

A descriptive grammar of Bunan

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Manuel Widmer
Sumiswald / BE

Prof. Dr. George van Driem
Prof. Dr. Scott DeLancey

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List of Abbreviations

1	first person
2	second person
3	third person
ABL	ablative case
ABS	absolute case
ACT	active participle
ADESS	adessive case
ALL	allative case
ANTER	anterior clitic
APP	approximative clitic
APPR	apprehensive future tense
ASS	assertive particle
ASSER	assertive future tense
ASSUM	assumptive mood
ATT	attributive copula
AUTH	authoritative use of kinship terms
AUX	auxiliary
AVS	adversative clitic
CAUS	causal clitic
CIRCUM	circumstantial clitic
CJ	conjunct
CNS	consent particle
COM	comitative case
CON	conjunction clitic
COND	conditional clitic
CONSEC	consecutive clitic
CONSUL	consultative mood

CVB	converb
DAT	dative case
DEF	definite clitic
DEM	demonstrative pronoun
DETR	detransitivizing suffix
DIM	diminutive suffix
DIR	direct evidence
DJ	disjunct
DU	dual number
EMPH	emphatic clitic
ENR	enumerative clitic
EQ	equative copula
ERG	ergative case
EVOC	evocative clitic
EX	existential copula
EXCL	exclusive
EXT	extended topic clitic
F	feminine
FIN	finite ending
FOC	focus particle
FUT	future tense
FIN	finite verbal ending
GEN	genitive case
HON	honorific
HS	hearsay clitic
HUM	human
IMMED	immediate clitic
IMP	imperative mood

INCL	inclusive
INDEF	indefinite clitic
INF	infinitive
INFER	inferential evidence
INTESS	interessive case
INTR	intransitive conjugation
intr.	intransitive
LOC	locative case
M	masculine
MID	middle conjugation
MOD	modifier marker
NFIN	non-finite verbal ending
NZR	nominalizer
ONOM	onomatopoetic expression
PL	plural number
POSS	possessive copula
PROG	progressive participle
PROHIB	prohibitive mood
PRS	present tense
PST	past tense
PTB	Proto-Tibeto-Burman
PUNCT	punctual clitic
Q	question clitic
QUE	querying particle
REL	relativizing clitic
REPUD	repudiative mood
RESUL	resultative aspect
SG	singular number

SIM	simultaneous clitic
SML	semblative clitic
STAT	stative suffix
SUG	suggestive particle
SUP	supine
T	functionally opaque derivational -t suffix
TERM	terminative case
TOP	topic clitic
TR	transitive conjugation
tr.	transitive
UND	conjunct undergoer
VOL	volitional
VRB	verbalizing suffix
WT	Written Tibetan
(f)	female
(h)	honorific
(m)	male
*	reconstructed form
**	ungrammatical form / ungrammatical construal
?	form with debatable grammatical status
/.../	phonological representation
[...]	phonetic representation
<...>	orthographic representation

1 Preliminaries

1.1 Introduction

Bunan is a Tibeto-Burman minority language of India. The language is spoken by between 3,500 and 4,000 speakers in Lahaul, the northernmost region of the state Himachal Pradesh. The traditional homeland of the Bunan speaking community is the Gahr Valley, which lies in the center of Lahaul at an average altitude of approximately 3,000 meters above sea level. Within the Tibeto-Burman language family, Bunan is commonly assigned to the West Himalayish branch, which consists of a group of fourteen languages that are spoken in the states of Himachal Pradesh and Uttarakhand.

This thesis represents the most comprehensive description of the phonology and grammar of Bunan that is available to date. The material on which this description is based was gathered in Himachal Pradesh during four fieldtrips between 2010 and 2013. The data corpus primarily consists of recordings of elicitation sessions, everyday conversations, and traditional as well as autobiographical stories. To a lesser extent, it also comprises materials that were produced by members of the Bunan speaking community themselves.

The present chapter is intended to provide some background information about the language and its speakers. § 1.2 gives an overview of the geography and history of Lahaul and also provides information about the history of the Bunan speaking community. § 1.3 lists previous studies of the lexicon and grammar of Bunan. § 1.4 discusses the genetic position of Bunan within the West Himalayish subgroup. § 1.5 describes the data corpus on which this thesis is based and the circumstances under which the data were collected. § 1.6 accounts for the theoretical orientation of this thesis.

1.2 Background information

1.2.1 The geographical setting

Bunan is a Tibeto-Burman minority language of the North Indian Himalayas. The traditional homeland of the Bunan speaking community lies in the region of Lahaul in the mountainous North of the Indian state Himachal Pradesh. There, the language is spoken in an area known as the Gahr Valley, which lies at an altitude of approximately 3,000 meters above sea level. The valley, located in the center of Lahaul, stretches for about five kilometers along the lower course of the Bhaga river from west to east and borders on the Tod Valley in the east and on the Pattan Valley and Tinan Valley in the west.

Lahaul is separated from surrounding areas by high mountain ranges. In historical times, the area could only be accessed by crossing one of several mountain passes that connect Lahaul with the outside world. The most important of these passes are the Rohtang La (3,979 m), which connects Lahaul with the Kullu Valley in the south, the Kunzum La (4,590 m), which links Lahaul to the area of Spiti in the east, and the Baralacha La (4,890m), which leads to the area of Ladakh in the north. In the West, Lahaul is not bounded by mountains, as the Chenab River flows off in this direction. The Chenab River has never connected Lahaul to the outside world, however, as the river flows through a steep and narrow mountain valley that remains inaccessible until it reaches the foothills of the North Indian Himalayas some 200 kilometers to the west of Lahaul.

The climate of Lahaul is relatively dry, as the mountain ranges to the south keep out the monsoon rains in the summer. However, unlike Spiti and Ladakh, the area experiences periodic rainfall throughout the year, which allows for the cultivation of various sorts of field crops. From late autumn to late spring, Lahaul is usually cut off from neighboring areas, as snowfall makes it impossible to cross the surrounding mountain ranges. During that time of the year, the government of Himachal Pradesh runs a helicopter service between Kullu and a number of major villages in Lahaul. A tunnel connecting Lahaul to the Kullu Valley is currently under construction. The building project is supposed to be completed by 2016 and will render Lahaul accessible to road traffic throughout the year.

In the following, I provide a number of maps that illustrate the geographical position of the Gahr Valley in the context of South Asia (Figure 1), Himachal Pradesh (Figure 2), and Lahaul (Figure 3). Figure 4 is a satellite picture of the Gahr Valley, which gives an overview of the major villages and hamlets as well as important monasteries.¹ Note that all of the following maps are north-oriented.

¹ The maps were generated with the map editor of the online version of the World Atlas of Language Structures (<http://wals.info/>). The satellite image was created with Google Maps.

Figure 1: Map of India



Figure 2: Map of Himachal Pradesh and surrounding areas



Figure 3: Map of Lahaul and surrounding areas

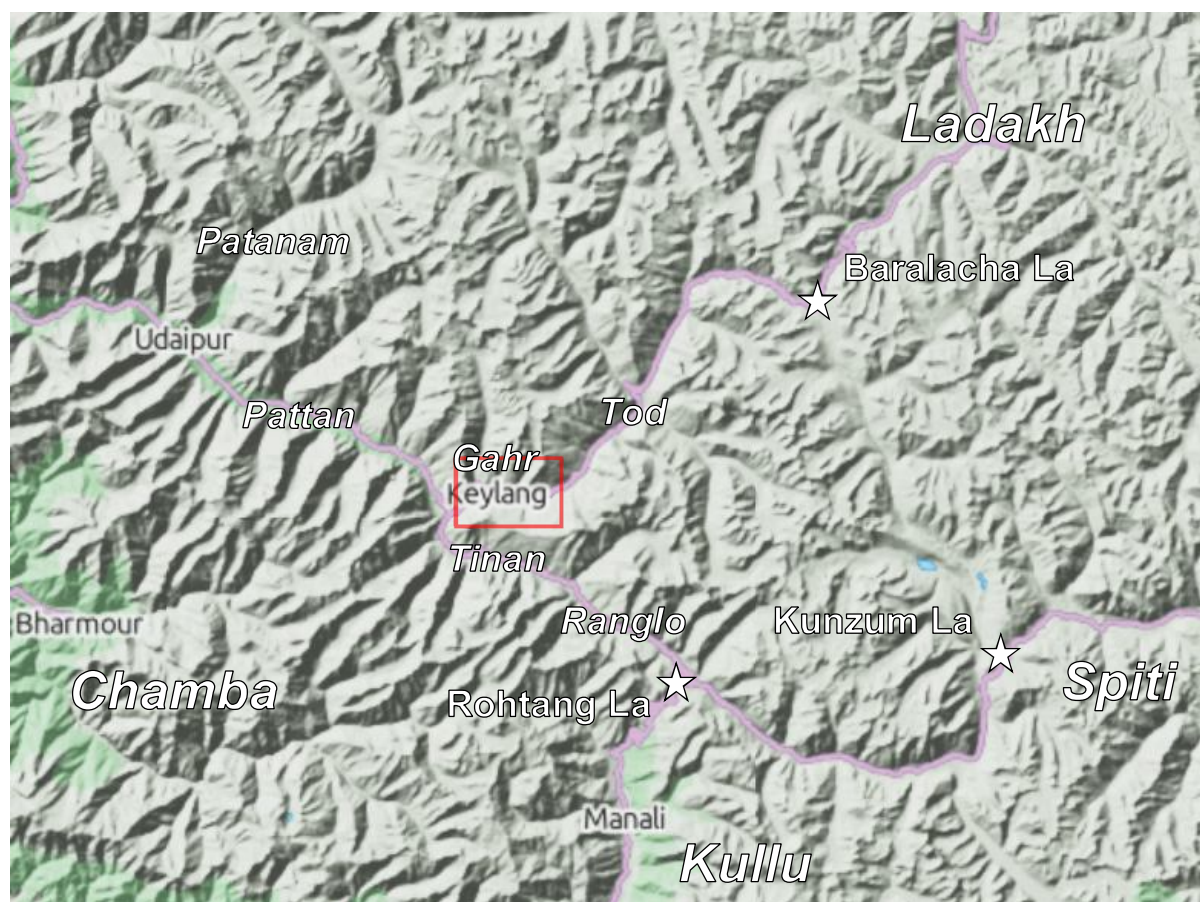
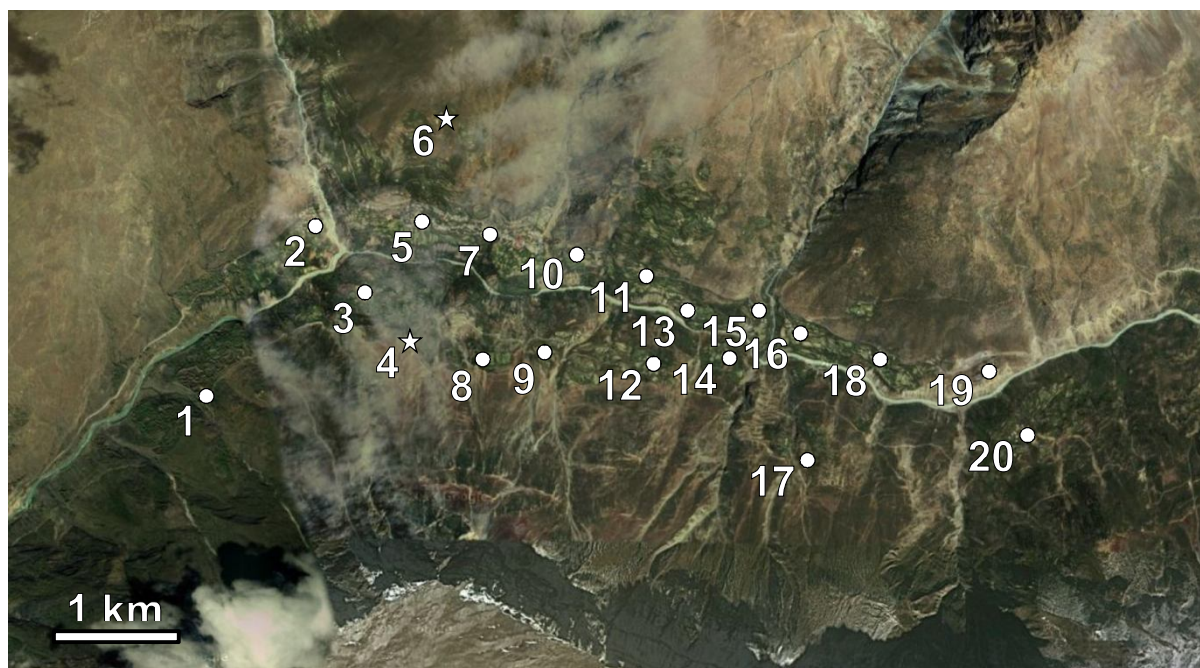


Figure 4: Map of the Gahr Valley showing major villages and monasteries



1	<i>gwadzan</i>	8	<i>barbok</i>	15	<i>katəaran</i>
2	<i>biliŋ</i>	9	<i>pasparak</i>	16	<i>mangun</i>
3	<i>kardan</i>	10	<i>kuskjar</i>	17	<i>pjaso</i>
4	<i>kardan gompə</i>	11	<i>jurnat</i>	18	<i>kjor</i>
5	<i>jokelan</i>	12	<i>laptəan</i>	19	<i>tiŋrik</i>
6	<i>əaəur gompə</i>	13	<i>gumliŋ</i>	20	<i>pjukar</i>
7	<i>raŋkelan</i>	14	<i>tə^heliŋ</i>		

1.2.2 Lahaul through the centuries

1.2.2.1 Political situation

Despite its remoteness, Lahaul has had strong political ties to surrounding areas for centuries. Due to its intermediate geographical position between Kullu, Spiti, and Ladakh, the region was and still is an area of great strategic importance, as Lahaul represents the most direct connection between the western Himalayan foothills and the Upper Indus Valley. Unfortunately, our knowledge about the early history of Lahaul and the western Himalayas in general is scarce. The earliest major political power in the western Himalayas was the kingdom of Zhangzhung, whose central regions lay in what is nowadays the southwestern part of the Tibet Autonomous Region.² Little is known about this kingdom, which was conquered in the mid-7th century AD by the emerging Tibetan empire (van Driem 2001: 121–122). It is conceivable that Lahaul was a part of Zhangzhung. This seems especially plausible given the fact that Bunan belongs to the eastern branch of West Himalayish (cf. § 1.4.2 below), which seems to be closely affiliated with the language of the kingdom of Zhangzhung (cf. § 1.4.3 below). However, given the fact that written historical sources are scarce and of questionable reliability, any account of the early history of Lahaul must remain extremely speculative (cf. Hutchinson & Vogel 1933: 476–477).

After the downfall of the Tibetan empire in the 9th century, Lahaul came to lie at the intersection of the spheres of influence of the kingdoms of Kullu and Ladakh. According to Hutchinson & Vogel (1933: 478–488), the few available historical sources indicate that the two kingdoms came into recurring conflicts with each other. As Lahaul represents the most direct geographical connection between Kullu and Ladakh, both kingdoms must have striven to bring the region under their direct control. However, as noted in the previous section, Lahaul is a remote area that is difficult to access from all directions. During the wintery half of the year, Lahaul is even completely cut off from the outside world. We may thus assume that neither Ladakh nor Kullu ever succeeded in gaining complete control over the region for a longer period of time (cf. Moorcroft's note below). Ladakh seems to have been the dominant political power in Lahaul between the 11th and 16th century, whereas Kullu gained supremacy over Lahaul from the 17th century onwards (Hutchinson & Vogel 1933: 480).

The watchtower at Gondhla in the lower Chandra Valley bears witness to this turbulent chapter of the history of Lahaul. The impressive building was built by Raja Man Singh of Kullu around 1700 AD to control the access to the Chandra Valley and the Rohtang La (Hutchinson & Vogel 1933: 478). Although it is likely that Lahaul was under foreign hegemo-

² See Denwood (2008) for a more elaborate account of the political situation in the western Himalayas in the mid-7th century.

ny for centuries, one may assume that the area nonetheless enjoyed a considerable degree of political autonomy under the rule of petty chiefs, so called *ṭhākur*.³ These local rulers usually were on good terms with the royal dynasties of the surrounding kingdoms. However, allegiance to the royal dynasties of Kullu and Ladakh represented a potential risk for these local rulers as well, as the example of the *ṭhākur* dynasty of Barbog illustrates. The *ṭhākur* of Barbog had been acting as the representatives of the kings of Ladakh in Lahaul for several centuries. When Lahaul eventually became part of Kullu in the 17th century, they were deprived of all their political power by the Raja of Kullu (Francke 1926: 221–222).

The first western account of the political situation in Lahaul was provided by the Jesuit missionary António de Andrade. In November 1631, de Andrade travelled through Lahaul on his way from Leh to Kullu. He called the area *Carja*, which is a transliteration of WT *gar zha*, the Tibetan name for Lahaul, and stated that it was part of the kingdom of Kullu (Wessels [1924] 1997: 112–116). Almost two centuries later, the English explorer William Moorcroft (1841: 198–199) travelled through the area in the summer of 1820. He noted that the “peasantry of Lahoul hold their lands of the Raja of Kulu, except at four villages, Barkalanak and three others, which we passed on our way to Tandi, and which, whilst they acknowledge military fealty to the Raj of Kulu, pay rent to the state of Ladakh.” Moorcroft’s notes corroborate the assumption that the political power mainly lay in the hands of the king of Kullu in the beginning of the 19th century, although the kingdom of Ladakh still seems to have had some sort of influence in the area.

In 1840, the kingdom of Kullu was conquered by the expanding Sikh Empire, and Lahaul, which was a part of Kullu at that time, suffered the same fate (Hutchinson & Vogel 1933: 482). Little is known about the invasion of the Sikhs in Lahaul. An eyewitness report which was recorded by Francke (1926: 222–223) suggests that the new rulers imposed a harsh regime on the inhabitants. However, the control of the Sikh Empire over Lahaul only lasted for six years, as Kullu and its surrounding areas became part of the British Empire in 1846 (Hutchinson & Vogel 1933: 473). With the independence of India in 1948, Lahaul came under the control of the Indian central government, and since 1971 the regions of Lahaul and Spiti have formed the northernmost district of the then formed Indian state of Himachal Pradesh (Charak 1979: 287–298).

³ In historical time, there were three *ṭhākur* dynasties in Lahaul: the chiefs of Kolong (Tod Valley), the chiefs of Barbog (Gahr Valley), and the chiefs of Gondhla (Tinan Valley) (Francke 1926: 195–220). These three families exist to the present day and, although they do no longer have any political power, still hold a prominent social position in the indigenous societies of Lahaul.

1.2.2.2 Economic situation

Until the mid-19th century, the inhabitants of Lahaul mainly persisted on agriculture and livestock breeding. A complex system of irrigation channels made it possible to grow a small number of crops on terraced fields. The most common foodstuffs were buckwheat and barley, which could be grown throughout Lahaul. Wheat, which could only be cultivated in the Pattan Valley, was much rarer (Harcourt 1871: 179). Uncultivated land and mountain pastures served as grazing grounds for cows, yak, sheep, and goats (Diack [1897] 1994, 3: 47). In addition, the male population of Lahaul also engaged in the trade between Kullu and Ladakh (Moorcroft 1841: 198–199; Harcourt 1871: 243–244; Francke 1926: 221–224). Diack's ([1897] 1994, 3: 51–52) description of this trading activity is given in the following.

The people are not entirely dependent on their land for subsistence. It is estimated that one-third of the proprietors are traders first and agriculturists afterwards. They own ponies of the sturdy Láhuli breed, and employ them either in trade ventures of their own or to carry for hire the wares of Punjabi merchants engaged in the Central Asian trade. [...] The remaining two-thirds of the proprietors all possess sheep and goats, which are used as beasts of burden, and are in that way a source of income to their owners. And each of the poorer families deputed one or two of its members to Simla or Kúlu for the winter to make money by working as coolies, or by keeping *lurgi* shops. [...] Large number of Láhulis engage in this traffic [i.e. the trade between Kullu and Ladakh] both as traders and carriers. They purchase indigo, rice, piecegoods, and brass and copper vessels in Kúlu, and carry them on their ponies and on their sheep and goats, which are also used as beasts of burden, to Ladak and Tibet, where they exchange them for borax, wool, *pashm* [i.e. pashmina wool], and salt, which they bring back and sell in Kúlu. Less enterprising traders content themselves with importing rice from Kúlu and exchanging it with Tibetans in Láhul for double its weight of salt, which they take back to Kúlu and barter for double its weight of rice, thereby making a profit of 300 per cent on each venture. Wool is also brought by Tibetans to Láhul and bought by the Láhulis, who sell it at a profit of 40 to 50 per cent (including cost of carriage) in Kúlu.

Diack's account suggests that the trans-Himalayan trade route was an important source of income for Lahaul in the 19th century and that the inhabitants of the area maintained particularly strong economic relations with the valley of Kullu, where a considerable number of them used to spend the winter months. The 1891 Census reported that 5,725 Lahaulis spent the winter in Lahaul, whereas 866 Lahaulis (i.e. 13% of the total population)

were in Kullu at the same time (Diack [1897] 1994, 3: 24).⁴ Although the literature does not mention this, it is likely that some inhabitants of Lahaul already owned real estate in the Kullu Valley at that time. Nowadays most families⁵ from Lahaul own a house or at least a piece of land in Kullu, and many generate the major part of their income in Kullu, where they work in the agricultural, public, or service sector.

The trading activities that Diack described had likely been going on for a long time. The Chinese pilgrim Xuanzang (603–664), who travelled through the western Himalayas in the mid-7th century AD, visited a North Indian kingdom *Qālūduō*, which according to him lay in a remote and mountainous region. He mentioned two further kingdoms North of *Qālūduō* 屈露多, which he called *Luòhùluó* 洛護羅 and *Mòluósuō* 秣羅娑, and noted that they could only be reached by undertaking an arduous journey through the mountains (Beal 1884: 177–178). Cunningham (1854: 4) identified *Qālūduō* and *Mòluósuō* as Kullu and Ladakh, respectively,⁶ while Beal (1884: 177) considered the name *Luòhùluó* to be phonetic transcription of the name “Lahaul”. Cunningham and Beal’s interpretations subsequently gained wide acceptance among scholars (Francke 1908; Hutchinson & Vogel 1933; Uray 1990). If they are correct, this indicates that a trade route from Kullu to Ladakh through Lahaul may have existed by the middle of the first millennium AD.

The economic situation in Lahaul began to change radically towards the middle of the 18th century. This process was initiated by the invasion of the Sikhs in Kullu and surrounding territories in 1840, which seems to have obstructed the trade between Kullu and Ladakh (Francke 1926: 222–223). In 1846, economic circumstances changed again with the incorporation of Kullu and Lahaul into the British Empire. The colonial government built bridges and roads in the region, which facilitated travelling from Lahaul to neighboring areas (Diack [1897] 1994, 3: 51). At the same time, British officials expelled tax collectors from Ladakh, which kept visiting Lahaul until 1862 (Diack [1897] 1994, 3: 9). Hereby, they weakened the political and economic ties with Ladakh, which had existed for centuries. However, the event that may have had the most far-reaching consequences for everyday life in Lahaul took place in 1853, when the Moravian Church opened a missionary station in the Gahr Valley (Hutchinson & Vogel 1933: 482). The members of the mission introduced a number of agri-

⁴ Diack ([1897] 1994, 3: 24) also mentions that an unknown number of Lahaulis spent the winter in Ladakh and western Tibet. This implies that the percentage of the total population that did not spend the wintery half of the year in Lahaul may have been somewhat higher, possibly around 20%.

⁵ In this context, the term “family” is used in an “Indian sense” and refers to an extended family comprising all male descendants of a common male ancestor including their wives and unmarried children.

⁶ Cunningham interpreted *Mòluósuō* as a phonetic transcription of the toponym *Mar po yul*, a Tibetan epithet for Ladakh. However, as Uray (1990: 1) pointed out, it is very unlikely that Tibetan was already spoken in Ladakh by the middle of the 7th century. Nonetheless, Uray accepted Cunningham’s theory, but claimed that *Mòluósuō* represented a more ancient name for Ladakh, which he reconstructed as **Mars ~ *Mras*.

cultural, technological and institutional innovations in Lahaul that considerably raised the living standard of the indigenous population.⁷ They brought new trees and crop plants (i.e. the Lombardy poplar, the willow tree, and the potato) as well as hitherto unknown technologies (i.e. use of iron ovens for heating and the technique of knitting) to Lahaul. In addition, they opened a missionary school in Keylong and thus provided access to formal education for the male population (Dorje & Tobdan 2008: 35–41).

The slow but steady transformation of the economic environment continued after the independence of India in 1947. The new constitution of 1950 recognized socio-economically disadvantaged communities throughout the country as “Scheduled Tribes” or “Scheduled Castes”, which benefit from public development programs. All indigenous ethnolinguistic communities of Lahaul were classified either as Scheduled Tribes or Scheduled Castes, granting them generous financial support and privileged access to higher education. At the same time, the First Indo-Pakistani War (1947–1949) revealed the strategic importance of the western Himalayan areas. As a result, the Indian Government made great efforts to promote the economic development of the region in order to ensure the political loyalty of the indigenous population. Ongoing border disputes with Pakistan and China lead the Indian Government to construct a mountain road between Kullu and Lahaul between 1963 and 1965. Ten years later, this road was extended up as far as Leh, thus establishing a direct traffic connection between the Upper Beas Valley and the Upper Indus Valley. This project had a great impact on the everyday life of the population of Lahaul in general and the Bunan speaking community in the Gahr Valley in particular. The mountain road considerably facilitated traveling from Lahaul to Kullu and Ladakh and thus increased the residential mobility of the indigenous population. Furthermore, Keylong in the Gahr Valley became one of the major intermediate stations on the Leh-Manali-Highway. When the road from Keylong to Leh was opened for tourism in 1982, this gave rise to the development of a flourishing hotel industry in Keylong, which has led many local families to prosperity. The tourist sector will likely continue to thrive in the coming decades, when the Rohtang Tunnel will make Lahaul easily accessible from the Kullu Valley throughout the year.

The development of Lahaul as a tourist destination is surely a profitable business. However, it also poses a challenge to the indigenous population, as it will likely bring along environmental problems such as water shortages, pollution, and the disfigurement of the natural landscape. At the same time, a massive and unregulated immigration of outsiders

⁷ The inhabitants of Lahaul quickly came to appreciate the advantages of the innovations introduced by the Moravians. This appreciation continues to the present day. The members of the Bunan speaking community are well aware that the missionaries considerably improved the standard of living in Lahaul and have kept their memory fondly alive.

might lead to the disintegration of the traditional ethnolinguistic groups of Lahaul in the long term. We may only hope that the political and economic elite of Lahaul are aware of these risks and will opt for a sustainable economic development of their traditional homeland.

1.2.2.3 Ethnolinguistic situation

Lahaul is an area of extraordinary linguistic diversity. In historical times, the area has been home to six different language communities. The following table gives an overview of the indigenous ethnolinguistic groups of Lahaul.

Table 1: Indigenous ethnolinguistic groups of Lahaul

Ethnicity	Area of settlement	Population ⁸
Pattani	Pattan Valley	15,000–20,000
Gahri	Gahr Valley	3,500–4,000
Tibetan	Tod Valley, Ranglo Valley, Patanam Valley	3,500–4,000 (?)
Tinani	Tinan Valley	1,833
Chanal	Pattan Valley	1,286
Lohar	throughout Lahaul	872

The inhabitants of the Pattan Valley constitute the largest ethnolinguistic community of Lahaul. In the literature, there are two concurrent designations for these people: “Pattani” and “Manchadpa”. Pattani seems to be an Indo-Aryan exonym with an unclear etymology, whereas Manchadpa is a Tibetan exonym that means “lowlander” (WT *man chad* “lower area”). The Pattani speak a West Himalayish language that is known as “Pattani” or “Manchad”. As the latter designation is more established in the literature, I shall refer to the language as Manchad in the following. Manchad is closely affiliated with the language spoken in the Tinan Valley but only distantly related to Bunan (cf. § 1.4.2 below). Francke (1917: 137) stated that the language contains a considerable number of Indo-Aryan and Tibetan loanwords, which suggests that its speakers have been in longstanding contact with both Indo-Aryan and Tibetan communities. This assumption is plausible given the fact that the population of the lower Pattan Valley adheres to Hinduism, whereas the Manchad speakers in the upper Pattan Valley follow Tibetan Buddhism.

⁸ The population numbers for the ethnicities of the Pattani, Gahri, and Tinani are taken from van Driem (2001: 935–938), who cites the 1981 Census of India. The population number for the Tibetan ethnicity is a personal guess based on a number provided by the *Ethnologue* (Lewis et al. 2014; cf. below). The population numbers for the Chanal and Lohar ethnicities are taken from the 2001 Census of India.

The Gahri or Bunanpa represent the second largest ethnolinguistic community of Lahaul. I restrict myself to a brief discussion of the ethnonyms “Gahri” and “Bunan” at this point, as the Bunan speaking community is introduced in more detail in § 1.2.3 below. The origin and etymology of the name “Gahri” are obscure. The term is used in the languages Manchad and Tinan as well as local Indo-Aryan idioms to refer to the members of the Bunan speaking community. The term is obviously related to the toponym “Gahr”, i.e. the designation of the Gahr Valley in the aforementioned languages. It also seems to occur in the toponym *garza*, the Tibetan name for Lahaul (WT *gar zha*). The designation “Bunanpa”, on the other hand, is derived from the exonym *punan*, which is the Tibetan name for the Gahr Valley. The original meaning of this toponym is unclear. Note that the Tibetan exonym *punan* exhibits a voiceless rather than a voiced initial in Tibetan. The established spelling with an initial was introduced by Jäschke (1865: 94), who first mentioned the language as “Boonan”. Jäschke’s spelling most probably arose from a mere misperception of the Tibetan name *punan*. This assumption is corroborated by the fact that Jäschke’s Bunan vocabulary contains numerous misspellings of voiceless plosives as voiced plosives and vice versa.⁹ The term “Bunan” was subsequently popularized by Francke, who adopted Jäschke’s spelling in his publications. Note that the members of the Bunan community refer to themselves as *eraṅmi* “our people”, to Lahaul and the Gahr Valley as *eraṅman* “(in) our place”, and to their language as *eraṅkat* “our language”. When talking to foreigners, they normally use the term Gahri to specify their ethnicity. Interestingly, most members of the Bunan speaking community are not familiar with the term “Bunan” or “Punan”. I have nonetheless chosen to adopt this designation in my thesis, as it is the more established term in the literature.

The northern and eastern valleys of Lahaul are inhabited by Tibetan speaking communities. According to my consultants, the Tibetan varieties spoken in these valleys represent one dialect that is very similar to the dialect of Spiti. It is not clear how many Tibetans there are in Lahaul. The *Ethnologue* (Lewis et al. 2014) gives a number the 2,500 speakers for Tod Tibetan alone based on an unknown source from 1998. In my estimation, there may be 1,500 – 2,000 additional speakers of Tibetan in the valleys of Ranglo and Patanam. This conjecture suggests that the Tibetan speaking population of Lahaul has approximately the same size as the Bunan speaking community. The Tibetan population of Lahaul adheres to Tibetan Buddhism.

⁹ Sharma (2007b: 270–272) interprets these mismatches as evidence for recent sound changes. However, there are no systematic sound correspondences between Jäschke’s spellings and the contemporary pronunciation of the respective lexemes. Some of Jäschke’s voiceless plosives correspond to voiced plosives in contemporary Bunan, while some voiced plosives correspond to voiceless plosives. This suggests that Jäschke had difficulties in distinguishing voiceless and voiced plosives and consequently gave some wrong spellings in his vocabulary.

The inhabitants of the Tinan Valley represent the smallest of the four major ethnolinguistic communities of Lahaul. The etymology of the name “Tinan” is unclear. The second syllable of the word might be related to the second syllable of the toponym “Bunan”. The designation “Tinan” is used in all languages of the area (i.e. Tibetan, Manchad, Bunan, Indo-Aryan idioms) to refer to the Tinan Valley as well as its inhabitants. The Tinan language is closely related to Manchad. The two languages are not mutually intelligible, but share a great amount of lexical and grammatical traits, which indicates that they form a subgroup within West Himalayish. As mentioned above, Manchad and Tinan are only distantly related to Bunan (cf. § 1.4.2 below). Tinan seems to possess a large stock of Tibetan loanwords, which implies that the speakers of the language have been in longstanding contact with Tibetan speaking communities, from which they also adopted Tibetan Buddhism.

The two remaining ethnolinguistic groups of Lahaul are the Indo-Aryan communities of the Lohar and the Chanal. The members of these communities are not settled in a contiguous geographical area, but live in small groups that are scattered among the four dominant ethnolinguistic groups discussed so far. The Lohar can be found throughout Lahaul. In historical times, they worked as blacksmiths and musicians at festivals and funerals. The Chanal, on the other hand, are only found in the Pattan Valley, where they traditionally worked as laborers, carpenters, and musicians. Both the Lohar and Chanal are considered to be socially inferior by the major ethnolinguistic communities of Lahaul, who do not intermarry with them. Note that Lohar and Chanal are not only settled in Lahaul, but can be found throughout Himachal Pradesh (Singh 1993: 356–358, 802–805).

As mentioned in the previous section, all indigenous communities of Lahaul are acknowledged to be Scheduled Tribes or Scheduled Castes. The different communities that adhere to Tibetan Buddhism form a Scheduled Tribe with the name “Bodh” (from Tibetan *bod* “Tibet”). This group comprises the Tibetan, Bunan, and Tinan speaking communities as well as the Manchad speaking population of the Upper Pattan Valley. The population of the Lower Pattan Valley, which adheres to Hinduism, is classified as a Scheduled Tribe called “Swangla”. This designation reflects the toponym *swaŋla*, which is the name of Lahaul in Manchad. The two tribes are sometimes subsumed under the superordinate term “Lahaula” (Singh 1994: 680). Unlike the Tibeto-Burman communities, the Indo-Aryan communities of the Lohar and Chanal are not classified as Scheduled Tribes but as the Scheduled Castes “Lohar” and “Chanal”.

At this point, it also seems indispensable to discuss the toponym “Lahaul” itself. The toponym “Lahaul” (from which the ethnonym “Lahauli” is derived) is clearly not an endonym. The indigenous ethnolinguistic minorities of Lahaul do not use the term, but refer to their homeland as *swaŋla* (Manchad), *garza* (Tibetan and Tinan), or *eraŋmaŋ* (Bunan). Many

scholars have interpreted the term as a Tibetan exonym. The most common Tibetan etymologies found in the literature are WT *lho yul* “southern realm” (Cunningham 1854: 24; Diack [1897] 1994, 3: 9; Hutchinson & Vogel 1933: 476; van Driem 2001: 935) or WT *lha'i yul* “country of gods” (Hutchinson & Vogel 1933: 476; Charak 1979: 269). However, it is doubtful whether the term “Lahaul” originated in Tibetan. Francke (1926: 195) mentioned that the Tibetan name of Lahaul is *gar zha*, whereas “the name Lahul is entirely unknown among the Tibetans”. Moreover, the name is already mentioned by the Chinese pilgrim Xuanzang (603–664) as *Luòhùluó* 洛護羅 (Beal 1884: 177–178). As Uray (1990: 218) points out, it is highly unlikely that Tibetan was already spoken in the western Himalayas in those days. This suggests that the name “Lahaul” is not of Tibetan origin. It seems much more plausible that the term originated in the Kullu Valley, where in the time of Xuanzang it apparently was already used to refer to the area north of the Rohtang La. However, given the fact that our knowledge of the early history of Kullu is scarce, it is not possible to say anything more about the origin of the toponym, let alone its original meaning.

1.2.2.4 Some further historical speculations

Considering the ethnolinguistic diversity of Lahaul, the question arises as to how such a culturally and linguistically heterogeneous society could have developed in such a remote and inaccessible area. On further reflection, it becomes obvious that the geographical remoteness of Lahaul must be the main conditioning factor that brought about the present-day situation. It is highly improbable that the communities of the Manchadpa, Bunanpa and Tinanpa (and other West Himalayish communities in general) were always confined to the narrow and remote mountain valleys where they can be found today. It seems much more likely that the small West Himalayish communities of today represent the remnants of a West Himalayish dialect continuum that once extended over the area of the modern Indian states of Himachal Pradesh and Uttarakhand as well as western Tibet. In the course of the centuries, the majority of these West Himalayish communities assimilated to the culture and language of Indo-Aryan and Tibetan communities, which advanced into the North Indian Himalayas from the plains in the south and the Tibetan plateau in the west, respectively. West Himalayish communities only persisted in some inaccessible mountainous areas of the Himalayan range, i.e. Lahaul, Kinnaur, and the north of Uttarakhand.

In the case of Lahaul, there are unfortunately almost no sources for the ethnolinguistic history of the region. The only available documents are materials collected by the Moravian missionary Francke ([1907a] 1998: 134–141, [1907b] 2008: 155–179, 1926: 195–220) in the early 20th century. These collections contain two short stories that describe the arrival of Indo-Aryan communities in Lahaul (Francke [1907b] 2008: 157–158, 168–169). Since these events were still present in the collective memory one hundred years ago, we may suppose

that the Indo-Aryan communities may have migrated to the area relatively late as compared to the Tibeto-Burman communities of Lahaul. Given the fact that the Lohar and the Chanal are not settled in a contiguous area, this assumption seems plausible. However, Francke's materials do not allow us to draw further inferences about the historical processes that gave rise to the multiethnic society of Lahaul. Since the sources do not contain any evidence for major migration movements in the recent past, we have to assume that the ethnolinguistic situation of Lahaul has persisted for a comparatively long time, possibly for many centuries.

Linguistic evidence may be able to throw some light on the ethnolinguistic history of Lahaul, especially the history of the Bunan speaking community. As I argue in § 1.4.2, there is robust evidence that West Himalayish consists of two major subgroups: a western branch and an eastern branch. Interestingly, the languages of Lahaul do not belong to the same subgroup. Manchad and Tinan pertain to the western branch, which additionally comprises the language Kanashi¹⁰ spoken in the Kullu Valley and most West Himalayish idioms of Kinnaur. Bunan, on the other hand, belongs to the eastern branch together with the language Sunnami spoken in Upper Kinnaur and the West Himalayish languages of Uttarakhand. The language of the ancient kingdom of Zhangzhung most probably belongs to eastern West Himalayish as well. The fact that the closest linguistic relatives of Bunan are found in Upper Kinnaur and Northern Uttarakhand implies that the linguistic ancestors of the present-day Bunan speaking community came from the East, i.e. Spiti Valley¹¹ and western Tibet. The Manchad and Tinan speaking communities, on the other hand, probably came to Lahaul from the Himalayan foothills in the South, i.e. the present-day districts of Mandi, Chamba, Kangra, and Kullu, where the closely related language Kanashi is spoken to the present day (cf. above). It is not possible to say which of the West Himalayish communities settled in Lahaul first, but we may assume that Tibetan speaking communities migrated to Lahaul comparatively late. Klimburg-Salter (1997: 32) assumes that the Tibetanization of the North Indian Himalaya only began in the 10th century with the conquest of the area by descendants of the Central Tibetan Yarlung dynasty (cf. Petech 1997: 231–232).

¹⁰ Kanashi is spoken in the village of Malana, which is located in an inaccessible tributary valley east of Kullu (cf. van Driem 2001: 938). The geographical location of the language is remarkable, as it represents an isolated Tibeto-Burman idiom in an otherwise Indo-Aryan speaking environment. The inhabitants of Malana appear to have resisted linguistic assimilation because they follow a rigorous code of conduct that strongly restricts social interaction with members of other ethno-linguistic communities.

¹¹ Early inscriptions from Tabo Monastery in Spiti (10th century CE) contain several non-Tibetan clan names and personal names, which indicates that the local population did not speak Tibetan in those days (Klimburg-Salter 1997: 32–43; Luczanits 1999: 96). Today, the closely related eastern West Himalayish languages Bunan and Sunnami are spoken on the western and southern border of Spiti, respectively. Based on their geographical distribution, one may speculate whether the inhabitants of Spiti once spoke a language that represented the linguistic ancestors of the two languages.

In addition, it is worth including geography into our considerations, in particular the geographical location of the Gahr Valley. The Gahr Valley, which lies in the center of Lahaul, does not have any direct geographical connection to Kullu, Spiti or Ladakh (cf. § 1.2.1). The valley can only be accessed from the Pattan Valley and the Tinan Valley in the west, or the Tod Valley in the east. All of these neighboring areas are home to other Tibeto-Burman communities that must have been settling in these regions for a considerable amount of time. It is difficult to imagine that the linguistic ancestors of today's Bunan speakers migrated to their present area of settlement in the recent past by moving through territories that were already inhabited by other ethnolinguistic communities. It is much more plausible that the Bunan speakers were gradually confined to their present-day homeland by a socio-economically dominant group, most probably Tibetan speaking tribes. In this context, we have to consider the following note of Jäschke (1865: 94) on Bunan:

“An instance of peculiar interest in this respect is found in the Boo-nan language, spoken in a small district of Lahaul, and in part of Kunawur, where it is called Tibar-skad, Tibar-language. [...] The fact of this language existing in two different provinces, like two islands separated from each other by the pure Tibetan population of Spiti and the pure Hindu nationality of Kooloo, renders the theory of a wider diffusion, of the Tibarskad language in former times probable, and agrees with the assertion of the Lahoul people, that even within the remembrance of the present generation, its district was greater than it is now, and has been more and more encroached upon by the Tibetan.”

Jäschke's statement suggests that Bunan was still spoken in a wider area a few centuries ago. However, there is reason to question the reliability of his statement. Francke, who conducted extensive research on the history of the North Indian Himalayas only forty years after Jäschke, does not adduce a single piece of evidence that would support Jäschke's claim that the Bunan speaking community had only been recently confined to the Gahr Valley. I myself have neither been able to find any evidence in favor of Jäschke's hypothesis while conducting fieldwork on Bunan. The present-day Bunan speakers cannot remember that their language was ever spoken outside of the Gahr Valley. I thus strongly suspect that Jäschke overinterpreted the linguistic evidence, the more so as his claim that Bunan and Theborskad, i.e. Sunnami, represent a single language is an obvious exaggeration (cf. footnote 15). Nonetheless, we have reason to believe that Jäschke's historical scenario is essentially correct and that Bunan and Sunnami belonged to a contiguous West Himalayish dialect continuum that was gradually superseded by Tibetan varieties in the course of the past millennium.

1.2.3 The Bunan speaking community

1.2.3.1 The speakers

The traditional homeland of the Bunan speaking community lies in the Gahr valley, where the Bunan speakers are settled in thirty villages and hamlets that are scattered on both sides of the Bhaga River. The settlements on the Northern bank of the Bhaga River from west to east are: *bilin*, *dan̄gun*, *raṅkelan̄*, *jokelan̄*, *tiṅtse*, *kuskjar*, *gun̄ran̄*, *sakilin̄*, *grimas*, *jurnat*, *gun̄lin̄*, *kaṭsaraṅ*, *makon*, *kjor*, *bar*, and *(s)tiṅrik*. The settlements on the Southern bank of the Bhaga River from west to east are: *gwadzan̄*, *tsikaraṅ*, *kardaṅ*, *barbok*, *pasparak*, *namtsi*, *lap̄tsaṅ* ~ *lap̄jaṅ*, *tə̄helin̄*, *pjaso*, *maṅmur*, *pjukar*, and *tə̄ardzi*. The two villages *raṅkelan̄* and *jokelan̄* are usually collectively referred to as *kelan̄*, as the two settlements have merged together in the course of the 20th century. *Kelan̄*, whose name is officially spelt as *Keylong*, is the headquarters of the district Lahaul and Spiti and thus not only serves as an economic and political center for the Gahr Valley but for all of Lahaul. However, until the 19th century, the village *kardaṅ* on the other side of the Bhaga River was the most important village in Lahaul (cf. Harcourt 1871: 154). This is also the reason why the Moravians opened their first missionary station in *kardaṅ* 1854 before moving to *raṅkelan̄* two years later (Dorje & Tobdan 2008: 18).

The Census of India counted 3,581 speakers of Bunan in 1981 (van Driem 2001: 938). The *Ethnologue* (Lewis et al. 2014) gives a number of 4,000 speakers based on an unknown source from 1997. Unfortunately, I have not been able to verify this information, but the number provided above coincides with estimates of my consultants. We may thus assume that Bunan is currently spoken by 3,500 to 4,000 people. I have not been able to obtain more precise numbers for two reasons. First, the recent editions of the Census of India have only classified the inhabitants of Lahaul according to caste or tribe membership but not according to their native languages. The Bunan speaking community is thus subsumed under the Scheduled Tribe “Bhot”, which comprises all Buddhist communities of Lahaul & Spiti. Second, many Bunan speakers do not live in Lahaul, but have settled down in the Kullu Valley. The size of this emigrant community is even more difficult to assess than the total number of speakers. In my estimation, there must be several hundred Bunan speakers who currently live outside of Lahaul.

As mentioned before, the Bunan speaking community adheres to Tibetan Buddhism. Within Tibetan Buddhism, they follow the Drukpa Lineage (WT ‘*brug pa bka’ brygud*), whose headquarters lie in Ladakh and Bhutan. The most important monastery of the Gahr Valley is *kardaṅ gompa*, which is located on a mountain slope above the village of *kardaṅ* and is home to largest monastic community in the area, which in 2011 consisted of seven monks and five nuns. The second notable monastery is *saṣur gompa* above Keylong. This monas-

tery is older than *kardanj gompā*, but is nowadays only stewarded by a small number of monks from *kardanj gompā*. Its historical significance is, however, still reflected by the fact that it hosts the *ts^heeu* festival in summer. In addition to *kardanj gompā* and *sa^hur gompā*, there are eight minor monasteries scattered throughout the Gahr valley.

Although the Bunan people are Buddhists, they are well acquainted with Hinduism, to which the Manchad speaking population of the western Pattan Valley adheres. The two religions appear to have peacefully coexisted in Lahaul for possibly more than a millennium. This is reflected by the fact that there are several pilgrimage sites in Lahaul that are visited by Buddhists and Hindus alike. The most renowned example is the sanctuary of Triloknath in the Pattan Valley, which is maintained by both Buddhist monks and Brahmins who take care of the religious needs of the pilgrims. Inter-marriage between the two religious communities is socially accepted and occurs frequently. Remarkably, persons who marry into the other religious community are not expected to convert to the religion of their marriage partner.

The Bunan speaking community is organized by patrilineal descent. Married sons stay at their parents' house together with their wives and children, whereas daughters become a part of their husband's family on the day of their marriage. As a consequence, possessions can only be inherited along the male line of a family. If a parental couple only has female offspring, one daughter will remain at her parents' home with her husband, who will become the heir of the family's possessions. Until the recent past, the inhabitants of Lahaul practiced fraternal polyandry, i.e. marriage between one daughter of one family and all brothers of another family. Although this custom has been abandoned in the course of the 20th century, it has left its marks on the vocabulary of Bunan. The language does not make a lexical distinction between "fathers" and "paternal uncles". Rather, the respective kinship terms are all derived from the root *awa* "father" and describe the relative age of a brother in comparison to his brothers, as illustrated in the table below.

Table 2: Kinship terms for "father"

kinship term	relative age	literal meaning
<i>teawa</i>	eldest brother	"big father" <i>tedzi</i> "big" + <i>awa</i> "father"
<i>barawa</i>	second eldest brother	"intermediate father" <i>bar</i> "between" + <i>awa</i> "father"
<i>p^hetse awa</i> ~ <i>p^hetsawa</i>	second youngest brother	"young father" <i>p^hetsetsi</i> "young" + <i>awa</i> "father"

<i>awa kjuktsi ~ awatsi</i>	youngest brother	“small father” <i>awa</i> “father” + <i>kjuktsi</i> “small”
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As mentioned in the previous sections, the Bunanpas subsisted on agriculture and livestock breeding in historical times. Both economic domains still represent important means of livelihood for the contemporary Bunan speaking community. Originally, the most common field crops were barely and buckwheat, but nowadays the inhabitants of the Gahr Valley mainly grow potatoes and peas. Many Bunan families also own land in the Kullu Valley, where they mostly grow apples and rice. The most common livestock are goats and sheep. Most families also keep one or two cows as a source of milk but not as a source of meat, as the consumption of beef is not common among the inhabitants of Lahaul.

In the recent past, the Bunan people did not exclusively rely on their field crops and their cattle for subsistence, as they also participated in the trade across the western Himalayan range between Ladakh and Kullu. This trans-Himalayan trade route gradually lost its importance after the Sikh invasion in 1840 and the subsequent establishment of British rule, and ceased to exist with the construction of the Manali-Leh-Highway. However, many Bunan people adapted to these new economic circumstances and entered into the tourist business, which is an important source of income throughout Himachal Pradesh but especially in the Kullu Valley, as the area represents one of the most renowned tourist destinations of the Indian Himalayas. Many Bunan families own shops, restaurants, hotels, or trekking agencies in Lahaul and Kullu, which generates the greater part of their income in summertime. Winter tourism is in the early stages of development, but will without doubt become more important in the future, which will allow members of the Bunan community profitably to run their businesses throughout the year.

