSS-name    FOC    cover-3P-TEL-3P=NMLZ=REP

*mʌ-rʌŋ=ku*    *rʌchʌ*
3PL-say=NMLZ    MIR

'They said that the name of this place was 'kept covering'.'

*ke-a=na*    *men-sin=ku=ni*    *mʌ-rʌŋ-a=ni*
1PL-ERG=PTCL    NEG.IMP-know=NMLZ=REP    3PL-say-PST=REP

'They said, 'We are those who do not know'.'

*pʌŋ*    *dipd-i-ŋess-i=ni*    *pʌrʌŋ*    *khoci-a*    *pʌrʌŋ*    *doro=cha*
CONN    cover-3P-TEL-3P=NMLZ    FOC    3PL-ERG    FOC    what=ADD

*men-tup-mʌŋ*    *ṭhāu-bo*    *kʌnʌŋ=ni*    *mʌ-min-a=ni*
NEG.IMP-understand-NEG    place-GEN    3SG.POSS-name=REP    3PL-think-PST=REP

'They thought that they said the name of this place *dipdiŋessi* 'kept covering' without their knowledge.'

*dipd-i-ŋesss-i=ni*    *mʌ-rʌŋ-a=ni*
cover-3P-TEL-3P=NMLZ    3PL-say-PST=REP

'It is said they said *dipdiŋessi* 'kept covering'.'

*pʌŋ*    *dipd-i-ŋess-i=ni*    *pʌŋ*    *ṭhāu-bo*    *kʌ-nʌŋ=ni*
CONN    cover-3P-TEL-3P=NMLZ    CONN    place-GEN    3SG.POSS-name=REP

*rʌŋ-so*    *rʌŋ-so*
say-CVB    say-CVB

'Then saying the place name as *dipdiŋessi* 'kept covering','

| *khoci* | *dipd-i-ŋess-i-do-ŋkʌŋ* | | *dipd-i-kharo-ŋkʌŋ* |
|---|---|---|---|
| 3PL.ABS | cover-3P-TEL-3P-GEN.LOC-ABLT | | cover-3P-where-ABLT |
| *doro=ni* | *doro=ni* | *rʌŋ-so* | *lasʈʌ-do* | *pʌrʌŋ* |
| what=REP | what=REP | say-CVB | last-GEN.LOC | FOC |
| *dipluŋ=ni* | *mʌ-rʌŋ-a* | *rʌchʌ* |
| Diplung=REP | 3PL-say-PST | MIR |

'Saying whatever from *dipdiŋessi* 'kept covering' or *dipdi*, finally they said *Diplung*[60].'

| *pʌŋ* | *ʌkku* | *ṭhāu-bo* | *kʌ-nʌŋ* | *pʌrʌŋ* | *dipluŋ=ni* |
|---|---|---|---|---|---|
| CONN | DET | place-GEN | 3SG.POSS-name=REP | FOC | Diplung=REP |
| *rʌŋso* | *rʌŋso* | *khoci* | *mʌ-yuŋ-a* | *rʌchʌ* |
| say-CVB | say-CVB | 3PL.ABS | 3PL-stay-PST | REP |

'Then, saying the name of this place *Diplung*, they lived there.'

| *pʌŋ* | *tonni=ŋe* | *tʌkku* | *ṭhāu-bo* | *kʌ-nʌŋ* | *pʌrʌŋ* |
|---|---|---|---|---|---|
| CONN | that.much=EMPH | DET | place-GEN | 3SG.POSS-name=REP | FOC |
| *dipluŋ* | *yuŋ-a=ku=ni* |
| Diplung | exist-PST=NMLZ=REP |

'In that way the name of that place was named as *Diplung*.'

| *ni* | *ichit* | *pailā* | *pailā=ku* | *burāpākā-ci* | *mʌ-rʌŋ=ku* | *rʌchʌ* |
|---|---|---|---|---|---|---|
| FILLER | little bit | before | before=NMLZ | elders-NS | 3PL-say=NMLZ | REP |

'Once upon a time, it is said that elders used to say.'

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[60] Nowadays Diplung is the name of the village and of the Village Development Committee (VDC).

**(3)  *myth_sibeu* (Ms. Nirmaya Rai)**

*ʌru-ci-bo=ni*          *lulu*  *phalanā*      *phalānī-o*        *en-cha-ci*
other-NS-GEN=REP        FILLER so.and.so      so.and.SO-TEK.GEN    1DL.POSS-child-NS
*pukd-u-m-cʌ-m=ku*               *wa*    *lend-u-m-yam-cʌm=ni*        *mʌ-rʌŋ-a*
take-3P-1/2PL-DL-COPY=NMLZ water  flow-3P-1/2PL-IPFV-DL=REP       3PL-say-PST

'Hi, so and so! They said "Let us cause to flow our children in water (Koshi river)!"