1.2.3.2 The sociolinguistic situation – past and present

The Bunan speaking community and the inhabitants of Lahaul in general have lived in a multilingual society for several centuries. The earliest accounts of multilingualism in Lahaul date from the second half of the 19th century. Jäschke (1865: 94) stated that “Tibetan is understood and spoken fluently enough in intercourse with genuine Tibetans by the adult men, but more or less imperfectly by women and children [...]”. In an article published two years later, Jäschke (1867: 175) noted that many inhabitants of Lahaul, most of them male, were also fluent in Hindi. Similar observations were made by Harcourt (1871: 136) and Diack ([1897] 1994, 3: 23). Tibetan and Hindi have not represented the only contact languages for the Bunan speaking community for the past centuries, however. Its members have also been in close contact with the neighboring West Himalayish communities and their languages, i.e.

Manchad and Tinan. Especially Manchad, which served as a regional *lingua franca* throughout Lahaul, has been an important contact language for the inhabitants of the Gahr Valley.

Multilingualism at a regional level must have existed in Lahaul for as long as the local population has been ethnically heterogeneous. As argued in § 1.2.2.3 the ethnolinguistic diversity of Lahaul cannot be a recent phenomenon and has most likely persisted for several centuries. Multilingualism at a supraregional level must have been common for a long time as well, probably for as long as people have been travelling on the trade route between Kullu and Ladakh. As argued in § 1.2.2.2, there is evidence that this trade route is of considerable antiquity and may already have existed in the 7th century AD. We cannot know, of course, whether the present inhabitants of Lahaul were already settled in the area at that time, but the fact that it was possible to travel from the Upper Beas Valley to the Upper Indus Valley in those days entails that the people who did so were able to communicate in different local languages.

The sociolinguistic situation in Lahaul has changed radically since the mid-20th century. The creation of new national boundaries between India, Pakistan, and China and the ensuing border conflicts between these nations broke up the close economic and cultural ties between the North Indian Himalayas and western Tibet, which had been existing for centuries. These developments permanently altered the economic structure of the regions that became part of the Republic of India. The trans-Himalayan trade between the Upper Indus Valley and the Upper Beas Valley gradually became less important. As a consequence, the Tibetan varieties of Ladakh, Spiti, and western Tibet, which had been important contact languages for the Bunan speaking community for centuries, subsequently lost their status as supraregional *lingue franche*. They were gradually replaced in this function by the emerging national language Hindi. Since Hindi was taught in elementary school throughout Himachal Pradesh, it became the standard language for supraregional communication within less than a generation, which accelerated the decline of Tibetan as a *lingua franca* in Lahaul and neighboring areas. As time went by, Hindi also began to replace Manchad as the traditional regional language of communication in Lahaul.

The fundamental changes of the socio-linguistic environment are reflected by the fact that Bunan speakers that belong to different speaker generations tend to be competent in different languages. Nowadays, virtually all members of the Bunan speaking community are fluent in Hindi. Speakers who were born before 1960 usually also have good competence in both Tibetan and Manchad. Speakers who were born in the 1960s or later, on the other hand, tend to have much less proficiency in these two traditional contact languages as compared to the oldest generation of speakers. Many members of the younger speaker generations do not even have passive knowledge of Tibetan and Manchad. In reverse, many young

speakers have a good command of English, whereas only few old speakers are fluent in this language. However, the competence of English does not only correlate with a person's age, but also depends on the social factors of sex and education. Usually, only male persons with a higher education have solid communication skills in English. Many other members of the Bunan speaking community can understand the language, but are not able to speak the language fluently.

Since the opening of the road over the Rohtang La in 1965, an increasing number of Bunan families have permanently migrated to Kullu Valley. Their descendants often speak Hindi as a primary language and only have an imperfect command of the language of their parents. Fortunately, such cases are rather exceptional. Bunan as a spoken language is thus not immediately threatened at present. The Bunan speaking community in Lahaul is still cohesive and most parents still raise their children in the Gahr Valley, where they grow up speaking Bunan. Still, the rapid social and economic changes that are currently taking place in India are a challenge for both the traditional culture and the language of the Bunan speaking community (and for the cultural and linguistic diversity of South Asia in general). In the future, the steady emigration of Bunan speakers to other areas inside and outside of Himachal Pradesh combined with the increasing immigration of outsiders may well lead to the destabilization and disintegration of the Bunan speaking community in the foreseeable future. Great efforts will have to be made in order to preserve the cultural and linguistic diversity of Lahaul for future generations. However the indigenous inhabitants of Lahaul are increasingly becoming aware of the uniqueness of their cultural heritage. Manifestations of this growing awareness are publications such as the book *Moravian missionaries in western Trans-Himalaya* (Dorje & Tobdan 2008), which was authored by indigenous scholars. An ever-growing number of Lahauli music videos on YouTube likewise illustrate this development. I am thus confident that Bunan and the other indigenous languages of Lahaul at least stand a good chance of surviving as spoken languages in the near future. The transformation of modern India may indeed be a challenge for the countless linguistic minorities of India. However, at least in the case of Lahaul, the process is also bringing along increased social awareness of the value of cultural and linguistic diversity, which may prove to be a powerful resource for the indigenous ethnolinguistic societies of Lahaul.

1.3 Previous descriptions

The earliest descriptions of Bunan date back to the mid-19th century. We owe these accounts to the renowned tibetologist August Hermann Jäschke, who lived in Keylong from 1857 to 1868 as a member of the local Moravian missionary station (Dorje & Tobdan 2008: 35). Although the main focus of Jäschke's research lay on the study of Tibetan, he also conducted fieldwork on Bunan. In his 1865 study of the diachronic phonology of Tibetan,

Jäschke included a Bunan glossary and some notes on Tibetan loanwords in Bunan. Two years later, a slightly different version of the same article was published in German (Jäschke 1867). Although Jäschke did not provide any information about the grammar of the language, his vocabulary lists represent a valuable source for the historical phonology of Bunan. In addition, his articles contain some interesting notes on the socio-linguistic situation of the Bunan speaking community.

Almost three decades after Jäschke's early work on Bunan, the British official Alexander Henderson Diack (1896) published a short vocabulary of Bunan in the appendix to his grammar of the Indo-Aryan dialect of Kullu. Around the same time, August Hermann Francke began to conduct research on the languages spoken in Ladakh and Lahaul. Like Jäschke, Francke was a member of the Moravian Church. Between 1896 and 1916, he spent fifteen years as a missionary in the North Indian Himalayas (Walravens & Taube 1992: 17). Francke published a considerable number of articles and books on the history, culture, and languages of Lahaul and Ladakh. Many of these publications contain Bunan materials, for example traditional songs and stories (Francke 1899: 105–107, [1907b] 2008: 5–11, 1926: 219–224) as well as short grammatical descriptions of the language (Francke [1907a] 1998: 134–141, Francke 1909: 65–77). In addition, Francke prepared the Bunan data that were compiled for the *Linguistic Survey of India* by Konow and published by Grierson (1909: 469–478, 532–565).

Konow acknowledges that the Bunan material in the *Linguistic Survey of India* had originally been compiled by August Wilhelm Heyde, a member of the Moravian mission in Keylong who spent almost four decades in Lahaul (cf. Dorje & Tobdan 2008: 35). He also mentioned that Francke had translated the Gospel of Mark into Bunan. However, this translation was never published. Konow's comments suggest that the members of the missionary station at Keylong did not publish all their Bunan data. It is likely that these unpublished materials can be found at the Moravian Archive at Herrnhut, Germany.

Francke's materials represent an invaluable source for the history of Bunan as well as the Bunan speaking community. To be sure, his grammatical descriptions merely consist of nominal and verbal paradigms that do not tell us much about the function of the respective forms. However, in combination with his collections of texts, these data still give us a good idea of what the grammatical structure of Bunan looked like one hundred years ago. Thus, Francke's materials allow us to make interesting inferences about the grammatical changes that the language has undergone since those days.

For much of the 20th century, the material that had been compiled by the members of the Moravian mission in Lahaul remained the only Bunan data available. In the late 1980s,

more than sixty years after Francke's last publication, the Indian linguist Devi Datta Sharma published several studies of tribal languages of the North Indian Himalayas. Amongst these, there are a grammatical sketch of Bunan (Sharma 1989b: 189–260) as well as a comparative grammar of North Indian Tibeto-Burman languages (Sharma 1994), which contains some Bunan material as well. Although Devi Datta Sharma's sketch grammar is more comprehensive than earlier descriptions, his study is problematic in several ways. Sharma describes most parts of the grammar in a shallow and oversimplifying manner and omits several crucial grammatical features such as epistemic marking. In addition, his transcription of the data is highly unsystematic, making it virtually impossible to distinguish between phonetic and phonological features. The usefulness of Sharma's material is thus limited (cf. Saxena 1992: 8–9).

Since Devi Datta Sharma's (1989b) grammatical sketch of Bunan, there has not been another attempt to provide a comprehensive descriptive account of the language. Since the early 1990s, Anju Saxena (1992: 91–102, 1997), Suhnu Ram Sharma (1996, 2007b), and Yoshiharu Takahashi (2009) have published a number of comparative studies on West Himalayish languages, all of which contain some Bunan data. However, only Suhnu Ram Sharma's studies contain data that are based on personal fieldwork, while Saxena and Takahashi draw on other published sources. Finally, Yoshio Nishi & Yasuhiko Nagano provide a 17-page comparative word list of West Himalayish languages in the appendix to Nishi (2001). This word list also contains some Bunan data. The authors do not indicate whether this lexical material was adopted from another source or whether it was collected in the field.

1.4 Genetic affiliation¹²

Bunan is commonly assigned to the subgroup of West Himalayish languages, which form a separate branch within the Tibeto-Burman language family. West Himalayish comprises sixteen languages, fourteen of which are spoken in the North Indian states of Himachal Pradesh and Uttarakhand to the present day. The following table shows the geographical distribution of West Himalayish languages based on information drawn from van Driem (2001: 934–957).

¹² I would like to express my sincere thanks to Christian Huber (University of Vienna), who gave me valuable feedback on an earlier draft of this section and was willing to share his data on Shumcho, Sunnami, and Jangrami with me. On his behalf, I would like emphasize that the Shumcho and Sunnami data that will be discussed in the following are only preliminary and may need to be revised in the future.

Table 3: The West Himalayish languages and their geographical distribution

State	District	Languages
Himachal Pradesh	Lahaul & Spiti	Bunan, Manchad, Tinan
	Kullu	Kanashi
	Kinnaur	Lower Kinnauri, Standard Kinnauri, Chitkhuli, Jangrami, Shumcho, Sunnami
Uttarakhand	Camoli	Rongpo
	Pithauragarh	(†)Rangkas ¹³ , Darma, Byangsi, Chaudangsi
-	-	†Zhangzhung

Note that van Driem (2001: 939) does not list Jangrami, Shumcho, and Sunnami as separate languages. Based on Bailey (1910: 559), he subsumes the West Himalayish idioms of Upper Kinnaur under the label “Thëbörskad”. However, Christian Huber (personal communication), who has been conducting fieldwork in Upper Kinnaur since 2002, has confirmed their status as distinct languages as well as their genetic affiliation with the West Himalayish subgroup.

The origin and meaning of the name “Thëbörskad” (and several variant forms thereof) are unclear. The term was first used by Gerard (1841: 88, 1842: 551) to refer to the language spoken in the village of Sunnam, i.e. Sunnami. Joseph Cunningham (1844: 223–225) applied the designation to the language spoken in Sunnam (pp. 223–224) and idioms of neighboring villages (p. 225). Jäschke (1865: 94) noted that the language was spoken in “part of Kunawur [= Kinnaur]” without giving a more precise location. However, the fact that Jäschke postulated a close genetic affiliation with Bunan (cf. below) implies that he used the term to refer to Sunnami. Alexander Cunningham (1854: 391) and Bailey (1909: 661–662) used the designation to refer to all West Himalayish languages of Upper Kinnaur. This suggests that the term originally referred to Sunnami, but was subsequently used as a cover term for all West Himalayish languages of Upper Kinnaur by Western scholars. According to Christian Huber (per-

¹³ Rangkas was still spoken by about 600 speakers in the beginning of the 20th century (Grierson 1909: 479–486) but according to Sharma (1994: 5) and van Driem (2001: 934) it is now extinct. However, Willis (2007a: 23) adduces evidence that the language may still be spoken to the present day. Her claim can, however, only be verified by future research in the Milam valley, where the traditional homeland of the Rangkas community lies.

sonal communication), the indigenous communities of Kinnaur are no longer familiar with the term “Thëbörskad”.

Further languages have occasionally been assigned to the West Himalayish subgroup. Konow grouped the language Janggali (Raji-Raute) spoken in eastern Uttarakhand / western Nepal together with West Himalayish in the *Linguistic Survey of India* (Grierson 1909: 530), while Shafer (1967: 3) also included Thami (Thangmi) and Brahmū (Bramā) spoken in central and eastern Nepal, respectively. However, most scholars no longer consider these languages to be part of West Himalayish (cf. van Driem 2001: 934).

1.4.1 Previous classifications¹⁴

Heinrich August Jäschke was the first scholar who conducted research on Bunan. In his 1865 article, he noted that the language – despite the great number of Tibetan loanwords – was not part of the Tibetan dialect continuum and instead suggested that it was closely related to the language “Theborskad” (i.e. Sunnami) spoken in Kinnaur.¹⁵ Some forty years later, August Hermann Francke ([1907a] 1998: 134–136) pointed out that Bunan not only was related to tribal languages spoken in Kinnaur, but also to the neighboring languages Manchad and Tinan. He further claimed that those languages exhibited traces of an ancient Munda substratum, a theory that was propagated by several scholars in those days (Bailey 1909: 662; Grierson 1909: 427). However, as Genetti (2007: 7) points out, the alleged shared properties of Tibeto-Burman and Munda are only typological features that cannot be considered as evidence for genetic relatedness.

¹⁴ All languages names have been adopted from the respective sources without standardizing them. In a number of sources, some languages are listed several times under different names. In that case, the divergent designations are linked with equal signs (=). If a language is referred to with a name that is not commonly used in the literature, a more common name is added in square brackets.

¹⁵ Jäschke (1865: 94) stated that Bunan and Sunnami were so closely related that they could be regarded as dialects of the same language. However, he did not present any empirical evidence for his hypothesis. Nonetheless, his idea has been taken up by several researchers who worked on the classification of Tibeto-Burman (see below). Jäschke’s claim that Bunan and Sunnami are merely dialects of one language is without doubt too extreme. However, there is substantial evidence that the two languages are indeed closely related (cf. § 1.4.2), and Jäschke must have become aware of that fact by the time he published his first article on Bunan in 1865. In 1862, the Moravian Church, had opened up a missionary station in the village of Poo in Upper Kinnaur (Seeliger 2005: 16), where Sunnami and other West Himalayish languages are spoken. It is beyond doubt that the Moravian missionaries conducted small-scale fieldwork on the local languages in that area and compared their findings with the data they had collected in Lahaul. Thus, Jäschke must have had access to some Sunnami data. If these materials consisted of written records, they can probably still be found in the central archive of the Moravian Church in Herrnhut, Germany.

Sten Konow was the first to treat Bunan in a broader genetic context in the *Linguistic Survey of India* (Grierson 1909: 427–586). He assigned the language to the “western subgroup” of “Complex Pronominalizing Languages”, into which he also incorporated Manchad, Tinan, Kanashi, Kinnauri, Rangkas, Darma, Chaudangsi, Byangsi, and Janggali.

Figure 5: Classification of Bunan according to Konow (Grierson 1909)

Tibeto-Burman

1. Tibetan
2. **Himalayan languages**
 - 2.1 Non-Pronominalized Languages
 - 2.2 **Complex Pronominalized Languages**
 - 2.2.1 **Western subgroup**

Kanāw^arī, Kanāshī, Manchātī = Chamba Lāhuī, Tinan, **Bunān**, Rangkas, Dārmīyā, Chaudāngsī, Byāngsī, Janggalī
 - 2.2.2. Eastern subgroup
3. North Assam group
4. Burma group
5. Kachin group
6. Kuki-Chin group
7. Naga group
8. Bara or Bodo group

Shafer (1967: 3) mainly adopted Konow's western subgroup, but changed its name to West Himalayish and assigned it to the Bodic Division together with Bodish (= Tibetan), West Central Himalayish, and East Himalayish (= Kiranti). He also revised the internal structure of West Himalayish by adding the two languages Thami (Thangmi) and Bhramu (Bramā) and by subdividing the subgroup into five branches. Bunan was classified under the label "North-Northwestern" together with Theborskad (i.e. Sunnami), most probably because Jäschke (1865: 94) had postulated a close genetic relationship between the two languages.

Figure 6: Classification of Bunan according to Shafer (1967)

Sino-Tibetan

1. Sinitic Division

2. Daic Division

3. **Bodic Divison**

3.1 Bodish Section

3.2 **West Himalayish Section**

3.2.1. *North-Northwestern*

Bunan, Thebor (Sumtsú, Žangram, Sungnam, Kanam, Lippa)

3.2.2. *North-Northwestern*

Kanauri (Upper, Lower, Tśitkhuli, Tukpa, Kanaśi)

Mantśati (Standard, Tśamba Lahuli, Rangloi)

3.2.3. *Almora*

Rangkas, Darmiya, Tśaudangsi, Byangsi

3.2.4. *Džangali*

Džangali

3.2.5. *Eastern*

Thami, Bhramu

3.3. West Central Himalayish Section

3.4. East Himalayish Section

4. Burmic Division

5. Baric Division

Benedict (1972: 7) referred to West Himalayish as “Himalayish” and subsumed it together with Bodish (= Tibetan) under a Tibeto-Kanauri branch. His internal classification of West Himalayish was simpler than the model proposed by Shafer (1967). First, Benedict excluded the three languages Janggali, Thangmi, and Brahmu. Second, he only postulated two subtypes within the subgroup: a “Kanauri subtype” (which Bunan was assigned to) and an “Almora subtype”.

Figure 7: Classification of Bunan according to Benedict (1972)

Tibeto-Burman

1. Tibeto-Kanauri

1.1. Bodish

1.2. Himalayish

1.2.1. *Kanauri subtype*

Kanauri, Chithkuli, Thebor, Kanashi, Rangloi = Tinan,
Bunan, Manchatī = Chamba Lahuli, †Zhangzhung

1.2.2. *Almora subtype*

Rangkas, Darmyia, Chaudangsi, Byangsi

2. Bahing-Vayu

3. Abor-Miri-Dafla

4. Burmese-Lolo

5. Kachin

6. Kuki-Naga

7. Bodo-Garo

Bradley's (1997: 7) classification is largely identical with the model proposed by Shafer. He placed the West Himalayish languages in the western branch of Tibeto-Burman together with Bodish (= Tibetan), Tshangla, and Himalayan (= Kiranti and other languages of Nepal) and subdivided them into five subgroups. However, unlike Shafer (1967), Bradley did not postulate a close genetic affiliation between Bunan and Theborskad, but instead grouped Bunan together with Manchad and Tinan.

Figure 8: Classification of Bunan according to Bradley (1997)

Tibeto-Burman

1. North-Eastern India / Sal

2. **Western Tibeto-Burman / Bodic**

2.1. **Bodish**

2.1.1. Central Bodish (Tibetan)

2.1.2. West Bodish

2.1.3. East Bodish

2.1.4. **West Himalayan**

2.1.4.1. *North-Northwestern (Lahul)*

Pattani = Manchati, Tinan = Gondhla = Ranglo,

Bunan = Gahar

2.1.4.2. *Northwestern (Kinnaur)*

Lower Kinnauri, Upper Kinnauri, Chitkhuli, Thebar

2.1.4.3. *Kanashi / Malana*

Kanashi

2.1.4.4. *Almora*

Rangkas / Rangpa, Rangkhas, Darmiya, Chaudangsi /

Byangsi

2.1.3.5. *Eastern (Nepal)*

Bhramu, Thami

2.2. Himalayan

3. South-Eastern

4. North-Eastern

The model used by Saxena (1992: 2) is based on a more comprehensive family tree of Tibeto-Burman developed by Nishi (1990). The classification scheme is similar to Benedict's (1972) approach. The West Himalayish languages are placed in a superordinate grouping together with Bodish (= Tibetan) and are internally divided into two branches with Bunan being grouped with Theborskad and the West Himalayish languages spoken in Uttarakhand.

Figure 9: Classification of Bunan according to Saxena (1992)

Tibeto-Burman

1. Bodic

1.2. Bodish

1.2.1 Tibeto-Kinnauri

1.2.1.1 Tibetan

1.2.1.2 West Himalayish

a) Kinauri-Patani, Tinan

b) Thebor-**Gahri**, Rangpa, Chaudangsi, Darmyia

Thurgood's (2003) family tree places the West Himalayish languages in the Rung branch of Tibeto-Burman, which comprises a number of diverse language groupings found in Nepal and China. According to him, the Rung languages share "a complex, innovated person marking system, [...], as well as a *-si reflexive / middle marking verb suffix" (Thurgood 2003: 14). With regard to internal classification, West Himalayish is divided into two subgroups: a Kinauri branch (including Bunan) and an Almora branch.

Figure 10: Classification of Bunan according to Thurgood (2003)

Tibeto-Burman

1. Lolo-Burmese
2. Bodic
3. Sal
4. Kuki-Chin-Naga

5. Rung

- 5.1. rGyalrong
- 5.2. Nungish
- 5.3. Kiranti

5.4. West Himalayish

5.4.1. *Kinauri*

Kanauri, Kanashi, Rangloi = Gondla = Tinan, **Bunan** = **Gahri**, Manchati = Chamba Lahuli = Pattani, Marchcha [= Rongpo], Jahri¹⁶

5.4.2. *Almora*

Rangkas, Darmiya, Chaudangsi, Byangsi

- 5.5. Kham-Magar-Chepeng
- 5.6. Qiangic

6. Karenic

¹⁶ I have not been able to determine what language / dialect the name "Jahri" refers to.

The models discussed above can be grouped into three types with regard to how they classify West Himalayish within the broader context of the Tibeto-Burman language family: First, there are classifications that assume a close genetic link between West Himalayish and Tibetan (Benedict 1972, Saxena 1992). Second, there are approaches that group West Himalayish together with Kiranti and other languages exhibiting verb agreement systems (Grierson 1909, Thurgood 2003). Third, there are models that classify West Himalayish in a more comprehensive grouping that includes Tibetan, Kiranti, and a number of further Tibeto-Burman languages spoken in Nepal (Shafer 1967, Bradley 1997). At present, it is not possible to decide which of these models truthfully reflects the mutual genetic affiliation of these major groupings. Only future research will enable us to clarify the genetic relationship between West Himalayish and its next relatives.

As for the internal classification of West Himalayish, the situation is equally unclear. Benedict (1972), Saxena (1992), and Thurgood (2003) subdivide West Himalayish into a western and an eastern branch. Their classification schemes agree on the fact that Manchad, Tinan, and most Kinnauri varieties are assigned to the western (Kinnauri) branch, whereas Rangkas, Darma, Chaudangsi, and Byangsi are subsumed under the eastern (Almora) branch. However, they are not in agreement about the position of Bunan, Theborskad, and Rongpo. Saxena (1992) classifies them as part of the eastern subgroup, while Benedict (1972) and Thurgood (2003) place them in the western branch. Shafer (1967) and Bradley (1997) put forward more complex classifications. Shafer divided West Himalayish into a North-Northwestern (Bunan, Theborskad), a Northwestern (Manchad, Tinan, Kinnauri varieties), and an Almora subgroup (Rangkas, Darma, Chaudangsi, Byangsi). Bradley, in turn, postulates four subgroups: North-Northwestern (Manchad, Tinan, Bunan), Northwestern (Kinnauri varieties), Kanashi (Kanashi), and Almora (Rongpo, Rangkas, Darma, Chaudangsi, Byangsi). Unfortunately, none of the aforementioned scholars explicitly stated the criteria by which she or he classifies West Himalayish, which makes it difficult to critically assess their models. In the following section, I shall thus discuss a number of lexical and grammatical traits that allow for a tentative classification of West Himalayish and might prove helpful for future research.

1.4.2 A tentative classification of West Himalayish

Most West Himalayish languages have not been adequately described to the present day. Comprehensive grammars have only been written for Rongpo (Zoller 1983) and Darma (Willis 2007a). For the remaining languages, only partial descriptions are available, most of which are dated and / or of doubtful reliability. Needless to say, these materials only allow for a small-scale comparative study. The results that will be presented in the following thus have

to be considered as tentative. The data used for the present study are based on the following authors¹⁷:

- Manchad: Francke (1909); Francke (1917); Grierson (1909); Sharma (1989b)
- Tinan: Francke (1909); Sharma (1989b); Grierson (1909)
- Kanashi: Harcourt (1871); Grierson (1909)
- Lower Kinnauri: Bailey (1920)
- Kinnauri: Bailey (1910)
- Shumcho: Huber (personal communication)
- Jangrami: Huber (personal communication)
- Sunnami: Gerard (1842); Huber (personal communication)
- Rongpo: Zoller (1983); Sharma (2001a)
- Darma: Willis (2007a); Krishan (2001a)
- Byangsi: Sharma (2001b)
- Chaudangsi: Krishan (2001b)

¹⁷ The lexical material for Manchad, Tinan, Kanashi, Shumcho, Rongpo, and Darma has been drawn from several sources. The following abbreviations will be used in the table to indicate the exact origin of the lexical data: A = Francke (1909), B = Francke (1917), C = Grierson (1909), D = Sharma (1989b), E = Harcourt (1871), F = Huber (personal communication), G = Gerard (1842), H = Zoller (1983), I = Sharma (2001a), J = Willis (2007a), K = Krishan (2001a). A bar symbol ‘—’ is used to indicate that a specific grammatical form does reportedly not exist in a language. The abbreviation “n/a” indicates that a particular word form is not available in the sources. Note that the data have been adapted from the respective sources without standardizing the orthography. The only exception is the data from Willis (2007a), which has been transliterated into IPA.

Table 4: Comparative word list of West Himalayish languages

		Bun	Man	Tin	Kan	L. Kin	St. Kin	Chit	Shum	Sun	Rong	Dar	Byang	Chaud
(1)	one	<i>tiki</i> “one”	<i>idi</i> “one” C	<i>ica</i> “one” D	<i>idh</i> “one” C	<i>īdd</i> “one”	<i>id</i> “one”	<i>idʰ</i> “one”	<i>it</i> “one”	<i>ti</i> “one” F	<i>tig</i> “one” H	<i>ṭaku</i> “one” J	<i>tigɛ</i> “one”	<i>tigə</i> “one”
(2)	two	<i>niskinj</i> “two”	<i>jut</i> “two” C	<i>nyizhi</i> “two” C	<i>nish</i> “two” C	<i>nish</i> “two”	<i>nish</i> “two”	<i>nish</i> “two”	<i>niɛ</i> “two”	<i>niɛi</i> “two” F	<i>nhi:s</i> “two” H	<i>nisu</i> “two” J	<i>naɬɛ</i> “two”	<i>nis</i> “two”
(3)	three	<i>sumi</i> “three”	<i>shumu</i> “three” C	<i>shrummu</i> “three” C	<i>shum</i> “three” C	<i>shūmm</i> “three”	<i>shum</i> “three”	<i>homō</i> “three”	<i>hum</i> “three”	<i>sum</i> “three” F	<i>sum</i> “three” H	<i>sum</i> “three” J	<i>sum</i> “three”	<i>sum</i> “three”
(4)	four	<i>pi:</i> “four”	<i>pi</i> “four” C	<i>pi</i> “four” D	<i>pu</i> “four” C	<i>pū</i> “four”	<i>pū</i> “four”	<i>pō</i> “four”	<i>pi:</i> “four”	<i>pi</i> “four” F	<i>pi</i> “four” H	<i>pi</i> “four” J	<i>pi</i> “four”	<i>pi</i> “four”
(5)	five	<i>ɲaj</i> “five”	<i>ngā</i> “five” C	<i>ngar</i> “five” C	<i>nga</i> “five” C	<i>ṅā</i> “five”	<i>ṅā</i> “five”	<i>ṅā</i> “five”	<i>ɲa:</i> “five”	<i>ɲai</i> “five” F	<i>ṅɛ</i> “five” H	<i>ɲaj</i> “five” J	<i>ɲai</i> “five”	<i>ɲəi</i> “five”
(6)	six	<i>truj</i> “six”	<i>tʰrui, trui</i> “six” C	<i>trui</i> “six” D	<i>ṭso, cho</i> “six” C	<i>ṭugg</i> “six”	<i>ṭug</i> “six”	<i>ṭūkʰ</i> “six”	<i>ṭu:</i> “six”	<i>tuki, ṭuki</i> “six” F	<i>chɛ</i> “six” H	<i>ṭuku</i> “six” J	<i>ṭugu</i> “six”	<i>Tuggo</i> “six”
(7)	seven	<i>nidzi</i> “seven”	<i>nyizhi</i> “seven” C	<i>ṅicce</i> “seven” D	<i>saot</i> “seven” C	<i>stissh</i> “seven”	<i>stish, tish</i> “seven”	<i>tissh</i> “seven”	<i>ɛiniɛ</i> “seven”	<i>naɛi, nəɛi</i> “seven” F	<i>sa:t</i> “seven” H	<i>nesu</i> “seven” J	<i>nɪɛ</i> “seven”	<i>hnis</i> “seven”

		Bun	Man	Tin	Kan	L. Kin	St. Kin	Chit	Shum	Sun	Rong	Dar	Byang	Chaud
(8)	eight	<i>gei</i> “eight”	<i>re</i> “eight” C	<i>gyeidi</i> “eight” D	<i>aṭh</i> “eight” C	<i>rāĩ</i> “eight”	<i>rai</i> “eight”	<i>rai</i> “eight”	<i>gjet</i> “eight”	<i>gjai</i> “eight” F	<i>a.ṭ, a.ṭh</i> “eight” H	<i>ɟɛdu</i> “eight” J	<i>ɟɛɛ</i> “eight”	<i>jyəd</i> “eight”
(9)	nine	<i>gu</i> “nine”	<i>kū</i> “nine” C	<i>ku</i> “nine” D	<i>nou</i> “nine” C	<i>zgüi</i> “nine”	<i>zgui, gui</i> “nine”	<i>zgǔĩ</i> “nine”	<i>gu:</i> “nine”	<i>gui</i> “nine” F	<i>nɔ</i> “nine” H	<i>gwi</i> “nine” J	<i>gui</i> “nine”	<i>gui</i> “nine”
(10)	ten	<i>təuj</i> “ten”	<i>sā</i> “ten” C	<i>sa</i> “ten” C	<i>sa</i> “ten” C	<i>das</i> “ten”	<i>sāĩ</i> “ten”	<i>sai</i> “ten”	<i>sai</i> “ten”	<i>tsui</i> “ten” F	<i>dəs</i> “ten” H	<i>ci</i> “ten” J	<i>ɕ</i> “ten”	<i>ci</i> “ten”
(11)	1SG	<i>gi</i> “1SG”	<i>gye</i> “1SG” A	<i>gye</i> “1SG” A	<i>gu</i> “1SG” C	<i>gǔ</i> “1SG”	<i>gö</i> “1SG”	<i>gā</i> “1SG”	<i>gĩ:</i> “1SG”	<i>gi</i> “1SG” F	<i>gye</i> “1SG” H	<i>ɟi</i> “1SG” J	<i>je</i> “1SG”	<i>ji / je</i> “1SG”
(12)	1SG.GEN	<i>gi:</i> “1SG. GEN”	<i>gyiu</i> “1SG. GEN” A	<i>gyeu</i> “1SG. GEN” A	<i>aka</i> “1SG. GEN” C	<i>añ</i> “1SG. GEN”	<i>añ(u)</i> “1SG. GEN”	<i>ǎge</i> “1SG. GEN”	<i>aŋ</i> “1SG. GEN”	<i>gie</i> “1SG. GEN” F	<i>gyit</i> “1SG. GEN” H	<i>ɟu</i> “1SG. GEN” J	<i>jigɛ</i> “1SG. GEN”	<i>jigə</i> “1SG. GEN”
(13)	2SG	<i>han</i> “2[SG]”	<i>ka</i> “2SG” A	<i>ka</i> “2SG” A	<i>ko</i> “2SG” C	<i>kaʼ</i> “2SG”	<i>ka</i> “2SG”	<i>kan</i> “2SG”	<i>ka:</i> “2SG”	<i>ŋan, ŋən</i> “2SG” F	<i>gən</i> “2SG” H	<i>gɛ</i> “2SG” J	<i>gan</i> “2SG”	<i>gɛ</i> “2SG”
(14)	3SG	<i>tal</i> “3[SG]”	<i>dĩ, du</i> “DEM” A	<i>dĩ, do</i> “DEM” A	<i>du, nu</i> “DEM” C	<i>zhu, nau, nǒ</i> “DEM”	<i>jũ, do, nũ</i> “DEM”	<i>yō</i> “DEM”	<i>dzi, do, no</i> “DEM”	<i>hai, haru</i> “DEM” F	<i>dhi, dhɛ</i> “DEM” H	<i>u</i> “3SG” J	<i>uo</i> “3SG”	<i>o</i> “3SG”

		Bun	Man	Tin	Kan	L. Kin	St. Kin	Chit	Shum	Sun	Rong	Dar	Byang	Chaud
(15)	1DU.INCL	–	<i>ngyenggu</i> “1DU. INCL” A	<i>(ny)ishag</i> “1DU. INCL” A	–	<i>kashū</i> “1DU. INCL”	<i>kashōñ</i> “1DU. INCL”	<i>nīñiñ</i> “1DU. INCL”	<i>unië</i> “1DU. INCL”	<i>oŋɕi</i> “1DU. INCL” F	–	–	–	–
(16)	1DU. EXCL	–	<i>ngyeku</i> “1DU. EXCL” A	<i>nyish</i> “1DU. EXCL” A	–	<i>niṣṭ</i> “1DU. EXCL”	<i>nishī</i> “1DU. EXCL”	<i>nishī</i> “1DU. EXCL”	<i>niŋnië</i> “1DU. EXCL”	<i>enɕi</i> “1DU. INCL” F	–	–	–	–
(17)	2DU	–	<i>kyeku</i> “2DU” A	<i>kyentsag</i> “2DU” A	–	<i>kisi</i> “2DU”	<i>kishī</i> “2DU”	n/a	<i>kanie</i> “2DU”	<i>ŋanɕi</i> “2DU” F	–	–	–	–
(18)	3DU	–	<i>doku</i> “DEM.DU” A	<i>doku</i> “DEM.DU” A	–	n/a	<i>dōsōñ, nūsōñ</i> “DEM.DU”	n/a	<i>džinië, nonië, donië</i> “DEM.DU”	–	–	–	–	–
(19)	1PL.INCL	<i>eraŋ</i> “1PL. INCL”	<i>ngyenare, ngyenang</i> “1PL. INCL” A	<i>ngenag, enag</i> “1PL. INCL” A	<i>ni</i> “1PL” C	<i>kishū</i> “1PL. INCL”	<i>kishōñā’</i> “1PL. INCL”	<i>gā (?)</i> “1PL. INCL”	<i>uppaŋ</i> “1PL. INCL”	<i>okpaŋ</i> “1PL. INCL” F	<i>in</i> “1PL” H	<i>niŋ</i> “1PL”	<i>in</i> “1PL”	<i>in jemma</i> “1PL”
(20)	1PL. EXCL	<i>hiŋ</i> “1PL. EXCL”	<i>ngyere</i> “1PL. EXCL” A	<i>ngyene</i> “1PL. EXCL” A		n/a	<i>niñā’</i> “1PL. EXCL”	<i>nī (?)</i> “1PL. EXCL”	<i>niŋpaŋ</i> “1PL. EXCL”	<i>enpaŋ</i> “1PL. EXCL” F				

		Bun	Man	Tin	Kan	L. Kin	St. Kin	Chit	Shum	Sun	Rong	Dar	Byang	Chaud
(21)	2PL	<i>han̄si</i> “2PL”	<i>kyere</i> “2PL” A	<i>kyene</i> “2PL” A	<i>ki</i> “2PL” C	<i>kī</i> “2PL”	<i>kināʼ</i> “2PL”	<i>kan</i> “2PL”	<i>kanpaŋ</i> “2PL”	<i>nanpaŋ</i> “2PL” F	<i>gẽ</i> “2PL” H	<i>gɛni</i> “2PL” J	<i>gani</i> “2PL”	<i>gəni jemma</i> “2PL”
(22)	3PL	<i>tal̄si</i> “3PL”	<i>dore</i> “DEM.PL” A	<i>dore</i> “DEM.PL” A	<i>duga</i> “DEM.PL” C	<i>nõgau, zhugau</i> “DEM.PL”	<i>jăgo, dogo, nũgo</i> “DEM.PL”	<i>yō</i> “DEM”	<i>dzipaŋ, nopaŋ, dopaŋ</i> “DEM.PL”	<i>haipaŋ, harupaŋ</i> “DEM.PL” F	<i>dhite, dhete</i> DEM.PL H	<i>wi</i> “3PL” J	<i>ufi</i> “3PL”	<i>uɛi jemma</i> “3PL”
(23)	to fear	<i>gyarmen</i> “to fear”	<i>bei, bebi</i> “to fear” B	<i>be-</i> “to fear” D	n/a	n/a	<i>byaŋmigʼ</i> “to fear”	n/a	<i>be:ma</i> “to fear”	<i>gearbuŋ</i> “to fear” G	<i>gyəpəŋ</i> “to fear” H	<i>jɛmu</i> “to be afraid” J	<i>dze:mo</i> “to fear”	<i>byomo</i> “to be afraid of”
(24)	to come	<i>ramen</i> “to come”	<i>api</i> “to come” B	<i>ampim</i> “to come” A	<i>zhar</i> “to come” C	<i>tũnmu</i> “to come”	<i>bönnigʼ, būnnigʼ</i> “to come”	<i>bʰan, būn</i> “to come”	<i>tuma</i> “to come”	<i>rawang</i> “to come” F	<i>rhapəŋ</i> “to come” H	<i>ramu</i> “to come” J	<i>ra:mo</i> “to come”	<i>ramo</i> “to come”
(25)	to cry	<i>tjomen</i> “to cry”	<i>krabtsi</i> “to cry” B	<i>krapi</i> “to cry” D	n/a	n/a	<i>krammigʼ</i> “to cry”	n/a	<i>krapma</i> “to cry”	<i>toebung</i> “to cry” G	<i>tyōpəŋ</i> “to cry” H	<i>temu</i> “to cry” J	<i>tyemo</i> “to cry”	<i>temo</i> “to cry”
(26)	to eat	<i>dzamen</i> “to eat”	<i>zai</i> “to eat” B	<i>zaim</i> “to eat” A	<i>zau</i> “to eat” C	<i>zāmū</i> “to eat”	<i>zāmigʼ</i> “to eat”	<i>zā</i> “to eat”	<i>dza:ma</i> “to eat”	<i>dzawaŋ</i> “to eat” F	<i>jəpəŋ</i> “to eat” H	<i>jamu</i> “to eat” J	<i>dza:mo</i> “to eat”	<i>jamo</i> “to eat”
(27)	to give	<i>dat̄sum</i> “to give”	<i>randri, rami</i> “to give” B	<i>rəŋtri</i> “to give” D	<i>raŋ, ke</i> “to give” C	<i>kēmū, rāŋmū</i> “to give”	<i>kēmigʼ, ranmigʼ</i> “to give”	<i>dā</i> “to give”	<i>kʰe:ma</i> “to give”	<i>dawaŋ, kʰewaŋ</i> “to give” F	<i>dha:pəŋ</i> “to give” H	<i>damu</i> “to give” J	<i>da:mo</i> “to give”	<i>damo</i> “to give”

		Bun	Man	Tin	Kan	L. Kin	St. Kin	Chit	Shum	Sun	Rong	Dar	Byang	Chaud
(28)	to go	<i>elmen</i> “to go”	<i>ibi</i> “to go” _B	<i>ibim</i> “to go” _A	<i>bungt</i> “to go” _C	<i>dēmū,</i> <i>baumū</i> “to go”	<i>bīmīgʻ</i> “to go”	<i>bī, pā, yūn</i> “to go”	<i>dzɛ:ma</i> “to go”	<i>dewanʃ</i> “to go” _F	<i>dipəŋ</i> “to go” _H	<i>demu</i> “to go” _J	<i>dyemo</i> “to go”	<i>demo</i> “to go”
(29)	to kill	<i>purtsuṃ</i> “to kill”	<i>satsi</i> “to kill” _B	<i>šeči</i> “to kill” _D	n/a	<i>shumū</i> “to kill”	<i>sannigʻ</i> “to kill”	n/a	<i>satma</i> “to kill”	<i>satpaŋ</i> “to kill” _F	<i>sadpəŋ</i> “to kill” _H	<i>sɛmu,</i> <i>semu</i> “to kill” _J	n/a	<i>sɛmo</i> “to kill”
(30)	barley	<i>dzat</i> “barley”	<i>thaŋzəd</i> “barley” _D	<i>zəd</i> “barley” _D	n/a	<i>kūfl</i> “barley” <i>zōd</i> “wheat”	<i>ṭag</i> “barley” <i>zōdʻ</i> “corn”	n/a	<i>ṭá</i> “barley”	<i>zut</i> “barley”	<i>swa</i> “barley” <i>jəd</i> “wheat” _G	<i>jɛ</i> “barley” _K	<i>dzɛ</i> “barley”	<i>jɛ</i> “barley”
(31)	calendar day	<i>gjak</i> “calendar day”	<i>dhyara</i> “day” _D	<i>gya</i> “day” _D	<i>dhyaree</i> “day” _E	n/a	<i>dīār</i> “calendar day”	n/a	<i>dia:r</i> “calendar day”	<i>diar</i> “calendar day” _F	<i>gya</i> “day” _H	<i>yja</i> “day” _J	<i>pye</i> “day” <i>thinja:</i> “today”	<i>jya</i> “day”
(32)	eye	<i>mik</i> “eye”	<i>ṭira</i> “eye” _B	<i>mig</i> “eye” _D	<i>meega</i> “eye” _E	<i>mīñ</i> “eye”	<i>migʻ</i> “eye”	n/a	<i>mí</i> “eye”	<i>mi</i> “eye” _F	<i>mig</i> “eye” _H	<i>me</i> “eye” _J	<i>myɛ</i> “eye”	<i>mě</i> “eye”
(33)	fat	<i>tsʰos</i> “fat”	n/a	n/a	n/a	n/a	<i>tshōs</i> “fat”	n/a	<i>tsʰos</i> “fat”	<i>sos</i> “fat” _F	<i>chyəs</i> “fat” _H	<i>tʰɛ</i> “fat” _J	<i>tshɛ̀</i> “fat”	<i>chɛ</i> “fat”

		Bun	Man	Tin	Kan	L. Kin	St. Kin	Chit	Shum	Sun	Rong	Dar	Byang	Chaud
(34)	field	<i>rik</i> “field”	<i>rhi</i> “field” D	<i>ri</i> “field” D	n/a	<i>riñ, rim</i> “field”	<i>rim</i> “field”	n/a	<i>ri</i> “field”	<i>ree, reem</i> “field” G	<i>rhigər</i> “field” H	<i>re</i> “field” J	<i>re</i> “field”	<i>re</i> “field”
(35)	god	<i>sat</i> “god”	<i>sad</i> “god” B	<i>səd</i> “god” D	n/a	n/a	<i>shu</i> “god”	n/a	<i>sat</i> “god”	n/a	<i>dɔ</i> “god” H	<i>sɛ</i> “god” J	n/a	<i>sɛ</i> “god”
(36)	grand-child	<i>kʰot</i> “grand-child”	n/a	<i>koc</i> “grand-son” D	n/a	n/a	<i>spāts</i> “grand-child”	n/a	<i>koʰ</i> “grand-child”	n/a	n/a	<i>kʰɛ</i> “grand-son” J	<i>khuɛ̀</i> “grand-son”	n/a
(37)	hand	<i>lak</i> “hand”	<i>guɾ</i> “hand” B	<i>gud</i> “hand” D	<i>guɖ</i> “hand” C	<i>guɖ</i> “hand”	<i>gǔd(h)</i> “hand”	n/a	<i>gut</i> “hand”	<i>la</i> “hand” F	<i>lag</i> “hand” H	<i>la</i> “hand” J	<i>là</i> “hand”	<i>la</i> “hand”
(38)	house	<i>kjum</i> “house”	<i>cuñ</i> “house” B	<i>kyum</i> “house” D	<i>kīm</i> “house” C	<i>kim</i> “house”	<i>kim</i> “house”	<i>kyim</i> “house”	<i>kjum</i> “house”	<i>kjum</i> “house” F	<i>kim</i> “house” I	<i>cim, tim</i> “house” J	<i>cim</i> “house”	<i>cɪm</i> “house”
(39)	milk	<i>peltsi</i> “milk”	<i>panu</i> “milk” D	<i>pəlmʉ</i> “milk” D	<i>kheerang</i> “milk” C	<i>khěărăñ</i> “milk”	<i>khěərõñ</i> “milk”	n/a	<i>pe:l</i> “milk”	<i>pel</i> “milk” F	<i>pyəlc</i> “milk” H	<i>nu</i> “milk” J	<i>nù</i> “milk”	<i>nũ</i> “milk”
(40)	nose	<i>gjum</i> “nose”	<i>nyā</i> “nose” C	<i>ñā</i> “nose” D	<i>ta</i> “nose” C	<i>stakũts</i> “nose”	<i>tākũs</i> “nose”	n/a	<i>mur</i> “nose”	<i>neoom</i> “nose” G	<i>nhimci</i> “nose” H	<i>nim</i> “nose” J	<i>hnim</i> “nose”	<i>hnim</i> “nose”

		Bun	Man	Tin	Kan	L. Kin	St. Kin	Chit	Shum	Sun	Rong	Dar	Byang	Chaud
(41)	skin	<i>bat</i> “skin”	<i>cəm</i> “skin” _D	<i>cəm</i> “skin” _D	n/a	n/a	<i>bǝdʼ</i> “skin”	n/a	<i>bot</i> “skin”	<i>pakpʰa</i> “skin” _F	<i>lotɔ</i> “skin” _I	<i>bɛ</i> “skin” _J	<i>bɛ</i> “skin”	<i>bɛ</i> “skin”
(42)	snow	<i>mu</i> “snow”	<i>mug</i> “snow” _B	<i>mug</i> “snow” _D	n/a	n/a	<i>pǝm</i> “snow”	n/a	<i>ras</i> “snow”	<i>ung</i> “snow” _G	<i>aŋ</i> “snow” _H	<i>χo</i> “snow” _J	<i>hɾɔ</i> “snow”	<i>hɾo</i> “snow”
(43)	copula *jen-	<i>jen</i>	–	–	–	–	–	<i>hen</i>	–	<i>hin</i> _G	<i>hwən-</i> _H	–	<i>yin</i>	–
(44)	copula *hle-	–	–	–	–	–	–	–	–	–	–	<i>le</i> _J	<i>hle</i>	<i>hlɛ</i>
(45)	copula *ni-	<i>ni-</i>	–	–	–	–	<i>ni</i>	–	–	<i>ni</i> _G	–	<i>ni</i> _J	–	–
(46)	copula *to-	–	<i>to-</i> _A	<i>to-</i> _A	<i>to-</i> _C	<i>to-</i>	<i>to-</i>	<i>to-</i>	<i>to-</i>	–	–	–	–	–
(47)	copula *ɛu-	–	<i>shu-</i> _A	<i>shu-</i> _A	–	–	–	–	–	–	–	–	–	–
(48)	copula *ta-	<i>ta-</i>	<i>ta-</i> _A	<i>ta-</i> _A	–	–	–	–	<i>ta-</i>	<i>ta-</i> _G	–	–	–	–

The data presented above bring out that some languages share a sufficient degree of lexical and grammatical traits to postulate the existence of two major groupings within West Himalayish, viz. a western branch and an eastern branch. The western branch comprises the languages Manchad, Tinan, Kanashi, Lower Kinnauri, Standard Kinnauri, Chitkhuli, and Shumcho, which share the following characteristics:

Table 5: Characteristic traits of western West Himalayish

Etymon	Description
(1)	reflexes of numeral “one” derived from root <i>*it-</i> rather than <i>*tik-</i>
(3)	reflexes of numeral “three” with initial fricative <sh> rather than <s>
(8)	reflexes of numeral “eight” derived from root <i>*rai</i> rather than <i>*g(j)ed</i>
(13)	reflexes of second person pronoun derived from root <i>*ka-</i> rather than <i>*ga-</i>
(14)	reflexes of demonstrative pronouns derived from roots <i>*do</i> and <i>*nu</i>
(16), (17), (18)	special dual forms for pronouns
(25)	verb “to cry” derived from root <i>*krap-</i> rather than <i>*tjo-</i>
(27)	verb “to give” derived from roots <i>*ke-</i> and / or <i>*ran-</i> rather than <i>*da-</i>
(37)	noun “hand” derived from root <i>*guḍ</i> rather than <i>*lak</i>
(46)	reflexes of a copula <i>*to</i> ¹⁸

There is evidence that this western branch can be further subdivided into a “Lahaul subgroup” comprising Manchad and Tinan and a “Kinnaur subgroup”, comprising Kanashi, Lower Kinnauri, Standard Kinnauri, Chitkhuli, Jangrami, and Shumcho. For one thing, such a classification is suggested by the geographical distribution of the languages. For another thing, there is lexical and grammatical evidence for this hypothesis:

Table 6: Characteristic traits of the Lahaul subgroup

Etymon	Description
(47)	reflexes of an equative copula <i>*shu-</i>

¹⁸ This copula is likely derived from a verb with the meaning “to sit”, cf. Standard Kinnauri *tōshimig* “to sit”.

Table 7: Characteristic traits of the Kinnaur subgroup

Etymon	Description
(12)	reflexes of a first person singular stem <i>*aŋ-</i> / <i>*ak-</i> in oblique cases

The eastern branch comprises the languages that have been subsumed under the label “Almora” by Shafer (1967), Benedict (1972), Bradley (1997), and Thurgood (2003), e.g. Darma, Byangsi, Chaudangsi, and most probably also the extinct language Rangkas, which has not been included in the comparative word list above. In the following, I refer to these languages as the “Pithauragarh subgroup”.

Table 8: Characteristic traits of Pithauragarh subgroup

Etymon	Description
(8), (11), (12), (23), (31), (38)	palatalization of velar plosives before front vowels
(29), (30), (35), (36), (41)	loss of syllable final <i>*-t</i> (with additional vowel raising / fronting)
(32), (34), (37)	loss of syllable final <i>*-k</i> ¹⁹
(33)	loss of syllable final <i>*-s</i> (with additional vowel raising / fronting)
(39)	noun “milk” derived from root <i>*nu</i> rather than <i>*pel</i>
(40)	noun “nose” derived from root <i>*nim</i> ~ <i>*njum</i> rather than <i>*sta</i>
(42)	noun “snow” derived from root <i>*hro</i> rather than <i>*aŋ</i> or <i>*mu(k)</i>
(44)	reflexes of a copula <i>*hle-</i>

The classification of the remaining three languages Bunan, Sunnami, and Rongpo on the basis of the 48 cognate sets above is difficult. One may hypothesize that there is a close genetic link between Sunnami and Rongpo. First, this is implied by their geographical position between the languages belonging to the western and eastern branches of West Himalayish. Second, this is suggested by the presence of a cognate infinitive marker *-pung* / *-pəŋ* and a shared word for snow derived from the root **aŋ*. One may be tempted to add the presence of the cognate copula *hin* / *hwən*, but I assume that this auxiliary is a Tibetan

¹⁹ This trait is shared by the languages Shumcho and Sunnami. However, as these languages are spoken in a considerable distance from Uttarakhand, the loss of syllable final consonants in Kinnaur seems to have developed independently from the sound change in the eastern branch.

loanword derived from the common Tibetan copula *yin*. The question remains to be answered whether the two languages should be assigned to one of the two major branches postulated above or established as a third main branch of West Himalayish. I am tempted to classify them as a distinct subgroup within the eastern branch based on the fact that they share a number of core vocabulary items with the languages spoken in Uttarakhand.

Table 9: Cognates between Sunnami / Rongpo and the Pithauragarh subgroup

Etymon	Description
(23)	verb “to fear” going back to <i>*gjar-</i> rather than <i>*bja(ŋ)-</i> (Kinnauri / Shumcho)
(24)	verb “to come” going back to <i>*ra-</i> rather than <i>*am-</i> / <i>*bun-</i> (eastern branch)
(25)	verb “to cry” going back to <i>*tjo-</i> rather than <i>*krap-</i> (eastern branch)
(27)	verb “to give” going back to <i>*da-</i> rather than <i>*ke-</i> (eastern branch)
(28)	verb “to go” going back to <i>*de-</i> rather than <i>*bi-</i> (eastern branch)
(40)	noun “nose” derived from root <i>*nim ~ *num</i> rather than <i>*sta</i>

Finally, the position of Bunan within West Himalayish needs to be addressed. It is not a coincidence that this issue has been left aside until now, as it is difficult to relate the language to other West Himalayish idioms based on the material presented above. Remarkably, Bunan does not share many lexical cognates with the languages of the western branch, in particular not with the directly neighboring languages Manchad and Tinan. Rather, the language exhibits an astonishing number of lexical parallels to the languages of the eastern branch. These lexical parallels are basically the same that have been discussed with regard to a possible genetic affiliation of Sunnami and Rongpo with the Pithauragarh subgroup (cf. Table 9 above). Based on this evidence, Bunan should also be classified as a member of the eastern branch, despite its “isolated” geographical position in the far West of the West Himalayish speaking area. This brings us to the question as to how the language should be positioned within eastern West Himalayish. For the internal classification of this branch, it is helpful to consider additional lexical cognates that have not been included in the comparative word list in Table 10.

Table 10: Additional lexical data for eastern West Himalayish languages

Etymon	Bun	Theb	Rong	Dar	Byang	Chaud
“where”	<i>guj</i>	<i>goa ~ go</i>	<i>gu</i> _H	<i>wude</i> _J	<i>ulo</i>	<i>ulo</i>
“today”	<i>ʰan</i>	<i>diring</i> ²⁰	<i>than</i> _H	<i>thyã</i> _J	<i>thinja</i> :	<i>thĩyã</i>
“day after tomorrow”	<i>mingjaks</i>	<i>meengeea</i>	<i>miŋgya</i>	<i>niŋja</i> _J	<i>nimja</i> : ²¹	<i>nin-jya</i>
“snow”	<i>aŋ</i> - ²²	<i>ung</i>	<i>añ</i>	<i>χo</i> _J	<i>hrɔ</i>	<i>hro</i>
“to die”	<i>ɕitsum</i>	<i>sheechpung</i>	<i>sicpəñ</i>	<i>simu ~ sɨjimu</i>	<i>hicimo</i>	<i>si-ci-mo</i>

The lexical data in the table above suggest that Bunan, Sunnami, and Rongpo form a separate subgroup within the eastern branch of West Himalayish. The three languages share common roots for the interrogative pronoun “where” (**gu* ~ **go*), the adverbials “today” (**ʰan*) and “day after tomorrow” (**mingja(k)*), and the noun “snow” (**aŋ*). Reflexes of the adverbials **ʰan* and **mingja(k)* are also attested in the Pithauragarh subgroup. However, the reflexes of the adverbial “today” go back to a compound expression **ʰan-gja(k)* (lit. “today-day”) rather than a simple form, while the reflexes of the adverbial “day after tomorrow” exhibit an initial nasal /n/ rather than /m/.

The last cognate set in the list corroborates the assumption that the six languages indeed form a close genetic unit within West Himalayish. The verb stem “to die” exhibits the same morphological structure in all six languages. The verb consists of the lexical root *ɕi-* / *si-*, which is augmented by a palatal affricate. In Bunan, this affricate consists of two distinct morphemes: a functionally opaque derivational suffix *-t* and the middle conjugation marker *-ɕ*. It is highly probable that the affricate is composed of the same morphemes in the other languages as well, at least from a diachronic perspective. This presence of identical derivational morphemes on a cognate verb is highly indicative of a close genetic relationship

²⁰ Theborskad *diring* is a loanword from Tibetan (WT *de ring*).

²¹ Sharma (2001b: 295) gives the meaning “tomorrow” instead of “day after tomorrow”.

²² In Bunan, the root *aŋ-* “snow” only occurs as a bound morpheme in the compound *aŋmik* “snow blindness” (lit. “snow-eye”). The Bunan word for “snow” is *mu*, which is likely related to Theborskad *mookpa* “rain” and Darma *mo* “rain”.

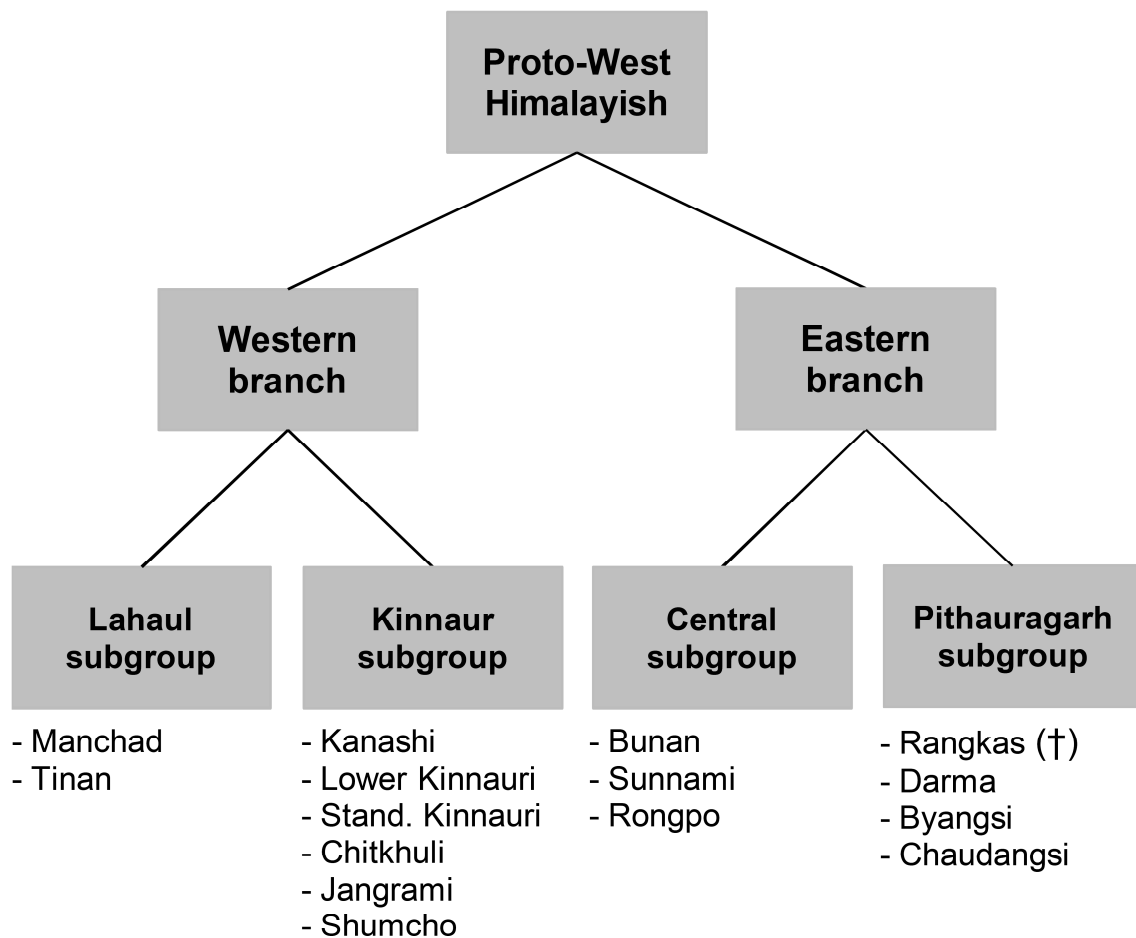
and suggests that future comparative research on West Himalayish languages should also take into account morphosyntactic correspondences.

Based on the data presented in Table 10, I classify Bunan, Sunnami and Rongpo together in a “Central subgroup” within the eastern branch of West Himalayish. The term “central” may seem misleading given the fact that only one of the three languages (Sunnami) is located in the geographical center of the West Himalayish speaking area. However, the outlying position of Bunan in the West and Rongpo in the East suggests that the three languages may once have been part of a West Himalayish dialect continuum that extended over the areas of present-day Spiti and western Ngari, and thus lay in the (supposed) centre of the then West Himalayish speaking area.

Based on the material discussed in this section, we may draw the following tentative family tree for West Himalayish.²³ Again, I emphasize that this tree is the result of a small-scale comparative study that is based on a limited amount of data. Accordingly, the conclusions drawn should be considered as preliminary. Future research will most likely call for a revision and refinement of the model proposed here.

²³ The West Himalayish language Jangrami, which is spoken in Upper Kinnaur, has not been included in the discussion above. However, Christian Huber (personal communication) kindly shared his Jangrami data with me. His material suggests that Jangrami should be assigned to the Kinnaur subgroup of western West Himalayish.

Figure 11: A tentative family tree of West Himalayish



1.4.3 The relationship between West Himalayish and Zhangzhung

This section discusses the relationship between the West Himalayish languages and the extinct language Zhangzhung. Zhangzhung was spoken in the ancient kingdom of Zhangzhung (WT *zhañ zhuñ*), which once covered the southwestern parts of today's Tibetan Autonomous Region. The realm was conquered by the expanding Tibetan empire in the 7th century, and its population subsequently assimilated to the language and culture of Tibet (van Driem 2001: 946–947). However, even though Zhangzhung became extinct as a spoken language, it survived in written form in the liturgical texts of the Bon religion. These Bon manuscripts are a valuable source for comparative Tibeto-Burman linguistics, as they allow us to draw inferences about the linguistic situation in the western Himalayas prior to the expansion of the Tibetan empire. The translation and interpretation of the lexical material is, however, a difficult task, as Martin (2010: 8, 11–12) points out. This is primarily due to the special circumstances under which the language was transmitted. Over the centuries, the Bon scriptures must have been copied by generations of scribes who did not know Zhangzhung particularly well and consequently tended to change the form or the meaning of words that they did not understand. In this way, a considerable number of minor and major

modifications accumulated over time, and nowadays the original spelling or meaning of certain words can often only be reconstructed by a careful philological analysis of the manuscripts.

The liturgical texts of the Bon religion, however, might not be the only remaining source for Zhangzhung. Thomas (1933) suggested that the language is also documented in a small number of manuscripts from the Library Cave of Dunhuang. This hypothesis was originally disputed but has gained wide acceptance by now (cf. van Driem 2001: 952–953 for an overview). The manuscripts have been analyzed by a team of Japanese scholars (Takeuchi, Nagano & Ueda 2001; Takeuchi & Nishida 2009), who accepted Thomas' view that the language is Zhangzhung, albeit a more archaic variety than the one represented in the Bon liturgy. It has not, however, proved possible to translate the manuscripts so far. This has led Martin (2013) to raise the question as to whether the identification of the language as Zhangzhung was not premature. His objection seems reasonable, given the fact that the growing amount of lexical data available for both Zhangzhung and modern West Himalayish languages has not yet made it possible to translate at least some longer passages of the text. Future research on Zhangzhung as well as the Tibeto-Burman languages of the western Himalayas will hopefully clarify this issue.

While the identification of the language of the Dunhuang manuscripts as Zhangzhung needs to be further substantiated, there is plausible evidence for a close genetic link between Zhangzhung and the West Himalayish languages. First, this is implied by the geographical distribution of the modern West Himalayish languages, all of which are spoken to the south and the west of the area that was known as Zhangzhung in ancient times. The West Himalayish speaking communities of today might be the descendants of Zhangzhung tribes that lived in inaccessible border areas of the former kingdom, where the cultural and political influence of the Tibetan empire remained weak. Second, there is comparative evidence for this hypothesis. Matisoff (2001: 22) has identified nine etyma that are exclusively attested in Zhangzhung and West Himalayish. Although the significance of these isoglosses has been called into question by van Driem (2001: 956–957), the identification of Zhangzhung as a West Himalayish language remains the most plausible hypothesis for the time being, as will be shown in the following. Based on lexical comparisons between Zhangzhung and West Himalayish, some scholars have postulated close genetic affinities between Zhangzhung and particular West Himalayish languages. Martin (2010: 17–22), for example, speculates on a close genetic link between Zhangzhung and Darma. Sharma (1989b: 10–12) assumes that Zhangzhung and the West Himalayish languages of Lahaul (i.e. Bunan, Manchad, and Tinan) might be closely related. Van Driem (2001: 955) thinks along similar lines when he states that an etymological study by Hoffmann (1972) suggested “a close affinity between

Zhangzhung and the Bunan language of Gahri.” In the following, these claims will be checked against linguistic evidence. Table 11 below contains the nine etyma assembled by Matisoff (2001) as well as nine additional lexemes that have not been considered in his study, but which I believe to be helpful in assessing the genetic relationship between Zhangzhung and West Himalayish.²⁴ Needless to say, we cannot make any secure statements based on the limited and fragmentary material available at present. Thus, the results of the following discussion have to be considered as preliminary.

²⁴ The material is taken from the same sources as the data discussed in § 1.4.2., except words marked with the abbreviation STEDT, which have been extracted from the STEDT database (stedt.berkeley.edu/search).

Table 11: Lexical cognates between Zhangzhung and West Himalayish

etymon		ZZ	Bun	Man	Tin	Kan	L. Kin	St. Kin	Chit	Shum	Sun	Rong	Dar	Byang	Chaud
(1)	arrow	<i>hrim</i> “arrow”	<i>ṣim</i> “arrow”	<i>čun</i> “arrow” D	<i>čun</i> “arrow” D	n/a	n/a	<i>mōh</i> “arrow”	n/a	<i>ṣim</i> “arrow”	<i>sheem</i> “arrow” G	<i>tir</i> “arrow” I	<i>tir</i> “arrow” K	<i>rim</i> “arrow”	<i>rim</i> “arrow”
(2)	barley (Matisoff 2001)	<i>zad</i> “barley”	<i>dzat</i> “barley”	<i>thañzəd</i> “barley” D	<i>zəd</i> “barley” D	n/a	<i>zöd</i> “barley”	<i>zöd'</i> “barley”	n/a	<i>ʈá</i> “barley”	<i>zut</i> “barley” G	<i>jəd</i> “wheat” H	<i>jɛ</i> “barley” K	<i>dze</i> “barley”	<i>jɛ</i> “barley”
(3)	black	<i>kha nig</i> “black”	<i>kʰaj</i> “black”	<i>roki</i> “black” D	<i>roki</i> “black” D	n/a	n/a	<i>rōkh</i> “black”	n/a	<i>kʰai</i> “black”	<i>kʰani</i> “black” F	<i>khasyũ</i> “black” H	<i>womnu</i> “black” J	<i>wamɬe</i> “black”	<i>womɬe</i> “black”
(4)	blue	<i>ting</i> “blue”	<i>tiŋi</i> “blue, green”	<i>tiŋi</i> “blue, green” D	<i>tiŋgi</i> “blue, green” D	n/a	n/a	<i>rāg</i> “blue, green”	n/a	<i>tiŋi</i> “green”	<i>teengee</i> “blue” G	<i>tiŋd</i> “blue” H	<i>tuŋnu</i> “blue, green” J	<i>timbu</i> “blue”	<i>timburəŋ</i> “blue”
(5)	cloud	<i>du</i> “cloud”	<i>du</i> “cloud”	<i>du</i> “cloud” D	<i>du</i> “cloud” D	n/a	n/a	<i>dubōñ</i> “mist”	n/a	<i>dzu:</i> “cloud”	<i>zhoo</i> “cloud” G	<i>ba:dəw</i> “cloud” H	<i>mo</i> “cloud, rain” J	<i>kasa:</i> “cloud”	<i>səka</i> “cloud”
(6)	DIM suffix	<i>-tse</i> “DIM”	<i>-tsi</i> “DIM”	<i>-tsa</i> “DIM?” D	<i>-tsa</i> “DIM?” D	n/a	<i>-ts</i> “DIM?”	<i>-ts</i> “DIM”	n/a	<i>-ts</i> “DIM?”	<i>-ch</i> “DIM?” G	<i>-ci</i> “DIM” I	<i>-tsɛ / -tsi</i> “DIM?” J	<i>-ts</i> “DIM”	<i>-tsɛ</i> “DIM”
(7)	ear (Matisoff 2001)	<i>ratse</i> “ear”	<i>retsi</i> “ear”	<i>rheṭra</i> “ear” D	<i>reṭra</i> “ear” D	<i>rhod</i> “ear” C	<i>kāñāñ</i> “ear”	<i>kāñōñ</i> “ear”	n/a	<i>repaŋ</i> “ear”	<i>repaŋ</i> “ear” F	<i>kənu:ñ</i> “ear” H	<i>rɛju</i> “ear” J	<i>hracɛ</i> “ear”	<i>ratse</i> “ear”

etymon		ZZ	Bun	Man	Tin	Kan	L. Kin	St. Kin	Chit	Shum	Sun	Rong	Dar	Byang	Chaud
(8)	fat (Matisoff 2001)	<i>tshas</i> “fat”	<i>tsʰos</i> “fat”	<i>tsʰoi</i> “fat” STEDT	n/a	n/a	n/a	<i>tshōs</i> “fat”	n/a	<i>tsʰos</i> “fat”	<i>sos</i> “fat” F	<i>chyəs</i> “fat” H	<i>tsʰɛ</i> “fat” J	<i>chɛ̀</i> “fat”	<i>chɛ</i> “fat”
(9)	girl / daughter / woman	<i>tsa med</i> “woman, girl”	<i>tsemet</i> “daughter, girl”	<i>mečmi</i> “woman” D	<i>meča</i> “woman” D	<i>chīme</i> “daughter” C	<i>cīmě</i> “daughter”	<i>ciměd'</i> “daughter”	n/a	<i>tsamets</i> “daughter, girl”	<i>tsamet</i> “daughter, girl” F	<i>ca:ma</i> “daughter” H	<i>timme</i> “daughter, girl” J	<i>tsame</i> “daughter, girl”	<i>tsəme</i> “daughter, girl”
(10)	god	<i>sad</i> “god”	<i>sat</i> “god”	<i>sad</i> “god” B	<i>səɖ</i> “god” D	n/a	n/a	<i>shu, darga</i> “god”	n/a	<i>sat</i> “god”	<i>la</i> “god” G	<i>dɔɔ</i> “god” I	<i>sɛ</i> “god” J	n/a	<i>sɛ</i> “god”
(11)	gold (Matisoff 2001)	<i>zangs</i> “iron (?)”	<i>ser</i> “gold”	<i>zang</i> “gold” B	<i>žəŋ</i> “gold” D	<i>zāngg</i> “gold” C	n/a	<i>zaʰ</i> “gold”	n/a	<i>dzaŋ</i> “gold”	<i>zaŋ</i> “gold” F	<i>jās</i> “gold” H	<i>jās</i> “gold” K	<i>dzaŋ</i> “gold”	<i>jʰəŋ</i> “gold”
(12)	heart (Matisoff 2001)	<i>she</i> “heart”	<i>ʂoɕa</i> “heart”	<i>shuja</i> “heart” B	n/a	n/a	n/a	<i>zǔiā</i> “heart”	n/a	<i>ʂoɕa</i> “heart”	<i>ʂoɕa</i> “heart” F	<i>swasya</i> “heart” H	<i>çiçjo</i> “heart” J	<i>fiso</i> “heart”	<i>ʂiɕo</i> “heart”
(13)	intestines (Matisoff 2001)	<i>hri tsum</i> “intestines”	<i>gjuma</i> “intestines”	<i>ritsi</i> “small intestines” STEDT	n/a	n/a	n/a	n/a	n/a	<i>gjuma</i> “intestines”	n/a	<i>naŋcya</i> “intestines” I	<i>ɣjama</i> “small intestines” J	<i>tsiri</i> “intestines”	<i>tsəri</i> “intestines”
(14)	neck (Matisoff 2001)	<i>khang</i> “neck”	<i>kʰaŋgul</i> “neck”	<i>muthu</i> “neck” B	n/a	n/a	<i>rǎŋ</i> “neck”	<i>kak'ts</i> “neck”	n/a	<i>kʰakli:</i> “neck”	<i>kaklee</i> “neck” G	<i>məŋgəni</i> “neck” H	<i>bana</i> “neck” J	<i>koŋkro</i> “neck”	<i>bana</i> “neck”

etymon		ZZ	Bun	Man	Tin	Kan	L. Kin	St. Kin	Chit	Shum	Sun	Rong	Dar	Byang	Chaud
(15)	nose (Matisoff 2001)	<i>lgyum zhi</i> “nose”	<i>gjumpʰuk</i> “nose”	<i>nyā</i> “nose” C	<i>ñā</i> “nose” D	<i>ta</i> “nose” C	<i>stakũts</i> “nose”	<i>tākũs</i> “nose”	n/a	<i>mur</i> “nose”	<i>neoom</i> “nose” G	<i>nhimci</i> “nose” H	<i>nim</i> “nose” J	<i>hnim</i> “nose”	<i>hnim</i> “nose”
(16)	old (person)	<i>shang ze</i> “old person”	<i>ɛaŋdzi</i> “old (f.)”	<i>hyaŋzi</i> “old woman” D	<i>hyaŋča</i> “old woman” D	n/a	n/a	<i>yaŋzē</i> “old (f.)”	<i>bŭdɔ̄a</i> “old”	<i>uəi</i> “old”	<i>niŋpa</i> “old” F	<i>syaŋni</i> “older” H	<i>ɕjaŋnu</i> “being old” J	<i>faŋthe</i> “old (person)”	<i>səntə</i> “old (person)”
(17)	red	<i>mang</i> “red”	<i>maŋi</i> “red”	<i>šei</i> “red” D	<i>məŋi</i> “red” D	n/a	n/a	<i>shwikʰ</i> “red”	n/a	<i>maŋi</i> “red”	<i>maŋni</i> “red” F	<i>meŋd</i> “red” H	<i>maŋnu</i> “red” J	<i>maŋde</i> “red”	<i>məŋdə</i> “red”
(18)	skin (Matisoff 2001)	<i>pad</i> “skin”	<i>bat</i> “bark”	<i>cəm</i> “skin” D	<i>cəm</i> “skin” D	n/a	n/a	<i>bōdʰ</i> “skin”	n/a	<i>bot</i> “skin”	<i>pakpʰa</i> “skin” F	<i>lotɔ</i> “skin” I	<i>bɛ</i> “skin” J	<i>bɛ</i> “skin”	<i>bɛ</i> “skin”
(19)	white	<i>shi nom</i> “white”	<i>ɕi:</i> “white”	<i>thsaŋsi</i> “white” B	<i>sii</i> “white” D	n/a	<i>chōg</i> “white”	<i>ʰhōgʰ</i> “white”	n/a	<i>ɕi:</i> “white paint”	<i>tsʰaŋi</i> “white” F	<i>si:d</i> “white” H	<i>ɕinu</i> “white” J	<i>ʃi:dɛ</i> “white”	<i>ɕidə</i> “white”

The data presented in the table above suggest that there is indeed a close genetic link between Zhangzhung and West Himalayish. In particular, such a close relationship is implied by a number of roots that occur in Zhangzhung and are also robustly attested across West Himalayish. The most common of these lexemes, all of which are attested in at least eight modern West Himalayish languages, are listed in the table below.

Table 12: Robustly attested cognates between ZZ and WH

Etymon	Zhangzhung	Proto-West Himalayish	Meaning
(1)	<i>zad</i>	* <i>zat</i>	“barley”
(4)	<i>ting</i>	* <i>tiŋ-</i>	“blue”
(6)	<i>-tse</i>	* <i>-tse ~ *-tsi</i>	“diminutive suffix”
(7)	<i>ra tse</i>	* <i>re</i>	“ear”
(8)	<i>tsʰas</i>	* <i>tsʰos</i>	“fat”
(9)	<i>tsa med</i>	* <i>tsamet</i>	“girl”
(10)	<i>sad</i>	* <i>sat</i>	“god”
(11)	<i>zang</i>	* <i>zaŋ</i>	“gold” ?
(12)	<i>she</i>	* <i>ʂe</i>	“heart”
(16)	<i>shang ze</i>	* <i>ʂ(j)aŋ</i>	“old (person)”
(17)	<i>mang</i>	* <i>maŋ</i>	“red”
(19)	<i>shi nom</i>	* <i>ʂi</i>	“white”

The case of the Zhangzhung word *zang* “iron” requires some more explanation. Matisoff (2001: 9–10) has identified the root as one of the lexemes that are exclusively shared by Zhangzhung and West Himalayish.²⁵ He compares this root with words for

²⁵ Matisoff (2001: 10) acknowledges that “WT *lcags* looks rather similar”, but it is much more plausible that the word has a cognate in WT *zangs* “copper”. However, given the fact that the etymon has a different meaning in Tibetan, it may nonetheless be helpful in defining West Himalayish as a distinct subgroup.

“iron” that occur in the West Himalayish languages spoken in Uttarakhand, where the following forms are found (all forms adopted from Matisoff²⁶):

Rangkas	<i>chyang</i>
Darma	<i>nijang</i>
Chaudangsi	<i>najang</i>
Byangsi	<i>najag</i>

The forms in Darma, Chaudangsi, and Byangsi are morphologically complex, as they are composed of a first syllable *na-* / *ni-* and the root *jang*. The root *jang* also occurs as a simple noun in all three languages. However, when occurring as a simple noun, *jang* does not mean “iron” but “gold”. The meaning “gold” for the simple noun is not confined to the West Himalayish languages spoken in Pithauragarh district. Rather, this meaning is attested in all other languages except for Bunan, where the original word has been replaced by the Tibetan loanword *ser* (WT *gser*), and Chitkhuli and Lower Kinnauri, for which no data are available. Based on the comparative evidence, we are thus able to reconstruct a noun **zanj* for proto-West Himalayish, which most likely had the meaning “gold”. However, we are then confronted with the problem that the cognate form *zang* in Zhangzhung does not mean “gold” but “iron”, the Zhangzhung word for “gold” being *mar*.

There are basically two possibilities to account for this semantic mismatch between Zhangzhung and West Himalayish. If we assume that the semantic interpretation of *zang* as “gold” in Zhangzhung is correct, this entails that the word must have undergone a semantic change in either Zhangzhung or the West Himalayish languages. In my opinion, it seems more likely that the semantic change occurred in Zhangzhung. The opposite assumption would imply that the remaining West Himalayish languages all underwent the change indepently, which seems very unlikely, even if we acknowledge the possibility that the change might have spread areally.²⁷ However, given the fact that Zhangzhung was transmitted as a written language for more than a millennium (see above), it is imaginable that the meaning “iron” for *zang* is due to a misinterpretation on behalf of the scribes who copied the Bon texts. This assumption is even more plausible in view of the fact that the Zhangzhung word for “gold”, *mar*, is not attested in any other West Himalayish language, but has a cognate in Written Tibetan *dmар* “red”, from which it might

²⁶ Matisoff (2001: 9) adduces a fifth lexeme *najang* from a language called “Almora”. While the lexeme is clearly cognate to the forms found in Darma, Chaudangsi, and Byangsi, it is not clear which language the term “Almora” refers to. Most likely, “Almora” is merely a dialect of one of the four languages listed above, which is why I have excluded it here.

²⁷ Theoretically, it is possible that the semantic shift occurred in Proto-West Himalayish after Zhangzhung had split off from the family. This assumption is, however, implausible, as there are no other linguistic traits that would distinguish Zhangzhung from all other West Himalayish languages.

have been derived. At present, is not, however, possible to decide which of the two scenarios discussed here is preferable.

In addition to the etyma discussed above, there are the two additional lexemes for “god” and skin”, which are less well attested but nonetheless have a considerably wide distribution across West Himalayish. These words are given in the table below.

Table 13: Moderately well attested cognates between ZZ and WH

Etymon	Zhangzhung	Proto-West Himalayish	Meaning
(10)	<i>sad</i>	* <i>sat</i>	“god”
(18)	<i>pad</i> ²⁸	* <i>bad</i>	“skin”

The fourteen lexemes that have been discussed so far imply that there is a close genetic link between Zhangzhung and West Himalayish in general. However, this finding immediately brings us to the question whether there are further cognate forms with a more limited distribution, which would allow us to establish a genetic link between particular modern West Himalayish languages and Zhangzhung. So far, I have only been able to identify six lexemes that might prove helpful in classifying Zhangzhung within West Himalayish. These are listed below.

Table 14: Rarely attested cognates between ZZ and WH

Etymon	Zhangzhung	Proto-West Himalayish	Meaning
(1)	<i>hrim</i>	* <i>hrim</i>	“arrow”
(3)	<i>kha nig</i>	* <i>kʰa</i>	“black”
(5)	<i>du</i>	* <i>du</i>	“cloud”
(13)	<i>hri tsum</i>	* <i>hri</i>	“intestines”
(14)	<i>khang</i>	* <i>kʰaŋ</i>	“neck”
(15)	<i>lgyum zhi</i>	* <i>lgjum</i>	“nose”

We have to be careful when interpreting the distribution of these lexemes across West Himalayish, as native roots have been replaced by loanwords from Tibetan and Indo-Aryan in many cases. Nevertheless, it seems that a clear pattern emerges from the

²⁸ The voiceless consonant in Zhangzhung again might be the result of a scribal error, given the fact that the Tibetan letters <p> and look similar.

data. The roots for “arrow”, “black”, “neck”, and “nose” are robustly attested in the languages that have been assigned to the hypothetical eastern branch of West Himalayish in the preceding section, whereas they do not occur in the languages of the western branch. The root for “cloud”, on the other hand, is robustly attested in the western branch, but only occurs once in the eastern branch in Bunan, where it may represent a borrowing from Manchad or Tinan. The root for “intestines”, finally, is only attested once in the western branch and twice in the eastern branch. However, the distribution of the lexeme is particularly difficult to interpret, given the fact that there are no data obtainable for seven languages.

All in all, the data suggest that Zhangzhung should be assigned to the eastern branch of West Himalayish. This is not only implied by linguistic evidence but also by the geographical distribution of the languages, as the core region of the kingdom of Zhangzhung lay to the north of present-day Uttarakhand. Northern Uttarakhand is the traditional homeland of the ethno-linguistic communities that speak the West Himalayish languages Rongpo, Darma, Byangsi, and Chaudangsi. The evidence thus lends credence to Martin and van Driem, who speculated that Zhangzhung might be a close relative of Darma and Bunan, respectively. Within the eastern branch, Bunan exhibits the highest number of cognates with Zhangzhung, sharing seventeen out of nineteen possible forms. The lexemes that are not shared do not represent distinct West Himalayish roots, but are Tibetan loanwords (*gjuma* “intestines” from WT *rgyu ma* and *ser* “gold” from WT *gser*). However astonishing the lexical parallels between Bunan and Zhangzhung may be, they should not tempt us to draw any premature conclusions about a particularly close genetic link between the two languages, let alone to identify Bunan as a direct descendant of Zhangzhung. The available material is still too sparse and fragmentary for this purpose. For the time being, we can only note that Zhangzhung seems to be genetically affiliated with eastern West Himalayish and that it may be a close relative of the languages of the central subgroup, i.e. Bunan, Sunnami and Rongpo.

1.5 The data and their presentation

1.5.1 Fieldwork and language consultants

The data on which this thesis is based were collected during four fieldtrips to India in 2010 (12 weeks), 2011 (12 weeks), 2012 (7 weeks) and 2013 (12 weeks). When I first arrived in Himachal Pradesh in June 2010, I was overwhelmed by the hospitality and openness of the indigenous population. Although I was a complete foreigner in the area, the members of the indigenous communities treated me with great kindness and were happy to introduce me to other community members. In this way, I was able to establish

numerous contacts to Bunan speakers in a short time and eventually found a Bunan speaking family in Keylong that was willing to host me for the summer.

Despite the hospitality and kindness that I meet with, I quickly realized that summer was not a particularly good time of the year to do fieldwork in Lahaul. Since the region is a high alpine area that is cut off from the outside world from late autumn to late spring, the inhabitants of Lahaul are forced to assure their livelihood between April and September. During that time of the year, they are busy herding cattle, irrigating fields, harvesting crops, running shops, hotels, and restaurants, guiding trekking groups, and so forth. Moreover, they may want to travel to nearby areas to visit relatives, attend religious festivals, or settle administrative matters. Accordingly, I experienced great difficulties in finding Bunan speakers who could spare time to meet with me on a regular basis. Eventually, I was able to find a number of male speakers who had time to work with me. These consultants had been born in 1936, 1953, 1967, 1973 and 1981 and had all received a higher school education. All of them were fluent in Bunan, Hindi, English and had some basic competence in Manchu. The consultants born in 1936 and 1973 were additionally fluent in both the western Tibetan variety spoken in Lahaul and the Central Tibetan variety spoken among members of the Tibetan exile community.

When I returned to Lahaul in the following summer, I was confident that I would be able to work with the same language consultants whom I had been working with the year before. However, it quickly became clear that those people had other obligations and would not be able to spare the time to meet up with me on a regular basis. I was thus forced to look for new consultants and was eventually fortunate enough to meet Tshering Dorje, who became my main consultant. Tshering Dorje was born in 1936, spent his school time in Keylong, and as a young adult studied at the monastery of Tholing, which lies in the area that nowadays forms the western part of the Tibetan Autonomous Region. Because of his education, he was later hired as an advisor and interpreter by the Deputy Commissioner of the district of Lahaul and Spiti. Eventually, he was promoted to the rank of a Public Relations Officer and subsequently served in several different districts of Himachal Pradesh. Accordingly, Tshering Dorje is well acquainted with the indigenous communities of Himachal Pradesh and western Tibet. Thus, he did not only teach me his native language, but also shared his profound knowledge about the history and culture of the indigenous communities of Himachal Pradesh with me.

In August 2011, Tshering Dorje only had time to work with me for one week. However, he showed great interest in my work and invited me to visit him during the winter

months in his house in the Kullu Valley.²⁹ Although the Swiss academic calendar only allowed me to spend a maximum of seven weeks in the field during winter, I accepted his offer and visited him and his wife in the village of Barituni nearby Kullu in January and February 2012. During that time, I not only had the opportunity to work with him and his wife, but also got to know his nephew, Sonam Angrup, who became a valuable consultant and close friend. In addition, I also worked with Bunan speakers who spent the winter months in Manali to enlarge and round out my corpus of language data.

With the help of Tshering Dorje and his family, I was able to collect and analyze a considerable amount of data during the seven weeks that I spent in the Kullu Valley in winter 2012. As the winter months turned out to be a much more suitable time for fieldwork than the summer months, I decided to do my fourth and final fieldtrip in winter 2013. During that stay, which had a length of twelve weeks, I again worked with my main consultant and his nephew as well as with my consultants in Manali.

While I recorded and analyzed the majority of my language data in India, I also conducted small-scale research in Switzerland, where one member of the Bunan community has settled down. The respective consultant had spent the greater part of his adolescence in the Kullu Valley, where he grew up speaking Hindi and the local Indo-Aryan dialect as his first languages. Accordingly, he never gained full proficiency in the language of his parents. However, my Swiss consultant still had an excellent passive command of Bunan and thus became an invaluable help for the transcription and preliminary analysis of the recordings that I had made in the field.

In the following table, I list the consultants from which I recorded the majority of my elicited data. The table contains their names, their year of birth as well as the years in which I worked together with them.

²⁹ Note that the Kullu Valley, unlike Lahaul, is easily accessible from Delhi throughout the year.

Table 15: Consultants that participated in elicitation sessions

Consultant	Year of birth	Sex	Years of collaboration
Tshering Dorje	*1936	male	2011–2013
Nawang Norbu	*1939	male	2010–2011, 2013
Shamsher Singh	*1953	male	2010–2011
Tuthob Gyalchen	*1967	male	2010
Prem Singh Barbogpa	*1968	male	2012–2013
Tashi Larje	*1973	male	2010–2013
Sonam Angrup	*1981	male	2012–2013
Sonam Zangpo	*1984	male	2010–2011

The table above suggests that there is a strong bias towards male speakers in my language corpus. However, this is only true for elicited data. My corpus of natural language data (see below) comprises various recordings of conversations that involved female speakers. Furthermore, I had access to female speakers during all my fieldtrips and used to double-check crucial grammatical phenomena with them.

When I began to conduct fieldwork on Bunan, I primarily used English as a contact language. This was possible because male Bunan speakers generally have a good command of the language, in particular young speakers. I only used Hindi when I had reason to believe that speakers had difficulties in expressing themselves in English. As time went by, I began to use Bunan as a contact language, especially when talking to female speakers, who often only have passive knowledge of English.

1.5.2 Corpus of language data

The material on which this thesis is based was recorded with an Olympus LS-11 recorder in Waveform Audio Format (WAV) and analyzed with the software Praat. The corpus of recordings consists of five different types of data: (1) data recorded from elicitation sessions, (2) data recorded from natural discourse, (3) data recorded from traditional and autobiographical stories, (4) data from my fieldnotes (unrecorded), and (5) data adapted from other sources.

The corpus of elicited materials consists of 69 hours of recordings. I recorded these materials from the consultants that are listed in Table 15 above. About half of the elicited data were recorded from my main consultant Tshering Dorje, while the other half

was recorded from my other consultants in equal proportions. Throughout this thesis, elicited sentences are referenced with an abbreviation that consists of the initials of the respective consultant, the number of the respective recording and the number of the respective sentence. In addition, the label “elicited” is added in square bracket, e.g. TD 83.14 [elicited].

The database further comprises approximately seven hours of recordings of natural discourse that have been transcribed, annotated, and translated. These files mainly represent recordings of everyday conversations between members of my host families, but also comprise a number of phone calls. Example sentences taken from natural discourse are referenced with the label “Conversation”, followed by the number of the recording and the number of the sentence, e.g. Conversation 14.103.

In addition, I have recorded one and a half hours of traditional and autobiographical stories from different consultants. These recordings have been fully transcribed, annotated, and translated. The following list gives an overview of these files.

Table 16: Recordings of traditional and autobiographical stories

Title	Storyteller	Duration
King Kesar	Nawang Norbu	17:55
Tshechu 1	Sonam Angrup	3:51
Tshechu 2	Sonam Angrup & Tshetan Drolma ³⁰	32:42
The Fairies of Kullu 1	Tshering Dorje	6:25
The Fairies of Kullu 2	Tshering Dorje	1:43
The Lama and the Owl	Tshering Dorje	6:38
Tulshug Lingpa	Tshering Dorje	19:41
Zhangzhung	Tshering Dorje	10:53
		Total: 1:39:48

Recordings of traditional and autobiographical stories are referenced with the title of the file and the number of the sentence, e.g. Tulshug Lingpa 87.

³⁰ Tshetan Drolma is the wife of my main consultant.

Besides recorded data, I have an inventory of about one hundred sentences that I picked up while listening to conversations and that I immediately wrote down in my field-notes. Accordingly, these sentences only exist in written form. However, I have double-checked all of these sentences with Bunan speakers in order to make sure that I had not misunderstood or misinterpreted the respective utterances. Sentences from my fieldnotes are referenced with the initials of the person who uttered the sentence, followed by the label “unrec” (for “unrecorded”) and the number of the sentence, e.g. TD unrec 12.

Finally, my corpus comprises a small number of language data that have been produced by members of the Bunan speaking community. These materials comprise recordings of two pop songs sung in Bunan, *Han ma ra nang* and *Chespa*, as well as a number of biblical stories that had been translated by Bunan speakers for Indian Baptist associations. One of these stories, the *Parable of the Prodigal Son*, had been published in an edited volume. The remaining stories had been recorded and distributed on a CD with the title *Words of Life*, which has a running time of 45 minutes. As I do not know the exact circumstances under which these indigenous materials have been produced and recorded, I have treated them with reserve and only rarely cite example sentences from these sources. Example sentences drawn from indigenous sources are referenced with a title and the number of the sentence, e.g. The Prodigal Son 53.

1.5.3 Presentation of the data

In this thesis, all Bunan data is rendered in the International Phonetic Alphabet. The language data is usually provided in form of example sentences, whose structure is illustrated below.

(1)	<i>gi kwasa.</i>	Line 1: Orthographical representation
	<i>gi kwas-dza</i>	Line 2: Phonological representation
	1SG become.full-PST.DIR.DJ.SG	Line 3: Interlinear gloss
	“I am full.”	Line 4: English translation
	(Conversation 74.24)	Line 5: Reference

The orthographical representation given in line 1 represents an approximation of the actual pronunciation of a given word, taking into account morphophonological processes but not phonological processes. This principle is illustrated by the list below, which illustrates the orthographic, phonological, and phonetic form of the direct evidential past tense form *kwas-dza* “become.full-PST.DIR.DJ.SG”.

Different notations of the verb form *kwas-dza* “become.full-PST.DIR.DJ.SG”

Orthographic form:	< <i>kwas</i> >
Phonological form:	/kwas-dza/
Phonetic form:	[kwasæ ~ kwasə ~ kwas]

Bunan possesses a morphophonological rule according to which the plosives /t, k/ are merely realized as a glottalization when occurring between two vowels and in root-final position, e.g. *dat-i* [dæʔj] “fall-ACT” and *pʰok-i* [pʰɔʔj] “hurt-ACT” (cf. § 3.2.5). In the orthographic representation, plosives that surface as a glottalization are written with superscript letters, i.e. <*da^tj*> and <*pʰo^kj*>, respectively.

The use of an orthographic representation offers the problem of defining orthographic words, i.e. establishing criteria that determine which sequences of morphemes are written as one word and which sequences of morphemes are written as separate words. In this thesis, I follow an approach that is based on grammatical wordhood. Accordingly, syntactic constituents will be written as separate words if they are grammatical words (see § 2.6.4 for a definition and discussion of the term). In the case of nouns, pronouns, adjectives, quantifiers and adverbs, a minimal grammatical word consists of a lexical root, whereas a maximal grammatical word is composed of a lexical root followed by a derivational morpheme. In the case of verbs, a minimal grammatical word consists of a lexical root followed by a verbal ending, whereas a maximal grammatical word is made up of a lexical root, a derivational morpheme, a conjugation class marker, and a verbal ending.

Clitics that modify noun phrases or non-finite verb forms are written as one orthographic word with their morphological host if they are monosyllabic (i.e. *tal=dzi* “3=ERG.SG” ⇒ <*taldzi*>), but written as a separate orthographic word if they are polysyllabic (i.e. *tal=nampo* “3SG=COM” ⇒ <*tal nampo*>). I have decided to spell polysyllabic clitics as separate orthographic words because most of them are still in the process of being grammaticalized from independent grammatical words. The morpheme *tiki*, for example, is attested as an independent grammatical morpheme with the lexical meaning “one”, but also occurs as an inflectional clitic =*tiki*, which expresses indefiniteness on nouns. Accordingly, this spelling convention emphasizes the intermediate position of polysyllabic clitics between clitics and independent grammatical words.

Clitics and particles that fulfill discourse-structuring rather than morphosyntactic function are always written as separate words (i.e. *gi=ni*: “1SG=TOP” ⇒ <*gi ni*>, i.e. *tal=ta* “3[SG]=AVS” ⇒ <*tal ta*>). This correlates with the intuition of native speakers who perceive discourse clitics and discourse particles as separate words rather than dependent morphemes. However, discourse-structuring clitics are written as one orthographic word

with their morphological host if there is a strong syntagmatic relation between the two constituents. Such a case is, for example, the collective numeral *nispi=re*, which consists of the numeral *nispi* “two (human)” and the extended topic clitic *=re*. Although this collective numeral is clearly morphological complex at an underlying level, Bunan speakers commonly pronounce the word as *[nɪspɪr]* (rather than *[nɪspɪre]*). Some speakers are not even aware of the fact that the numeral consists of two separate morphemes. This suggests that this word form is strongly entrenched in the mental lexicon of Bunan speakers. Accordingly, *nispi=re* is orthographically represented as *<nɪspɪr>* rather than *<nɪspɪ re>*.

Another issue that has to be addressed here is the orthographic representation of periphrastic verb forms. Bunan is rich in periphrastic verbal constructions that consist of a non-finite verb form followed by a copula (cf. § 15.3). In most cases, a non-finite verb form and a following copula can be identified as independent words on grounds of both phonological and morphological criteria (cf. § 2.6 for a discussion of wordhood). However, there are cases in which the copula has become cliticized to the non-finite verb with the result that the two constituents now form one phonological word. Such an example is the generic disjunct future tense, which consists of nominalized verbal participle that is followed by the disjunct form of the equative copula *jen-*, e.g. *ra-i-pa=jendzi* “come-ACT-NZR=EQ.DJ.SG” “(You / she / he) will come”. This form clearly consists of two separate morphological words. First, this is implied by the morphological structure of the two syntactic constituents. Second, this is suggested by the fact that negation is expressed on the auxiliary rather than the non-finite verb, hence *ra-i-pa mendzi* “come-ACT-NZR NEG.EQ.DJ.SG” instead of ***ma-ra-i-pa=jendzi* “**NEG-come-ACT-NZR=EQ.DJ.SG”. However, speakers usually realize the verb form *ra-i-pa=jendzi* as *[ræjpæ]*, with the second constituent being phonologically reduced to a voiceless alveo-palatal fricative in the coda of the second syllable. I have chosen to take into account such cases of phonological reduction in the orthographic representation. Accordingly, the verb form *ra-i-pa=jendzi* is rendered as *<rajpajendzi>* or *<rajpæ>*, depending on the degree of phonological reduction of the cliticized copula.