*kinani thaŋna=ni*           *pʌ-cupd-a*     *kina*  *pʌ-wass-a-kess-a=ni*
CONN    torn. clothes=REP     3S/A-pack-PST CONN   3S/A-throw-PST-TEL-PST=REP

'(They) wrapped their children into torn clothes and caused to flow in water.'

*kʌ-yoŋni-ci-bo=ni*           *kho-bo=na=ni*         *men*  *kʌ-cha=ŋa=ni*
3SG.POSS-friend-NS-GEN        3SG-GEN=PTCL=REP       FILLER 3SG.POSS.child=IMPH=REP
*pukḍ-i-kina=ni*          *koshi-i=ni*                  *wass-i-waks-i=ni*          *mʌi*
take-3P-PARTCP=REP      Koshi-DOWN.LOC=REP            throw-3P-TEL-3P-REP FILLER

'They threw away her and her friend's child in the Koshi river.'

*pʌŋ*     *wa-a*        *lekd-i-pukd-i=ni*
CONN    water-ERG     flow-3P-TEL-3P=REP

'The water flowed away (him/her).'

*wa-a*          *lekḍ-i-pukḍ-i*
water-ERG      flow-3P-TEL-3P=REP

'The water flowed away (him/her).'

*pʌŋna=ni*      *kʌ-yoŋni-ci-bo*               *na*     *thaŋna=ni=ku*
CONN=REP        3SG.POSS-friend-NS-GEN         PTCL    shawl=REP=NMLZ
*nihi*          *ananda=ni*
FILLER          pleasure=REP

'Her friend's child got pleasure being wrapped into shawl.'

*tonpʌŋ=na*    *kʌ-cha*          *mit-ma*            *si-a=ni*
CONN=PTCL      3SG.POSS-child      remember-INF         feel-PST=REP

'After then she remembered her child.'

*pʌŋ=ni*                *tʌkku=ni*     *pe=ni*      *barkhā*       *pe*      *wadhup*
CONN=REP                DET=REP        cry=REP       rainy.season cry      flood

'Then, she cries in the flood of rainy season.'

*pʌŋ=ni*            *sʌŋlo=paa=ni*        *khaŋŋ-i ŋʌsʌŋ*        *li=ni*         *koshī*
CONN=REP            clean=NMLZ=REP        see-3P  look.like      be=REP         Koshi

'Looks like she is seen when the Koshi river is clean.'

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| *pʌŋ=ni* | *wa* | *dup=paa=ni* | *pʌ-de-nin* |
|----------|------|--------------|-------------|
| CONN=REP | water | flood=NMLZ=REP | NEG-see-NEG |

'She is not seen when there is flood.'

| *pʌŋ=ni* | *tʌkku=ni* | *sibeu sibeu=ni* | *pe=ni* | *nʌmmai* |
|----------|-----------|------------------|---------|----------|
| CONN=REP | DET=REP | sibeu sibeu=REP | cry=REP | isn't it |

'She cries saying *sibeu sibeu*[61], isn't it?'

| *pʌŋ=ni* | *tʌkku=ni* | *sibeu sibeu=ni* | *rʌŋ=ku=na=ni* |
|----------|-----------|------------------|----------------|
| CONN=REP | DET=REP | sibeu sibeu=REP | say=NMLZ=PTCL=REP |

| *kʌ-cha-a=ni* | *bud-aŋ=ku=ni* |
|---------------|----------------|
| 3SG.POSS-child-ERG=REP | call-IPFV=NMLZ=REP |

'It is said that saying (crying) *sibeu sibeu* denotes to her child is calling.'

| *tʌkku* | *koshī-i=ni* | *walend-i=ku* | *pʌ-khaŋŋ-in* |
|---------|-------------|---------------|---------------|
| DET | Koshi-DOWN.LOC=REP | flow-3P=NMLZ | NEG-see-NEG |

| *pʌŋ=ni* | *pe=ni* |
|----------|---------|
| CONN=REP | cry=REP |

'It is said that that (child) cries who has not been seen, flowed in the Koshī.'

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[61] *Sibeu sibeu* denotes to the chirp of a bird.