A last point to be discussed here is the issue of the transliteration of Tibetan and Indo-Aryan loanwords. In the case of Tibetan loanwords, I will generally provide the Written Tibetan equivalent in Wylie transliteration, e.g. Bunan *gompa* “monastery” < WT *dgon pa* “monastery”. For Indo-Aryan, I will generally provide the Hindi equivalent in the International Alphabet of Sanskrit Transliteration, e.g. Bunan *bakta* “time” < H *vakt* “time”. Note that this approach is somewhat problematic, as it is quite unlikely that Written Tibetan and Hindi ever directly contributed loanwords to the vocabulary of Bunan. Most probably, the ultimate donor languages were Tibetan varieties and Indo-Aryan idioms spoken in Himachal Pradesh and surrounding areas. However, given the fact that it is virtually impossible

to identify the exact donor language for every single loanword, I have decided to make recourse to written languages with a standardized orthography. Note that I will only provide vernacular forms if there is no corresponding form in Written Tibetan or Hindi. Vernacular forms from Tibetan varieties are all taken from the *Comparative Dictionary of Tibetan Dialects* (Bielmeier et al., forthcoming). Vernacular forms from Indo-Aryan idioms are taken from different sources that are specified for each individual word.

Finally, note that the transliteration conventions described above do not apply to place names and personal names, which will be rendered in customary forms. Accordingly, the name of the capital of Ladakh will be spelled “Leh” rather than “Sle”, while the name of the capital of India will be spelled “Delhi” rather than “Dillī”. In the same vein, the name of my main consultant will be spelled “Tshering Dorje” rather than “Tshe ring rDo rje”.

1.6 Theoretical orientation

This thesis is based on a functional approach towards grammatical description, that is to say, it is grounded on the assumption that the structure of natural language is best described and explained in terms of its function and not in terms of a pre-established theoretical framework (cf. Givón [1984–1990] 2001, 2: 3). This approach entails that a language should be described “on its own terms”. That is: All theoretical notions that are necessary to describe the structure of a language should be derived from constructions that are attested in the language in question rather than be adopted from the arsenal of pre-defined descriptive concepts supplied by theoretical approaches (Croft 2001: 3–8). The ultimate goal of describing a language “on its own terms” is thus to write a “framework free” grammar in the sense of Haspelmath (2008: 342), who argues that “we should approach any language without prejudice and describe it in its own terms, non-aprioristically, overcoming possible biases from our native language, from the model of a prestige language (such as Latin or English), or from an influential research tradition (such as that of Donatus's Latin grammar, or Chomsky's generative grammar).”

Needless to say, writing a frame-work grammar is a challenging task. After all, we tend to construe unknown linguistic structures based on grammatical concepts that we are already acquainted with. If in a given language I encounter words that consistently denote properties of beings and objects, I will inevitably conceptualize these words as “adjectives” based on my German (or more generally European) linguistic background. Most probably, I will also refer to these words as “adjectives” in my description. Accordingly, one may wonder whether it is legitimate to use this term, as this notion seems to be adopted from a pre-established descriptive framework. However, Haspelmath (2008: 350) convincingly argues that it is legitimate to use well-established and widely used descriptive concepts:

“Because of the striking similarities between languages, it is often possible to use familiar transparent terminology (e.g. ‘Noun’ for a word class denoting mostly people and things in English, and ‘Noun’ for a semantically similar word class in Tagalog), rather than completely new or opaque terminology (‘class B words’).”

Accordingly, a frame-work free approach to grammatical description does not necessarily force us to abandon well-established and widely used terms like “tense”, “case”, or “number” and to replace them with self-invented terminology, nor does it force us to ignore all theoretical models that were ever invented within the discipline of linguistics. Rather, frame-work free grammatical description urges us not to impose pre-defined concepts unto a language, but only to apply categories and concepts that are appropriate and necessary to describe the linguistic structures that are encountered in a language. To be sure, the question of which grammatical concepts are appropriate for the description of a language and which are not is largely a matter of one’s personal interpretation. Accordingly, frame-work free grammatical description may be seen as an illusionary goal that is eventually not achievable (cf. Haspelmath 2008: 342). However, in my opinion, it is a goal worth pursuing. I have thus attempted to implement this approach within this thesis. It remains for the reader to judge how close I have come to that goal.

A second basic assumption that underlies this thesis is the persuasion that a comprehensive grammatical description of a language should not only be grounded on a purely synchronic perspective, but should also incorporate diachronic considerations whenever they contribute to our understanding of linguistic structures. This position has been rigorously formulated by Croft (2000: 229), who argues that “[l]anguage change cannot be separated from language structure (phonology, morphology, syntax), language function (semantics, pragmatics, discourse analysis, and phonetics with respect to phonology), language in the mind (psycholinguistics, first and second language acquisition), language in society (sociolinguistics), language variation (sociolinguistics again), or language diversity (typology, genetic linguistics, language contact studies, pidgin and creole linguistics). [... .] In fact, language change is the glue that holds all of these facets of language together.”

The reader will find that I have incorporated diachronic considerations into this thesis whenever I regarded them as helpful for our understanding of the polyfunctionality of particular morphemes such as the terminative clitic *=astok*, which may both express a movement unto a specific location or indicate the vagueness of a location (cf. § 4.4.4.6), or our understanding of the asymmetry of certain paradigms such as the past tense paradigm of the direct evidential past tense, where we still find remnants of first and second person agreement forms but no corresponding third person agreement forms (cf. § 13.5.4 and § 15.2.1.2).

2 Phonetics and Phonology

2.1 Introduction

The following chapter discusses the phonemic inventory of Bunan. § 2.2 and § 2.3 describe the inventory of consonantic and vocalic phonemes, respectively. § 2.4 discusses the syllable structure and phonotactic constraints. § 2.5 deals with the suprasegmental features stress and phonation. § 2.6 addresses the question of how a Bunan word can be defined in terms of phonetic and phonological criteria, and § 2.7, finally, describes the phonology of loanwords.

2.2 Consonants

The phonemic inventory of Bunan comprises twenty-nine consonant phonemes. The following table gives an overview of these phonemes.

Table 17: Inventory of consonant phonemes

		bilabial	alveo-dental	retro-flex	alveo-palatal	palatal	velar	glottal
plosive	vl.	<i>p</i>	<i>t</i>	<i>ʈ</i>			<i>k</i>	
	asp.	<i>pʰ</i>	<i>tʰ</i>	<i>ʈʰ</i>			<i>kʰ</i>	
	vd.	<i>b</i>	<i>d</i>	<i>ɖ</i>			<i>g</i>	
affricate	vl.		<i>ts</i>		<i>tʃ</i>			
	asp.		<i>tsʰ</i>		<i>tʃʰ</i>			
	vd.		<i>dʒ</i>		<i>dʒ</i>			
fricative			<i>s</i>	<i>ʂ</i>	<i>ʃ</i>			<i>h</i>
nasal		<i>m</i>	<i>n</i>			<i>ɲ</i>	<i>ŋ</i>	
trill			<i>r</i>					
lateral			<i>l</i>					
glide						<i>j</i>		

More than half of the Bunan phonemic inventory consists of plosives, which occur in four places of articulation (bilabial, alveo-dental, retroflex, and velar), and affricates, which occur in two places of articulation (alveo-dental and alveo-palatal). Both plosives and affricates exhibit three manners of articulation (voiceless unaspirated, voiceless

aspirated, and voiced), yielding a total of twelve plosive and six affricate phonemes. In addition, Bunan possesses four fricative phonemes (alveo-dental, retroflex, alveo-palatal, and glottal) as well as four nasal phonemes (bilabial, alveo-dental, palatal, and velar). The remaining three phonemes are an alveo-dental trill, an alveo-dental lateral, as well as palatal glide. The phonemic status of these sounds will be established in the following subsections.

2.2.1 Stops and affricates

2.2.1.1 Manners of articulation

There are three distinct manners of articulation for stops: voiceless unaspirated, voiceless aspirated and voiced. The contrastive quality of aspiration and voicing was established by assessing the “voice onset time” of the respective sounds, that is the time interval between the release of the closure in the oral cavity and the moment in which the vocal chords start to vibrate (Johnson [1997] 2012: 101–102). A brief acoustic study of the speech of three male speakers yielded the following results: The mean value of the voice onset time of voiceless unaspirated sounds was 21 milliseconds for stops and 44 milliseconds for affricates. The mean value of the voice onset time of voiceless aspirated sounds was 50 milliseconds for stops and 71 milliseconds for affricates. Voiced stops and affricates differ from their voiceless unaspirated and voiceless aspirated counterparts in that they exhibit a “negative” voice onset time. This means that the vibration of the vocal chords sets in before the closure in the oral cavity is released, which leads to a prevoicing of the respective sound. The mean interval of prevoicing was 70 milliseconds for stops and 65 milliseconds for affricates.

Figure 12: Waveform of initial /t/ (/tal/ “3[SG]”, speaker: NN)

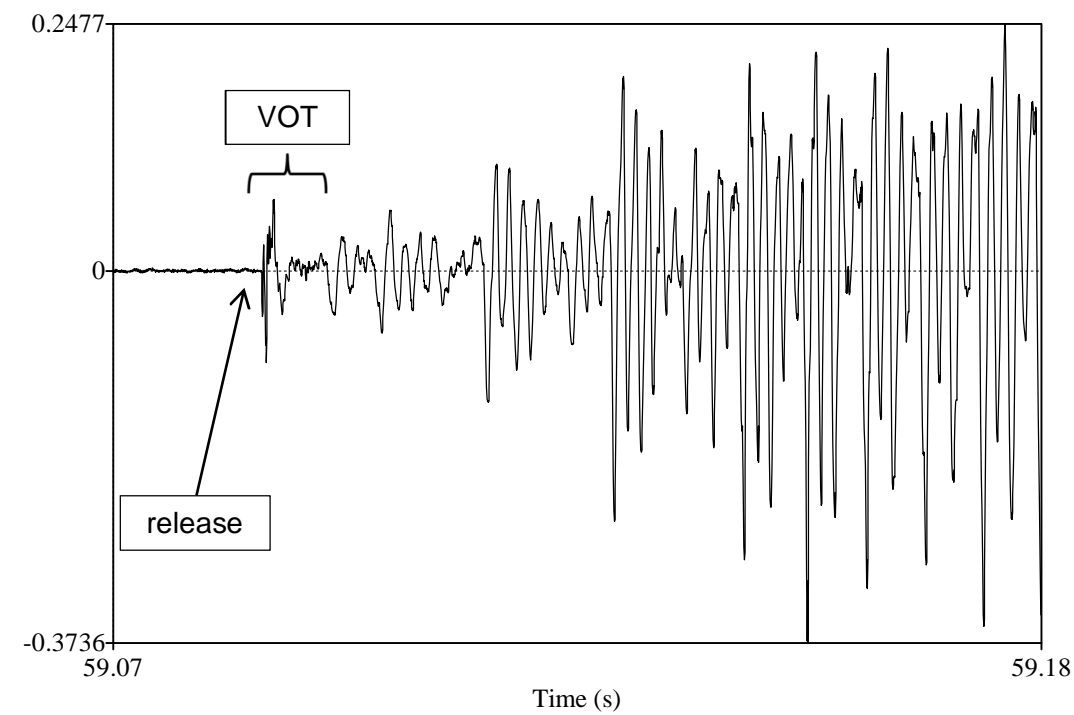


Figure 13: Waveform of initial /tʰ/ (/tʰadzu/ “that”, speaker: NN)

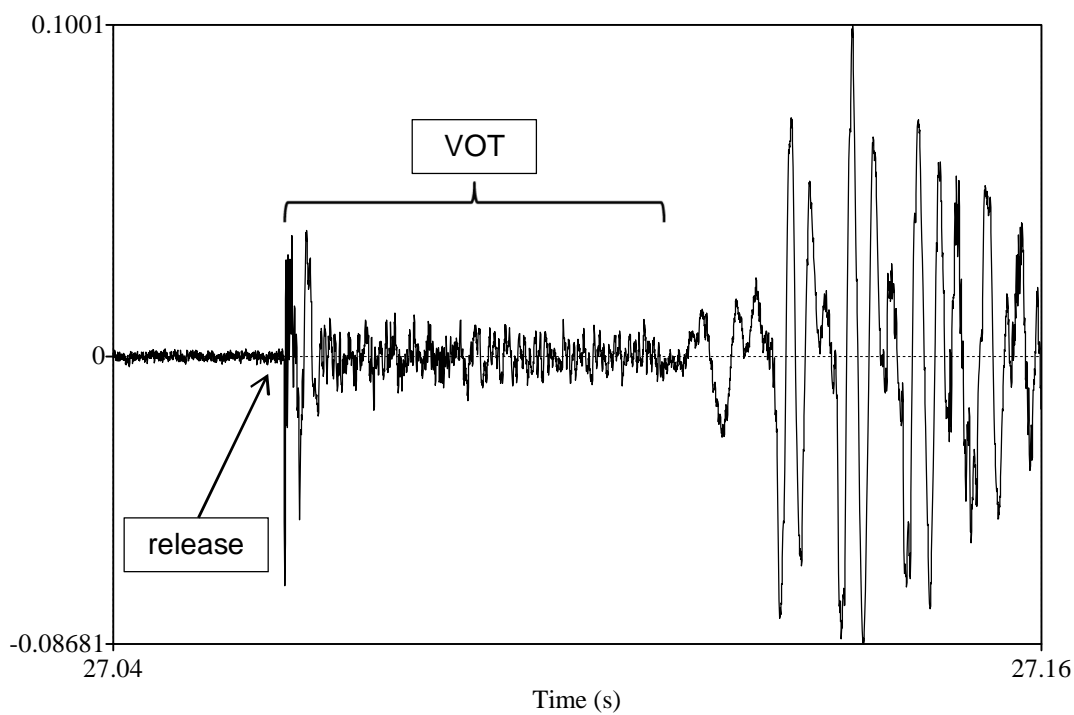
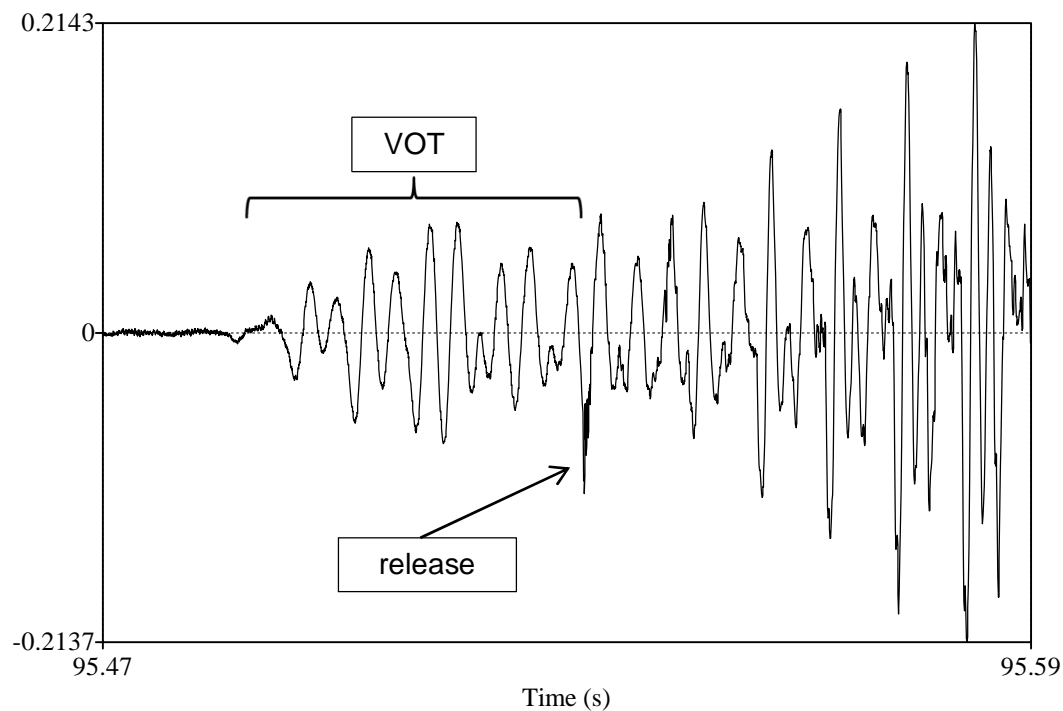


Figure 14: Waveform of initial /d/ (/da/ “now”, speaker: NN)



Minimal pairs illustrating the phonemic status of the three different manners of articulation are given below.

/p/ – /pʰ/ – /b/

pat

“letter”

pʰat

“bag”

bat

“bark”

pu

“body hair”

pʰu

“kind of pot”

bu

“insect”

/t/ – /tʰ/ – /d/

ta

“vein”

tʰa-

“prohibitive prefix”

da

“now”

tal

“3[SG]”

tʰal

“slap”

dal

“slowness”

/t/ – /tʰ/ – /d/

tʰup-tɕ-um
“be.able-TR-INF”

dʊp-tɕ-um
“finish-TR-INF”

tɕɔŋtɕɔbujan
“bumble bee”

dɔŋdɔŋ
“deep”

takʰak
“dried up”

tʰakdok
“jealous”

/k/ – /kʰ/ – /g/

kil
“centre, middle”

kʰilti
“puddle”

gil
“fence”

kjut
“ram”

kʰjut
“kind of dough”

gjut
“need”

/ts/ – /tsʰ/ – /dz/

tsak-tɕ-um
“put.in-TR-INF”

tsʰak-tɕ-um
“sieve-TR-INF”

dzakdzak
“backache”

tsʰot
“color”

dzot
“storeroom”

tsokna
“cross-legged”

dzokna
“motionless”

/tɕ/ – /tɕʰ/ – /dz/

tɕa
“cow dung”

tɕʰa
“heat”

dza
“tea”

tɕamna
“whole”

tɕʰam
“mask dance”

dzam
“soup (h)”

2.2.1.2 Voiceless unaspirated stops and affricates

The following minimal pairs illustrate the phonemic status of voiceless aspirated stops and affricates.

/p/ – /t/ – /tʃ/ – /k/ – /ts/ – /t͡s/

<i>pak-t͡s-um</i> “measure-TR-INF”	<i>tak-t͡s-um</i> “stab-TR-INF”	<i>t͡ʃakpo</i> “strong”
<i>kak-t͡s-um</i> “block-TR-INF”	<i>tsak-t͡s-um</i> “put.inside-TR-INF”	<i>t͡sʌk-t͡s-um</i> “wash-TR-INF”
	<i>tok-t͡s-um</i> “recognize-TR-INF”	<i>t͡ʃokt͡ʃoktsi</i> “elbow”
<i>kok-t͡s-um</i> “devour-TR-INF”	<i>tsok-t͡s-um</i> “pick-TR-INF”	<i>t͡sʌk-t͡s-um</i> “cover-TR-INF”
<i>polqo</i> “ball”	<i>tol-t͡s-um</i> “pierce-TR-INF”	<i>t͡ʃol-t͡s-um</i> “explain-TR-INF”
<i>kol-t͡s-um</i> “distil-TR-INF”		<i>t͡sʌl-t͡s-um</i> “propose-TR-INF”

The voiceless unaspirated stops /p, t, k/ are the only plosives that can also occur in syllable codas. Their phonemic status in this position is illustrated by the following examples.

/p/ – /t/ – /k/ (syllable final)

<i>lap</i> “lightning”	<i>latmo</i> “imitation”	<i>lak</i> “hand”
	<i>t͡ʃʌt</i> “fever”	<i>t͡ʃʌk</i> “sieve”
<i>tapna</i> “similar”	<i>tatna</i> “small”	

In absolute syllable final position, voiceless unaspirated stops are always articulated as unreleased plosives. Syllable final /t/ and /k/ trigger a glottalized articulation of the preceding vowel, with /k/ additionally causing a lowering / backing. This phonological process is described in § 2.3.5.3. The syllable final allophones may either be

voiced or voiceless, depending on whether the voicing period of the preceding vowel stretches over the interval of the closure in the oral cavity or not.

tʰap [tʰap̚ ~ tʰab̚]

“oven”

put [puʔt̚ ~ puʔd̚]

“teat”

tɕik [tɕiʔk̚ ~ tɕiʔg̚]

“one”

The coexistence of voiceless and voiced variants raises the question as to whether syllable final unreleased stops have to be considered as allophones of the voiceless unaspirated phonemes [p, t, k] or allophones of the voiced phonemes [b, d, g]. If native speakers are asked to write Bunan words with final plosives in Latin script, they will mostly use the graphemes <b, d, g> to render final plosives. However, the intuition of native speakers is not always a reliable guide when it comes to assessing phonetic nuances of their mother tongue. Also, this orthography is most probably influenced by Tibetan orthography, where final stops are always written as <b, d, g>. I have chosen to treat syllable final unreleased stops as allophones of voiceless unaspirated plosives based on the fact that all verbal endings with a voiced initial are devoiced when suffixed to a verb stem ending in a voiceless unaspirated sound (cf. § 3.2.1.2 for a more detailed description of the process).

/bup-/ + /-dza/ > [buptsə] not: **[bub̚dzə]

“to stumble” PST.DIR.DJ.SG

/tɕʰak-/ + /-dzi/ > [tɕʰaʔktɕi] not: **[tɕʰaʔg̚dzi]

“to cease” PST.INFER.DJ.SG

Word-internally, syllable final stops are likewise articulated as unreleased stops. When followed by a voiced consonant, these unreleased stops become voiced. This voicing assimilation is triggered by a phonological process that is described in § 2.2.5.3. When followed by a voiceless plosive or voiceless sibilant, the plosives /p, t, k/ surface as voiceless unreleased stops.

tapna [tab̚nə]

“similar”

tiptsi [tɪp̚tsi]

“tip”

latmo [laʔd̚mo]

“imitation”

natpa [naʔt̚pa]

“sick person”

tɕakdzwa [tɕaʔg`zwæ]

“iron bucket”

laktʰil

“palm”

[laʔk`tʰɪl]

There are, however, two exceptions to this rule. First, the alveo-dental stop /t/ is deleted when the following syllable begins with an affricate /ts, tsʰ, dz, tɕ, tɕʰ, dz/ or a fricative /s, ɕ/, with the glottalization on the preceding vowel being retained.

butsa [buʔsæ]

“shelf place” (lit. “put-place”)

ketdzi [keʔdzi]

“alone”

Second, the phoneme /k/ surfaces as a fricative [ç ~ x ~ χ] when directly followed by a voiceless fricative /s/ or /ɕ/ in the coda of the same syllable or in the onset of the following syllable. The exact articulation of the allophone depends on the quality of the preceding vowel. [ç] is found after the front vowels [i, e], while [χ] occurs after the back vowels [a, o]. [x] is documented after the back vowel [u]. Vowel glottalization is always retained if the preceding vowel is a back or central vowel, while it is commonly dropped when the preceding vowel is a front vowel.

tiks [tɪçs]

“lightning”

keks [kɛçs]

“present”

naksa [naʔχsæ]

“ink”

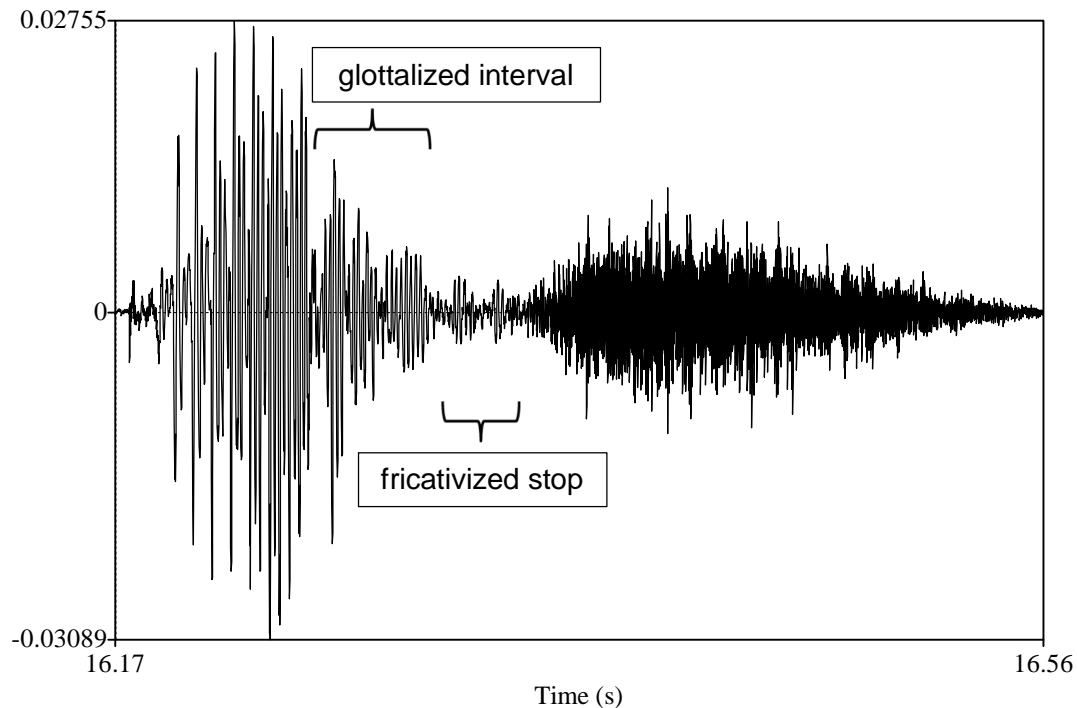
proks [proʔχs]

“kick”

lukɕa [luʔxɕæ]

“mutton”

Figure 15: Waveform of fricativized /k/ (/proks/“kick”, speaker: TD)



2.2.1.3 Voiceless aspirated stops and affricates

As mentioned above, voiceless aspirated stops and affricates only occur in syllable initial position. Minimal pairs illustrating their phonemic status are given below.

/p^h/ – /t^h/ – /tʰ/ – /k^h/ – /ts^h/ – /tɕ^h/

p^hot

t^hotpa

tʰot-men

“dried stuff”

“skull”

“suit-INF”

k^hot

ts^hot

tɕ^hot

“grandchild”

“color”

“offering”

p^ham-tɕ-um

tʰampa

“defeat-TR-INF”

“hard-working”

k^hampa

ts^ham

tɕ^ham

“person from Kham”

“wool”

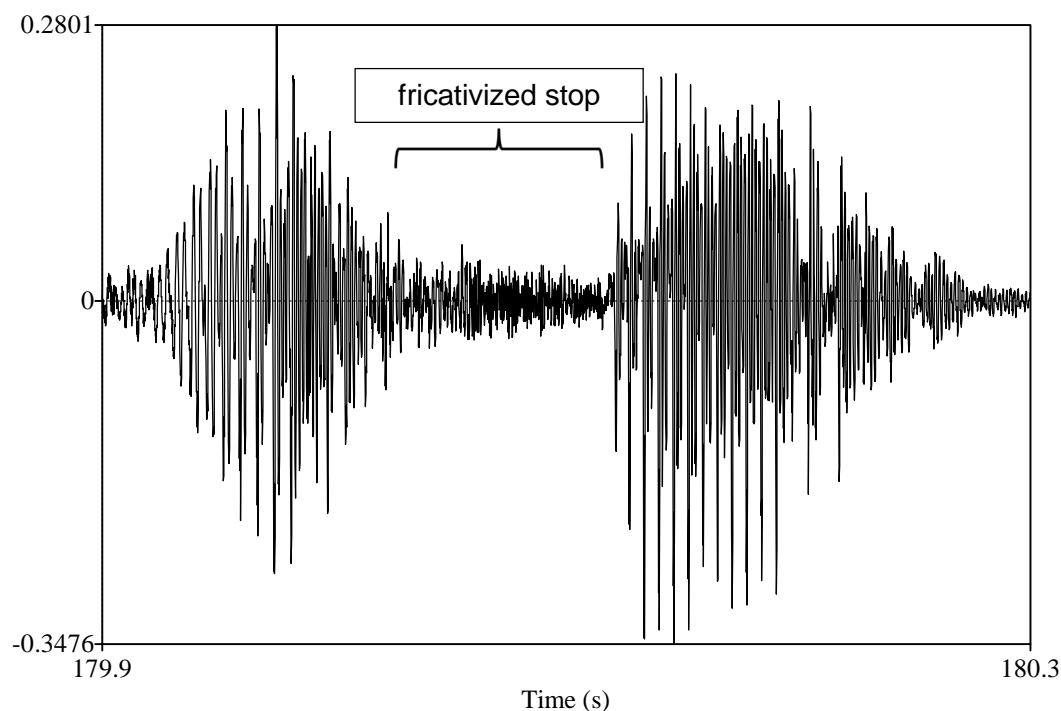
“mask dance”

The stop /p^h/ is often realized as a bilabial fricative [ɸ] when occurring between two vowels, while the stop /k^h/ is often pronounced as a fricative [χ] in the same environment. However, the fricativization of /k^h/ is more restricted as it only commonly occurs when the following sound is a central open vowel /a/.

qip^huk [d̪i̯p̪ʊ^ʔk̪]
 “cave”

kja-k^ha [c^haχa]
 “become-PROG.PL”

Figure 16: Fricativized /k^h/ (/kjak^ha/ “become-PROG.PL”, speaker: NN)



2.2.1.4 Voiced stops and affricates

Like their voiceless aspirate counterparts, voiced plosives and affricates only occur in syllable initial position. Their phonemic quality is illustrated by the following minimal pairs.

/b/ – /d/ – /q/ – /g/ – /dz/ – /dʒ/

ba

“wall”

da

“now”

qa

“enemy”

dʒa

“tea”

bu

“insect”

du

“cloud”

qu

“corner”

gu

“nine”

dʒu

“lips”

<i>bik</i>	<i>dik</i>	<i>qik</i>
“full”	“vase-shaped pot”	“okay”
	<i>dzik</i>	
	“snow leopard”	

The affricate phonemes /dz/ and /dʒ/ only surface as [dz] and [dʒ] after the alveo-dental sounds /t/ and /n/. In all other phonetic contexts, they are usually articulated as homorganic fricatives [z] and [ʒ] with no audible release of a closure in the oral cavity.

<i>ketdzi</i>	[keʔˈdzi]	<i>gatzda</i>	[gaʔˈdʒæ]
“alone”		“uproar”	
<i>indzi</i>	[indzi]	<i>phundʒi</i>	[pʰundʒi]
“oneself”		“hot”	
<i>tʰakdzwa</i>	[tʰaʔgˈzwæ]	<i>tʰupdzi</i>	[tʰubˈʒi]
“iron bucket”		“forty”	
<i>kʰodzup</i>	[kʰozupˈ]	<i>lodʒun</i>	[loʒun]
“thigh of an animal”		“every year”	
<i>umdzat</i>	[umzatˈ]	<i>soldʒa</i>	[solʒæ]
“performer of funeral rites”		“tea (h)”	

The complementary distribution observed above may convey the impression that /z/ and /ʒ/ should be regarded as the underlying phonemes, while [dz] and [dʒ] should be analyzed as allophones occurring after a homorganic stop. However, this analysis proves to be untenable once morphophonological alternations of inflectional morphemes with an initial /dz/ or /dʒ/ are taken into account. These suffixes are listed in the following.

1. =dzi	=ERG.SG	“ergative”
2. -dza	-PST.DIR.DJ.SG	“direct evidential disjunct past tense”
3. -dʒi	-PST.INFER.DJ.SG	“inferential disjunct past tense”
4. -dʒi	-CVB.SG	“converb”

As the inferential disjunct past tense ending and the converb suffix are homophonous, only the converb suffix will be considered in the following discussion. The data given below demonstrate that the ergative clitic, the direct evidential disjunct past tense ending, and the converb suffix show a similar complementary distribution of allomorphs when suffixed to nouns and verbs.

Table 18: Allophones of inflectional endings with initial /dz/ or /dʒ/

_ #	=dzi	-dza	-dʒi
-p	<i>dzep=dzi</i> [zeptsi] “stallion=ERG.SG”	<i>bup-dza</i> [buptsæ] “stumble-PST.DIR.DJ.SG”	<i>bup-dʒi</i> [buptɕi] “stumble-CVB.SG”
-t	<i>sat=dzi</i> [saʔtsi] “god=ERG.SG”	<i>dat-dza</i> [daʔtsæ] “fall-PST.DIR.DJ.SG”	<i>dat-dʒi</i> [daʔtɕi] “fall-CVB.SG”
-k	<i>lak=dzi</i> [laʔkʰtsi] “hand=ERG.SG”	<i>tɕʰak-dza</i> [tɕʰaʔkʰtsæ] “cease-PST.DIR.DJ.SG”	<i>tɕʰak-dʒi</i> [tɕʰaʔkʰtɕi] “cease-CVB.SG”
-m	<i>ʃim=dzi</i> [ʃimzi] “arrow=ERG.SG”	<i>kjum-dza</i> [cumzæ] “ply-PST.DIR.DJ.SG”	<i>kjum-dʒi</i> [cumʒi] “ply-CVB.SG”
-n	<i>han=dzi</i> [handzi] “2=ERG.SG”	<i>pan-dza</i> [pandzæ] “spin-PST.DIR.DJ.SG”	<i>pan-dʒi</i> [pandʒi] “spin-CVB.SG”
-ŋ	<i>adʒaŋ=dzi</i> [aʒaŋzi] “maternal.uncle=ERG.SG”	<i>turŋ-dza</i> [turŋzæ] “drink-PST.DIR.DJ.SG”	<i>turŋ-dʒi</i> [turŋʒi] “drink-CVB.SG”
-s	<i>ʃaŋs=dzi</i> [ʃaŋsi] “horse=ERG.SG”	<i>nas-dza</i> [nasæ] “be.sick-PST.DIR.DJ.SG”	<i>nas-dʒi</i> [naɕi] “be.sick-CVB.SG”
-r	<i>mar=dzi</i> [marzi] “butter=ERG.SG”	<i>gjar-dza</i> [ʒarzæ] “be.afraid-PST.DIR.DJ.SG”	<i>gjar-dʒi</i> [ʒarʒi] “be.afraid-CVB.SG”
-l	<i>tal=dzi</i> [talzi] “3=ERG.SG”	<i>gjal-dza</i> [ʒalzæ] “win-PST.DIR.DJ.SG”	<i>gjal-dʒi</i> [ʒalzɕi] “win-CVB.SG”
-V	<i>gi=dzi</i> [gizi] “1SG=ERG.SG”	<i>kja-dza</i> [cæzæ] “become-PST.DIR.DJ.SG”	<i>kja-dʒi</i> [cæʒi] “become-CVB.SG”

I shall not provide a more detailed discussion of the complementary distribution of all allomorphs here, as this topic will be addressed in more detail in § 3. The crucial point is that the allomorphs that occur after stems ending in the voiceless plosives /p, t, k/ are

all articulated with a syllable initial affricate, e.g. [zeptsɪ], [saʔtsɪ], and [laʔktsɪ]. If we assumed that the underlying phonological forms of these endings were /-zi/, /-za/, and /-zi/ (with a simple fricative), we would expect the phonetic forms [zepsɪ], [saʔsɪ], and [laʔχsɪ]. However, the resulting forms all exhibit an initial affricate. This fact can only be accounted for if we assume that the underlying phoneme is not a simple fricative but an affricate.

There are two further arguments supporting this analysis. From a structural perspective, we would expect the underlying form to be /dz/ rather than /z/, as the symmetry of the phonemic inventory (with three distinct manners of articulation for both stops and affricates) would be disrupted otherwise (Clark, Yallop & Fletcher [1990] 2007: 99–103). Comparative evidence likewise suggests that we should postulate the phoneme /dz/, as West Himalayish languages in general exhibit a voiced affricate phoneme /dz/ but no corresponding voiced fricative phoneme /z/ (cf. Zoller 1983: 3; Krishan 2001a: 402; Sharma 2007b: 275; Willis 2007a: 42).

2.2.2 Nasals

There are four nasal phonemes /m, n, ɲ, ŋ/ in Bunan. Minimal pairs illustrating their contrastive quality in syllable initial position are given below.

/m/ – /n/ – /ɲ/ – /ŋ/

<i>ma</i>	<i>na</i>	<i>ɲa</i>	<i>ŋa</i>
“ulcer”	“oath”	“fish”	“drum”
<i>min</i>	<i>nin</i>		
“name”	“daytime”		
<i>mama</i>		<i>=ɲama</i>	<i>ŋama</i>
“breast”		“=all”	“tail”

The phonemes /m, n, ŋ/ can also occur in syllable final position. This is demonstrated by the following minimal pairs.

/m/ – /n/ – /ŋ/ (syllable final)

<i>tsʰam</i> “fur”	<i>tsʰan</i> “resin”	<i>tsʰaŋ</i> “nest”
<i>sim</i> “arrow”	<i>sin</i> “epilepsy”	<i>siŋ</i> “sister”

The phoneme /n/ surfaces as [ŋ] when preceding a velar stop word-internally. This allophone can be clearly distinguished from the phoneme /ŋ/, as it does not cause the lowering of a preceding vowel (cf. § 2.3.1.2).

mankʰaŋ [maŋkʰaŋ]
“hospital”

pʰan-ka [pʰaŋgjæ]
“be.beneficial-PROG.SG”

The phoneme /ŋ/ differs from the three other nasal phonemes in two respects. First, it can only be found in syllable initial position. Second, it has a limited distribution, occurring only before the mid and back vowels /a, o, u/. Before the front vowels /i, e/ the sound [ŋ] is merely an allophone of the phoneme /n/ (cf. § 2.2.5.2).

nek [nɛʔk̚ ~ ɲɛʔk̚]
“last year”

nira [niræ ~ ɲiræ]
“afternoon”

When the phoneme /ŋ/ is preceded by a vowel and followed by a voiceless fricative, it is often deleted with the preceding vowel becoming lengthened and nasalized, especially in fast speech. Also, /ŋ/ is deleted when occurring between two vowels. If the adjacent vowels share the same quality, they merge into a long nasalized vowel. If they differ in quality, they merge into a nasalized diphthong. This is phonological rule is discussed in more detail in § 2.3.5.5.

saŋs [saŋs ~ sã:s]
“horse”

tsʰaŋtsʰaŋi [tsʰã:tsʰãj]
“everybody”

maŋi [mãj]
“red”

tiŋi [tĩ:]
“blue”

tuŋi [tʏj]
“drink-ACT”

2.2.3 Fricatives

Bunan possesses the four fricative phonemes /s, ʃ, ɕ, h/. Their phonemic status in syllable initial position is illustrated by the minimal pairs given below.

/s/ – /ʃ/ – /ɕ/ – /h/

<i>sak</i> “breath”	<i>ʃak</i> “shame”	<i>ɕakbuʈa</i> “birch tree”	<i>hak</i> “damn!”
<i>siŋe</i> “lion”	<i>ʃiŋ</i> “sister”	<i>ɕiŋ</i> “wood”	<i>hiŋ</i> “1PL.EXCL”
<i>set-men</i> “ride-INF”	<i>ʃet-men</i> “laugh-INF”	<i>ɕet-men</i> “flee-INF”	

Of the four fricative phonemes, only /s/ is commonly found in syllable codas. It can either occur as a single syllable final consonant or form a syllable final cluster with a preceding consonant /p, t, k, m, n, ŋ, r, l, j/. Syllable final clusters are discussed in § 2.4.3 in more detail.

tɕaks
“iron”

liŋs
“hunt”

pus
“knee”

The phoneme /ɕ/ is also found in syllable codas. However, this phoneme is only attested in this position in the quantifier *hoɕmej* “much, many, very” and the noun *gaɕʈa* “wooden stairs”. The quantifier *hoɕmej* is a contraction of the Indo-Aryan loanword *hōś* “wisdom, consciousness, sense” and the negated existential copula *mej* < *ma-ni*. The noun *gaɕʈa* is likely a loanword as well, although I have not been able to identify the donor language so far. Eventually, the restricted occurrence in a few non-native lexemes suggests that the phoneme /ɕ/ was originally not allowed in syllable final position.

2.2.4 Liquids and approximants

The trill /r/, the lateral /l/, and the glide /j/ occur both in syllable initial and syllable final position. The phonemic quality of the two sounds in syllable initial position is illustrated by the minimal pairs below.

/r/ – /l/ – /j/

ra

“goat”

la

“moon”

ja

“spoilt food”

ras

“cloth”

las

“price”

jas

“righthand”

The following examples demonstrate that the two sounds also contrast in syllable codas.

/r/ – /l/ – /j/ (syllable final)

mar

“butter”

mal

“place”

jur

“water channel”

jul

“country”

juj

“old (of things)”

bor

“shrub”

boj

“fat”

ŋal

“plough”

ŋaj

“five”

The trill /r/ is often articulated as a devoiced allophone [r̥] in both syllable initial and syllable final position. Usually, the sound is only partially devoiced in syllable initial position, as voicing will set in again before the syllable nucleus (see Figure 17 below). In syllable final position, however, the sound may be totally devoiced and articulated with a considerable amount of friction. Acoustically, the resulting sound is perceived as a voiceless fricative similar to the English phoneme /ʃ/.

Figure 17: Illustration of partially devoiced initial /r/ (*rut* “flood”, speaker: TD)

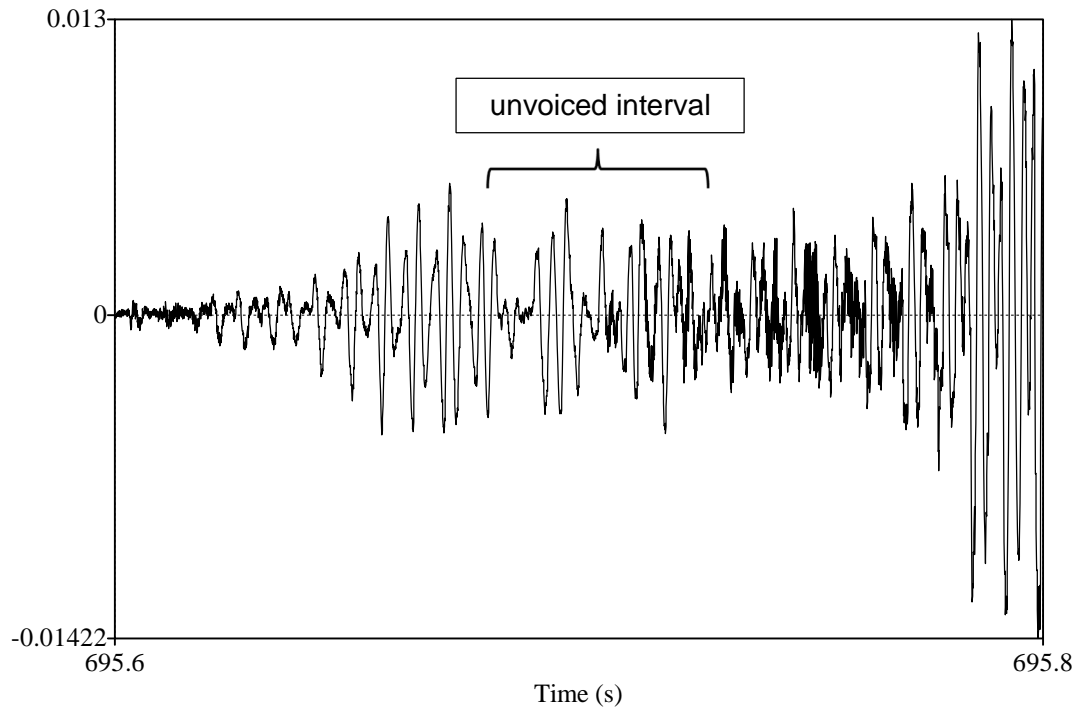
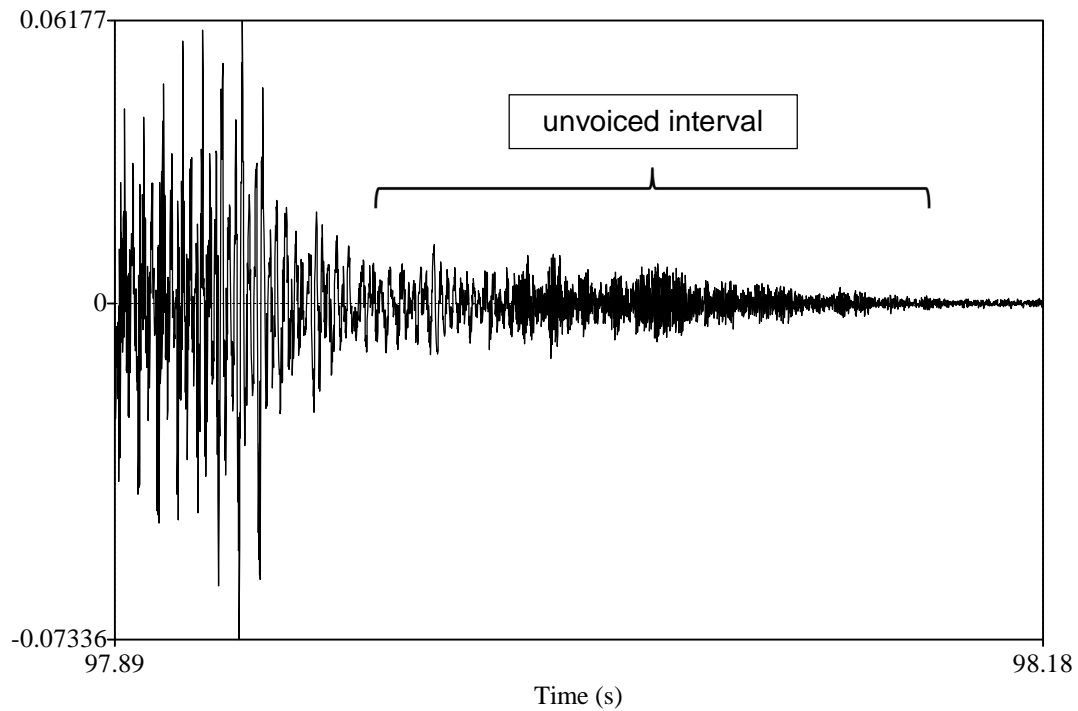


Figure 18: Illustration of totally devoiced final /r/ (*dzer* “nail”, speaker: TD)



In my data, the palatal approximant /j/ is only attested before the vowels /e, a, o, u/ but not before the closed front vowel /i/. As there are only four etyma with a syllable initial /i/ in Bunan, it is not clear whether the articulatory combination of /j/ + /i/ is theoretically possible but not attested or whether the approximant is generally deleted before /i/. In the Tibetan dialects of Lower Ladakh, the approximant /j/ is regularly dropped before front

vowels (Zeisler 2011: 244), which suggests that the absence of the sound combination in Bunan might be an areal phenomenon. Before the half-close front vowel /e/, the approximant /j/ is articulated as a voiced glottal fricative /h/, as in the equative copula *jen* [hen]. Similar phonological developments have been reported for Tibetan dialects of Upper Ladakh (Zeisler 2011: 244), which again suggests that this is an areal phenomenon. The fricative articulation of the /j/ before /e/ usually leads to a breathy articulation of the following vowel. This is illustrated by the following waveform diagrams. Figure 19 shows the waveform of a syllable initial /j/ followed by the vowel /e/. The noise components of the voiced fricative [h] are still present during the articulation of the vowel, which is thus articulated with a considerable amount of breathiness. Figure 20 shows the waveform of a plain initial /e/. This vowel is articulated with modal voice, which is evident from the absence of noise components in the wave signal.

Figure 19: Fricativization of /j/ before /e/ (/jen/ “existential copula”, speaker: NN)

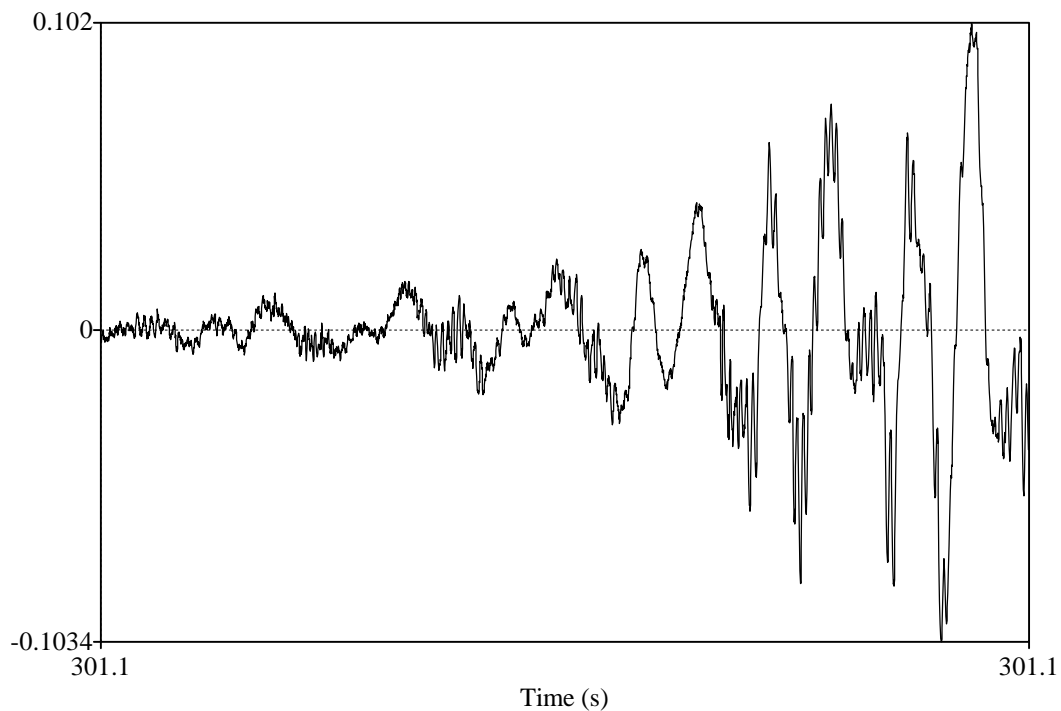
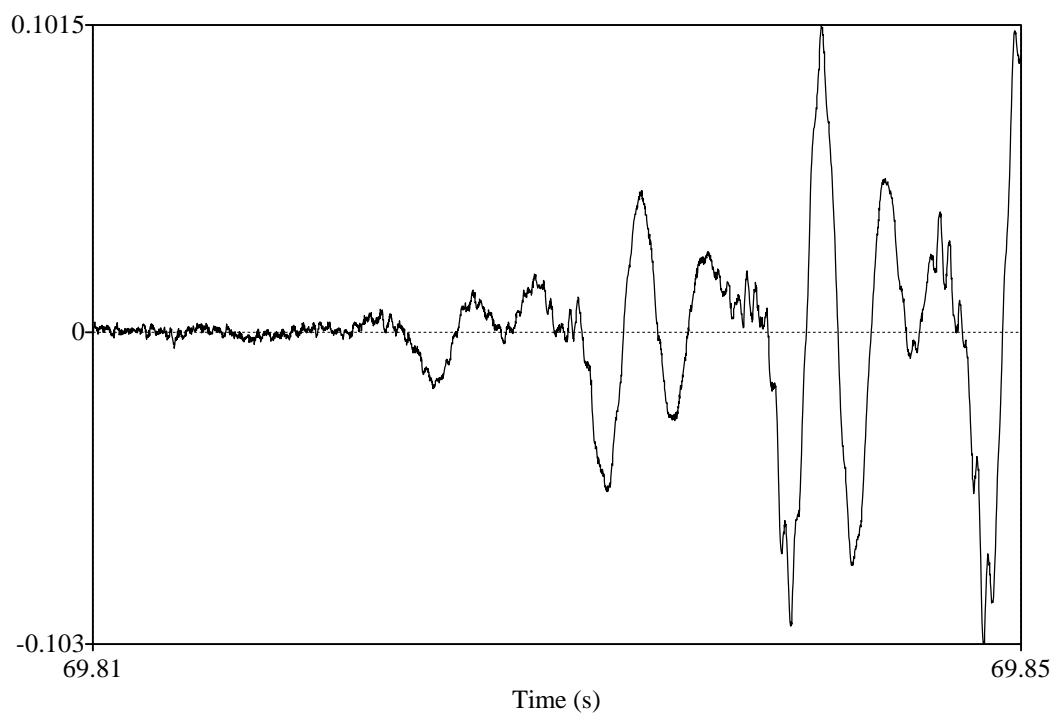


Figure 20: Syllable initial /e/ (/erĩ:/ “ours”, speaker: NN)



2.2.5 Major phonological processes affecting consonants

Minor allophonic variants of single phonemes (e.g. the voiceless allophone [r̥] of the voiced trill /r/) or small groups of phonemes (e.g. the deaffricated allophones [z̥, ʒ̥] of the affricates /dz, dʒ/) have been discussed above. In addition, there are also major phonological processes that affect a greater number of phonemes belonging to different sound classes. These processes will be described in the following subsections.

2.2.5.1 Degemination

If a sequence of two identical consonants occurs at a word-internal syllable boundary, the syllable final consonant of the first syllable is commonly deleted. Any phonetic influence of the syllable final consonant on the preceding vowel (glottalization, lowering, etc.) still persists after its deletion.

tattat [taʔtat̚]
“small”

lik-ka [lɪʔka]
“do-PROG”

dot-de [doʔde]
“meet-SUP”

ketdzi [keʔdzi]
“alone”

kjuttsi [cyʔtsi]

“young wether”

However, the rule stated above does not hold for sequences of homorganic nasals. They are not simplified but commonly pronounced as true geminates.

sonna [sonna]

“slightly”

pan-ni [panni]

“spin-IMP.PL”

2.2.5.2 Palatalization

Bilabial, alveo-dental and velar plosives as well as the nasal stop /n/ commonly undergo palatalization when standing before a front vowel. Before the front vowel /e/, the bilabial and alveo-dental stops /p, t, p^h, t^h, b, d/ are often articulated with a palatal secondary articulation.

tebu [tebu ~ tiebu]

“snake”

the [the ~ tie]

“this”

berbu [berbu ~ bierbu]

“trousers”

The velar stops /k, k^h, g/, on the other hand, surface as the palatal allophones [c, c^h, ɟ] before the front vowel /e/, the front vowel /i/, and the glide /j/. In an initial cluster of /k, k^h, g/ and /j/, the two sounds merge into a single allophone [c, c^h, ɟ], with the glide no longer discernible as a distinct sound.

k^hep [c^hep̃]

“needle”

ken [cen]

“breakfast”

gi [ɟi]

“1SG”

g^hap [ɟap̃]

“back”

Like the velar stops, the alveo-dental nasal /n/ usually undergoes palatalization before the front vowels /i, e/ and surfaces as the allophone [ɲ]. Consequently, the nasal phonemes /n/ and /ɲ/ only contrast before the non-front vowels /a, o, u/. Before front vowels, the sound [ɲ] is merely an allophone of the phoneme /n/ (cf. § 2.2.2).

nek [nɛʔk̚ ~ ɲɛʔk̚]

“last year”

nira [niræ ~ ɲiræ]

“afternoon”

2.2.5.3 Retroflexion

There is some evidence for a phonological process in the course of which alveo-dental stops are turned into retroflex stops. The process affects alveo-dental stops when they occur in the onset of the second syllable of a morphologically complex word and when the preceding syllable is either open and begins with an alveo-palatal fricative or ends in the alveo-dental nasal /n/.

tɕʰaː = {a-

“knowledge=POSS-”

cf. *ta-*

“POSS-”

tɕʰeʔi

“warm water”

cf. *ti*

“water”

pʰuŋʔi

“hot water”

cf. *ti*

“water”

However, the process is only attested in a relatively small number of lexemes and does not affect all alveo-dental stops that occur in the phonological environments described above. For example, there are lexemes such as *tɕʰuta* “riverbank” or *genti* “pick-axe”, in which the alveo-dental plosive /t/ does not undergo retroflexion. Also, verbal forms are not affected by the process. The finite form *tɕu-ø-ta* “squeeze-TR-PST.INFER.DJ.SG”, for example, is pronounced as [tɕutæ] and not *[tɕutʰæ]. Accordingly, retroflexion does not represent a generally valid phonological process in Bunan, but rather has to be considered as an irregular process that only affects certain lexemes.

2.2.5.4 Voicing assimilation

The plosives /p, t, k/ as well as the fricative /s/ may undergo progressive voicing assimilation when they occur in word-internal syllable final position. The stops /p, t, k/ surface as voiced unreleased allophones [b̚, d̚, g̚] when followed by any kind of voiced consonant in the onset of the following syllable.

təopgjaʔ [təobˈgjaʔt̚]

“eighteen”

datle [daˈd̪le]

“right now”

təakdzwa [təaˈg̊zwæ]

“alone”

t̪ikma [t̪iˈg̊mæ]

“tie-dye”

The fricative /s/ is also affected by voicing assimilation, although to a lesser extent. The phoneme only surfaces as a voiced fricative [z] when it is word-internally followed by a voiced plosive. When followed by nasal or liquid or when occurring in intervocalic position, it is articulated as a voiceless fricative [s].

təusdruk [təuzdruˈk̚]

“sixteen”

təasga [təazgæ]

“ginger”

lasmi [lasmi]

“woman”

mjosla [mjøslæ]

“6th month of traditional calendar” (lit. “ploughing-month”)

sasa [sæsæ]

“different”

2.3 Vowels

In Bunan, there are five short vowel phonemes: an unrounded close front vowel /i/, an unrounded half-close front vowel /e/, an unrounded central open vowel /a/, a rounded half-close back vowel /o/, and a rounded close back vowel /u/. Additionally, there are two long vowel phonemes: a long unrounded close front vowel /i:/ and a long unrounded open central vowel /a:/. As will be shown below, the long vowels exhibit a limited distribution.

Table 19: Inventory of monophthong phonemes

	front	central	back
close	<i>i / (i:)</i>		<i>u</i>
half-close	<i>e</i>		<i>o</i>
open		<i>a / (a:)</i>	

Additionally, there are three diphthong phonemes /ew, wa, aw/ attested in my language data. The diphthongs /ew, aw/, however, only occur in a small number of lexemes that are loanwords from Tibetan and Indo-Aryan languages. Accordingly, /wa/ is the only genuine diphthong in Bunan.

Table 20: Inventory of diphthong phonemes

	front	central	back
close			(aw)
half-close	(ew)		
open		wa	

2.3.1 Short vowels

The phonemic quality of the five short vowels /i, e, a, o, u/ is established by the following minimal pairs.

/i/ – /e/ – /a/ – /o/ – /u/

tik-tɛ-um

“close-TR-INF”

tek

“untained hide”

mi

“person”

me

“fire”

tak-tɛ-um

“stab-TR-INF”

ma

“ulcer”

tuk-tɛ-um

“sew-TR-INF”

tok-tɛ-um

“recognize-TR-INF”

mo-tɛ-um

“roast-TR-INF”

mu

“snow”

The allophonic variants of these basic vowel phonemes are described in the following subsections.

2.3.1.1 Front vowels

The unrounded close front vowel /i/ always surfaces as a high front vowel when standing in absolute syllable final position, in word-internal syllable final position with an alveo-palatal fricative or affricate directly following, or in a closed syllable with an initial alveo-palatal fricative or affricate. In most other contexts, the pronunciation varies between the two allophones [i ~ ɪ]. The vowel always surfaces as a lowered allophone [ɪ] when followed by the velar plosive /k/, the velar nasal /ŋ/, or the trill /r/. However, these consonants only trigger a lowering effect when there is no alveo-palatal consonant in syllable initial position.

gi [ɟi]
“1SG”

kit [kiʔt̪ ~ kɪʔt̪]
“dirt”

mik [mɪʔk̟]
“eye”

ɕiŋ [ɕɪŋ]
“wood”

kekir [ceciɾ]
“flatbread”

Another allophone of the close front vowel /i/ is found after the retroflex fricative /ʂ/. In this phonetic environment, the vowel is centralized to [ɨ].

ʂim [ʂɨm]
“arrow”

The allophones of the unrounded half-close front vowel /e/ are largely conditioned by the same phonetic environments that have already been described for the vowel /i/. The half-close allophone [e] occurs in open syllables and is also found in closed syllables preceded or followed by an alveo-palatal or palatal sound. In most other phonetic environments, the pronunciation fluctuates between a half-close [e] and a more open variant [ɛ].

tete [tete]
“grandfather”

ɕel [ɕel]
“summer”

<i>lej</i>	[lej]
“yellow”	
<i>p^het</i>	[p ^h iɛʔt̚ ~ p ^h ɛʔt̚]
“half”	
<i>k^hep</i>	[c ^h ep̚ ~ c ^h ɛp̚]
“needle”	

A considerably lowered allophone [ɛ] is found in syllables that end in a velar plosive /k/, a velar nasal /ŋ/ or the trill /r/. However, the lowering effect of these consonants is again blocked if the syllable initial consonant is an alveo-palatal or palatal sound.

<i>hek</i>	[hɛʔk̚]
“vulture”	
<i>dzer</i>	[zɛr]
“nail”	
<i>tɕeŋtɕeŋ</i>	[tɕeŋtɕeŋ]
“upright”	

The allophone /ɛ/ is also found in syllables with an initial retroflex fricative /ʂ/.

<i>ʂets</i>	[ʂɛs]
“laughter”	

2.3.1.2 Low central vowel

The unrounded low central vowel /a/ has three major allophones: a low central allophone [a], a fronted and raised allophone [æ], and a lowered allophone [ɑ]. The low central allophone [a] is the most common one and occurs in syllables ending in the nasal /m, n/, the stops /p, t/, the fricative /s/, and the liquids /l, r/.

<i>kat</i>	[kaʔt̚]
“language”	
<i>dan</i>	[dan]
“belly”	
<i>las</i>	[las]
“price”	

mar [mar]
 “butter”

The fronted and raised allophone [æ] occurs in absolute syllable final position. It also appears in word-internal syllable final position if the following consonant is an alveo-palatal or palatal sound. In addition, it is attested in closed syllables when preceded by an alveo-palatal or palatal sound in the syllable onset or followed by palatal glide in the syllable coda. In fast speech, speakers sometimes pronounce the vowel /a/ as [e] when it is followed by a palatal glide in the syllable coda.

ɸa [ɸæ]
 “meat”

laja [læjæ]
 “month”

gjaɸ [ɟæp̚]
 “back”

tʰaj [tʰæj ~ tʰej]
 “up there”

ra-i [ræj ~ rej]
 “come-ACT”

The raising effects of palatal and alveo-palatal sounds are, however, blocked by the presence of a velar consonant in the same syllable.

kʰaj [kʰaj]
 “black”

ŋaj [ŋaj]
 “five”

Finally, the lowered and retracted allophone /a/ occurs in closed syllables that end in a velar stop /k/ or a velar nasal /ŋ/.

lak [laʔk̚]
 “hand”

laŋ [laŋ]
 “bull”

2.3.1.3 Back vowels

The rounded half-close back vowel /o/ has three major allophones: a rounded half-close back vowel [o], the rounded half-close front vowel [ø], and the rounded half-open back vowel [ɔ]. The rounded half-open back vowel [ɔ] has the most limited distribution and only occurs in syllables ending in a velar plosive [k] or a velar nasal [ŋ].

lok [lɔʔkʰ]
“lightning”

loŋ [lɔŋ]
“free time”

The allophone [o] is found in most other contexts, i.e. in syllables that end in a consonant /p, t, m, n, s, l, r/. The final consonants [t, n, s] may trigger the fronting of /o/ in combination with an alveo-palatal or palatal initial, yielding the rounded front vowel [ø]. This phonological process is described in § 2.3.5.2 below.

tʰɔpɡjat [tʰøbʲaʔtʰ]
“eightteen”

solpon [solpon]
“cook”

pʰot-s [pʰos]
“put.on-NZR” (“clothes”)

bor [bor]
“shrub”

The rounded close back vowel /u/ exhibits an allophonic distribution that is analogous to the allophonic distribution of the rounded half-close back vowel /o/. It also has three major allophones: a rounded close back vowel [u], a rounded close front vowel [y], and the slightly lowered and fronted back vowel [ʊ]. The allophone [ʊ] is commonly found before a syllable final velar consonant /k, ŋ/ or a syllable final trill /r/.

luks [lʊʔxs]
“custom”

luŋ [lʊŋ]
“autumn”

tʰurgop [tʰʊrgopʰ]
“headstall”

The rounded close back vowel [u], finally, is found in syllables ending in [p, t, m, n, s, l]. The alveo-dental consonants [t, n, s, l] cause the fronting of /u/ to [y] in syllables with an alveo-palatal or palatal initial consonant. This phonological process is described in § 2.3.5.2 below in more detail.

put [puʔt̪]

“teat”

gun [gun]

“winter”

rus [rus]

“clan”

bul [bul]

“log”

2.3.2 Long vowels

In Bunan, there are two marginal long vowel phonemes: the long close central vowel /a:/ and the long high front vowel /i:/. Although the two vowels only occur in a small number of words, they have to be considered as independent phonemes, as will be argued in the following. Their rare occurrence as well as the fact that they are exclusively attested in open syllables indicates that they have either recently acquired the status of independent phonemes or that they represent the last remnants of a more complex vowel system that was based on phonemic contrasts between short and long vowels. Based on the distribution of long vowel phonemes in Bunan, I am inclined to favor the first hypothesis. However, further comparative research is needed determine the historical status of long vowels in Bunan.

The long vowel [a:] is not an uncommon sound in Bunan. However, in most cases, this vowel does not possess phonemic status, but surfaces as the result of morphophonological processes. It commonly results from the deletion of an unaspirated velar plosive in intervocalic position (cf. § 3.2.1.1), or emerges when two adjacent vowels with the quality /a/ merge word-internally.

dza-k-are [dza:re]

“eat-INTR-PRS.DJ.SG”

kja-ka [ca:]

“become-PROG.SG”

sarka=astok [*sarka:stɔʔkʰ*]

“road=TERM”

awa-ama [*awa:mæ*]

“father and mother”

However, there are a few words with the vowel /a:/ in which it is not explicable as the result of a contraction of a more complex sound sequence. These lexemes are listed in the following.

ta:

“POSS.1SG”

tɕa:=ʔa-

“to know” (lit. “knowledge=POSS-)

ga:

“honorific term of address for members of a petty chief family”

na:

“EX.1SG”

ha: go-tɕ-um

“understand-TR-INF”

ja:

“yesterday”

The long vowel /a:/ in the first person singular forms of the existential copula and possessive copulas might be explicable as the result of the contraction of the copula stems *ni-* and *ta-* with a first person singular suffix **-gja* (i.e. **ta-gja* “POSS-1SG” and **ni-gja* “EX-1SG”), which is still attested in an archaic agreement form of the equative copula *jen-* (see § 14.2.2). However, this suffix is no longer productive in contemporary Bunan and speakers do not perceive these forms as morphologically complex. The words *ha:* (*go-*) and *tɕa:*, on the other hand, are clearly Tibetan loanwords (WT *ha go* “to understand”, WT *cha* “knowledge”), and it is likely that the two remaining words *ga:* and *ja:* have been borrowed from neighboring languages as well. It is not clear why these words were borrowed with a long vowels, however. Bunan possesses many more Tibetan loanwords that are monosyllabic and end in an open syllable, but with the exception of the lexemes listed above all of them end in short vowels (e.g. *da* “now” < WT *da* “now”, *gja* “one hundred” < WT *brgya* “one hundred”, *na* “oath” < WT *mna* “oath”). Two minimal pairs

that illustrate the phonemic contrast between /a:/ and its short counterpart /a/ are given in the following.

/a:/ – /a/

na:

“EX.1SG”

na

“fish”

ta:

“POSS.1SG”

ta

“POSS.NON1SG”

Like the long central vowel [a:], the long close front vowel [i:] is the regular outcome of morphophonological processes in Bunan. The vowel may arise in two ways. It results from the merger of a root final vowel /i/ with the modifier marker *-i* (cf. § 6.3.1) or the active participle suffix *-i* (cf. § 12.7.4), or arises when a nominal stem ending in the vowel /i/ takes the genitive marker *=ki* (cf. § 4.4.4.10).

li-i

[li:]

“heavy-MOD”

gi=ki

[gi:]

“1SG=GEN”

However, the long vowel /i:/ is also attested in the non-first person singular form of the existential copula *ni:* and the topic marker *=ni:*. In both cases, it is not possible to explain the long vowel as an outcome of a synchronic morphophonological process.

ni:

“EX.NON1SG”

=ni:

“topic marker”

The similarity of the non-first person singular form *ni:* and the topic marker *=ni:* suggests that the two lexemes may have a common origin. If this hypothesis is correct, we would expect that the topic marker represents a grammaticalized form of the copula *ni:*, which was reanalyzed as a marker of given information in specific syntactic contexts, most probably cleft-constructions. First, this directionality (“copula” > “topic marker”) is suggested by comparative evidence, as reflexes of a proto-West Himalayish copula **ni* are attested in the West Himalayish languages Darma (Willis 2007a: 337–338), Sunnami (Christian Huber, p.c.), and Standard Kinnauri (Saxena 2000: 472). Second, it seems more likely that the more abstract function of the topic marker as “marking topical information” is derived from the more concrete meaning of the copula of “indication of location

/ identity” than vice versa. Note, however, that copulas more commonly seem to be reanalyzed as focus markers and not as morphemes denoting “topical information” (Heine and Kuteva 2002: 95–96; Lehmann 2008: 4–5). It is thus questionable whether the hypothetical grammaticalization pathway “copula” > “topic marker” can be upheld in this form. There may have been intermediate stages (“copula” > ... > “topic marker”) that are no longer attested in the grammar of Bunan.

Matters are further complicated by the presence of a focus particle *ni* in Tibetan. This lexeme is widely attested in Tibetic (Koshal 1979: 275–278, 286–287; Häslér 1999: 235; Haller 2000a: 61; Huber 2005: 183; Zemp 2014: 799–801) and goes back to the Written Tibetan focus particle *ni*.³¹ This raises the question whether the focus particle in Bunan might be a borrowing from Tibetan. Strictly speaking, we cannot rule out this possibility, but given the fact that *ni* is also attested as an independent copula in Bunan, it seems more likely that the topic marker was grammaticalized from the existential copula rather than borrowed from Tibetan. Of course, it is possible that the reanalysis of the copula as a topic marker was encouraged by the presence of a homonymous topic particle in neighboring Tibetan dialects. Further research is needed to clarify the history of this morpheme in Bunan.

These diachronic considerations do not, however, explain the presence of the long vowel /i:/ in the non-first person singular copula form *ni*. Given the fact that the long vowel in the first person singular form *na* might be the result of a contraction of a proto-form **ni-gja*, we may speculate that the long vowel in the non-first person singular form *ni* likewise arose due to a contraction of a longer sound sequence. However, it is not possible to reconstruct such an ending based on language-internal evidence.

In any case, it is not surprising that the only long vowel phonemes that exist in Bunan commonly occur as the result of morphophonological processes as well. As the sounds [i:] and [a:] already exist at a phonetic level, speakers are already familiar with them, which facilitates their introduction into the phonemic system. It would seem much more unnatural to establish new long vowel phonemes that do not occur in the language at all, i.e. the long vowels [e:, o:, u:].

2.3.3 Diphthongs

In my language data, three different diphthong phonemes are attested: the falling diphthongs /ew, aw/ as well as the rising diphthong /wa/. However, only /wa/ has robust phonemic status, whereas /ew, aw/ are marginal phonemes that occur in a small number

³¹ Most probably, the Written Tibetan topic marker *ni* and the existential copula of Bunan are ultimately related and go back to a (western) Tibeto-Burman copula **ni*. However, the lexeme had been fully reanalyzed as a topic marker in Tibetan before the language was first put into writing.

of loanwords. The diphthong /ew/ is attested in the noun *sew* “apple”, which is a loanword from Indo-Aryan (cf. H *seb* “apple”). The diphthong /aw/, on the other hand, appears in a small number of Tibetan loanwords that are listed in the following.

Bunan	Written Tibetan
<i>tsʰaw</i> “brother-in-law”	<i>tsha bo</i>
<i>dzaw</i> “friend”	<i>mdza’ bo</i>
<i>d̥zaw</i> “lame person”	<i>zha bo</i>
<i>aw</i> “kiss”	<i>o ~ ‘o</i>
<i>braw</i> “buckwheat”	<i>bra bo ~ bra bu</i>
<i>tʰaw</i> “teapot”	<i>khro bu</i>

The diphthong /wa/ is widely attested in Bunan. Its phonemic status is illustrated by the following minimal pairs.

<i>/wa/ – /i/ – /e/ – /a/ – /u/ – /o/</i>		
<i>kʰi</i> “laterine”	<i>kʰa</i> “what”	<i>kʰu</i> “smoke”
<i>kʰe</i> “cheap”	<i>kʰwa</i> “broth”	
<i>kil-t̥-um</i> “dam.up-TR-INF”	<i>kal-t̥-um</i> “load-TR-INF”	
<i>kel-men</i> “carry-INF”	<i>kwal-t̥-um</i> “hang.up-TR-INF”	<i>kol-t̥-um</i> “distile-TR-INF”

There are two reasons why /wa/ should be analyzed as single diphthong phoneme instead of a combination of a labio-velar glide /w/ followed by the vowel /a/. First, the labio-velar glide /w/ only occurs preceding the vowel /a/. A combination with the vowels /i, e, u, o/ is not attested, which suggests that the sounds /w/ and /a/ form a phonological unit. Second, the diphthong /wa/ occurs in syllable positions in which an analysis as two separate phonemes would violate the basic syllable structure *CRVCC* (cf. § 2.4).

dɟwak

“two days ago”

kjwar-tɛ-um

“spread.legs-TR-INF”

trwan-tɛ-um

“hang.up-TR-INF”

The diphthong /wa/ has a number of allophones. In open syllables, the nucleus is usually fronted and raised, yielding the pronunciation [wæ̯]. This allophone also occurs when the glide /j/ follows the diphthong.

swa [swæ̯]

“tooth”

waj [wæ̯j]

“far”

When followed by a velar consonant, the diphthong nucleus is usually lowered to [a], yielding the allophone /wa/.

tsʰwak [tsʰwaʔkʰ]

“thorn”

rwaŋ [rwaŋ]

“mountain pasture”

When preceded by a palatal glide /j/, the initial labiovelar glide of the diphthong usually merges with the palatal sound into a rounded close front vowel [y]. This fronting process is also observed when the diphthong nucleus /a/ is lowered to [a] by the presence of a velar consonant at the same time.

khjwa [chʏæ̯]

“man”

dɟwak [dʏaʔkʰ]

“two days ago”

2.3.4 The phonological status of -jV- and -Vj- sequences

Apart from the three diphthong phonemes discussed so far, there are combinations of the vowel phonemes /e, a, u, o, wa/ and the palatal glide /j/, which could potentially be considered as diphthongs. They are listed in the table below.

Table 21: Combinations of vowel phonemes with the glide /j/

	-jV-	-Vj-
/e/	<i>jen</i> “equative copula”	<i>lej</i> “yellow”
/a/	<i>gjak</i> “day”	<i>kaj</i> “difficult”
/u/	<i>pjutsi</i> “mouse”	<i>nuj</i> “new”
/o/	<i>kjot</i> “fodder”	<i>boj</i> “fat”
/wa/	<i>djwak</i> “two days ago”	<i>waj</i> “far”

However, I do not analyze these sound combinations as diphthong phonemes, but treat them as combinations of the consonantic element /j/ and the vowel phonemes /e, a, u, o, wa/. This analysis seems preferable for several reasons. First, it is more economical to consider these vowel sequences as phonemically complex, as we would have to postulate ten additional diphthong phonemes otherwise, thereby duplicating the total number of vowel phonemes. Second, the fact that the glide /j/ can precede the diphthong phoneme /wa/ suggests that this sound should be interpreted as consonantic when occurring in syllable heads, as the syllable structure *CRVCC* would be violated otherwise (cf. below). Third, the sound sequences /ej, aj, uj, oj, waj/ are usually the result of derivational processes involving the modifier marker *-i* (cf. § 6.3.1) or the active participle marker *-i* (cf. § 12.7.4). The fact that they do not occur in underived lexical roots implies that they are not basic phonemes.

2.3.5 Major phonological processes affecting vowels

2.3.5.1 Deletion

Vowels occurring in grammatical morphemes may become deleted in certain phonetic contexts. The phenomenon is especially common in fast speech and doubtlessly related to the fact that grammatical morphemes are usually not stressed (cf. § 2.5.1). The process only operates on morphemes that end in an open syllable. In morphemes that consist of more than one syllable, only the last vowel is deleted. The vowel /a/ is often reduced to schwa [ə] instead of disappearing entirely.

tal=dzi [talzi ~ talz ~ tals]
 “3=ERG.SG”

bup-dza [bup˥tsæ ~ bup˥tsə ~ bup˥ts]

“fall-PST.DIR.DJ.SG”

tun-k-are [tʉŋgare ~ tʉŋgaɿ]

“drink-INTR-PRS.DJ.SG”

lik-ø-kata [liʔkatæ ~ liʔkatə ~ liʔkat]

“make-TR-FUT.CJ.SG”

2.3.5.2 Fronting

In certain phonetic contexts, the back vowels /o, u/ undergo fronting and surface as the allophones /ø, y/. This phonological process affects closed syllables that begin with an alveo-palatal consonant [tʃ, dʒ, ʃ], a palatal consonant [ɲ, j], or an initial consonant cluster consisting of a voiceless plosive and the palatal glide [j], and, at the same time, end with an alveo-dental sound [t, n, s] or a palatal glide [j].³²

təuj [təyj]

“ten”

dʒot-men [ʒøʔd˥men]

“sit-INF”

ʃun [ʃyn]

“fingernail”

ɲos-men [ɲøsmen]

“clear.up-INF”

kjot [cøʔt˥]

“fodder”

kjut [cyʔt˥]

“wether”

joj [jøj]

“askew”

In the case of the back vowel /u/, the fronting also occurs in syllables ending in the lateral /l/. The back vowel /o/, however, does not undergo fronting in this phonetic context.

³² This rule is reminiscent of a sound change that caused the fronting of the rounded back vowels /o, u/ in Tibetan dialects of Central and West Tibet (cf. Huber 2005: 47–48; Haller 2000a: 48). However, in Tibetan, the fronting is triggered by the mere presence of a sound /t, n, l/ in the syllable coda. The phonological process is thus more complex in Bunan, as it involves both the palatalizing effects of syllable initial (alveo-)palatal and syllable final alveo-dental sounds.

jol-men [jɔlmen]
 “faint-INF”

jul [jɪl]
 “country”

A voiceless aspirated alveo-palatal affricate /tɕʰ/ may equally trigger the fronting of a back vowel. In this case, however, the fronting only occurs in words ending in the alveo-dental plosive /t/.

tɕʰot [tɕʰøʔt̚]
 “ritual offering”

tɕʰos [tɕʰos]
 “religion”

The fronted allophones /ø, y/ are also found in open syllables beginning with the consonants /tɕ, tɕʰ, dʒ, ɕ, ɲ, j/ if the following syllable begins with a palatal consonant or exhibits the vowel /i/ as a nucleus. The fronting process is, however, commonly blocked by the presence of non-front vowel or a non-palatalized velar consonant in an adjacent syllable.

kʰjotsi [cʰøtsi]
 “ritual offering”

alkjotsi [alkjotsi]
 “chin”

pjutsi [pjytsi]
 “mouse”

jokelaŋ [jøcelaŋ]
 “Lower Keylong”

ɕuri [ɕyri]
 “sour”

tɕʰumik [tɕʰumiʔk̚]
 “fountain”

The fact that the vowel /i/ in the following syllable may trigger the fronting of /o, u/ in the preceding syllable suggests that this phonological process may be an instance of vowel harmony. However, we have to consider that it is not the sole presence of the front vowel in the following syllable that causes the fronting. The presence of a palatal sound

before the back vowel is equally necessary to initiate the change of the vowel quality. Thus, it seems that this is not an instance of canonical vowel harmony, but rather a particular subtype of the fronting process in which one of the two conditioning factors is not part of the same syllable but of the following syllable.

When the back vowels /o, u/ are either preceded by an alveo-palatal or palatal initial consonant or a followed by an alveo-dental consonant [t, n, s] or a palatal glide [j], this may still cause a slight degree of fronting. However, the resulting allophones [ø, ʉ] are only centralized and, thus, considerably less fronted than the allophones [ø, y]. Also, they freely alternate with the non-fronted allophones [o, u].

don-men [donmen ~ dənmen]

“eat.HON-INF”

dzot [dzoʔt̚ ~ dʑøʔt̚]

“storeroom”

rut [ruʔt̚ ~ rʉʔt̚]

“flood”

2.3.5.3 Glottalization

Vowels are always glottalized when occurring in closed syllables and followed by an alveo-dental stop /t/ or a velar stop /k/. The glottalization of a vowel usually sets in between 10 and 15 milliseconds after the highest amplitude has been reached and is visible in the waveform as a sudden interruption of the regular oscillation pattern (see

Figure 21 below). Voicing may be interrupted for several milliseconds during the onset of glottalization and often continues to be irregular for the remaining duration of the vowel. At the same time, there is a considerable decrease in acoustic energy, which is most obvious in the case of F1, as the spectrogram reveals (see Figure 22).

Figure 21: Waveform of glottalized vowel /o/ (*kjot* “fodder”, speaker: TD)

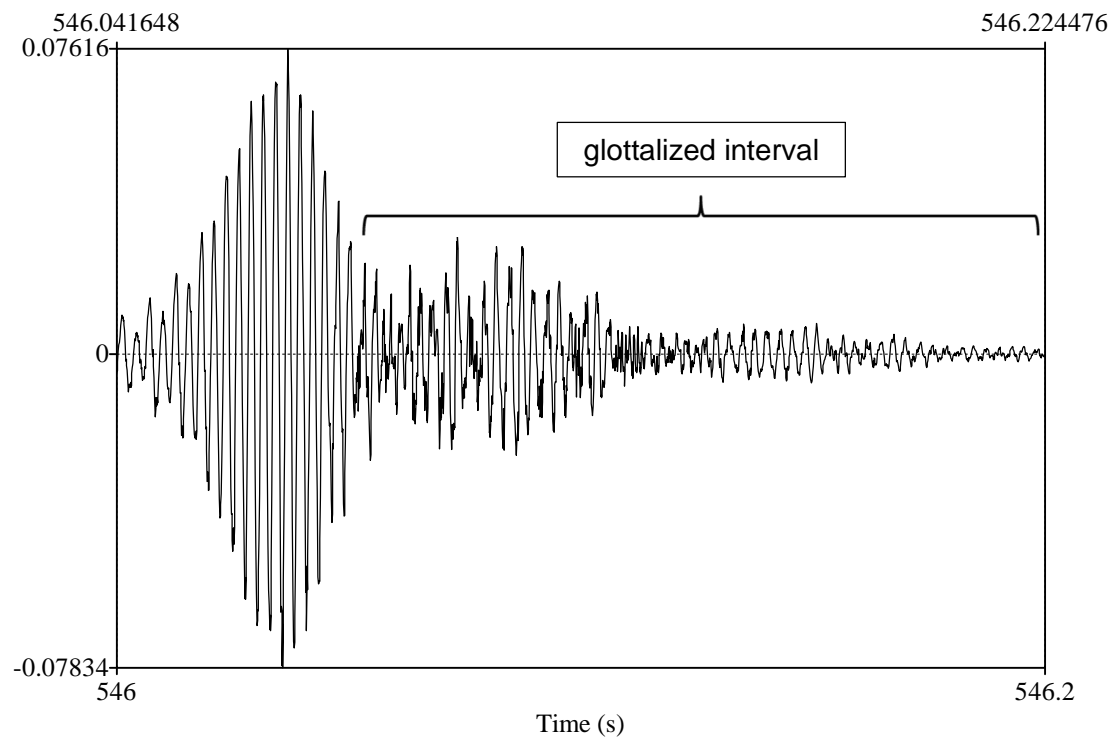
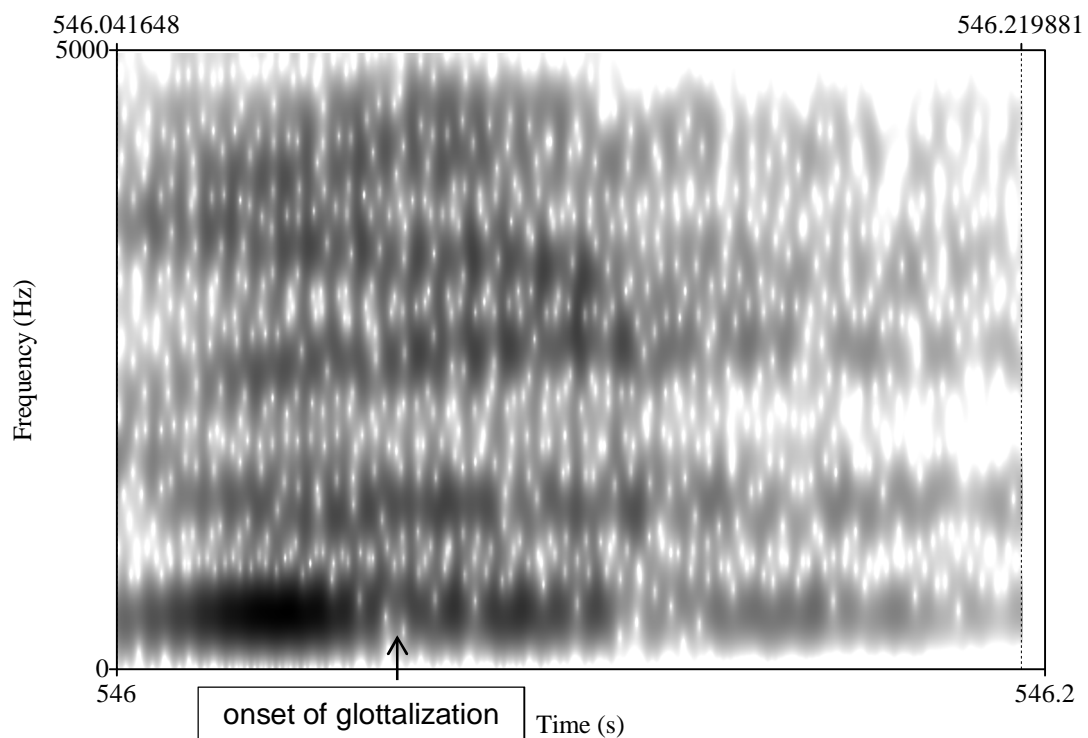


Figure 22: Spectrogram of glottalized vowel /o/ (*kjot* “fodder”, speaker: TD)



A second type of glottalization occurs when the modifier marker /-i/ or the active participle suffix /-i/ are suffixed to roots that end in the plosives /t/ or /k/. In this case, the

two consonants are not articulated as plosives, but only surface as a glottalization of the vowel sequence.³³

kʰaʔak-i [kʰaʔaʔj]

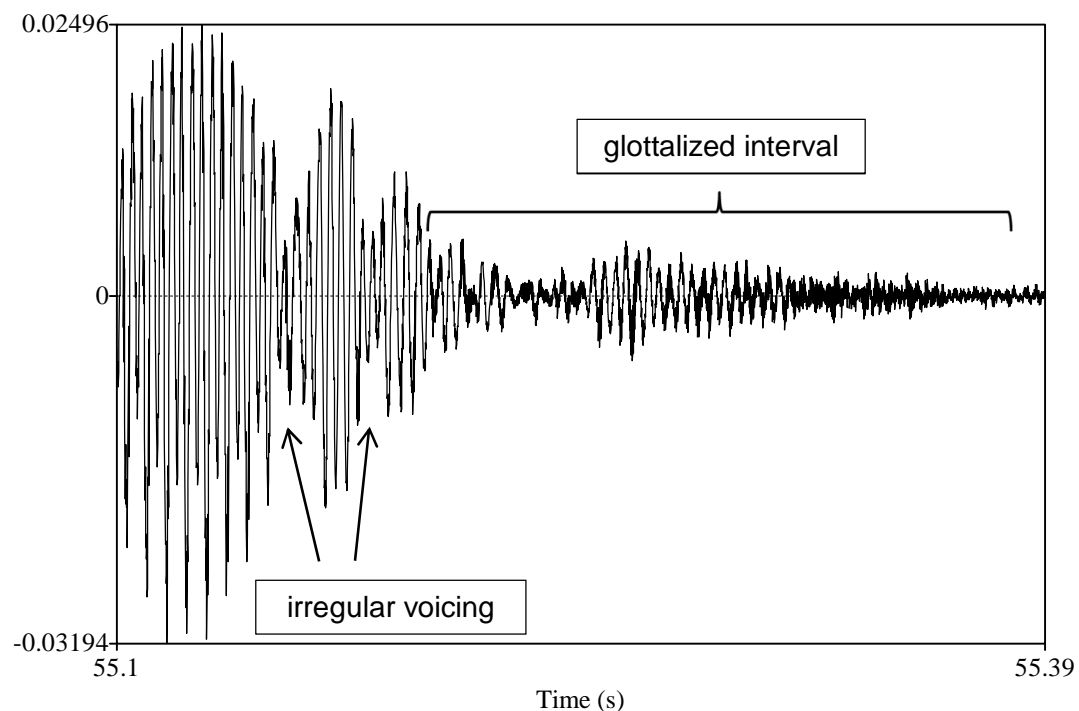
“bitter-MOD”

dʒut-i [dʒyʔj]

“be.weak-ACT”

Glottalization usually sets in with the articulation of the final glide /j/. In the waveform (see Figure 23 below), glottalization is first visible as short intervals of irregular voicing accompanied by a considerable decrease in acoustic energy. Eventually, voicing becomes entirely irregular and may sometimes even disappear, yielding a voiceless pronunciation of the syllable final glide /j/.

Figure 23: Waveform of glottalized /u/ (*dʒut-i* “be.weak-ACT”, speaker: TD)



Note that the second type of glottalization is only observed at morpheme boundaries that emerge by suffixing the adjective marker /-i/ or the active participle suffix /-i/ to an adjective or verb stem, respectively. It does not, however, affect /Vti/ or /Vki/ sound sequences that arise in other ways, e.g. by compounding noun roots.

³³ The phonological similarity of the two suffixes suggests that they have the same origin. This hypothesis is corroborated by the fact that they are the only morphemes affected by the morpho-phonological process of glottalization (see below).

lati [lati] not: **[laʔi]

“saliva” (lit. “?-water”)

piti [piti] not: **[piʔi]

“Spiti”

This demonstrates that the second type of glottalization is not a phonological process. Rather, it has to be regarded as a morphophonological process that only affects a specific class of morphemes. Hence, glottalization is also briefly addressed in § 3.2.5, where it is treated with other morphophonological processes.

2.3.5.4 Initial glottal stop

At phonological word boundaries, vowels are pronounced with an initial glottal stop to prevent hiatus. In fast speech, the glottal stop often triggers a slight glottalization of the preceding vowel. Both phenomena are illustrated by the waveform and spectrogram given below Figure 24 and Figure 25).

Figure 24: Glottal stop (/tal=ɛi ipt-ɛ^{hi}/ “3=PL sleep-MID-CVB.PL”, speaker: TD)

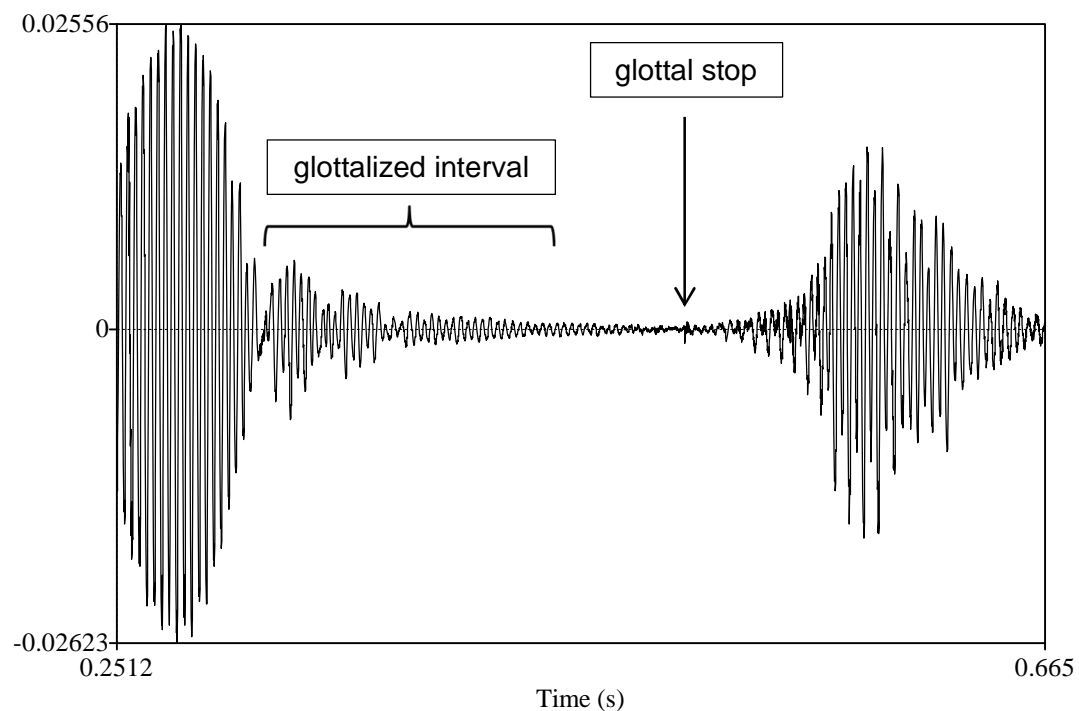
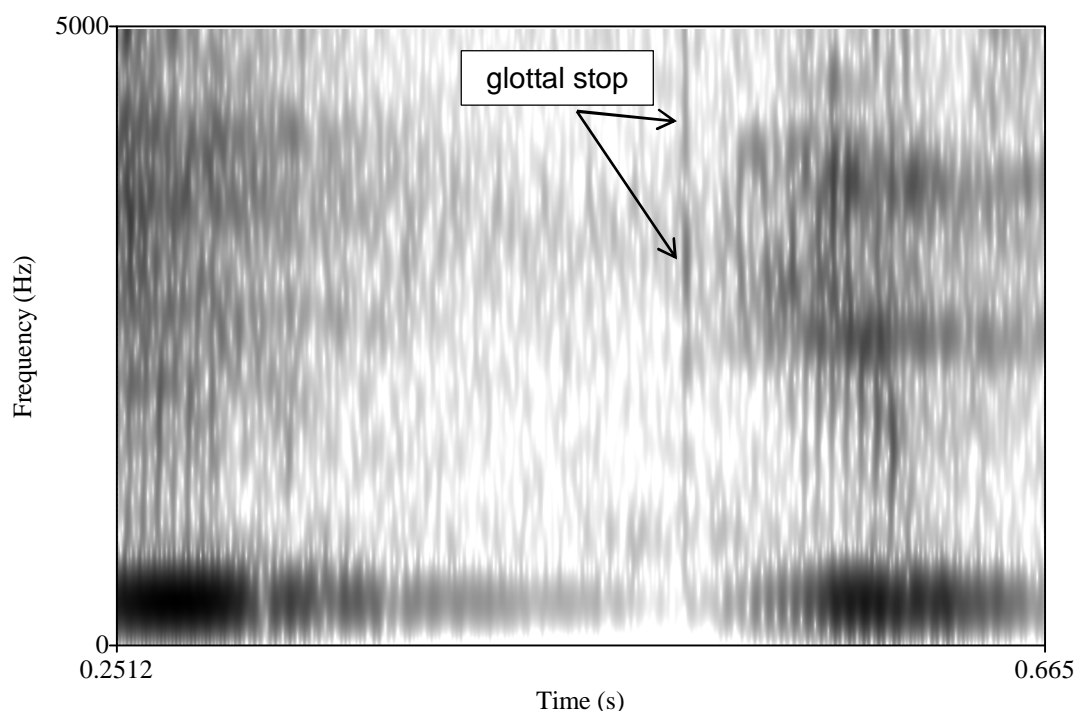


Figure 25: Glottal stop (/tal=ɛi ipt-ɛ-hi/ “3=PL sleep-MID-CVB.PL”, speaker: TD)



Note that glottal stops only occur at word boundaries and never word-internally. The compound *awa-ama* “parents” (lit. “father-mother”), for example, is always pronounced as [awa:mæ] and never as *[awaʔamæ].

2.3.5.5 Nasalization

Vowels may be nasalized when directly followed by a nasal consonant in the syllable coda or the onset of the following syllable. They tend to be completely nasalized when the preceding consonant is also a nasal.

mama [mãmæ]

“breast”

loŋ [lõŋ]

“free time”

gun [gũn]

“winter”

The sequence of a vowel followed by the velar nasal /ŋ/ merges into a short nasalized vowel when followed by another vowel. If the two vowels exhibit the same quality, they merge into a long nasalized vowel. If they do not have the same quality, they merge into a nasalized diphthong.

tun-i [tỹj]

“drink-ACT”

goŋa [gwã]

“winter”

maŋ-i [mãj]

“red-MOD”

riŋ-i [rĩ:]

“say-ACT”

If a sequence /Vŋ/ occurs between fricatives or affricates, this usually results in the deletion of the nasal, while the vowel becomes nasalized and lengthened. The lowering effect of the velar nasal still persists after its deletion.

saŋs [sã:s]

“horse”

dziŋ-s-men [dzĩ:smen]

“quarrel-DETR-INF”

tsʰaŋtsʰaŋi [tsʰã:tsʰã:j]

“everybody”

2.4 Syllable structure

Bunan possesses a moderately complex syllable structure, which can be described with the following scheme.

(C₁) (R) V (C₂) (C₃)

The consonant segments given in brackets are optional, leaving the syllable nucleus as the only obligatory element. A minimally complex syllable thus consists of a single vowel nucleus V without any other consonant elements preceding or following. In a maximally complex syllable, on the other hand, the vowel nucleus is preceded and followed by consonant clusters composed of two consonant elements, yielding the syllable structure C₁RVC₂C₃. There are nine possible patterns of syllable structures in total, all of which are illustrated in the following table.