# Appendix C: Contributors

Texts from the following speakers were recorded, annotated, and used in this study. Each of them has kindly given their permission for the recordings and annotations to be distributed without restriction.

| Name | Gender | Age[62] | Education | Address | Contribution (Sessions) |
|---|---|---|---|---|---|
| Premdhoj Rai | M | 60 | SLC | Beltar-1, Lahure Tole | myth_boka; Paradigms; Lexicons; Elicitation |
| Pabita Rai | F | 25 | BA | Beltar-2, Beltar | song_bidesh |
| Bir Bahadur Rai | M | 71 | Literate | Cisapani-7, Bhir gau | nuwagi_samkha |
| Dhan Bahadur Rai | M | 37 | SLC | Cisapani-7, Pathibhara | autobio_05 |
| Man Kumari Rai | F | 54 | Literate | Cisapani-7, Pathibhara | volunteer_02 |
| Samjhana Rai | F | 30 | IED | Cisapani-7, Pathibhara | somtukma_song |
| Bharat Maya Rai | F | 65 | Preliterate | Cisapani-7, Pathibhara | hekchakuwa_09 |
| Muna Rai | F | 29 | MED | Cisapani-7, Pathibhara | LH_F_04 |
| Kishor Rai | M | 23 | BA | Cisapani-7, Pathibhara | poem_banda |
| Gaj Bahadur Rai | M | 77 | Preliterate | Cisapani-7, Pathibhara | riti_04 |
| Prem Kumari Rai | F | 72 | Preliterate | Cisapani-7, Pathibhara | LH_F_03 |
| Kishor Rai | M | 23 | BA | Cisapani-7, Pathibhara | poem_undo |
| Bishnu Rai | M | 26 | MA | Devisthan-2, Rila | kavita_01 |
| Mani Raj Rai | M | 30 | MA | Devisthan-2, Rila | hongmathan_01 |
| Padam Bahadur Rai | M | 78 | Preliterate | Devisthan-3, Machumtemba | myth_rodung |
| Ram Kumari Rai | F | 57 | Preliterate | Devisthan-3, Machumtemba | convers_family |
| Tilak Rai | M | 52 | SLC | Dharan-10, Putaliline | autobio_02 |
| Sajan Rai | M | 29 | MA | Dharan-16, Bhimsen Path | autobio_01 |
| Amar Bahadur Rai | M | 62 | Literate | Diplung-6, Allegaira | DA_tupkhabang |
| Ganesh Bahadur Rai | M | 61 | Literate | Diplung-6, Kharachongpa | chwa_syasya |
| Dakshu Man Rai | M | 73 | Preliterate | Diplung-7, Bukampa | myth_phuraulo |
| Nir Maya Rai | F | 71 | Preliterate | Diplung-7, Bukampa | myth_rum_01 |
| Shree Kumar Rai | M | 33 | MBA | Diplung-7, Bukampa | myth_sangpwa; Transcriptions; Elicitation; Lexicons |
| Arjun Rai | M | 25 | SLC | Diplung-7, Nigalbas | poem_banda |

[62] Age at the time of recording.

| Name | Gender | Age | Education | Address | Contribution (Sessions) |
|---|---|---|---|---|---|
| Dakshi Maya Rai | F | 67 | Preliterate | Diplung-7, Nigalbas | convers_HW_02 |
| Goman Singh Rai | M | 76 | Literate | Diplung-7, Nigalbas | DA_rodung |
| Jagat Rai | M | 36 | SLC | Diplung-7, Nigalbas | DA_pumala_03 |
| Kali Maya Rai | F | 63 | Preliterate | Diplung-7, Nigalbas | convers_DA_01 |
| Kalpana Rai | F | 30 | BA | Diplung-7, Nigalbas | myth_diplung; Transcriptions |
| Karuna Rai | F | 29 | 8 Class | Diplung-7, Nigalbas | song_love |
| Lal Dhan Rai | M | 84 | Preliterate | Diplung-7, Nigalbas | myth_sumni_01 |
| Mān Bahadur Rai | M | 76 | Preliterate | Diplung-7, Nigalbas | DA_lanka |
| Mina Kumari Rai | F | 35 | Informal | Diplung-7, Nigalbas | DA_HW |
| Mishra Devi Rai | F | 36 | Informal | Diplung-7, Nigalbas | conves_HW_01 |
| Mishra Maya Rai | F | 73 | Preliterate | Diplung-7, Nigalbas | dailylife |
| Prem Rai | M | 25 | 8 Class | Diplung-7, Nigalbas | puma_tan |
| Ambar Raj Rai | M | 49 | SLC | Diplung-7, Nigalbas | DA_tan |
| Chandrakala Rai | F | 51 | Preliterate | Diplung-7, Nigalbas | LH_M_05 |
| Devi Maya Rai | F | 39 | SLC | Diplung-7, Nigalbas | mt_training |
| Janak Rai | M | 57 | SLC | Diplung-8, Nigalbas | DA_LH |
| Harka Bahadur Rai | M | 57 | Literate | Diplung-9, Nigalbas | convs_sanskar |
| Nayindra Rai | M | 70 | Preliterate | Diplung-9, Nigalbas | sumni_paru_01 |
| Parsu Ram Rai | M | 50 | Preliterate | Diplung-9, Nigalbas | hekchakupa_01 |
| Mani Raj Rai | M | 28 | SLC | Mauwabote-1, Malbase | autobio_04 |
| Saindhoj Rai | M | 86 | Preliterate | Mauwabote-1, Tambuwa | sumni_paru_02 |
| Lokendra Rai | M | 26 | SLC | Mauwabote-2, Koltong | DA_puma |
| Krishna Kumari Rai | F | 32 | IA | Mauwabote-2, Kurakhim | LH_F_01 |
| Dil Bahadur Rai | M | 41 | Literate | Mauwabote-2, Mauwabote | DA_village |
| Padam Rai | M | 66 | Preliterate | Mauwabote-2, Walambung | riti_03 |
| Bed Bahadur Rai | M | 63 | Preliterate | Mauwabote-3, Mauwabote | mauwa_01 |
| Kamal Bahadur Rai | M | 73 | Literate | Mauwabote-3, Mauwabote | sumniparu_02 |
| Kedar Man Rai | M | 69 | Preliterate | Mauwabote-3, Mauwabote | police_job |
| Bimal Rai | M | 30 | BA | Mauwabote-3, Okwaritiong | DA_mauwabote |