Table 22: Possible syllable structures

	V#	VC ₂ #	VC ₂ C ₃ #
#V	V wa “focus particle”	VC ₂ ak “mouth”	VC ₂ C ₃ uks “soul”
#C ₁ V	C ₁ V ba “wall”	C ₁ VC ₂ æel “summer”	C ₁ VC ₂ C ₃ koks “cough”
#C ₁ RV	C ₁ RV grwa “lungs”	C ₁ RVC ₂ gjum “nostrils”	C ₁ RVC ₂ C ₃ kjuks “ashes”

Phonotactic constraints affecting the different parts of the syllable are discussed in the following subsections.

2.4.1 Syllable onset

A syllable onset can either consist of a single consonant C_1 or an initial consonant cluster composed of a single consonant C_1 followed by a resonant R . In a simple onset consisting of a single consonant element, any of the twenty-nine consonant phonemes of Bunan can fill the slot C_1 (see Table 17). However, syllable initial clusters consisting of a consonant C_1 followed by a resonant R are subject to phonotactic restrictions. In this case, only the bilabial, alveo-dental, or velar plosives / p , t , k , p^h , t^h , k^h , b , d , g / or the nasal / m / can occur in slot C_1 . The slot R , on the other hand, can only be filled by the alveo-dental trill / r / or the palatal glide / j /. The combination of the bilabial nasal with the alveo-dental trill to form the initial cluster / mr -/ does not occur in my data. It is not clear whether the absence of this cluster represents a general phonotactic constraint or whether it is due to chance. All other logical combinations are attested, as the table below demonstrates.

Table 23: Possible syllable initial clusters

	/r/	/j/
/p/	<i>pr-</i> <i>prak</i> “rock”	<i>pj-</i> <i>pjatsi</i> “bird”
/t/	<i>tr-</i> <i>tre</i> “fermenting agent”	<i>tj-</i> <i>tjo-men</i> cry-INF

<i>/k/</i>	<i>kr-</i> <i>kra</i> “hair”	<i>kj-</i> <i>kjuks</i> “ashes”
<i>/pʰ/</i>	<i>pʰr-</i> <i>pʰrin</i> “message”	<i>pʰj-</i> <i>pʰju</i> “fart”
<i>/tʰ/</i>	<i>tʰr-</i> <i>tʰrunj-tɕ-um</i> nourish-TR-INF	<i>tʰj-</i> <i>tʰjot-men</i> cry.PL-INF
<i>/kʰ/</i>	<i>kʰr-</i> <i>kʰres</i> “hunger”	<i>kʰj-</i> <i>kʰjoj</i> “dry”
<i>/b/</i>	<i>br-</i> <i>bras</i> “rice”	<i>bj-</i> <i>bjanmo</i> “wife”
<i>/d/</i>	<i>dr-</i> <i>dralt-men</i> be.torn-INF	<i>dj-</i> <i>djwak</i> “two days ago”
<i>/g/</i>	<i>gr-</i> <i>grokpo</i> “river”	<i>gj-</i> <i>gjum</i> “nostrils”
<i>/m/</i>	<i>mr-</i> *not attested*	<i>mj-</i> <i>mjo-men</i> plough-INF

Most of the initial clusters listed above are robustly attested. However, there are a few clusters that only rarely occur in my data. These are clusters consisting of an alveo-dental consonant */t, tʰ, d/* followed by a palatal glide */j/*. There are only six instances of such clusters in my material, all of which are listed in the following.

tjal kʰet-tɕ-um
swim-TR-INF

tʰjak
“here”

djara
“season”

tjo-men
cry-INF

tʰjot-men
cry.PL-INF

djwak
“two days ago”

The verb *tjal* is likely to be a Tibetan loanword derived from WT *rkyal* “to swim”, while the noun *djara* is most probably a loanword from Manchad (*dhyara* “day”, Sharma 1989b: 72). This leaves us with only four genuine instances of this type of cluster. Another cluster that is poorly attested is the combination of the voiceless aspirated alveo-dental plosive /*tʰ*/ with the alveo-dental trill /*r*/. This cluster only occurs once in the verbal root *thrurŋ*- “to nourish”. However, the fact that these combinations of consonants are rarely attested does not necessarily mean that they are not genuine to Bunan. As there is currently no reason to assume that all of these lexemes are loanwords, their initial clusters have to be considered as rare but authentic consonant combinations that are licensed by the phonotactic rules of the language.

2.4.2 Syllable nucleus

The syllable nucleus position *V* can be filled by any of the vowel phonemes described in § 2.3. However, some vowel phonemes are subject to phonotactic constraints that prevent them from occurring in combination with certain consonants in syllable onsets or codas. These constraints are strongest for the long vowel phonemes /*i*:/, *a*:/ as well as the marginal diphthong phonemes /*ew*/, *aw*/. First, these sounds can only occur with simple onset consisting of a single consonant *C*₁. Second, they are only allowed in open syllables and are never followed by a consonant in the syllable coda. These constraints are without doubt due to the marginal phonemic status of these sounds (cf. § 2.3.2 and § 2.3.3).

The remaining vocal phonemes /*i*/, *e*/, *a*/, *o*/, *u*/, *wa*/ are not subject to such rigid constraints. The central and back vowels /*a*/, *o*/, *u*/ are attested in combination with all possible types of both simple and complex onsets and codas, respectively. The front vowels /*i*/, *e*/, however, exhibit a somewhat limited distribution. First, these vowels are never preceded by the palatal nasal /*ɲ*/ or the velar nasal /*ŋ*/. Second, they never occur following an initial cluster with the glide /*j*/. Further, the vowel /*i*/ is never preceded by the palatal /*j*/. These constraints appear to be related to the fact that palatalization of an initial consonant before front vowels is allophonic (cf. § 2.2.5.2). Also, it is noteworthy that the diphthong /*wa*/ only rarely occurs adjacent to bilabial sounds in the onset or coda of the same syllable. The only lexeme in which this combination is attested is the noun *bwa* “bubble”, which is, however, a loanword from Tibetan (WT *dbu ba* ~ *lbu ba* “bubble”). This suggests that originally there might have been a phonotactic constraint that prohibited the cooccurrence of the diphthong /*wa*/ and bilabial consonants in the same syllable.

2.4.3 Syllable coda

A syllable coda may either consist of a single consonant *C*₂ or a complex cluster composed of two consonants. In simple codas, the position *C*₂ can be filled by the sounds

/p, t, k, m, n, ŋ, s, r, l, j/. These consonants are attested after all of the major vowel phonemes /i, e, a, o, u, wa/, with the exception that the bilabial consonants /p, m/ are not found following the diphthong /wa/. This seems to reflect a general phonotactic constraint, as has been argued in the preceding section.

Phonotactic restrictions are much more rigid with regard to the consonants that are allowed to occur in slot C₃. The fricative /s/ is the only sound that is robustly attested in this position. Syllable final clusters with /s/ as a second element may arise in different ways. In some cases, they are an etymological part of a root, e.g. in the noun *ṭaks* “iron”, which is likely to be a loanword borrowed from WT *lcags* “iron”. In other cases, they are the result of an affixation process involving a derivational suffix /s/. There are three derivational morphemes with this phonological shape: a nominalizing suffix that derives nouns from verb roots (e.g. *tik-s* “lid” < *tik-* “to close”; cf. § 4.3.3), a stative suffix, which occurs on stative verbs (e.g. *kwa-s-* “to become full” < PTB **k-wa* “satiated” (Matisoff 2003: 618); cf. § 12.3.1), and a detransitivizing suffix, which decreases the valency of plurivalent verbs (e.g. *ḡen-s-* “to get up” < *ḡen-* “to raise”; cf. § 12.3.2).

The fricative /s/ may be preceded by the consonants /p, t, k, m, n, ŋ, r, l, j/ in slot C₂. The simultaneous occurrence of the fricative /s/ in slot C₂ and C₃ is not attested. In theory, it is possible that a root with a final fricative /s/ could take an additional derivational suffix that exhibits the phonological shape /s/. However, such a consonant sequence would be simplified according to the phonological rule of degemination (§ 2.2.5.1). It is thus impossible to detect such a cluster. Note that the presence of the detransitivizing suffix on verbs can sometimes only be established based on its devoicing effect on following morphemes (cf. § 3.2.2.1).

Table 24: Syllable final clusters with /s/ as a second element

	nouns	verbs
/p/	<i>k^hap-s</i> [k ^h aps] cover-NZR “cover”	<i>baps-men</i> [bapsmen] climb.down-INF “to climb down”
/t/	<i>t^hat-s</i> [t ^h as] be.happy-NZR “happiness”	<i>tet-s-men</i> [tesmen] think-STAT-INF “to think”

/k/	<i>gjuks</i> [ɟʊʔxs] “ashes”	<i>tak-s-men</i> [taʔχsmen] smell-STAT-INF “to smell”
/m/	<i>tsum-s</i> [tsums] seize-NZR “handle”	<i>tʰims-men</i> [tʰɪmsmen] become.full-INF “to become full (from eating)”
/n/	<i>pʰan-s</i> [pʰans] sew-NZR “seam”	<i>ɕen-s-ɕ-um</i> [ɕenɕum] raise-DETR-MID-INF “to stand up”
/ŋ/	<i>maŋs</i> [maŋs] “dream”	<i>ɕaŋs-men</i> [ɕaŋsmen] grow.old-INF “to grow old”
/s/	*not attested*	*not attested*
/l/	*not attested*	<i>al-s-ɕ-um</i> [alɕum] open-DETR-MID-INF “to become open”
/r/	<i>war-s</i> [wars] fence.in-NZR “fence”	<i>tʰor-s-ɕ-um</i> [tʰorɕum] feel-DETR-MID-INF “to feel”
/j/	<i>kʰu-i-s</i> [kʰujs] thresh-ACT-NZR “process of threshing”	*not attested*

There is another type of syllable final consonant cluster that exhibits the plosive /t/ as a second element. Such consonant sequences may arise when a derivational /t/-suffix is attached to a verbal root. There are two such derivational morphemes: a functionally opaque suffix (*dak-t-ɕ-um* “to break” “break-T-MID-INF”) and a verbalizing suffix (*kur-t-men* “to carry” “load-VRB-INF” < *kur* “load”). However, as the phonotactic rules of Bunan

do not license the occurrence of a plosive in slot C₃, this type of cluster only exists at an underlying level. In actual speech, such sequences are always simplified by deleting or resyllabifying the second element. These morphophonological processes are described in § 3.2.2.4. /t/-suffixes occur after the consonants /p, k, m, n, ŋ, r, l/. These combinations are illustrated in the table below.

Table 25: Syllable final clusters with /t/ as a second element

-p	-t	-k
<i>ip-t-ε-ka</i> [ɪpˈtɛæ] sleep-T-MID-PROG.SG „sleeping“	*not attested*	<i>dak-t-ε-ka</i> [daʔkˈtɛæ] break-T-MID-PROG „breaking“
-s	-m	-n
not attested	<i>bam-t-ε-ka</i> [bamtɛæ] become.insane-T-MID-PROG.SG “becoming insane”	<i>bran-t-ε-ka</i> [brantɛæ] fall-T-MID-PROG.SG „falling“
-ŋ	-r	-l
<i>pun-t-ka</i> [pʊŋkæ] grow-T-PROG.SG “growing”	<i>mer-t-ka</i> [merkæ] rise-T-PROG “rising”	<i>grel-t-ka</i> [grelkæ] run-T-PROG.SG “running”
-V		
<i>ti-t-ka</i> [tiˈtˈkjæ] water-VRB-PROG.SG “irrigating”		

Apart from the two types of clusters discussed above, there is another syllable final cluster /-jk/, which is only attested once in the plural form *gwajk* “EX.1PL”. This consonant sequence violates the phonotactic rule that no other sound than the fricative /s/ is allowed to surface in slot C₃. However, speaker commonly pronounce the form as [gwɛʔkˈ], thereby adjusting it to the phonotactic constraints. The existence of this particular consonant cluster can be explained as a consequence of syllable contraction. The plural form *gwajk* most probably goes back to an older form **gwa-ki-k* with an additional first person suffix *-ki. Consequently, the syllable final cluster is the result of the deletion of the velar plosive /k/ in intervocalic position, a morphophonological process that is widely attested in Bunan (cf. § 3.2.1.1).

2.4.4 Traces of a more complex syllable structure

There is evidence that the syllable structure of Bunan was originally more complex. This is suggested by Jäschke's (1865) study of the Bunan lexicon. Jäschke's list contains four lexemes with syllable initial clusters beginning with a fricative *s*-. These are listed in the table below.

Table 26: Syllable initial clusters with <s> in Jäschke's (1865) data

	Jäschke's form	Contemporary form	Meaning
(1)	<i>skyugtrong</i>	<i>kjukɬoŋ</i>	"chest"
(2)	<i>sta</i>	<i>ta</i>	"vein"
(3)	<i>stakorwa</i>	<i>n/a</i> ³⁴	"neck"
(4)	<i>smutig</i>	<i>mutik</i>	"flea"

The phonological structure of these four words implies that the consonant slot C_1 could originally be preceded by the fricative /s/, yielding the syllable structure $*sC_1RVC_2C_3$. Further evidence for this assumption comes from contemporary Bunan, where we find a small number of lexemes that have retained the *s*-prefix in specific contexts. One of these lexemes is the noun (s)la "moon, month". This word normally has the phonetic form [læ], no matter if speakers pronounce it in isolation or as a part of a more complex utterance. However, when the noun is preceded by certain numerals, the noun is pronounced as [slæ] with an initial *s*-prefix. At the same time, the respective numerals occur in a special short form, which is pre-cliticized to the nominal root (cf. § 7.3.1.2).

(s)la [læ]

"moon, month"

ni=(s)la [nislæ]

"two months"

sum=(s)la [sumslæ]

"three months"

pi=(s)la [pislæ]

"four months"

³⁴ My lexical database does not contain the reflex of Jäschke's (1865) noun *stakorwa*. The word for "neck" in contemporary Bunan is *kʰargul*.

The same phenomenon can be observed with the verb roots *(s)tan-* “see” and *(s)kja-* “become”. Both lexemes are normally pronounced with a single initial consonant, but may surface with an additional *s*-prefix when taking the negation prefix *ma-*.

(s)tant-k-are [*tancare*]

“see-INTR-PRS.DJ.SG”

“(I) see (it).”

ma-(s)tant-k-are [*mastancare*]

“NEG-see-INTR-PRS.DJ.SG”

“(I) don’t see (it).”

(s)kja-k-are [*ca:re*]

“become-INTR-PRS.DJ.SG”

“(It) becomes (ready).”

ma-(s)kja-k-are [*masca:re*]

“NEG-become-INTR-PRS.DJ.SG”

“(It) does not become (ready).”

Spurious *s*-prefixes are only attested in the noun *(s)la* “moon” and the verbs *(s)tant-men* “to see” and *(s)kja-men* “to become”, which implies that they are an etymological part of the respective lexeme and not the outcome of a morphophonological rule. Thus, there can be little doubt that these words were once pronounced with an initial *s*-prefix, which was later lost due to a simplification of the overall syllable structure of Bunan. The *s*-prefix has only been retained in contexts in which a lexeme with an *s*-prefix stands in a highly entrenched syntagmatic relationship to a preceding grammatical or lexical morpheme with an empty *C*₂ or *C*₃ position in its syllable coda. This phonetic environment allows the *s*-prefix to become a part of the preceding syllable coda, while etymologically still being a part of the following lexeme.

Further evidence for an originally more complex syllable structure can be derived from a small number of nouns that occur both as independent words and as second elements of compounds, e.g. *kat* “language”. This noun occurs in a number of compounds that are language designations: *boskat* “Tibetan”, *tinankat* “Tinan”, *pitikat* “Spiti Tibetan”, *melokkat* “Manchad”, *khunukat* “Kinnauri”, and *thaskat* “Hindi, Indo-Aryan idiom”. These words are all made of a toponym (*bod* “Tibet”, *tinan* “Tinan valley”, *piti* “Spiti”, *melok* “Pattan valley”, *khunu* “Kinnaur”) or an ethnonym (*tha* “Indo-Aryan”) followed by the second element *kat* “language”. However, in the case of *boskat* and *thaskat*, there is an additional fricative /s/ that occurs word-internally and does not appear to be part of the first nor the second element of the compound. This element is not an independent morpheme, nor can

it be interpreted as the result of a morphophonological process. Thus, its presence can only be explained if we assume that the word *kat* originally had the form **skat* with an *s*-prefix, which was occasionally preserved word-internally in compounds. This hypothesis becomes even more convincing in the light of the fact that the noun *kat* is likely to be a loanword going back to WT *skad*. The word must have had the phonological shape *skat* when it was borrowed into Bunan and only later lost the initial fricative /s/, which is now only preserved in the compounds listed above. It is not clear why the /s/ was not preserved in compounds such as *pitikat* “Spiti Tibetan” and *kʰunukat* “Kinnauri”, as the presence of a word-internal /s/ would not violate the syllable constraints of contemporary Bunan in these words. It is theoretically possible that these compounds were only formed after the syllable structure had been simplified. However, it seems more plausible that these syllable clusters were not preserved because they occur in the third syllable of a compound. The third syllable of nominals never bears lexical stress (cf. § 2.5.1), which might have triggered the simplification of the consonant clusters.

A last trace of the former existence of *s*-prefixes is found in the name of the northernmost village in the Gahr valley, which is located on the northern riverbank of the Bhaga river on the boundary to the Tod valley. This village is called *tiŋrik* (lit. “green field”) by Bunan speakers, but is referred to as *stiŋri* or *sətiŋri* in the official language Hindi. This suggests that the official name of the village was first recorded at a time when the village was still known as **stiŋrik*, which happened most likely in the early 19th century in the times of British rule. This assumption is corroborated by Moorcroft (1841: 204), who recorded the village name as *sitigiri* when he passed through Lahaul in 1820. Interestingly enough, the official name of the village affects the pronunciation of today’s Bunan speakers, who occasionally refer to the village as [sətiŋriʔkʰ] instead of [tiŋriʔkʰ].

Finally, the question arises whether the simplification of syllable structure is reflected in the historical data published by the Moravian missionaries between the mid-19th and the early 20th century. Indeed, it seems that the process can be observed in the sources. Jäschke’s (1865) word list contains lexemes that still retain complex syllable initial clusters. Jäschke must have collected his data while he was stationed at the missionary station in Keylong from 1857 to 1868 (Dorje & Tobdan 2008: 14). We may thus assume that *s*-prefixes were still pronounced by at least a part of the Bunan speaking population around 1860. The evidence contained in the *Linguistic Survey of India* is inconsistent. In the *Linguistic Survey of India* (Grierson 1909: 470), Konow stated that “[d]ouble consonants [i.e. complex syllable initial clusters] are sometimes simplified. Thus, *gyab*, Tibetan *rgyab*, back; *karma*, Tibetan *skarma*, star; *nying-jed*, Tibetan *snying-brje*, pity; *zā-i*, Tibetan *bzang-ba*, good, and so forth. In other cases double consonants are preserved; thus, *pro*, anger; *stonmo*, feast; *kyidpo*, happy; *smad*, harlot; [...]”. This

statement might be interpreted as evidence for a change in progress, as both lexemes with and without the s-prefix are listed. However, the material given in the passage cited above is problematic in two ways. First, it is not clear whether the words *gyab* “back”, *karma* “star”, *nying-jed* “pity” and *zā-i* “good”, which are all likely to be Tibetan loanwords, had ever been pronounced with a syllable initial cluster in Bunan. It is equally possible that these lexemes already had their present shape when they were borrowed into Bunan. Second, it is not clear when and by whom the lexical material was collected. In the *Linguistic Survey of India* (Grierson 1909: 469), Konow stated that the Bunan material had been prepared by August Hermann Francke. Francke lived in Lahaul for two years from 1906–1908 (Dorje & Tobdan 2008: 35), which might imply that the data contained in the *Linguistic Survey of India* were collected during that time. However, Konow indicates that Francke had not collected all the data by himself but had drawn from resources compiled by his predecessors, especially August Wilhelm Heyde, who had spent forty-five years from 1854 to 1899 in Lahaul (Dorje & Tobdan 2008: 34). This leaves us with a time frame of five decades within which the material could have been collected. It is thus not possible to make any detailed inferences about the process from the material in the *Linguistic Survey of India*. Still, it seems justified to conclude that the simplification of syllable structure must have progressed between the mid-19th century and the early 20th century and may even have been completed during that time. This hypothesis is corroborated by two publications by Francke ([1907b] 2008, 1926), which contain a number of stories that were recorded by himself, i.e. between 1906 and 1908. There are no traces of s-prefixes in these sources, which implies that the sound change had been completed in the first decade of the 20th century.

2.5 Suprasegmental features

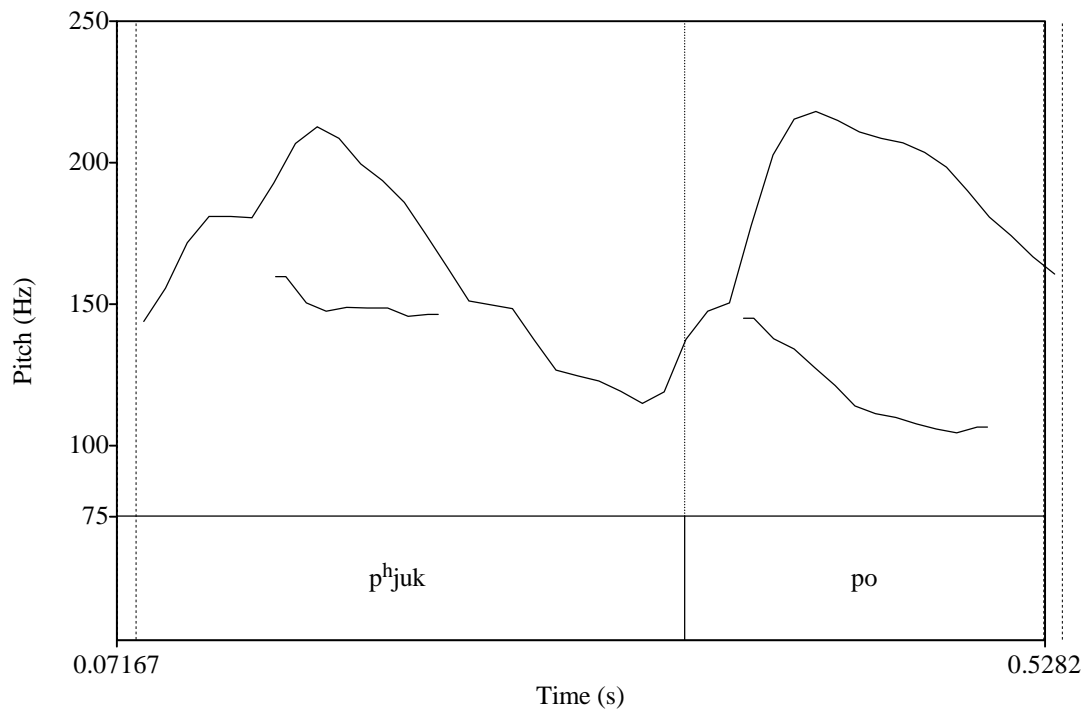
In this section, suprasegmental features are discussed. § 2.5.1 deals with stress at the word-level and phrase-level, whereas § 2.5.2 provides a preliminary account of phonation differences in Bunan.

2.5.1 Stress

Polysyllabic words carry a prominent stress on the first syllable when uttered in isolation. In Bunan, the main correlate of stress is pitch, which is illustrated in Figure 26 below. The first syllable of the word *pʰjukpo* “rich” exhibits a higher overall fundamental frequency than the second syllable. Also, the fundamental frequency remains relatively stable on the first syllable, whereas it considerably decreases towards the end of the second syllable. The phonetic parameter of intensity (measured in dB) is not a reliable criterion to distinguish stressed from unstressed syllables in Bunan. Often, there is a correlation between pitch and intensity, that is to say, initial syllables usually exhibit both a higher fundamental frequency and more acoustic energy than the following syllable(s).

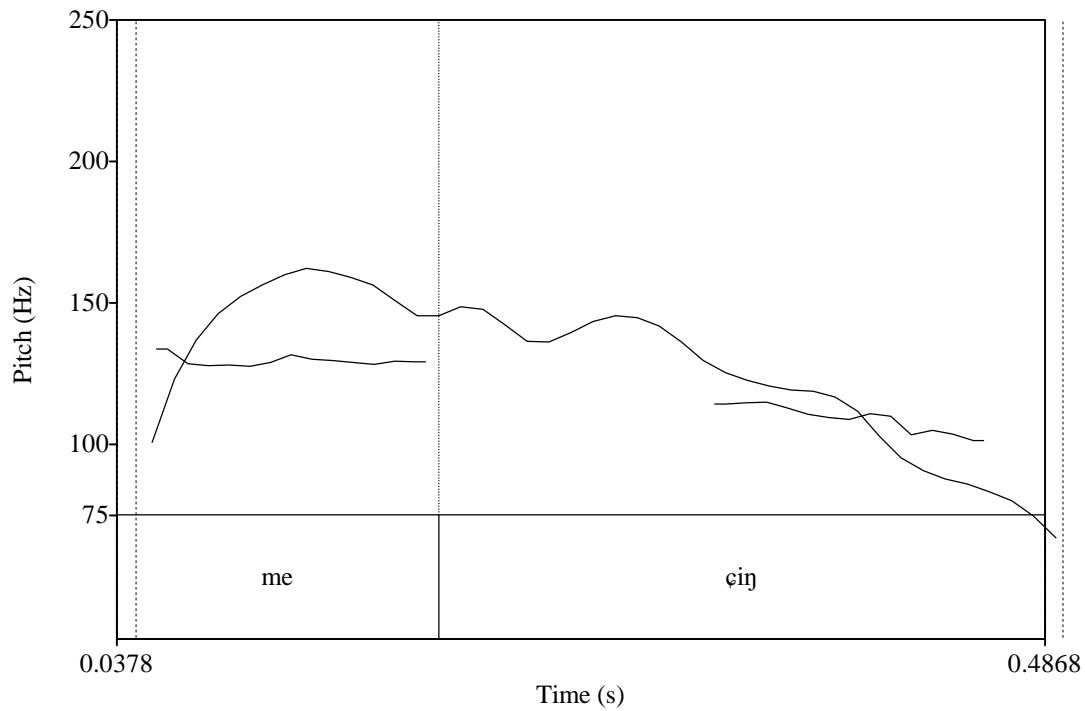
However, as illustrated in Figure 26 below, syllables of polysyllabic words may also be pronounced with the same amount of intensity.

Figure 26: Pitch on word level (*p^hjukpo* “rich” speaker: TD)



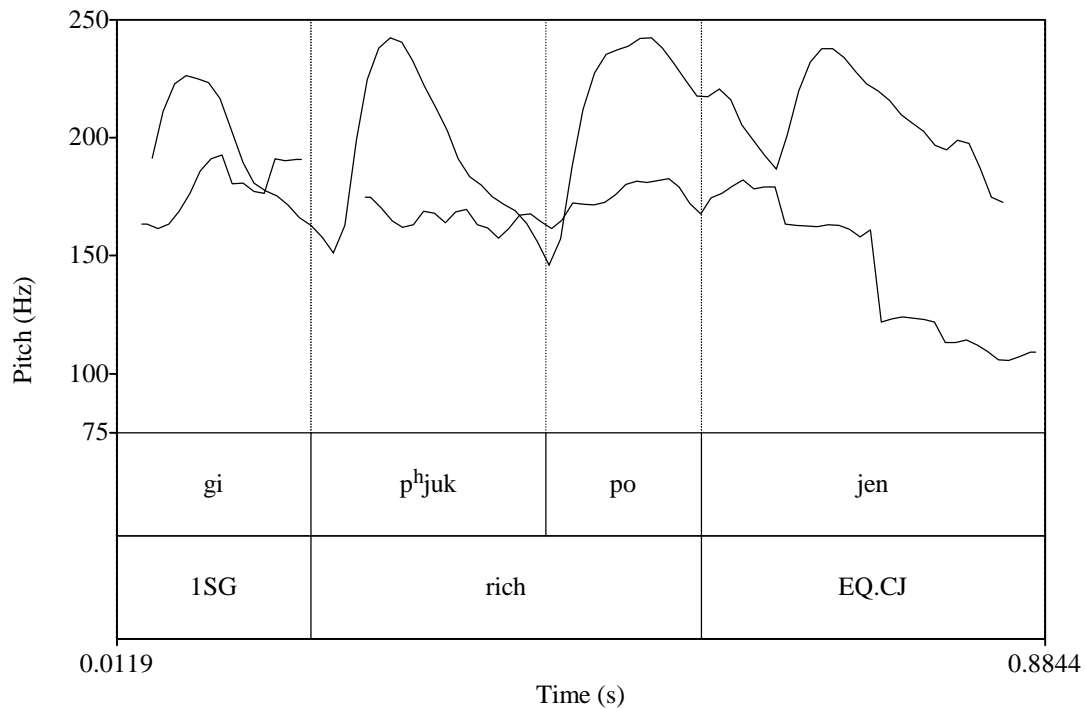
The same trochaic stress pattern is also found in compounds. This is illustrated in Figure 27 below, which gives the pitch trace over the noun *meɛiŋ* “firewood”. The noun consists of the two words *me* “fire” and *ɛiŋ* “wood”, which both also occur as independent nouns. Again, the first syllable has a higher pitch as opposed to the second syllable. This demonstrates that the morphological structure of the word has no effect on the placement of stress. As stress is always assigned to the first syllable of a word, polysyllabic words cannot differ from each other in terms of placement of stress. Consequently, stress is not phonemic in Bunan.

Figure 27: Pitch trace on word level (*me-ɕiŋ* “firewood” speaker: TD)



The trochaic stress pattern discussed above is, however, only attested at the word level, that is in words that are spoken in isolation. When polysyllabic words are uttered in the context of phrases, they follow an iambic stress pattern that is dictated by phrasal intonation. In the following, I refer to this intonation pattern as or “phrase-level stress” in order to demarcate it from “word-level stress”. Figure 28 below illustrates the pitch trace for the sentence *gi pʰjukpo jen* “I am rich”. Here, it is no longer the first syllable of the adjective *pʰjukpo* that is stressed. Rather, it is the second syllable that exhibits a higher fundamental frequency.

Figure 28: Pitch on phrasal level (*phjukpo* “rich” speaker: TD)



The iambic stress pattern dictated by phrasal intonation is attested in both monomorphemic words and compounds regardless of the number of syllables they consist of, e.g. /lak. 'gjaɲ/ “back of the hand” (*lak* “hand” + *gjaɲ* “back”), /te. 'a.wa/ “eldest father” (*te* “big” + *awa* “father”), /a. 'kjo.tsil/ “chin”. In quadrisyllabic words, which rarely occur in Bunan, the fourth syllable tends to be stressed as well. However, this stress is clearly less prominent than the primary stress on the second syllable and sometimes does not occur at all, e.g. /braŋ. 'si.bu. (,) jaŋ/ “honey bee” (*braŋsi* “honey” + *bujan* “fly”).

Phrasal stress is not sensitive to syllable weight. Regardless of the weight of the first and the second syllable of a polysyllabic word, phrasal stress is consistently assigned to the second syllable, e.g. /tʰa. 'pa/ “person of Indo-Aryan origin”, /ʂaŋs. 'pa/ “horsekeeper”, /ba. 'jaks/ “in three days”. The placement of phrasal stress is, however, affected by the lexical status of a given syllable. Phrasal stress is commonly attracted by syllables that have lexical content, whereas it does not occur on syllables that serve a grammatical function. Thus, in a word consisting of a monosyllabic noun or verb stem followed by a grammatical morpheme, phrasal stress is commonly assigned to the lexical root, i.e. /'gi=tok/ “1SG=DAT”, /'ta=dzil/ “3=ERG.SG”, /'kʰet-ø-dza/ “beat-TR-PST.DIR.DJ.SG”, /'lik-ø-kata/ “do-TR-FUT.CJ.SG”. This is illustrated in Figure 29 below, which gives the pitch trace of the following sentence.

(1) *awadzi girok k^hetdza.*

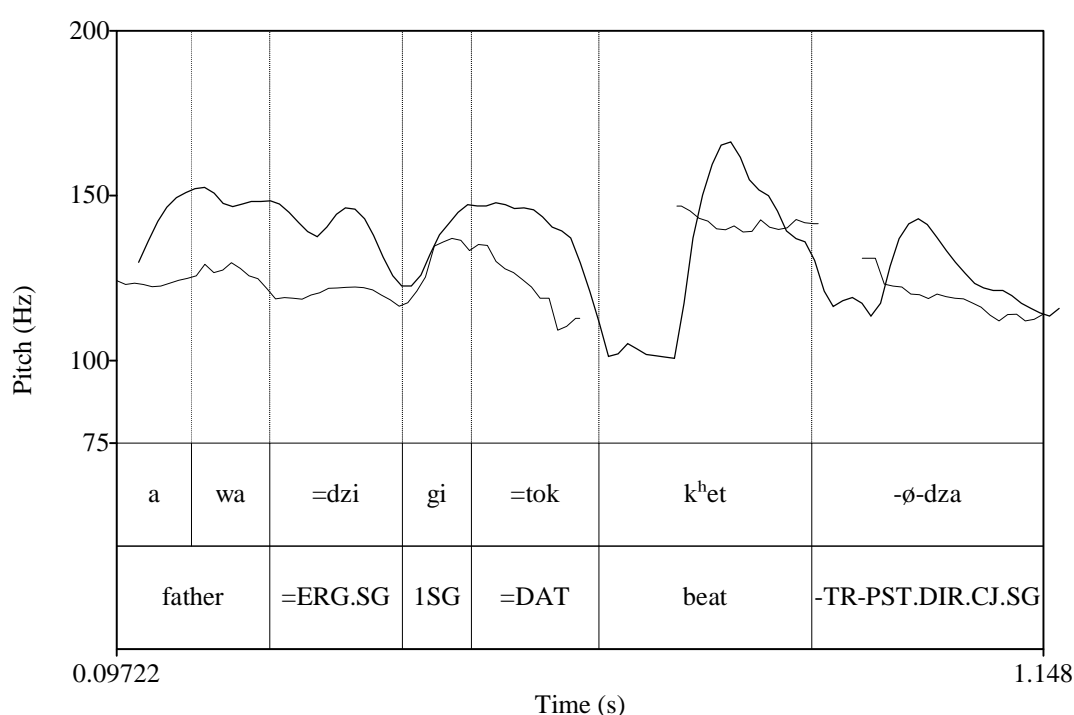
awa=dzi gi=tok k^het-ø-dza
 father=ERG.SG 1SG=DAT beat-TR-PST.DIR.DJ.SG

“Father beat me.”

(TD 168.3 [elicited])

In this example sentence, phrasal stress lies on the lexical stems /a'wa / father”, /'gi/ “1SG”, and /'k^het-/ “beat”, whereas the grammatical morphemes /=dzi/ “ERG.SG”, /=tok/ “DAT”, and /-dza/ “PST.DIR.DJ.SG” are unstressed.

Figure 29: Pitch on phrasal level (*awa=dzi gi=tok k^het-ø-dza*, speaker: TD)



However, there are some exceptions to the general rule stated above, as derivational word formation suffixes are not treated in a consistent manner with regard to phrasal stress assignment. Some word formation suffixes can bear stress like lexical morphemes, whereas others cannot bear stress and thus behave like grammatical morphemes. Nominal word formation suffixes are commonly stressed, whereas verbal and adjectival derivational suffixes are generally unstressed. Consider the following two sentences below and their corresponding pitch traces given in Figure 30 and Figure 31.

(2) *tal şaŋspa jen.*

<i>tal</i>	<i>şaŋs-pa</i>	<i>jen</i>
3[SG]	horse-NZR	EQ.CJ

“He is a horsekeeper.”

(TD 85.1 [elicited])

(3) *peltsi re lotmen.*

<i>pel-tsi</i>	<i>re</i>	<i>lot-ø-men</i>
milk-DIM	bring.IMP.SG	say-TR-PST.DIR.CJ

“‘Bring the milk’, I told (her / him).”

(TD 103.3 [elicited])

The two sentences contain the derived nouns *şaŋs-pa* “horse-NZR” “horsekeeper” and *pel-tsi* “milk-DIM” “milk”, respectively. The first contains the agentive nominalizer *-pa* (cf. § 4.3.2), whereas the later exhibits the diminutive suffix *-tsi* (cf. § 4.3.1). In both nouns, phrasal stress is assigned to the second syllable. This is indicated by two factors: First, we observe an increase rather than a decrease in pitch between the first syllable and the second syllable. Second, the overall pitch of the second syllable is higher than the overall pitch of the first syllable.

Figure 30: Pitch on phrasal level (*tal şaŋs-pa jen*, speaker: TD)

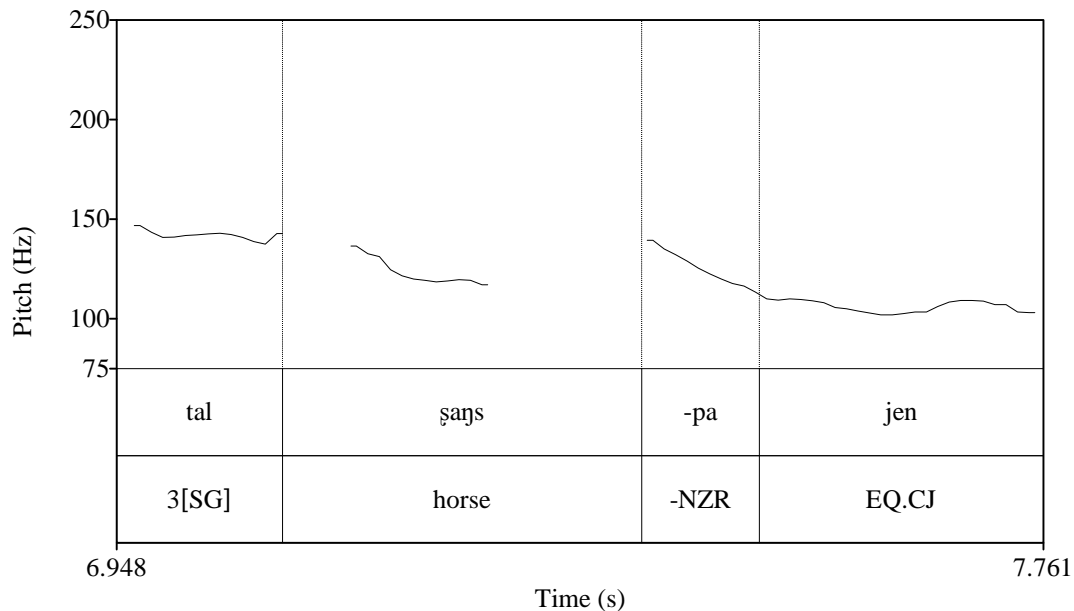
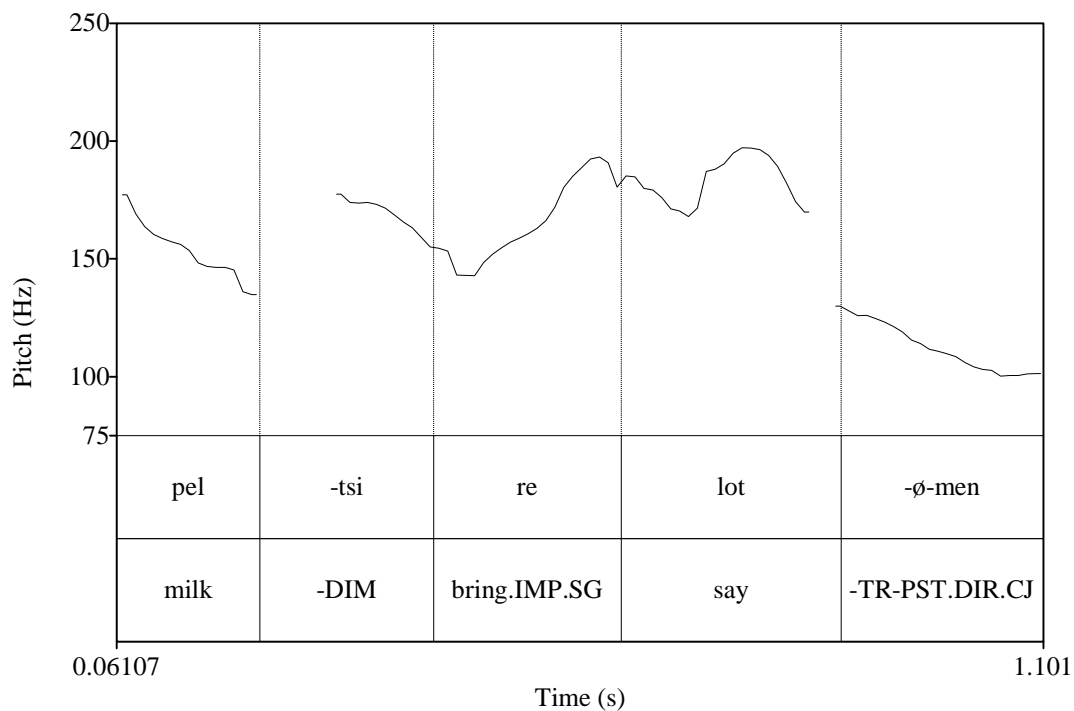


Figure 31: Pitch on phrasal level (*pel-tsi re lot-ø-men*, speaker: TD)



Things are different in case of adjectival word formation affixes. Consider the following two example sentences and their corresponding pitch traces given in Figure 32 and Figure 33 below. Both sentences contain adjectives that exhibit the derivational suffix *-na* (cf. § 6.3.2): *tsop-na* “slight-MOD”, *luk-na* “moist-MOD”, and *lom-na* “soft-MOD”.

(4) ... *ralqi tsopna khet thirta*.

ralqi *tsopna* *khet=thir-ø-ta*
sword slight beat-send-TR-PST.INFER.DJ

“... he touched it slightly with his sword.”

(King Kesar 146)

(5) *lukna lomna*.

luk-na *lom-na*
moist-MOD soft-MOD

“(It is) moist and soft.”

(Tshechu 2.427)

Figure 32: Pitch on phrasal level (*ralqi tsop-na k^het=t^hir-ta*, speaker: NN)

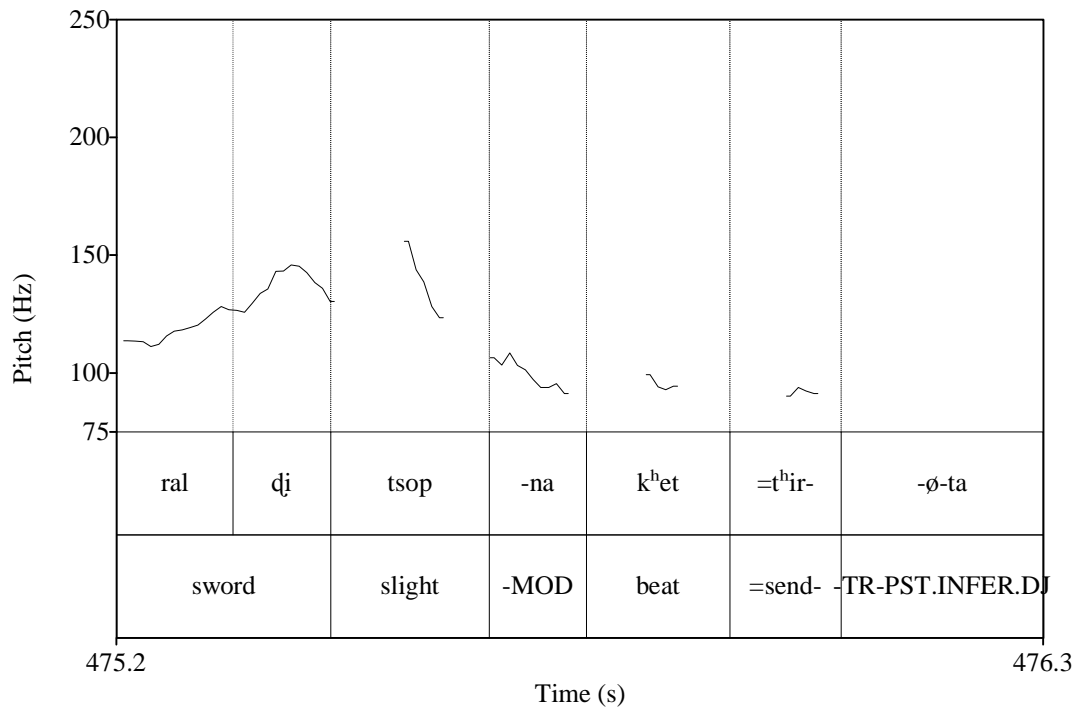
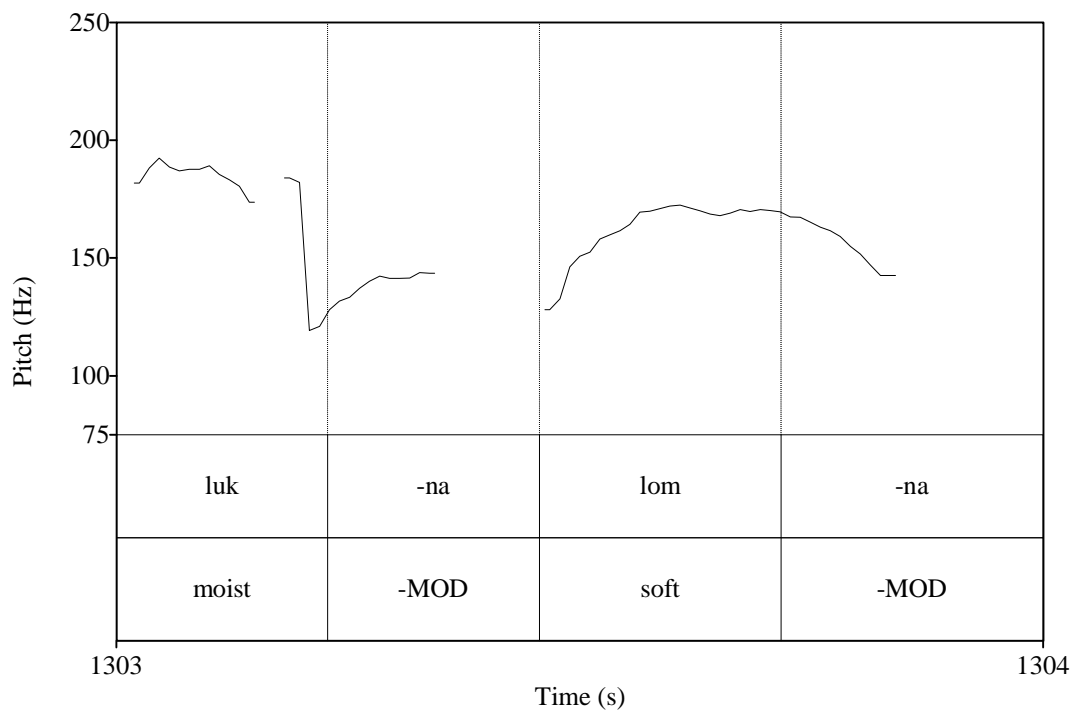


Figure 33: Pitch on phrasal level (*luk-na lom-na*, speaker: TDrol)



As the figures above illustrate, the lexical roots of the respective adjectives exhibit a higher pitch than the derivational suffixes. To be sure, the adjective *lom-na* “soft-MOD” in Figure 33 exhibits a relatively low initial pitch on its initial syllable. However, this is due to the low final pitch of the preceding syllable. Phrasal stress still clearly lies on the lexical root, as the low initial pitch considerably increases before levelling off at approximately

175 Hz. The derivational suffix, on the other hand, is clearly unstressed, as it begins with a relatively high pitch, which decreases throughout the production of the syllable.

Non-finite verbal endings such as the infinitive ending *-men* (cf. § 12.7.1), the progressive participle *-ka* (cf. § 12.7.3), or the converb ending *-dzi* (cf. § 12.7.5) are commonly unstressed as well. This is illustrated by Figure 34 and Figure 35 below, which are based on the following sentences.

(6)

tʰe

epo

lik-ø-dʒi

tʰruŋ-ka

jok-a

this

well

do-TR-CVB

nourish-PROG

keep-IMP.SG

“Do this well and keep (this boy), nourishing (him).”

(King Kesar 165)

(7)

glaːs

brantɕi

niː

glas

tumble.over-CVB.SG

EX.NON1SG

“The glass has tumbled over.”

(SSP-Questionnaire Sonam 20 [elicited])

Figure 34: Pitch on phrasal level (*tʰe epo lik-dʒi tʰruŋ-ka jok-a*, speaker: SA)

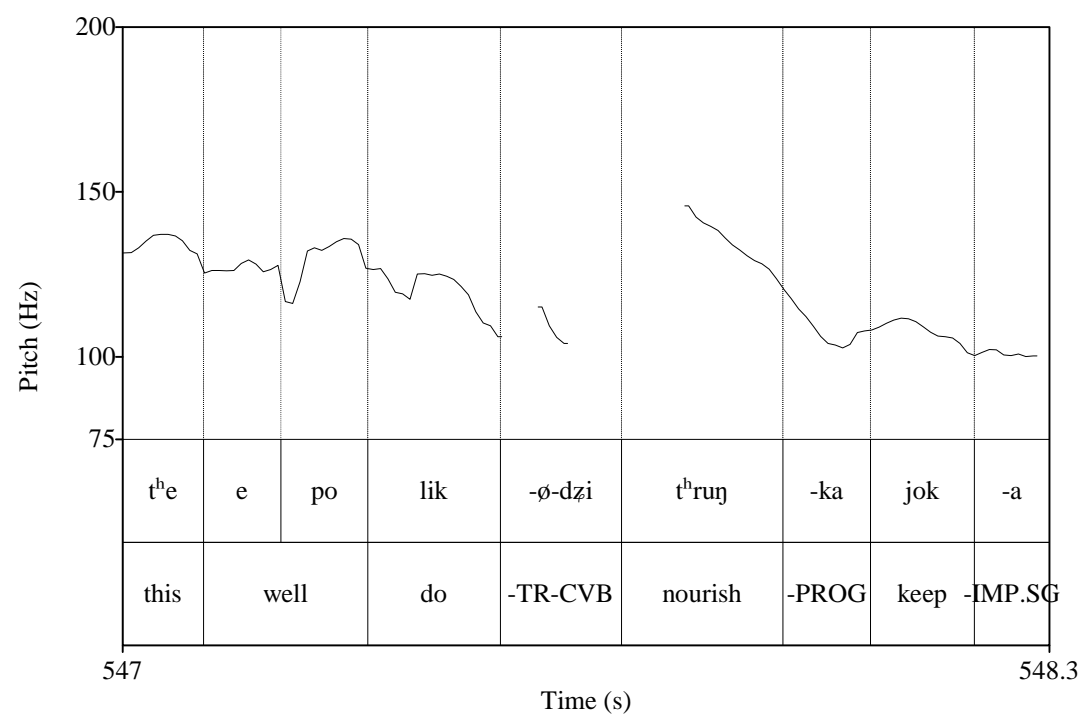
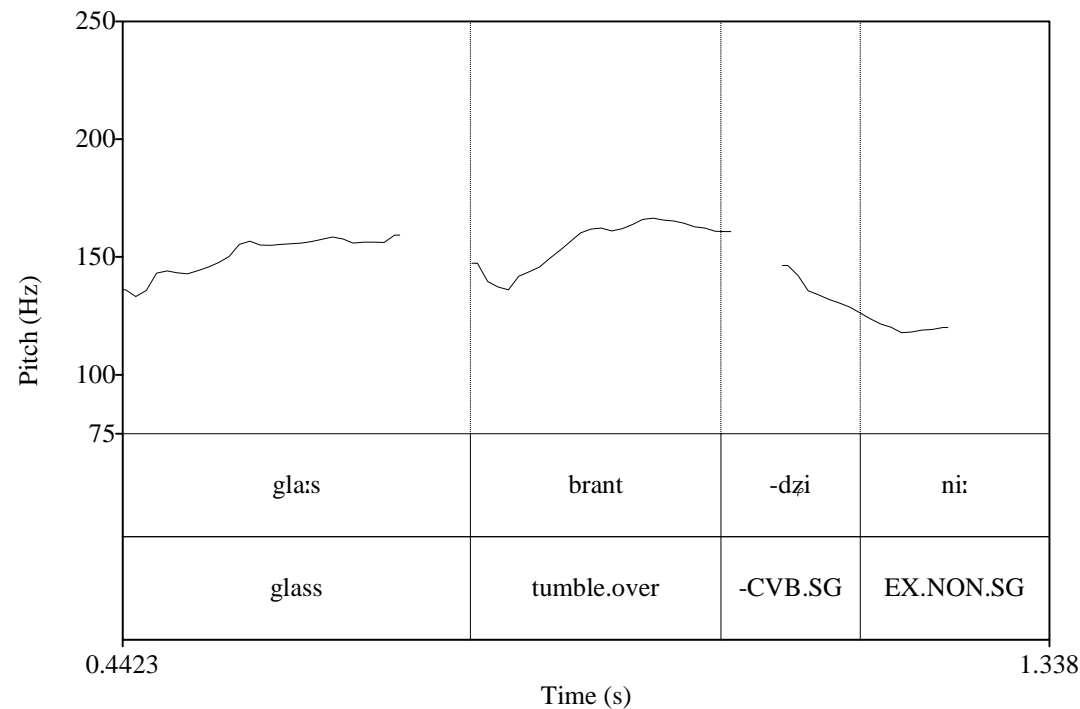


Figure 35: Pitch on phrasal level (*gla:s brant-dʒi ni:*, speaker: SA)



As the figures above illustrate, verb roots possess a higher relative pitch than the non-finite endings that are attached to them. Accordingly, phrasal stress clearly lies on the lexical roots rather than the derivational suffixes.

Our observations confirm the initial claim that word formation suffixes in the nominal domain can bear phrasal stress, whereas word formation suffixes in the adjectival and verbal domain cannot bear phrasal stress. This then leads us to the question as to why nominal word formation suffixes behave differently from other derivational morphemes. It is highly improbable that stress assignment is sensitive to the word class membership of a lexical root. Rather, word class membership seems to be an epiphenomenon of another factor that affects the distribution of phrasal stress. This basic factor seems to be “autonomy”. According to Bybee (1985: 57–58), “[t]he degree of autonomy of a word determines the likelihood that the word has a separate lexical representation.” Thus, a word possesses a high degree of autonomy if speakers consider it as morphologically simple and do not think of it as being derived from a more basic lexeme. At the same time, a word exhibits a low degree of autonomy if speakers view it as a morphologically complex form that is derived from a more basic lexeme. Bybee defines three criteria that determine the autonomy of a word form: (a) the semantic category to which a word belongs, (b) the frequency of a word, and (c) the morpho-phonemic irregularity of a word.

If we reconsider the distribution of phrasal stress in the light of Bybee’s approach, the peculiar behavior of nominal word formation suffixes becomes understandable. Nouns that contain the agentive nominalizer *-pa* or the diminutive suffix *-tsi* possess a high de-

gree of autonomy. This high degree of autonomy can be explained in terms of the semantic content and token frequency. Most nouns that contain these derivational suffixes are part of the everyday vocabulary, for example *leks-pa* “villager” (< *leks* “village”), *tot-pa* “person from Tod Valley” (< *tot* “Tod Valley”), *pjatsi* “bird”, *nitsi* “sun”, *latsi* “mountain”.³⁵ This basic semantic status correlates with a high token frequency and a high degree of entrenchment (cf. Croft & Cruse 2004: 292–293). Accordingly, these forms behave like morphologically simple word forms with regard to phrasal stress.

Note that the high degree of autonomy of nouns in *-pa* and *-tsi* may also be due to two further factors. First, Bunan possesses a large number of Tibetan loanwords that contain a suffix *-pa* (cf. § 4.3.9), which is ultimately cognate to the agentive nominalizer of Bunan. These loanwords are not morphologically transparent for Bunan speakers and are treated like morphologically simple forms, which carry phrasal stress on the second syllable. This may have facilitated the accent shift in genuine Bunan words that contain the agentive nominalizer *-pa*. Second, the diminutive suffix *-tsi* has largely lost its diminutive function in Bunan and now serves as a general noun formation suffix that occurs on various types of nouns (cf. § 4.3.1). The functional opaqueness of the morpheme may have contributed to its reconceptualization as an inherent part of the nouns on which it occurs.

Due to the fact that the placement of phrasal stress cannot vary freely, it is only weakly phonemic in Bunan. There are a few minimal pairs in which the assignment of stress expresses a difference in meaning, e.g. */mik. 'ti/* “tear” (lit. “eye-water”) vs. */ 'mik.ti/* “eye=INDEF”. In this case, the phonemic quality of phrasal stress is a direct consequence of the morphological structure of the two words. */mik. 'ti/* “tear” is a compound consisting of the two monosyllabic nouns *mik* “eye” and *ti* “water”. As both roots are lexical, stress is assigned to the second syllable. */ 'mik.ti/* “eye=INDEF”, on the other hand, is composed of the nominal root *mik* “eye” followed by the phonologically reduced form of the indefiniteness marker =*tiki*. The indefiniteness marker is a grammatical suffix and can thus not bear stress. Accordingly, phrasal stress is assigned to the first syllable of the word.

It is important to note that the basic phrasal intonation pattern described above may be overlaid with other pitch contours that specify the pragmatic context of an utterance. An in-depth study of these different pitch contours lies beyond the scope of this chapter. In the following, I confine myself to a short description of one of the most common pragmatic pitch contours, the “non-final rise”. The non-final rise is a pitch contour that commonly occurs at the end of clauses that do not constitute the end of the sentence to

³⁵ Of course, there are nouns that contain the derivational suffixes *-pa* or *-tsi* that consist of more than two syllables. However, such nouns are not relevant for the present discussion, as the word formation suffixes do not occur in a position in which they could potentially bear phrasal stress.

which they belong and is characterized by a distinctive rise in pitch on the last syllable of the clause. This rise in pitch occurs regardless of whether the respective syllable is lexical or grammatical. Consider the following example sentence and the corresponding pitch trace given in Figure 36 below.

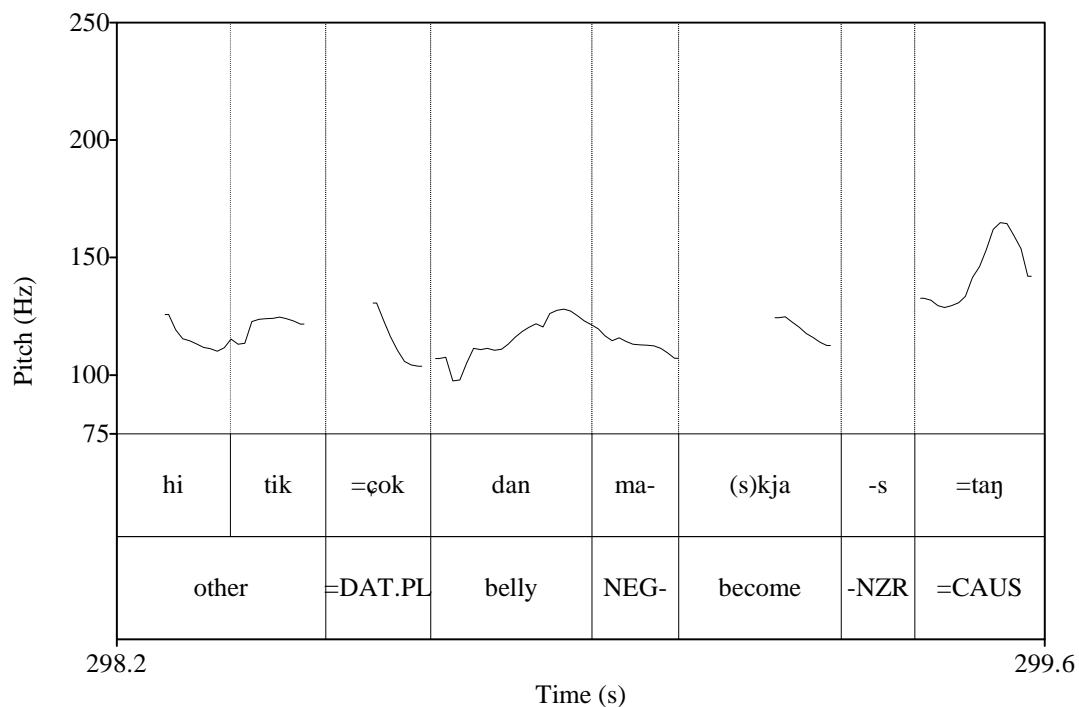
(8) *hitikɕok dan maskjastan̩ ...*

hitik=ɕi=tok dan ma-(s)kja-s=tan̩
 other=PL=DAT belly NEG-become-NZR=CAUS

“As the other (women) have not become pregnant”

(King Kesar 82)

Figure 36: Non-final rise (*hitik=ɕok dan ma-(s)kja-s=tan̩*), speaker: NN)



As the pitch trace above illustrates, the clitic *=tan̩*, which marks causal adverbial clauses, is pronounced with a higher pitch than the preceding verbal root *(s)kja-* “become”, despite being a grammatical rather than a lexical morpheme. The last syllable is characterized by a noticeable rise in pitch that starts at around 125 Hz, reaches its peak at around 160 Hz, and again goes down to approximately 140 Hz. This rising-falling pitch contour indicates that the respective utterance does not constitute the end of the sentence and that the speaker intends to continue speaking. Accordingly, the non-final rise contour is commonly attested on adverbial clauses, as they usually precede their corresponding main clauses.

However, non-final rises do not only mark clause boundaries within sentences, but may also occur within clauses. In this context, they serve two different functions. They may either be used as a stylistic device to create tension by slowing down the flow of discourse or they may be used as a pause marker if the speaker is unsure how to continue the utterance. Consider the following example sentence and the corresponding pitch trace given in Figure 37 below.

(9) ... *pata: madanaŋ ni: gidzi* [0.467] [*puɛak ralqiti kʰetdʒi*]

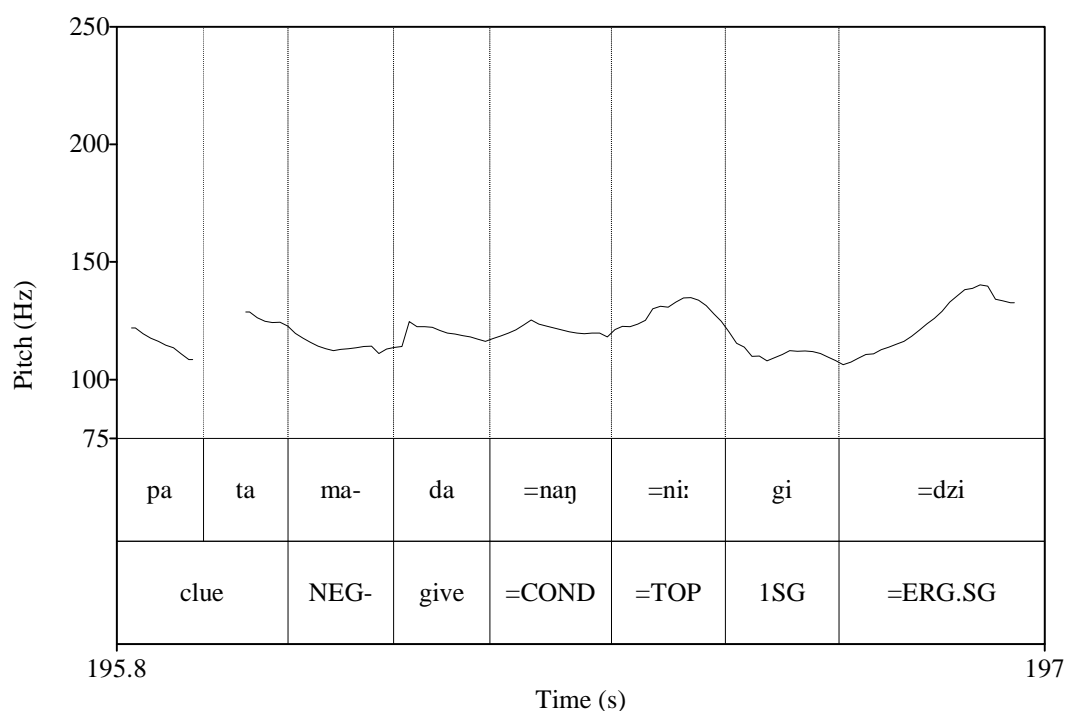
pata:LN *ma-da=naŋ=ni:* *gi=dzi*
 clue NEG-give=COND=FOC 1SG=ERG.SG

[*puɛa=tok* *ralqi=tiki* *kʰet-ø-dʒi*]
 [head=DAT sword=INDEF beat-TR-CVB]

“... if you do not give me notice, I [will cleave your head open] ... !”

(King Kesar 39)

Figure 37: Non-final rise (*pata: ma-da=naŋ=ni: gi=dzi*), speaker: NN)



The pitch trace above contains two non-final rises: a first one on the focus clitic *=ni:* and a second one on the ergative singular clitic *=dzi*. The first non-final rise signals the boundary of the non-finite conditional clause, whereas the second non-final rise occurs after the subject pronoun of the following main clause. After the second non-final rise, the narrator paused for nearly half a second before continuing the utterance. In this context, the precise function of the non-final rise is difficult to determine. It is possible that the narrator intentionally used the intonation contour to slow down the pace of the story in

order to increase tension before telling the listeners what the protagonist intended to do to the addressees if they should not give him notice. At the same time, it is also possible that the narrator himself had to reflect about how to continue the sentence.

2.5.2 Phonation

In his grammatical sketch of Bunan, Devidatta Sharma (1989b: 202) provides two minimal pairs of “phonemic accent”: “/ló/ south” vs. “/lo/ age, year” and “/lá/ goat” vs. “/la/ moon”. The fact that these words are monosyllabic strongly suggests that they do not contrast in terms of accent / stress but rather in terms of tone / phonation. Unfortunately, Sharma does not provide any further information about the phonetic parameters on which the phonemic contrast is based. A similar phenomenon has also been described by Suhnu Ram Sharma (2007b: 275), who claims that “Bunan has a two-way tonal contrast, i.e. high and low tone.” However, neither does he list any minimal pairs to illustrate the contrast, nor provide a more detailed account of the tonal opposition. The fact that both scholars have only provided brief and sketchy accounts of the phenomenon implies that they have had difficulties describing the phonemic contrast.

I myself was confronted with the same problem when I tried to account for the phonemic contrast between words such as the ones listed above. The difficulties I faced were primarily due to the fact that it was virtually impossible to elicitate minimal pairs in the first place. The differences between words such as “goat” and “moon” are so elusive, that Bunan speakers are not aware of them and, consequently, are not able to reproduce them, let alone explain their nature to a non-native speaker. During my time in the field, I enquired several dozens of Bunan speakers from both sexes and different generations about “tonal” minimal pairs. All of them assured me that the words that I was asking them about were pronounced in exactly the same way. Eventually, I found one male speaker in his early forties who was able to hear a minute difference in pronunciation between words such as /la/ “moon” and /la/ “goat”. Unfortunately, however, he was only able to spare time for a few short elicitation sessions. The data gained in these sessions only allow for a preliminary account of the phenomenon. This is due to the poor quality of the audio recordings, which had to be made in an environment that was not at all appropriate for this task. In addition, I am not sure to which extent the pronunciation of my consultant might have been influenced by Standard Tibetan, which he spoke very well. I suspect that he may have imposed phonetic correlates of tonal distinctions in Standard Tibetan on the phonological system of Bunan to make the distinction more salient for me. This seems especially plausible in view of the fact that Bunan has a great deal of Tibetan loanwords, which might encourage the interference of the phonological systems of the two languages.

In the following, I provide a preliminary interpretation of the phenomenon. The data I was able to elicit from my consultant confirmed my impression that Bunan is not a tonal

language. A phonetic analysis yielded that there is no significant difference in pitch height or pitch contour between the minimal pairs provided by my consultant. Rather, the distinction seems to be based on an opposition of modal vs. breathy voice. In the following, I provide a short list of the minimal pairs that my consultant identified.

breathy voice vs. modal voice

<i>la</i>	<i>la̤</i>
“goat” / “mountain pass”	“moon, month”
<i>sa</i>	<i>sa̤</i>
“vein”	“earth, soil”
<i>nam</i>	<i>na̤m</i>
“daughter-in-law”	“sky”
<i>taks</i>	<i>ta̤ks</i>
“smell”	“present”

The vowels of the nouns “moon, month”, “earth, soil”, “sky”, and “present” tended to be articulated with a considerable amount of breathiness. In some recordings, this noise was visible in the spectrogram as a cumulation of acoustic energy in the range of F3 and above. Also, breathiness sometimes correlated with an increased duration of an average glottal cycle and a steep decrease in amplitude towards the end of the vowel. All of these features are common correlates of breathy phonation (Johnson [1997] 2012: 170–172). Unfortunately, it is not possible to present a more detailed account based on the material I was able to record.

Of course, the question arises whether there is a possible explanation for the existence of such an elusive phonemic contrast in Bunan. Basically, there are two logical possibilities that can account for the phenomenon described above: Either Bunan is currently losing a phonemic distinction that was once fully established, or the language is acquiring a new phonemic contrast that was not originally phonemic. For several reasons, the second possibility is much more plausible.

First, the Tibetan dialects of Lahaul as well as the languages Manchad and Tinan, which directly border the Bunan speaking territory, are all clearly tonal. Native speakers of these languages never had any difficulty in coming up with tonal minimal pairs and would insist on a correct pronunciation of the tonemes when I repeated them. Bunan has been in longstanding contact with all of these languages, in particular with Manchad, which used to serve as a regional Lingua Franca throughout Lahaul in historical times. The oldest generation of Bunan speakers still speaks Manchad. In addition, Bunan must also have been in contact with the Tibetan varieties of Spiti, Zangskar and Upper Ladakh.

While the dialect of Spiti is known to have a tonal system (cf. Hein 2001, 2007), there is evidence that the dialects of Zangskar and Upper Ladakh are currently undergoing tonogenesis (see below). Given the fact the traditional Tibeto-Burman contact languages of Bunan in Lahaul are mostly tonal, it would seem strange if the language were currently losing a full-fledged tone system, the more so as the influence of the non-tonal contact language Hindi has only become prevalent in the course of the 20th century. If an old tonal system were currently disappearing in Bunan, we would also expect that old speakers would have less difficulty in producing minimal pairs as opposed to young speakers. However, as stated earlier, both old and young speakers are not aware of a phonemic difference between the minimal pairs listed above. Thus, it seems much more likely that Bunan is currently passing through an early stage of tonogenesis.

Second, this assumption seems plausible in view of the fact that the Bunan speaking territory lies close to the “tonogenetic frontier”, which runs through the Tibetan dialect continuum of western Tibet. Zeisler (2011: 251) has located the transitional zone between tonal and non-tonal Tibetan varieties in the areas of Upper Ladakh and Zangskar. According to Zeisler, it is extremely difficult to determine which of the dialects spoken in Upper Ladakh and Zangskar are tonal and which are not, as tonal distinctions still alternate with other phonetic parameters in these languages.

Third, this interpretation is also supported by diachronic considerations. As argued in § 2.4.4, there is ample evidence that Bunan once had a more complex syllable structure, which was only simplified in the recent past. The simplification of syllable structures is known to be a common starting point for tonogenetic processes (Mazaudon 1977), and the elusive phonation differences of Bunan might be the result loss of such a simplification process. The word /*la*/ “moon, month”, for example, still has the phonological form /*sla*/ “moon, month” with a prefixed *s*- when uttered in combination with certain numerals (cf. § 2.4.4). The words /*nam*/ “sky” and /*taks*/ “present”, on the other hand, are likely to be loanwords going back to WT *gnam* “sky” and WT *rtags* “present”. Although it is not possible to say whether these words were already borrowed with a simplified initial cluster or whether they underwent simplification in Bunan, the correlation between breathiness and the presence of a prefix in Written Tibetan is striking. As argued in § 2.4.4, the simplification of syllable initial clusters in Bunan most likely occurred in the recent past, i.e. at the end of the 19th century. The elusiveness of the phonation difference might be explicable in terms of the relatively short period of time that has passed since the simplification of syllable structure occurred. In the course of one century, the formerly allophonic breathiness of prefixed words might not have been able to develop into a salient phonemic feature. Also, the development might have been affected by the changes that occurred in the socio-linguistic environment of the Bunan speaking community in

the recent past (cf. § 1.2.3.2). As stated above, Bunan had mainly been in contact with Tibeto-Burman languages that were either tonal or undergoing tonogenesis until the beginning of the 20th century. The influence of these languages decreased throughout the 20th century and was gradually replaced by intense contact with Indo-Aryan idioms, in particular Hindi, which has become the dominant contact language since the 1960's. Indo-Aryan languages are well-known to have a phonemic opposition of modal vs. breathy voice, but they are not usually tonal.³⁶ It seems plausible that the inversion of areal linguistic influence might have delayed or even disrupted the tonogenetic process in Bunan. If my interpretation is correct, the already weakly established phonemic contrast between breathy and modal voice might be currently eroding in the youngest speaker generation. However, for the time being, this should only be regarded as a hypothesis. Further research is needed to give a full account of phonation differences in Bunan.

2.6 Phonological word

In this section, I discuss phonological features that define a “word” in Bunan. Dixon and Aikhenvald (2002: 13) have identified three types of criteria that may serve to identify a phonological word in a language: segmental features, prosodic features, and phonological rules. These will be discussed in the following subsections.

2.6.1 Segmental features

In Bunan, phonological words tend to be separated by short intervals of several milliseconds, especially in slow speech. However, in fast speech, this criterion becomes less reliable, as speaker may utter several words in rapid sequence without audible pauses between them. Apart from pauses, there are no other segmental features based on which phonological words can be identified. The phonotactic constraints that have been described in § 2.4 do not offer any valid criteria, as they only allow us to define syllable boundaries but not word boundaries.

2.6.2 Prosodic features

A distinctive criterion to define phonological words in Bunan is phrasal stress. Every phonological word only bears one primary phrasal stress. The position of phrasal stress depends on the number of lexical syllables that a word contains. In grammatical words that consist of one monosyllabic lexical root followed by inflectional clitics or suffixes, phrasal stress lies on the first syllable, e.g. *'tal=dzi* “3=ERG.SG”, *'lik-ø-kata* “do-TR-FUT.CJ.SG”. In polysyllabic words that contain a polysyllabic lexical stem or several lexical stems, phrasal stress lies on the second syllable, e.g. *a'tə'ho* “older brother”, *ka'katsi*, “lamb” *me'əiŋ* “firewood”. Accordingly, the position of phrasal stress does not reveal

³⁶ A notable exception is Panjabi, which has developed tonal contrasts from former aspiration distinctions (Shackle 2003: 592–594).

where exactly a word begins or ends, as it may lie on the first syllable, the last syllable, or the medial syllable of a word. However, as every phonological word only can bear one primary phrasal stress, stress assignment is still a reliable criterion to identify the lexical core of a phonological word.

2.6.3 Phonological rules

A number of phonological rules only apply within words but not across word boundaries. One such process is word-internal voicing assimilation. If a syllable final plosive is followed by voiced sound in the same word, the plosive undergoes progressive voicing assimilation, e.g. *thikma* [tʰɪʔg`mæ] “tie-dye”, *təupgjat* [təub`gjaʔt] “eighteen”. However, this rule is a relatively weak criterion for defining a phonological word, as allophonic voicing of unreleased stops may also occur at word boundaries, e.g. *lak* [laʔk` ~ laʔg] “hand” (cf. § 2.2.1.2).

A more reliable feature is the deletion of the velar nasal /ŋ/ in intervocalic position, e.g. *goŋa* [gwã] “collar”. This rule only applies within phonological words but never across word boundaries. Accordingly, the presence of a nasalized diphthong indicates the presence of a phonological word boundary. A similarly reliable criterion is the fronting of back vowels. As stated in § 2.3.5.2, the fronting of back vowels may be caused by the presence of a high front vowel /i/ in the following syllable, e.g. /pjutsi/ [piytsi] “mouse”. This process never applies across word boundaries, making it a reliable criterion to identify phonological word boundaries.

Another phonological process that is helpful for identifying phonological word boundaries is the deletion of syllable final vowels in grammatical endings. This phonological process is a consequence of the fact that grammatical endings cannot bear a phrasal stress (cf. § 2.5.1). The reduction of vowels in grammatical endings often gives rise to syllable final sounds or sound sequences that are at odds with phonotactic constraints. These may either be syllable final clusters such as the final consonant sequence [pts] in the verb form /bup-dza/ [bupts] “stumble-PST.DIR.DJ.SG”, or released stops such as the released syllable plosive [t] in the verb form /lik-kata/ [lɪʔkat] “do-FUT.CJ.SG”. These seeming violations of phonotactic rules are reliable indicators for the presence of word boundaries. An equally solid criterion for the definition of phonological words is the insertion of a glottal stop between vowels to prevent hiatus. This process is robustly attested at word boundaries, e.g. /tal=ɛi ipt-ɛ-tsʰa/ [talzi ʔiptsʰæ] “3=PL sleep-MID-PST.DIR.DJ.PL” “They slept”, but never occurs inside of a word, e.g. /awaama/ [awa:ma] “parents”. Accordingly, glottal stops between vowels reliably indicate the presence of a word boundary.

2.6.4 Grammatical words and their relationship to phonological words

The linguistic entity “word” cannot only be defined based on phonological criteria. It is also possible to define words in terms of grammatical features. Dixon & Aikhenvald (2002: 19) suggest three criteria to define grammatical words. According to them, a grammatical word consists of grammatical elements that “(a) always occur together, rather than scattered through the clause [...]; (b) occur in a fixed order; (c) have a conventionalised coherence and meaning.”

In Bunan, there is not a single valid definition for grammatical words, as the morphological structure of words varies according to their lexical class membership (cf. § 3.1). With regard to the verbal domain, we may define the grammatical word as consisting of a verbal root, which is followed by derivational suffixes and inflectional suffixes, e.g. *al-s-ə-are* [*alɛare*] “open-DETR-MID-PRS.DJ.SG” “(The door) opens (by itself).” In the domains of nouns, adjectives, and adverbs, we may define a word as consisting of a lexical root that may be followed by a derivational suffix. Here, inflectional morphemes are not part of the grammatical word, as they are clitics rather than suffixes.

verbal domain:

ROOT-DERIVATION-INFLECTION

nominal / adjectival / adverbial domain:

ROOT-DERIVATION

It is important to note that the two schemes given above illustrate the maximally complex grammatical word. The morphological structure of a grammatical word may in fact be simpler. For example, a verb may only consist of a verb root and an inflectional morpheme without any additional derivational suffixes, e.g. *dat-dza* [*datɕæ*] “fall-PST.DIR.DJ.SG” “(I / you / she / he / it) fell.”, whereas a noun may only consist of a single monosyllabic lexical root with no derivational suffixes attached to it, e.g. *me* “fire”, *əa* “meat”, *ak* “mouth”.

As Dixon & Aikhenvald (2002: 19) point out, there may be mismatches between phonological words and morphological words. In other words, the word boundaries that are defined by phonological criteria do not necessarily have to coincide with the word boundaries that are defined by morphological criteria. In Bunan, the word boundaries of phonological words most often coincide with the word boundaries of morphological words. However, mismatches between phonological and morphological words may occur. They always involve the cliticization of a lexical element that qualifies as a grammatical word based on its morphological structure, but fails to attract phrasal stress. Accordingly, it merges into one phonological word with its morphological host.

An example of such a mismatch is the indefinite noun form *totpa=tiki*, which translates into English as “a person from Tod Valley”. The noun *totpa* consists of the place name *tot* “Tod Valley”, to which the agentive nominalizer *-pa* is attached. Accordingly, *totpa* qualifies as a grammatical word as defined above, as it consists of a lexical root and a derivational suffix. The indefinite clitic *=tiki* represents a grammaticalized version of the numeral *tiki* “one”. This numeral consists of a lexical root *tik-* and the word formation suffix *-i*, which is commonly found on modifiers. Hence, *=tiki* qualifies as a grammatical word as well. The grammatical word status of the noun *totpa* and the clitic *tiki* can be illustrated with the following scheme (GW = grammatical word).

$$(totpa)_{GW}=(tiki)_{GW}$$

However, although the two constituents *totpa* and *tiki* represent two separate grammatical words, they behave like one single phonological word. That is because the indefinite clitic *=tiki* fails to bear phrasal stress, which is a crucial characteristic trait of phonological words (see above). The entire noun form only receives one single phrasal stress on the second syllable, i.e. */tot'patiki/*, and not ***/tot'pa tik'i/*. Accordingly, the two grammatical words merge into one phonological word, which we can illustrate with the following scheme (PW = phonological word).

$$[(totpa)_{GW}=(tiki)_{GW}]_{PW}$$

2.7 Phonology of loanwords

As pointed out earlier, Bunan has been in longlasting contact with both Tibeto-Burman and Indo-Aryan languages from which it has borrowed a great number of loanwords. The question arises as to which extent these loanwords have been adapted to the phonological system of Bunan. It is not possible to give a straightforward answer to this question for several reasons. First, the degree of phonological adaption obviously depends on how long ago a loanword was borrowed. Ancient loanwords are expected to be more accommodated than recent borrowings. Second, the phonological adaption of recent loanwords strongly depends on a speaker's individual proficiency in the donor language. Consequently, there is a high degree of interspeaker variability with regard to the pronunciation of loanwords. Third, it is difficult if not impossible to draw a clear-cut line between borrowing and code-switching. This problem is especially obvious in the case of Hindi, which is spoken as a second language throughout the Bunan speaking community and is often used in everyday communication, especially by young speakers. In spite of these difficulties, I provide a general account of the phonology of loanwords in the following.

In the main, Tibetan borrowings tend to be well adapted to the phonological system of Bunan. They are subject to the phonological rules outlined in previous sections and do not usually contain phonemes that are alien to the phonology of Bunan. The high degree of adaption of Tibetan loanwords is the result of two factors. First, Bunan and western Tibetan varieties have rather similar phonological systems, which considerably facilitates the process of integrating loanwords into the phonological system of Bunan. Second, some of these loanwords must have been part of the Bunan lexicon for several centuries. In the course of time, many borrowed Tibetan lexemes have become an integral part of the Bunan lexicon and are no longer considered as loanwords by the speakers. However, there are a small number of Tibetan borrowings that are still clearly identifiable because they exhibit long vowels and diphthongs that do not commonly occur in Bunan, e.g. *təa*: “knowledge” (WT *cha* “knowledge”) or *tsʰaw* “brother-in-law” (WT *tsha bo* “brother-in-law”). A more comprehensive list of examples can be found in § 2.3.2 and § 2.3.3.

The degree of adaptation of Indo-Aryan loanwords seems to strongly depend on their age. Words that were borrowed in the beginning of the 20th century or earlier have been assimilated to the phonotactics of Bunan by shortening long vowels, simplifying geminates, and replacing consonant phonemes alien to Bunan such as /v/.

Bunan	Indo-Aryan
<i>pat</i> “letter”	<i>patra</i> (Hindi)
<i>bila</i> “cat”	<i>bīllā</i> (Mandi) (Bailey 1908)
<i>bakta</i> “time”	<i>vakt</i> (Hindi)
<i>ʰatəa</i> “shepherd’s camp”	<i>ʰaːtə</i> (Gaddi)
<i>haʈi</i> “shop”	<i>hāṭ</i> (Hindi)

However, in some of these loanwords, there is variation between an adapted pronunciation and an original pronunciation.

Bunan	Indo-Aryan
<i>kukuri</i> ~ <i>kukuṛi</i> “chicken”	<i>kukkṛī</i> (Kullu) (Bailey 1908)

In the case of the word *kukuri* ~ *kukuṛi* “chicken”, the pronunciation seems to depend on the speaker’s proficiency in the donor language. Although the word is clearly of Indo-Aryan origin, it is uncertain whether it was directly borrowed from an Indo-Aryan idiom. It is possible that the word was borrowed from Manchad, which shows a strong Indo-Aryan influence in both its lexicon and its phonological system. Thus, the presence of the sound /ɾ/ in the word might not reflect a Bunan speaker’s acquaintance with the Indo-Aryan idioms spoken in the Kullu Valley but rather her / his competence in Manchad.

More recent Indo-Aryan loanwords are commonly used in discourse without being adapted to the phonological system of Bunan at all. Consequently, long vowels are not shortened, consonant geminates are not simplified, consonant phonemes alien to the phonological system of Bunan are not replaced, and syllable final plosives are not pronounced as unreleased sounds.

Bunan	Indo-Aryan
<i>[tʰi:k]</i> not: <i>**[tʰɪʔkʷ]</i>	<i>ṭhīk</i> (Hindi)
“okay, good”	
<i>[tṣa:dar]</i> not: <i>**[tṣadar]</i>	<i>cādar</i> (Hindi)
“sheet”	

Throughout this grammar, loanwords occurring in example sentences are written the way that they were pronounced by the respective speaker. Loanwords from Indo-Aryan idioms and English are additionally marked with the subscript abbreviation *LN* (for “loanword”) in order to make them clearly identifiable.

3 Morphophonology

3.1 Introduction

In this chapter, I describe the major morphophonological processes that are attested in the nominal, adjectival, and verbal domain. These phenomena are best explained based on the underlying morphological structures of nouns, adjectives and verbs, which can be described with the following schemes. Elements given in brackets are optional.

Table 27: Morphological structure of nouns

✓	– (derivational suffix) slot N ₁	= (qualifying / quantifying clitic) slot N ₂	= (definite / indefinite clitic) slot N ₃	= (number / case clitic) slot N ₄
root	derivational morphology		inflectional morphology	
stem (Σ)				

Table 28: Morphological structure of adjectives

✓	– (derivational suffix) slot A ₁
root	derivational morphology
stem (Σ)	

Table 29: Morphological structure of verbs

✓	– (derivational suffix) slot V ₁	– (conjugation suffix) slot V ₂	– (conjunct under- goer suffix) slot V ₃	– (TAME suffix) slot V ₄
root	derivational morphology		inflectional morphology	
stem (Σ)				

As the tables given above illustrate, adjectives exhibit a rather simple morphological structure. Most commonly, they consist of two morphemes, viz. a lexical root that is followed by a modifier marker (e.g. *so-i* “cold-MOD”, *dup-na* “blunt-MOD”). However, there

is also a small number of adjectives that only consist of a single monosyllabic morpheme (e.g. *bik* “full”, *qik* “suitable”).

Nouns possess a more complex morphological structure than adjectives. A noun standing in the unmarked absolutive case may consist of a single nominal root without any additional derivational or inflectional markers (e.g. *ti* “water”). A maximally complex noun, on the other hand, consists of a root followed by a derivational suffix, a qualifying / quantifying clitic³⁷, a definiteness / indefiniteness clitic, and a case / number clitic. Note that nouns exhibiting a qualifying / quantifying clitic are usually not inflected for definiteness / indefiniteness and case / number. Accordingly, the most complex nouns in my corpus only consist of four different morphemes (e.g. *kʰap-s=tiki=dzi* “cover-NZR=INDEF=ERG.SG” “with a cover”).

The morphological complexity of verbs is comparable to the morphological complexity of nouns. A minimally complex verb form consist of two morphemes, i.e. a verbal root followed by an inflectional suffix (e.g. *dat-dza* “fall-PST.DIR.DJ.SG” “(I / you / she / he) fell.”). A maximally complex verb form, in turn, can theoretically be segmented into five distinct morphemes. The most complex verb form attested in Bunan, however, only consists of four morphemes (e.g. *kʰet-ø-ku-dza* “beat-TR-UND-PST.DIR.DJ.SG” “(You / she / he) beat me.”).

Note that not all of the morphological slots that have been defined above play a role in morphophonological processes. Nominal clitics occurring in slot N_2 are only marginally affected by morphophonological alternations, whereas nominal clitics occurring in slot N_3 do not show morphophonological alternations at all. The most complex morphophonological phenomena generally occur in the verbal domain, while morphophonological processes are less complex in the nominal and adjectival domain. Still, there are a number of morphophonological processes that affect verbs, nouns, and adjectives alike, as will be demonstrated in the following. The tables below give an overview of all derivational and inflectional morphemes that are involved in the morphophonological processes described in this section.

³⁷ Note that I do not consider qualifying and quantifying morphemes as part of the noun stem. That is because they differ from derivational suffixes in slot N_1 in two crucial points. On the one hand, they are clitics rather than suffixes and thus only stand in a weak syntagmatic relationship to the noun stem. On the other hand, they are not an essential part of the noun stem. The verbal root *kʰap*- “to cover” necessarily needs to be augmented with the nominalizer -s before it can function as a noun with the meaning “cover”. However, the subsequent attachment of the semblative clitic =*asti* to the noun *kʰap-s* does not influence the grammatical properties of the noun, but only modifies its semantics by indicating that the referent may actually not be a real cover but just “something like a cover”.

Table 30: Nominal morphemes involved in morphophonological processes

Slot	Form	Gloss	Function	Section
N ₁	-s	NZR	nominalizing suffix	4.3.3
N ₄	= <i>tok</i>	DAT	dative case clitic	4.4.4.3
	= <i>ki</i>	GEN	genitive case clitic	4.4.4.10
	= <i>dzi</i>	ERG.SG	ergative case clitic	4.4.4.2
	= <i>ts^{hi}</i>	ERG.PL	ergative case clitic	4.4.4.2
	= <i>ɛi</i>	PL	plural number clitic	4.4.3.1

Table 31: Adjectival morphemes involved in morphophonological processes

Slot	Form	Gloss	Function	Section
A ₁	-i	MOD	modifier marker	6.3.1

Table 32: Verbal morphemes involved in morphophonological processes

Slot	Form	Gloss	Function	Section
V ₁	-s	STAT	stative suffix	12.3.1
	-s	DETR	detransitivizing suffix	12.3.2
	-t	VRB	verbalizing suffix	12.3.3
	-t	T	functionally opaque <i>t</i> -suffix	12.3.4
V ₂	-k	INTR	intransitive conjugation marker	12.4.1.2
	-ɛ	MID	middle conjugation marker	12.4.1.2
	-tɛ / -ø	TR	transitive conjugation marker	12.4.1.2
V ₃	-ku	UND	conjunct undergoer suffix	13.3.2.2
V ₄	-te	VOL.SG	volitional mood	15.2.2.1
	-t ^h ek	VOL.PL	volitional mood	15.2.2.1
	-de	SUP	supine	12.7.2

	<i>-ka</i>	PROG.SG	progressive participle	12.7.3
	<i>-k^ha</i>	PROG.PL	progressive participle	12.7.3
	<i>-kidza</i>	PST.DIR.1SG	direct evidential past	15.2.1.2
	<i>-kit^hsa</i>	PST.DIR.1PL	direct evidential past	15.2.1.2
	<i>-dza</i>	PST.DIR.DJ.SG	direct evidential disjunct past	15.2.1.2
	<i>-t^hsa</i>	PST.DIR.DJ.PL	direct evidential disjunct past	15.2.1.2
	<i>-dʒi</i>	CVB.SG	converb	12.7.5
	<i>-t^hji</i>	CVB.PL	converb	12.7.5
	<i>-dʒi</i>	PST.INFER.DJ.SG	inferential disjunct past	15.2.1.2
	<i>-t^hok</i>	PST.INFER.DJ.PL	inferential disjunct past	15.2.1.2
	<i>-ek</i>	PRS.CJ.SG	conjunct present	15.2.1.1
	<i>-^hek</i>	PRS.CJ.PL	conjunct present	15.2.1.1
	<i>-are</i>	PRS.DJ.SG	disjunct present	15.2.1.1
	<i>-^hak</i>	PRS.DJ.PL	disjunct present	15.2.1.1
	<i>-i</i>	ACT	active participle	12.7.4
	<i>-a</i>	IMP.SG	imperative mood	18.3.1

In the following two sections, I describe morphophonological processes in which the morphemes listed above are involved. § 3.2 focuses on the major types of morphophonological processes in Bunan, which can be subsumed under the labels “cluster simplification”, “assimilation”, “palatalization”, “aspiration” and “glottalization”. § 3.3 provides example paradigms of selected suffixes that illustrate the allomorphic distribution of a specific suffix class.

3.2 Morphophonological processes

In the following, I use a number of abbreviations to write morphophonological rules. These abbreviations are *C* = plosive; *C_{vd}* = voiced plosive; *C_{vl}* = voiceless plosive; *R* = non-vocalic resonant; *S* = sibilant; *V* = vowel; *X* = unspecified consonantic element; *Σ* = stem; *√* = root.

Morphophonological rules are represented with five lines. The first line describes the mutation of a specific sound or sound class. The second line specifies the morphological slot in which the respective sounds occur (if it is possible to specify their position).³⁸ The third line contains an example form that illustrates the respective morphophonological process. This example form is given in its (morphologically segmented) phonological representation as well as its phonetic surface representation. The fourth line contains the interlinear gloss of the phonological representation. The fifth line gives an English translation. Consider the following example.

<i>/C_{vd}/</i> > <i>[C_{vl}]</i> / <i>s</i> _	Line 1: Morphophonological rule
<i>V₄</i>	Line 2: Morphological slot
<i>baps-de</i> <i>[bap`ste]</i>	Line 3: Phonological & phonetic form
climb.down-SUP	Line 4: Interlinear gloss
“in order to climb down”	Line 5: English translation

The morphophonological rule written above can thus be paraphrased in the following way: “A voiced plosive that is the initial sound of a morpheme occurring in slot *V₄* will become voiceless when directly preceded by the voiceless fricative */s/*.”

3.2.1 Assimilation

3.2.1.1 Assimilation of plosives

There are a considerable number of grammatical suffixes with initial plosives in Bunan. Most of these morphemes are affected by assimilatory processes. The term “assimilation” is used in a very broad sense here and subsumes several morphophonological changes that are not usually considered as instances of assimilatory processes (cf. Campbell [1998] 2013: 24). If a grammatical ending exhibits an initial plosive, its underlying phonological form can be determined by attaching the respective suffix to a root with a voiceless final plosive. As the examples given below demonstrate, initial stops do not change their underlying form in this position.

³⁸ The position of nominal inflectional morphemes can usually not be specified, as they are clitics rather than suffixes and thus attach to a wide variety of morphological hosts.

rik=tok [ɽʔkʰtʔkʰ]

field=DAT

“to the field”

rik=ki [ɽʔki]

field=GEN

“of the field”

bjak-de [bjagʰde]

hide-SUP

“in order to hide”

bjak-ka [bjɑʔkæ]

hide-PROG.SG

“hiding”

Voiceless plosives undergo regressive voicing assimilation when attached to a stem ending in a non-vocalic resonant. This process is attested in both the nominal and verbal domain. In the verbal domain, it occurs in the intransitive and the transitive conjugation. Note that the process is not blocked by the transitive conjugation marker, which occurs between the verb stem and the verbal suffix in slot V_4 (positive evidence for the existence of this zero-suffix is adduced in § 3.2.1.3 and § 3.2.2.5).

/C_{vt}/ > [C_{vd}] / R _

N₄

tal=tok [taldʔkʰ]

3[SG]=DAT

“(to) her / him”

ser=ki [sergi]

gold=GEN

“(made) of gold”

/C_{vt}/ > [C_{vd}] / R _

V₃

Σ

tɕom-ø-ku-dza [tɕomguzæ]

rob-TR-UND-PST.DIR.DJ.SG

“(You / she / he) robbed me.”

/C_{vl}/ > [C_{vd}] / R _
V₄ Σ

tuŋ-ka [tuŋgæ]
 drink-PROG.SG
 “drinking”

tɕ^hur-ka [tɕ^hurgæ]
 milk-PROG
 “milking”

The same assimilatory process is attested in two further phonetic environments. It occurs after nominals and modifiers ending in a nasalized diphthong or long vowel [ṼV], which is the regular outcome of the contraction of an underlying sequence /VŋV/ (cf. § 2.3.5.5). In addition, it occurs after the sound sequence /Vj/.

/C_{vl}/ > [C_{vd}] / VŋV _
N₄

tɕ^haŋj=tok [tɕ^hãjdɔ^ʔkː]
 all=DAT
 “to everybody”

tɕ^haŋj=ki [tɕ^hãjgi]
 all=GEN
 “of everybody”

/C_{vl}/ > [C_{vd}] / Vj _
N₄

noi=tok [nojɔɔ^ʔkː]
 many=DAT
 “to many (people)”

noi=ki [nojgi]
 many=GEN
 “of many (people)”

A similar morphophonological alternation occurs in contexts in which a verb stem ending in a voiced bilabial plosive receives a suffix with an initial vowel. In this case, the bilabial plosive /p/ surfaces as [b].

/p/ > [b] / V _ V
√

bup-et [bubeʔtʰ]
 stumble-PST.DIR.CJ
 “(I / you / she / he) stumbled.”

Voiced initial plosives are likewise affected by assimilatory processes. They assimilate to the voicelessness of a preceding fricative /s/. This assimilation only occurs in the verbal domain, as the intransitive supine suffix *-de* is the only inflectional morpheme with a voiced initial plosive.

/C_{vd}/ > [C_{vl}] / s _
V₄ Σ

baps-de [bapʰste]
 climb.down-SUP
 “in order to climb down”

Plosive endings undergo further changes when their initial consonant occurs in intervocalic position. This situation arises when a plosive ending is attached to a stem ending in a vowel. The alveo-dental plosives /t/ and /d/ surface as a trill [r] in this phonological environment. This morphophonological process affects inflectional morphemes in both the nominal and the verbal domain. In addition, it is also observed in combination with verb stems ending in an alveo-dental plosive /t/ when the imperative singular suffix *-a* is attached to them.

/t/ > [r] / V _ V
N₄

gi=tok [girʔkʰ]
 1.SG=DAT
 “(to) me”

/d/ > [r] / V _ V
V₄ Σ

ra-de [rare]
 come-SUP
 “in order to come”

/t/ > [r] / V _ a
√ V₄

dʒot-a [ʒoræ ~ ʒor]
 sit-IMP.SG
 “Sit down!”

The velar plosive /k/, on the other hand, is entirely deleted in intervocalic position if the second vowel is not followed by another plosive that is part of the same syllable. This intervocalic deletion occurs in the nominal and the verbal domain.