| Name | Gender | Age | Education | Address | Contribution (Sessions) |
|---|---|---|---|---|---|
| Khadka Rai | M | 36 | SLC | Mauwabote-3, Okwaritiong | song_bakha_01 |
| Khem Rai | M | 30 | BA | Mauwabote-3, Okwaritiong | DA_pumala_02 |
| Manjir Man Rai | M | 69 | Preliterate | Mauwabote-3, Sanchekha | DA_tan_01 |
| Bhim Kumari Rai | F | 24 | BA | Mauwabote-3, Waritong | autobio_12 |
| Janga Bahadur Rai | M | 68 | Literate | Mauwabote-4, Dandagaun | LH_lahure |
| Tara Rai | F | 30 | IED | Mauwabote-5, Yaksa | yaksa_01 |
| Dil Kumar Rai | M | 42 | 8 class | Mauwabote-6, Bhangari | DA_pacha |
| Ichha (Kumari) Rai | F | 77 | Preliterate | Mauwabote-6, Damdame | fam_convs_02 |
| Surendra Rai | M | 24 | 8 class | Mauwabote-6, Damdame | autobio_08 |
| Dhandhoj Rai | M | 90 | Preliterate | Mauwabote-7, Rohom | war_01/02/03 |
| Buddi Bahadur Rai | M | 60 | Preliterate | Mauwabote-7, Walikha | fam_cons_01 |
| Asudevi Rai | F | 30 | IA | Mauwabote-8, Aahale | autobio_09 |
| Nar Bahadur Rai | M | 95 | Preliterate | Mauwabote-8, Aahale | lewa_samkha |
| Prasu Ram Rai | M | 30 | MA | Mauwabote-8, Aahale | autobio_10 |
| Shir Maya Rai | F | 64 | Preliterate | Mauwabote-8, Aahale | volunteer_01 |
| Surya Bahadur Rai | M | 47 | 3 class | Mauwabote-8, Aahale | attitude_01 |
| Kumar Rai | M | 45 | IA | Mauwabote-9, Caplokha | caplokha_01 |
| Man Bahadur Rai | M | 50 | Literate | Mauwabote-9, Caplokha | birth_death |
| Bir Bahadur Rai | M | 21 | BED | Pauwasera-3, Buyatar | salam_01 |
| Padam Bahadur Rai | M | 55 | Literate | Pauwasera-3, Buyatar | DA_pumala_01 |
| Ganga Kumar Rai | M | 35 | 10 Class | Pauwasera-7, Bangsila | myth_syala_01 |
| Man Bahadu Rai | M | 71 | Preliterate | Pauwaswra-3, Tirchippa | hekchakupa_08 |
| Birendra Rai | M | 71 | Preliterate | Siddiupur-9, Ratmate | riti_01 |
| Ram Kumari Rai | F | 29 | IA | Siddiupur-9, Ratmate | autobio_06 |
| Purna Bahadu Rai | M | 51 | Preliterate | Siddiupur-9, Torkhe | riti_02 |
| Deuki Rai | F | 20 | IA | Siddiupur-9, Torkhe | autobio_07 |
| Harka Maya Rai | F | 48 | Preliterate | Siddiupur-9, Torkhe | geneology_01 |

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