/k/ > [ø] / V _ V
N₄ Σ

gi=ki [gi:]
 1.SG=GEN
 “my / mine”

/k/ > [ø] / V _ V
V₃ Σ

da-ø-ku-dza [dawzæ]
 give-TR-UND-PST.DIR.DJ.SG
 “(You / she / he) gave (something) to me.”

/k/ > [ø] / V _ V
V₄ Σ

dza-ka [dza:]
 eat-PROG.SG
 “eating”

da-ka [da:]
 give-PROG
 “giving”

As noted above, the intervocalic deletion does not take place if the second vowel is directly followed by a plosive. In this case, the plosive /k/ merely undergoes voicing. This process is also observed on verb stems ending in the plosive /k/ when the past suffix *-et* is attached to them.

/k/ > [g] / V_ VC
 V₄ Σ

dza-k-ek [dzagɛʔkʰ]
 eat-INTR-PRS.CJ.SG
 “(I) eat.”

twa-k-ek [twagɛʔkʰ]
 mow-INTR-PRS.CJ.SG
 “(I) mow.”

/k/ > [g] / V_ et
 √ V₄

bjak-et [bjaʔgeʔtʰ]
 hide-PST.DIR.CJ
 “I hid myself away.”

3.2.1.2 Assimilation of sibilants

Morphemes with initial sibilants are likewise subject to assimilatory processes, as will be demonstrated in the following. Voiced sibilants become devoiced when attached to a stem ending in a voiceless plosive. This process occurs in the inflection of nouns as well as in the inflection of verbs that follow the intransitive conjugation. It does not, however, occur in the transitive conjugation, where the presence of the transitive conjugation marker inhibits the assimilatory process (cf. § 3.2.1.3).

/S_{vd}/ > [S_{vl}] / C_{vl}_
 N₄

dzep=dzi [zeptsi]
 stallion=ERG.SG
 “(by the) stallion”

/S_{vd}/ > [S_{vl}] / C_{vl}_
 V₄ Σ

dat-dzi [daʔtɕi]
 fall-CVB.SG
 “Having fallen”

bjak-dza [bjaʔkʰtsæ]
 hide-PST.DIR.DJ.SG
 “(You / she / he) hid.”

Voiceless sibilants, in turn, become voiced when suffixed to a stem ending in a non-vocalic resonant. This process is again attested in both the nominal and the verbal domain.

$$\begin{array}{l} /S_{vl}/ > [S_{vd}] / R_ \\ N_4 \end{array}$$

hambu=ɕi [hambuʒi]
cow=PL
“cows”

$$\begin{array}{l} /S_{vl}/ > [S_{vd}] / R_ \\ V_2 \qquad \qquad \qquad \Sigma \end{array}$$

loŋ-ɕ-um [loŋʒum]
vomit-MID-INF
“to vomit”

3.2.1.3 Assimilatory processes blocked by the transitive conjugation marker

The assimilation processes described in § 3.2.1.2 above are blocked by the zero-suffix of the transitive conjugation, which occurs in slot V_3 . Accordingly, a voiced sibilant in slot V_4 is not devoiced by the presence of a final voiceless plosive of a transitive verb stem. Rather, the sibilant keeps its voicing and, in turn, triggers the voicing assimilation of the stem final plosive. This represents the phonological process of voicing assimilation described in § 2.2.5.3

$$\begin{array}{l} /C_{vl}/ + /ø/ + /S_{vd}/ > [C_{vd}S_{vd}] \\ V_2 \qquad \qquad V_4 \end{array}$$

lik-ø-dza [lɪʔgʷzæ] not: **[lɪʔkʷtsæ]
hide-TR-PST.DIR.DJ.SG
“(You / she / he) did (something).”

3.2.2 Simplification of consonant clusters

3.2.2.1 Simplification of sibilant clusters

As demonstrated in § 3.1, suffixes with initial sibilants are common in both the nominal and verbal domain. They can be found in the morphological slots N_1 , N_4 , V_1 , V_2 , or V_4 . Accordingly, sequences of sibilants commonly occur in both nouns and verbs. It is possible to distinguish three major types of such sibilant clusters, which will be discussed in the following.

The most common type of sibilant clusters consists of a fricative /s/ followed by a sibilant suffix. This type is attested in nouns and verbs that follow the intransitive or middle conjugation. Such clusters are always simplified by deleting the first element of the consonant sequence. If the second element is an affricate, it loses its initial stop and is turned into a simple fricative. If the second element is voiced or aspirated, it undergoes devoicing or deaspiration.

$$\begin{array}{c} /s/ + /S/ > [S] \\ N_4 \end{array}$$

saŋs=dzi [saŋsi]
horse=ERG.SG”
“horse”

saŋs=tsʰi [saŋsi]
horse=ERG.PL
“horses”

saŋs=ɕi [saŋɕi]
horse=PL
“horses”

$$\begin{array}{c} /s/ + /S/ > [S] \\ \sqrt{V_1} \quad V_2 \end{array}$$

bron-s-ɕ-i [bronɕi]
tease-DETR-MID-ACT
“teasing each other”

$$\begin{array}{c} /s/ + /S/ > [S] \\ \sqrt{V_1} \quad V_4 \end{array}$$

waŋs-dza [waŋsæ]
come.out-PST.DIR.DJ.SG
“(You / she / he) came out.”

waŋs-tsʰa [waŋsæ]
come.out-PST.DIR.DJ.PL
“(You / they) came out.”

waŋs-dʒi [waŋɕi]
come.out-PST.INFER.DJ.SG
“(You / she / he) came out.”

wəŋs-tɕʰok [wəŋɕʰok̚]
 come.out-PST.INFER.DJ.PL
 “(You / they) came out.”

The second type of sibilant cluster consists of a fricative /ɕ/ followed by a sibilant suffix. This type only occurs in the past tense of the middle conjugation. The consonant sequence is simplified in a way similar to the process discussed above. The first element of the cluster is deleted. If the second element is an affricate, it undergoes deaffrication and is turned into a homorganic fricative. Aspirated affricates additionally lose their aspiration. Note that voiced sibilants are not devoiced in the course of the process, however.

/ɕ/ + /S/ > [S]
V₂ V₄

su-ɕ-dza [suzæ]
 wash-MID-PST.DIR.DJ.SG
 “(You / she / he) washed yourself / herself / himself.”

su-ɕ-tsʰa [susæ]
 wash-MID-PST.DIR.DJ.PL
 “(You / they) washed yourselves / themselves.”

su-ɕ-dʒi [suzi]
 wash-MID-CVB.SG
 “Having washed myself / yourself / herself / himself”

su-ɕ-tɕʰi [suɕi]
 wash-MID-CVB.PL
 “Having washed ourselves / yourselves / themselves”

The third type of sibilant cluster is the most complex one. Such sequences consist of a fricative /s/ followed by the middle suffix -ɕ, to which a sibilant ending is attached. Again, such clusters only occur in the past tense of the middle conjugation. The simplification of this kind of sound sequence follows the same pattern that has been described for the simplification of the first type of sibilant clusters. The first two elements are deleted, whereas the third element is deaffricated. If the third element is voiced or aspirated, it undergoes devoicing or deaspiration.

/s/ + /ɛ/ + /S/ > [S]
 √ / V₁ V₂ V₄

təʰoŋs-ɛ-dza [təʰoŋsæ]
 jump-MID-PST.DIR.DJ.SG
 “(You / she / he) jumped.”

təʰoŋs-ɛ-tsʰa [təʰoŋsæ]
 jump-MID-PST.DIR.DJ.PL
 “(You / they) jumped.”

təʰoŋs-ɛ-dzi [təʰoŋɕi]
 jump-MID-PST.INFER.DJ.SG
 “(You / she / he) jumped.”

təʰoŋs-ɛ-təʰok [təʰoŋɕoʔkʰ]
 jump-MID-PST.INFER.DJ.PL
 “(You / they) jumped.”

ɕen-s-ɛ-dza [ɕensæ]
 raise-DETR-MID-PST.DIR.DJ.SG
 “(You / she / he) woke up.”

ɕen-s-ɛ-tsʰa [ɕensæ]
 raise-DETR-MID-PST.DIR.DJ.PL
 “(You / they) woke up.”

As the examples given above demonstrate, the simplification of syllable clusters may cause the neutralization of underlying number distinctions. In the nominal domain, this process is observed with nouns that are marked with the ergative clitics =*dzi* or =*tsʰi*. If the case marker is attached to a noun ending in the fricative /s/, it is no longer possible to distinguish between singular and plural forms (e.g. *ɕaŋs=dzi* [ɕaŋsi] “(by) a horse” vs. *ɕaŋs=tsʰi* [ɕaŋsi] “(by) horses”). In the verbal domain, number neutralization may affect the past tense endings -*dza* and -*tsʰa*. If these morphemes are suffixed to verbs that follow the intransitive or middle conjugation and end in the fricative /s/, the resulting singular and plural forms become homophonous (cf. *təʰoŋs-dza* [təʰoŋsæ] “(You / she / he) jumped.” vs. *təʰoŋs-tsʰa* [təʰoŋsæ] “(You / they) jumped.”). In the transitive conjugation, the number distinction is, however, retained, as the transitive conjugation marker blocks the assimilatory process (cf. § 3.2.2.5).

3.2.2.2 Simplification of sibilant-plosive clusters

Sequences of a sibilant followed by a plosive are relatively rare in Bunan. They only occur when verbs following the middle conjugation take the volitional endings *-te* / *-^hek*, the progressive participle endings *-ka* / *-^ha*, or the past tense endings *-kidza* / *-kits^ha*. Clusters involving endings with an initial alveo-dental plosive are treated differently from clusters involving endings with an initial velar plosive. A cluster consisting of the middle conjugation marker *-ə* followed by a volitional suffix *-te*, *-^hek* is broken up by inserting an epenthetic vowel between the two sounds.

$$\frac{/\mathfrak{e}/}{V_2} + \frac{/t^{(h)}/}{V_4} > [e i t^{(h)}]$$

ɕuk-ɕ-te [ɕuxɕite]

comb-MID-VOL.SG

“(I) want to comb myself.”

ɕuk-ɕ-thek [ɕʊxɕitʰɛʔkʰ]

comb-MID-VOL.PL

“(We) want to comb ourselves.”

A cluster of the middle conjugation marker *-ə* and a following velar plosive */k, kʰ/* is simplified by deleting the velar plosive. This deletion is illustrated by the examples given below. Note that the aspiration of the plural suffix *-kʰa* is commonly lost in this process, but may be preserved under particular circumstances that are described in § 3.2.4.

$$\frac{/\epsilon/}{V_2} + \frac{/k^{(h)}/}{V_4} > [\epsilon]$$

ʁuk-ʁ-ka [ʁuxʁæ]

comb-MID-PROG.SG

“combing myself / yourself / herself / himself”

ɕuk-ɕ-kʰa [ɕuxɕæ]

comb-MID-PROG.PL

“combing ourselves / yourselves / themselves”

su-ɕ-kidza [suɕizæ]

wash-MID-PST.DIR.1SG

"I have just washed myself."

3.2.2.3 Simplification of plosive-sibilant clusters

In Bunan, there are several derivational suffixes with the phonological form /s/: the nominalizing suffix -s, which derives nouns from verb stems (cf. § 4.3.3), the stative suffix -s, which occurs on stative predicates (cf. § 12.3.1), and the detransitivizing suffix -s, which decreases the transitivity of plurivalent verb stems (cf. § 12.3.2). The morphemes occur in the morphological slots N_1 and V_1 , respectively. When these suffixes are added to a stem ending in the consonant /t/, this gives rise to an underlying affricate /ts/. This sound sequence never surfaces as an affricate, but is always simplified to a single fricative [s].

/t/ + /s/ > [s]
 √ N_1

tʰat-s [tʰas]

be.happy-NZR

“happiness”

tɕʰat-s [tɕʰas]

be.exhausted-NZR

“exhaustion”

/t/ + /s/ > [s]
 √ V_1

tet-s-k-ek [teskɛʔkʰ]

think-STAT-INTR-PRS.CJ.SG

“to think”

lot-s-ɕʰak [loɕak]

say-DETR-MID-PRS.DJ.PL

“(They / you) tell each other (something).”

3.2.2.4 Simplification of plosive clusters / resonant-plosive clusters

The phonotactic rules of Bunan do not license the occurrence of clusters consisting of two plosives or a nasal followed by a plosive in the coda of a syllable. However, this type of cluster may arise when verb roots are augmented with the functionally opaque suffix -t or the verbalizing suffix -t. As such consonant sequences are prohibited by phonotactic constraints, they do not surface as clusters, but are simplified by deletion or resyllabification. Deletion commonly occurs in the intransitive conjugation, where resyllabification is not possible due to the phonological shape of the morphemes that follow the verb stem. Consider the following example.

$/R/ + /t/ + /k/ > [Rk]$
 $\sqrt{\quad} \quad V_1 \quad V_4$

mur-t-ka *[murkæ]*

snore-VRB-PROG.SG

“snoring”

bar-ka *[bargæ]*

bloom-PROG.SG

“blooming”

As the examples above illustrate, the presence of derivational suffix can still be derived from the fact that the voiceless initial plosive in slot V_4 fails to undergo voicing assimilation (cf. § 3.2.1.1). In other phonological contexts, *t*-suffixes trigger the devoicing of endings with a voiced initial, as the following example illustrates.

$/R/ + /t/ + /S_{vd}/ > [CS_{vl}]$
 $\sqrt{\quad} \quad V_1 \quad V_4$

mur-t-dza *[murtsæ]*

snore-VRB-PST.DIR.DJ.SG

“(You / she / he) snored.”

bar-dza *[barzæ]*

bloom-PST.DIR.DJ.SG

“(The flower) bloomed.”

However, there are some contexts in which the *t*-suffix is deleted without leaving any traces in the form of morphophonological alternations. This is the case when suffixes with an initial vowel, e.g. the active participle suffix *-i* or the imperative singular suffix *-a*, follow directly after the *t*-suffix. Although such morphemes exhibit an empty syllable onset to which the *t*-suffix could theoretically be transferred, such a resyllabification does not take place. Rather, the stem final cluster is simplified by dropping the alveo-dental plosive.

$$\begin{array}{ccccccc} /R/ & + & /t/ & + & /V/ & > & [RV] \\ \sqrt{} & & V_1 & & V_4 & & \end{array}$$

pant-i [pani]
spin-ACT
“spinning”

pant-a [panæ]
spin-IMP.SG
“Spin!”

p^han-i [p^hani]
be.beneficial-ACT
“being beneficial”

In intransitive verb forms, the presence of a derivational *t*-suffix after a non-vocalic resonant can accordingly only be derived from its effect on following consonants. It prevents the voicing assimilation of voiceless stops and triggers the devoicing of voiced affricates that occur in the morphological slot *V*₄. However, there are also phonological contexts in which the derivational *t*-suffixes do not cause morphophonological alternation in their immediate phonological environment. In such cases, they are simply not detectable. For example, it is not possible to say whether intransitive verb stems with final plosives exhibit additional *t*-suffixes or not. On semantic grounds, we might assume that the verb root *bup*- “stumble” is augmented with the functionally opaque suffix *t*-, which often occurs on verbs that denote a change of state. The underlying form of the verb stem would then be *bupt*-. However, it is not possible to verify the presence of a derivational suffix in this case, as this additional segment would not affect the morphophonological behavior of the verb stem.

Things are different in case of the middle conjugation. Here, the presence of an additional *t*-suffix can be established irrespective of the final consonant of a verbal root. This is possible because the middle conjugation marker -*ε*, which occurs in the morphological slot *V*₂, allows for the resyllabification of preceding syllable clusters. Consider the following examples.

$$\begin{array}{ccccccc} /X/ & + & /t/ & + & /ε/ & + & /V/ & > & [X.tεV] \\ \sqrt{} & & V_1 & & V_2 & & V_4 & & \end{array}$$

ipt-ε-um [iptεum]
sleep-MID-INF
“to sleep”

bart-ə-um [bartəum]

come undone-MID-INF

“to come undone”

As the examples above illustrate, the alveo-dental plosive /t/ merges with the following fricative /ə/ into an affricate and is thus transferred into the onset of the following syllable. However, if the middle conjugation marker -ə is not directly followed by a vowel in slot V_4 , the *t*-suffix is again only detectable from the devoicing that is triggered by its presence.

/X/	+	/t/	+	/ə/	+	/S _{vd} /	>	[XS _{vl}]
√		V_1		V_2		V_4		

ipt-ə-dza [iptsə]

sleep-MID-PST.DIR.DJ.SG

“(You / she / he) slept.”

bart-ə-dza [bartsə]

come undone-MID-PST.DIR.DJ.SG

“(It) came undone.”

Syllable final plosive clusters are not attested in the transitive conjugation. It is not entirely clear why there are no traces of such consonant sequences in transitive verb stems. It may be that their potential effects on the immediate phonological environment are blocked by the zero-marked transitivity marker occurring in slot V_2 , which has been shown to block morphophonological processes such as voicing assimilation above. However, it is also conceivable that derivational *t*-suffixes are functionally not compatible with verb stems that follow the transitive conjugation. Given the fact that our synchronic and diachronic understanding of these derivational morphemes is still limited (cf. § 12.3.6), it is not possible to give a definite answer at the moment.

3.2.2.5 Simplification processes blocked by transitive conjugation marker

In the transitive conjugation, we find a type of sibilant cluster that seems to contradict the morphophonological processes that have been described in § 3.2.2.1. In the examples below, the combination of the transitive verb stem *bris-* with the suffix *-dza* yields the form [brizə]. Based on the morphological rules postulated in § 3.2.2.1 we would expect the form *[brisə], in which the inflectional suffix becomes devoiced. Likewise, the plural ending *-tsʰa* is not deaffricated by the presence of the fricative /s/ in the coda of the verb root. However, this unexpected behavior can be explained by the presence of a zero-suffix in the morphological slot V_2 , which blocks the morphophonological processes de-

scribed above. The examples given below can thus not be considered as true sibilant clusters, as the sibilants do not occur adjacent to each other at an underlying level.

$$\begin{array}{ccccccc} /s/ & + & /ø/ & + & /S_{vd}/ & > & [S_{vd}] \\ \sqrt{} & & V_2 & & V_4 & & \end{array}$$

bris-ø-dza [brizæ]

write-TR-PST.DIR.DJ.SG

“(You / she / he) wrote.”

bris-ø-tsʰa [bristsʰæ ~ britsʰæ]

write-TR-PST.DIR.DJ.PL

“(You / they) wrote.”

3.2.3 Palatalization of velars

Suffixes with a velar initial become palatalized when attached to an intransitive verb stem with a final alveo-dental consonant /t, n/. However, this palatalization is only distinctive before non-front vowels, as palatalization before front vowels regularly occurs according to the phonological rule described in § 2.2.5.2.

$$\begin{array}{ccc} /k^{(h)}/ & > & [c^{(h)}, ɟ] / \quad t, n _ \\ V_4 & & \Sigma \end{array}$$

dat-ka [daʔtˈcæ]

fall-PROG.SG

“falling”

dat-kʰa [daʔtˈcʰæ]

fall-PROG.PL

“falling”

pʰan-ka [pʰanʃæ]

be.beneficial-PROG.SG

“being beneficial”

The palatalization also occurs with transitive verbs, which implies that the process is not blocked by the zero morpheme, which occurs in morphological slot V_2 .

tat-ka [taʔtˈcæ]

put-PROG

“putting”

kan-ka [kanjæ]
 watch-PROG
 “watching”

kʰet-ø-ku-dza [cʰeʔtˈcyzæ]
 beat-TR-UND-PST.DIR.DJ.SG
 “(You / he) beat me.”

The palatalization does not, however, occur when a velar plosive follows an alveo-dental plosive that is deleted as a consequence of the simplification of plosive clusters (see § 3.2.2.4 above).

punʔt-ka [pʊŋkæ] not: *[pʊŋcæ]
 grow-PROG.SG
 “growing”

3.2.4 Aspiration of conjugation class markers

In Bunan, aspiration is commonly exploited to mark plural number in grammatical morphemes. This strategy is attested in both the nominal (e.g. =*dzi* “ERG.SG” vs. =*tsʰi* “ERG.PL”) and the verbal domain (e.g. -*dzi* “CVB.SG” vs. -*tʰi* “CVB.PL”). There are even some verbs that distinguish between an unaspirated singular stem and an aspirated plural stem (e.g. *tʊŋ-* “drink.SG” vs. *tʰʊŋ-* “drink.PL”) (cf. § 12.8). However, this strategy of number distinction offers the problem that aspiration may occur on morphological segments that are not allowed to be aspirated due to phonological constraints. This is true in case of the present tense plural endings, which are listed in the table below.

Table 33: Present tense endings

	PRS.CJ	PRS.DJ
SG	- <i>ek</i>	- <i>are</i>
PL	- <i>ʰek</i>	- <i>ʰak</i>

As illustrated in the table, the present tense plural endings are aspirated although they do not contain a consonantal element that is able to bear this aspiration. Accordingly, the aspiration has to be transferred to the morphological element in the preceding morphological slot V_2 , which is the position in which conjugation class markers occur. The three conjugations take different markers in the present tense: -*k* for the intransitive conjugation, -*ə* for the middle conjugation, and -*tʰ* for the transitive conjugation (cf. § 12.4). As demonstrated in the following examples, the aspiration of the verbal ending is transferred to the transitivity marker in the case of intransitive and transitive verbs.

/k/ + /^hek/ > [c^hεʔkʷ]
V₂ V₄

kjor-k^hek [corc^hεʔkʷ]
 dance-INTR-PRS.CJ.PL
 “(We) are dancing.”

kjor-k-ek [corεʔkʷ]
 dance-INTR-PRS.CJ.SG
 “(I) am dancing.”

/tɕ/ + /^hak/ > [tɕ^hɑʔkʷ]
V₂ V₄

lik-tɕ^hak [lɪʔkʷtɕ^hɑʔkʷ]
 do-TR-PRS.DJ.PL
 “(You / they) are doing (something).”

lik-tɕ-are [lɪʔkʷtɕare]
 do-TR-PRS.DJ.SG
 “(You / she / he) are / is doing (something).”

In the case of the middle conjugation, matters are somewhat more complicated. The middle conjugation marker -ɛ in isolation can not take over the aspiration form a plural ending, as aspirated fricatives are not licensed by the phonological system of Bunan. Consequently, aspiration is usually lost.

/ɛ/ + /^hek/ > [εʔkʷ]
V₂ V₄

su-ε^hek [suɹεʔkʷ]
 wash-MID-PRS.CJ.PL
 “(We) are washing ourselves.”

su-ε-ek [suɹεʔkʷ]
 wash-MID-PRS.CJ.SG
 “(I) am washing myself.”

The aspiration of the plural ending only surfaces in the combination with verb stems with a final consonant /t/. In this case, the middle conjugation marker will merge with the final plosive into an affricate /tɕ/, which can bear the aspiration of the following plural ending.

$/t/ + /ɛ/ + /^{(h)}ek/ > [tɛ^hɛ^?kʔ]$
 $\Sigma / V_1 \quad V_2 \quad V_4$

am-t-ɛ-^hek [amtɛ^hɛ[?]kʔ]
 path-VRB-MID-PRS.CJ.PL
 “(We) are walking.”

ɛit-ɛ-^hak [ɛitɛ^hɑ[?]kʔ]
 die-MID-PRS.DJ.PL
 “(You / they) are dying.”

§ 3.2.2.2 describes a type of cluster involving the middle conjugation marker -ɛ and the progressive participle -k^(h)a. It was shown that such consonant sequences are simplified by deleting the velar plosive. The examples given in § 3.2.2.2 imply that the aspiration of the plural form is lost in the course of the cluster simplification. However, the aspiration distinction is in fact retained and transferred to the middle conjugation marker in slot V₂, but it can only surface in this position if the middle conjugation marker is preceded by an alveo-dental plosive /t/.

$/t/ + /ɛ/ + /k^{(h)}a/ > [tɛ^hæ]$
 $\Sigma / V_1 \quad V_2 \quad V_4$

am-t-ɛ-k^ha [amtɛ^hæ]
 path-VRB-MID-PROG.PL
 “walking”

ɛit-ɛ-k^ha [ɛitɛ^hæ]
 die-MID-PROG.PL
 “dying”

3.2.5 Glottalization

Morphophonological glottalization has already been described in section 2.3.5.3, where it was referred to as the “second type of glottalization” to distinguish it from phonological glottalization induced by the syllable final plosives /t/ and /k/. The morphophonological process of glottalization occurs when the adjective marker -i or the active participle suffix -i are attached to roots ending in the stops /t, k/. In this case, the root final consonants only surface as a glottalization, while the preceding vowel and the suffix merge into a glottalized diphthong. The lowering of the velar plosive is retained, making it possible to distinguish the two plosives.

$/V/ + /t/ + /i/ > [V^?j]$
 $\sqrt{\quad} \quad \sqrt{\quad} \quad V_4$

tʰat-i *[tʰaʔ]*
 be.happy-ACT
 “somebody who is happy”

$/V/ + /k/ + /i/ > [V^?j]$
 $\sqrt{\quad} \quad \sqrt{\quad} \quad V_4$

pʰok-i *[pʰɔʔ]*
 be.hurt-ACT
 “somebody who is hurt”

$/V/ + /k/ + /i/ > [V^?j]$
 $\sqrt{\quad} \quad \sqrt{\quad} \quad A_1$

kʰaʔak-i *[kʰaʔaʔ]*
 bitter-ADJ
 “bitter”

Glottalization does not occur with intransitive stems ending in a plosive /p/. In this case, the consonant surfaces as a voiced allophone [b].

$/V/ + /p/ + /i/ > [Vbi]$
 $\sqrt{\quad} \quad \sqrt{\quad} \quad V_4$

bup-i *[bubi]*
 stumble-ACT
 “somebody who stumbles”

3.2.6 Idiosyncratic morphophonological alternations

Bunan possesses two inflectional endings that display an idiosyncratic morphophonological behavior and, accordingly, cannot be described in the framework of the general morphophonological rules described in the preceding sections. These endings are discussed in the following subsections.

3.2.6.1 Direct evidential conjunct past ending -et

Bunan possesses a past tense ending that expresses the epistemic categories “direct evidence” and “conjunct”. This ending has two lexically conditioned allomorphs: (1) an allomorph *-et*, which occurs on verbs following the intransitive and middle conjugation, and (2) an allomorph *-men*, which occurs on verbs following the transitive conjugations. Although these two allomorphs exhibit a rather diverging phonological shape, there is

reason to believe that they derive from a common source. However, I do not adduce further evidence for this claim at this point, as the matter is discussed in § 13.3.2.1 in more detail.

The allomorph *-men* does not display any morphophonological alternations. The allomorph *-et*, however, is subject to a number of morphophonological alternations that cannot be related to the general morphophonological rules described in the preceding sections. The ending *-et* surfaces as $[-e^{\text{ʔ}}]$ after non-vocalic resonants, the plosives /p, k/ and the fricative /s/. Note that the two plosives are subject to further morphophonological rules that are discussed in § 3.2.1.1 and § 3.2.5. Consider the following examples.

$/R/ + /et/ + > [Re^{\text{ʔ}}]$
 $\sqrt{\quad} \quad V_4$

el-et $[ele^{\text{ʔ}}]$
 go-PST.DIR.CJ
 “I went.”

$/C/ + /et/ + > [Ce^{\text{ʔ}}]$
 $\sqrt{\quad} \quad V_4$

bup-et $[bube^{\text{ʔ}}]$
 stumble-PST.DIR.CJ
 “I stumbled.”

bjak-et $[bja^{\text{ʔ}}g^{\text{ʔ}}e^{\text{ʔ}}]$
 hide-PST.DIR.CJ
 “I hid myself.”

$/s/ + /et/ + > [se^{\text{ʔ}}]$
 $\sqrt{\quad} \quad V_4$

waŋs-et $[waŋse^{\text{ʔ}}]$
 come.out-PST.DIR.CJ
 “I came out.”

After the alveo-dental plosive /t/, the ending *-et* is realized as zero. Accordingly, the direct evidential conjunct past form is identical to the bare verb stem. Consider the following example.

$\text{/t/} + \text{/et/} + > \text{[tˀ]}$
 $\sqrt{\quad} \quad V_4$

dzot-et *[zɔˀtˀ]*

sit-PST.DIR.CJ

“I sat down / I stayed.”

After vowels, the past tense ending *-et* loses its initial vowel and surfaces as *[tˀ]*. This is illustrated by the example given below.

$\text{/V/} + \text{/et/} + > \text{[Vˀtˀ]}$
 $\sqrt{\quad} \quad V_4$

ra-t *[raˀtˀ]*

come-PST.DIR.CJ

“I came.”

Finally, note that the verb *tun-men* “to drink” exhibits an irregular direct evidential conjunct past form. Instead of the expected form ***tun-et* *[**twẽˀtˀ]*, we encounter the form *twat* *[twaˀtˀ]*, which does not display any traces of the velar nasal /ŋ/ and exhibits an unrounded central open vowel /a/ instead of the unrounded half-close front vowel /e/. This irregular form is most probably a consequence of the high token frequency of the verb *tun-men* “to drink”.

3.2.6.2 Imperative singular endings -a /-i

The imperative singular ending exhibits two lexically conditioned allomorphs. In the intransitive and transitive conjugation, it surfaces with the phonological shape *-a*, whereas the middle conjugation it surfaces as *-i*. While the allomorph *-i* is not subject to any morphophonological alternations, its counterpart *-a* may change its phonetic form under certain conditions that are discussed in the following.

Before discussing the phonetic realization of the imperative suffix allomorph *-a* in more detail, it is important to note that the allomorph only ever surfaces as a separate phonetic element in the generatiolet of old speakers. Members of the youngest speaker generation do not generally pronounce the suffix, but use the bare verb stem to form imperative singular forms of intransitive and transitive verbs. In the speech of the old speakers, the morpheme *-a* commonly surfaces as *[-æ]* after non-vocalic resonants, the vowels /i, e, o, u/ and the fricative /s/. This is illustrated by the following examples.

/R/ + /a/ + > [Ræ]
 √ **V₄**

el-a [elæ ~ el]
 go-IMP.SG
 “Go!”

/V/ + /a/ + > [Væ]
 √ **V₄**

bro-a [broæ ~ bro]
 mix-IMP.SG
 “Mix!”

ki-a [ciæ ~ ci]
 wash-IMP.SG
 “Wash!”

/s/ + /a/ + > [sæ]
 √ **V₄**

waŋs-a [waŋsæ ~ waŋs]
 come.out-IMP.SG
 “Come out!”

After plosives, the imperative singular allomorph is never realized as a separate phonetic element, but surfaces as zero. This is illustrated by the following examples.

/C/ + /a/ + > [Cˀ]
 √ **V₄**

bjak-a [bjɑˀkˀ]
 hide-IMP.SG
 “Hide!”

kʰap-a [kʰapˀ]
 cover-IMP.SG
 “Cover!”

When following after verb stems ending in the vowel /a/, the imperative singular ending -a likewise surfaces as zero, as the following example illustrates.

$$\begin{array}{c} /a/ \\ \sqrt{} \end{array} + \begin{array}{c} /a/ \\ V_4 \end{array} + > [æ]$$

dza-a *[dzæ]*
eat-IMP.SG
“Eat!”

3.3 Example paradigms

This section contains a number of example paradigms illustrating the morphophonological processes that have been described in the previous section. Each paradigm is representative of a class of suffixes that exhibit a particular initial sound and occur in a specific morphological slot. I have grouped the derivational and inflectional suffixes into six major groups: voiceless unaspirated plosive suffixes, voiced plosive suffixes, voiceless unaspirated affricate suffixes, voiced affricate suffixes, voiceless fricative suffixes, and vocalic suffixes.

3.3.1 Voiceless unaspirated stop suffixes

The voiceless unaspirated stop suffixes can be divided into two subgroups: alveo-dental suffixes and suffixes with a velar suffixes. The first subgroup only consists of the dative singular suffix =*tok* (N_4). The second subgroup comprises the genitive suffix =*ki* (N_4), the intransitive conjugation suffix -*k* (V_2), the patient suffix -*ku* (V_3), the first person past suffixes -*kidza* and -*kitsʰa* (V_3), as well as the progressive participle singular suffix -*ka*. The following two tables illustrate the morphophonological alternations for alveo-dental and velar suffixes. Note that the genitive suffix =*ki* follows the same pattern as velar suffixes attached to intransitive verb stems.

Table 34: Example paradigm of =*tok* (=DAT) (N_4)

-p	-t	-k
<i>dzep=tok</i> <i>[zepʰtɔʔkʰ]</i> stallion=DAT	<i>sat=tok</i> <i>[saʔtɔʔkʰ]</i> god=DAT	<i>lak=tok</i> <i>[laʔkʰtɔʔkʰ]</i> hand=DAT
-s	-m	-n
<i>ʂaŋs=tok</i> <i>[ʂaŋstɔʔkʰ]</i> horse=DAT	<i>gjum=tok</i> <i>[ɟumɔʔkʰ]</i> nose=DAT	<i>han=tok</i> <i>[handɔʔkʰ]</i> 2[SG]=DAT

-ŋ	-r	-l
<i>adzəŋ=tok</i> <i>[adzəŋdɔʔkʰ]</i> maternal.uncle=DAT	<i>ɛar=tok</i> <i>[ɛardɔʔkʰ]</i> east=DAT	<i>tal=tok</i> <i>[taldɔʔkʰ]</i> 3[SG]=DAT
-V		
<i>gi=tok</i> <i>[girdɔʔkʰ]</i> 1SG=DAT		

Table 35: Example paradigm of -ka (-PROG.SG)

_ #	INTR	MID	TR
-p	<i>bup-ka</i> <i>[bupʰkæ]</i> stumble-PROG.SG	*not attested*	<i>kʰap-ka</i> <i>[kʰapkæ]</i> cover-PROG
-Vt	<i>dat-ka</i> <i>[daʔtʰkjæ]</i> fall-PROG.SG	<i>ɛit-ɛ-ka</i> <i>[ɛitɛæ]</i> die-MID-PROG.SG	<i>tat-ka</i> <i>[taʔkjæ]</i> put-PROG
-Ct	*not attested*	<i>ipt-ɛ-ka</i> <i>[iptɛæ]</i> sleep-MID-PROG.SG	*not attested*
-Rt	<i>tant-ka</i> <i>[tankjæ]</i> see-PROG.SG	<i>brant-ɛ-ka</i> <i>[brantɛæ]</i> fall-MID-PROG.SG	*not attested*
-k	<i>pʰok-ka</i> <i>[pʰɔʔkæ]</i> be.hurt-PROG.SG	<i>tik-ɛ-ka</i> <i>[tɪɕɛæ]</i> close-MID-PROG	<i>tik-ka</i> <i>[tɪʔkæ]</i> close-PROG
-m	<i>kjum-ka</i> <i>[cumgæ]</i> ply-PROG.SG	<i>dom-ɛ-ka</i> <i>[domzæ]</i> be.busy-MID-PROG.SG	<i>tʰum-ka</i> <i>[tʰumgæ]</i> wrap-PROG
-n	<i>pʰan-ka</i> <i>[pʰaŋgæ]</i> be.beneficial-PROG	<i>pan-ɛ-ka</i> <i>[panzæ]</i> fly-MID-PROG.SG	<i>tʰin-ka</i> <i>[tʰiŋgæ]</i> take-PROG

-ŋ	<i>biŋ-ka</i> [biŋgæ] become.full-PROG	<i>laŋ-ɛ-ka</i> [laŋzæ] sell-MID-PROG.SG	<i>laŋ-ka</i> [laŋgæ] sell-PROG
-s	<i>nas-ka</i> [naskæ] be.sick-PROG.SG	<i>ɛaŋs-ɛ-ka</i> [ɛaŋzæ] grow.old-MID-PROG.SG	<i>ɲuŋ-ka</i> [ɲuŋgæ] swallow-PROG
-r	<i>bar-ka</i> [bargæ] bloom-PROG	<i>dur-ɛ-ka</i> [durzæ] compete-MID-PROG.SG	<i>pur-ka</i> [purgæ] kill-PROG
-l	<i>gjal-ka</i> [ɟalgæ] recover-PROG	<i>rwal-ɛ-ka</i> [rwalzæ] doze.off-MID-PROG.SG	<i>tol-ka</i> [tolgæ] pierce-PROG
-v	<i>kja-ka</i> [ca:] become-PROG.SG	<i>gi-ɛ-ka</i> [gizæ] wash-MID-PROG.SG	<i>da-ka</i> [da:] give-PROG

3.3.2 Voiced stop suffixes

The only suffix with a voiced initial stop is the intransitive supine ending *-de*. Its allomorphic distribution is illustrated in the table below.

Table 36: Example paradigm of *-de* (-SUP) (V₄)

-p	-t	-Rt
<i>bup-de</i> [bub`de] stumble-SUP	<i>tit-de</i> [tiʔde] irrigate-SUP	<i>pan-t-de</i> [pande] spin-T-SUP
-k	-s	-m
<i>bjak-de</i> [bjaʔg`de] hide-SUP	<i>jaks-de</i> [jaʔχste] make.fun-SUP	<i>kjum-de</i> [cumde] ply-SUP
-n	-ŋ	-r
<i>don-de</i> [donde] eat.HON-SUP	<i>tun-de</i> [tuŋde] drink-SUP	<i>kjor-de</i> [corde] dance-SUP

-I	-V
<i>el-de</i> <i>[elde]</i> go-SUP	<i>kja-de</i> <i>[care]</i> become-SUP

3.3.3 Voiceless aspirated affricate suffixes

The voiceless affricate suffixes comprise the ergative plural suffix =*tsʰi* (*N*₄), the direct evidential past tense plural suffix -*tsʰa* (*V*₄), the converb plural suffix -*təʰi* (*V*₄), and the inferential past tense plural suffix -*təʰok* (*V*₄). Their allomorphic distribution is exemplified in the following table. Note that the ergative plural suffix follows the same pattern as aspirated affricate suffixes that are attached to intransitive verb stems.

Table 37: Example paradigm of -*tsʰa* (-PST.DIR.DJ.PL) (*V*₄)

_ #	INTR	MID	TR
-p	<i>bup-tsʰa</i> <i>[bup ʰtsʰæ]</i> stumble-PST.DIR.DJ.PL	<i>rup-ə-tsʰa</i> <i>[rup ʰsæ]</i> assemble-MID-PST.DIR.DJ.PL	<i>kʰap-ø-tsʰa</i> <i>[kʰap ʰtsʰæ]</i> cover-TR-PST.DIR.DJ.PL
-Vt	<i>dat-tsʰa</i> <i>[daʔtsʰæ]</i> fall-PST.DIR.DJ.PL	<i>əit-ə-tsʰa</i> <i>[əitsʰæ]</i> die-MID-PST.DIR.DJ.PL	<i>tat-ø-tsʰa</i> <i>[taʔtsʰæ]</i> put-TR-PST.DIR.DJ.PL
-Ct	*not attested*	<i>ipt-ə-tsʰa</i> <i>[ip ʰtsʰæ]</i> sleep-MID-PST.DIR.DJ.PL	*not attested*
-Rt	<i>tant-tsʰa</i> <i>[tantsʰæ]</i> see-PST.DIR.DJ.PL	<i>brant-ə-tsʰa</i> <i>[brantsʰæ]</i> fall-MID-PST.DIR.DJ.PL	*not attested*
-k	<i>pʰok-tsʰa</i> <i>[pʰɔʔk ʰtsʰæ]</i> be.hurt-PST.DIR.DJ.PL	<i>rwak-ə-tsʰa</i> <i>[rwaʔχsæ]</i> graze-MID-PST.DIR.DJ.PL	<i>tik-ø-tsʰa</i> <i>[tɪʔk ʰtsʰæ]</i> close-TR-PST.DIR.DJ.PL
-m	<i>kjum-tsʰa</i> <i>[cumtsʰæ]</i> ply-PST.DIR.DJ.PL	<i>dom-ə-tsʰa</i> <i>[domsæ]</i> be.busy-MID-PST.DIR.DJ.PL	<i>tʰum-ø-tsʰa</i> <i>[tʰumtsʰæ]</i> wrap-TR-PST.DIR.DJ.PL

-n	<i>dran-tsh'a</i> [drantsʰæ] miss-PST.DIR.DJ.PL	<i>pan-ɕ-tsh'a</i> [pansæ] fly-MID-PST.DIR.DJ.PL	<i>thin-ø-tsh'a</i> [tʰintsʰæ] take-TR-PST.DIR.DJ.PL
-ŋ	<i>den-tsh'a</i> [dɛntsʰæ] believe-PST.DIR.DJ.PL	<i>lan-ɕ-tsh'a</i> [lansæ] sell-MID-PST.DIR.DJ.PL	<i>lan-ø-tsh'a</i> [lantsʰæ] sell-TR-PST.DIR.DJ.PL
-s	<i>nas-tsh'a</i> [nasæ] be.sick-PST.DIR.DJ.PL	<i>ɕanɕ-ɕ-tsh'a</i> [ɕansæ] grow.old-MID-PST.DIR.DJ.PL	<i>ɲun-ø-tsh'a</i> [ɲuntsʰæ] swallow-TR-PST.DIR.DJ.PL
-r	<i>gjar-tsh'a</i> [ɟartsʰæ] be.afraid-PST.DIR.DJ.PL	<i>dur-ɕ-tsh'a</i> [dursæ] compete-MID-PST.DIR.DJ.PL	<i>pur-ø-tsh'a</i> [purtsʰæ] kill-TR-PST.DIR.DJ.PL
-l	<i>gjal-tsh'a</i> [ɟaltsʰæ] win-PST.DIR.DJ.PL	<i>rwal-ɕ-tsh'a</i> [rwalsæ] doze.off-MID-PST.DIR.DJ.PL	<i>tol-ø-tsh'a</i> [toltsʰæ] pierce-TR-PST.DIR.DJ.PL
-V	<i>kja-tsh'a</i> [catsʰæ] become-PST.DIR.DJ.PL	<i>su-ɕ-tsh'a</i> [susæ] wash-MID-PST.DIR.DJ.PL	<i>da-ø-tsh'a</i> [datsʰæ] give-TR-PST.DIR.DJ.PL

3.3.4 Voiced affricate suffixes

The group of voiced affricate suffixes consists of the ergative singular suffix =*dzi* (N_4), the direct evidential past tense singular suffix -*dza* (V_4), the converb singular suffix -*dzi* (V_4), and the inferential past tense singular suffix -*dzi* (V_4). The table below exemplifies the distribution of their allomorphs. Note that the ergative singular suffix follows the pattern of aspirated affricate suffixes that are attached to intransitive verb stems.

Table 38: Example paradigm of /-dza/ (-PST.DIR.DJ.SG) (V_4)

_ #	INTR	MID	TR
-p	<i>bup-dza</i> [bupʰtsæ] stumble-PST.DIR.DJ.SG	*not attested*	<i>kʰap-ø-dza</i> [kʰabʰzæ] cover-TR-PST.DIR.DJ.SG
-Vt	<i>dat-dza</i> [daʰtsæ] fall-PST.DIR.DJ.SG	<i>ɕit-ɕ-dza</i> [ɕitsæ] die-MID-PST.DIR.DJ.SG	<i>tat-ø-dza</i> [taʰdzæ] put-TR-PST.DIR.DJ.SG

-Ct	*not attested*	<i>ipt-ɛ-dza</i> [ɪp ʔtsæ] sleep-MID-PST.DIR.DJ.SG	*not attested*
-Rt	<i>tant-dza</i> [tantsæ] see-PST.DIR.DJ.SG	<i>brant-ɛ-dza</i> [brantsæ] fall-MID-PST.DIR.DJ.SG	*not attested*
-k	<i>pʰok-dza</i> [pʰoʔk ʔtsæ] be.hurt-PST.DIR.DJ.SG	<i>rwak-ɛ-dza</i> [rwaʔχsæ] graze-MID-PST.DIR.DJ.SG	<i>tik-ø-dza</i> [tɪʔg ʔzæ] close-TR-PST.DIR.DJ.SG
-m	<i>kjum-dza</i> [cumzæ] ply-PST.DIR.DJ.SG	<i>dom-ɛ-dza</i> [domzæ] be.busy-MID-PST.DIR.DJ.SG	<i>ʰum-ø-dza</i> [ʰumzæ] wrap-TR-PST.DIR.DJ.SG
-n	<i>pʰan-dza</i> [pʰandzæ] be.beneficial-PST.DIR.DJ.SG	<i>pan-ɛ-dza</i> [panzæ] fly-MID-PST.DIR.DJ.SG	<i>ʰin-ø-dza</i> [ʰinzæ] take-TR-PST.DIR.DJ.SG
-ŋ	<i>biŋ-dza</i> [biŋzæ] become.full-PST.DIR.DJ.SG	<i>lan-ɛ-dza</i> [lanzæ] sell-MID-PST.DIR.DJ.SG	<i>lan-ø-dza</i> [lanzæ] sell-TR-PST.DIR.DJ.SG
-s	<i>nas-dza</i> [nasæ] be.sick-PST.DIR.DJ.SG	<i>ɕaŋs-ɛ-dza</i> [ɕaŋsæ] grow.old-MID-PST.DIR.DJ.SG	<i>ɲuŋ-ø-dza</i> [ɲuŋzæ] swallow-TR-PST.DIR.DJ.SG
-r	<i>bar-dza</i> [barzæ] bloom-PST.DIR.DJ.SG	<i>dur-ɛ-dza</i> [durzæ] compete-MID-PST.DIR.DJ.SG	<i>pur-ø-dza</i> [purzæ] kill-TR-PST.DIR.DJ.SG
-l	<i>el-dza</i> [elzæ] go-PST.DIR.DJ.SG	<i>rwal-ɛ-dza</i> [rwalzæ] doze.off-MID-PST.DIR.DJ.SG	<i>tol-ø-dza</i> [tolzæ] pierce-TR-PST.DIR.DJ.SG
-V	<i>kja-dza</i> [cazæ] become-PST.DIR.DJ.SG	<i>su-ɛ-dza</i> [suzæ] wash-MID-PST.DIR.DJ.SG	<i>da-ø-dza</i> [dazæ] give-TR-PST.DIR.DJ.SG

3.3.5 Voiceless fricative suffixes

There are two types of voiceless fricative suffixes in Bunan, those with an initial fricative /s/ and those with an initial fricative /ɕ/. The first group comprises the nominalizing suffix -s (N_1) and the stative suffix -s (V_1). The second group consists of the plural suffix

=*ɛi* (*N*₄) and the middle conjugation marker -*ɛi* (*V*₂). Their morphophonological behavior is illustrated in the following two tables.

Table 39: Example paradigm of -s (-NZR) (*N*₁)

-p	-t	-k
<i>kʰap-s</i> [kʰaps] cover-NZR	<i>tʰat-s</i> [tʰas] be.happy-NZR	<i>kwaks</i> [kwaʔχs] dip.into-NZR
-s	-m	-n
not attested	<i>tʰum-s</i> [tʰums] wrap-NZR	<i>pʰan-s</i> [pʰans] sew-NZR
-ŋ	-r	-l
<i>deŋ-s</i> [deŋs] believe-NZR	<i>war-s</i> [wars] fence.in-NZR	*not attested*
-V		
<i>pʰja-s</i> [pʰjas] talk-NZR		

Table 40: Example paradigm of =*ɛi* (=PL)

-p	-t	-k
<i>dzep=ɛi</i> [zepɛi] stallion=PL	<i>sat=ɛi</i> [satɛi] god=PL	<i>jak=ɛi</i> [jaʔχɛi] yak=PL
-s	-m	-n
<i>ʂaŋs=ɛi</i> [ʂaŋɛi] horse=PL	<i>dom=ɛi</i> [domɛi] bear=PL	<i>han=ɛi</i> [handɛi] 2=PL

-ŋ	-r	-l
<i>siŋ=ɛi</i> <i>[siŋʒi]</i> sister=PL	<i>kar=ɛi</i> <i>[karʒi]</i> wether=PL	<i>tal=ɛi</i> <i>[talʒi]</i> 3=PL
-V		
<i>hambu=ɛi</i> <i>[hambuzi]</i> cow=PL		

3.3.6 Vocalic suffixes

The group of vocalic suffixes comprises the adjective marker *-i* (A_1) and the active participle marker */-i/* (V_4). The distribution of their allomorphs is illustrated in the table below.

Table 41: Example paradigm of */-i/* (-ACT) (V_4)

-p	-t	-Nt
<i>bup-i</i> <i>[bubi]</i> stumble-ACT	<i>dat-i</i> <i>[daʔ]</i> fall-ACT	<i>pant-i</i> <i>[pani]</i> spin-T-ACT
-k	-s	-m
<i>phok-i</i> <i>[pʰɔʔ]</i> be.hurt-ACT	<i>jaks-i</i> <i>[jaʔχsi]</i> make.fun-ACT	<i>kjum-i</i> <i>[cumi]</i> ply-ACT
-n	-ŋ	-r
<i>don-i</i> <i>[doni]</i> eat.HON-ACT	<i>tun-i</i> <i>[tʃj]</i> drink-ACT	<i>kjor-i</i> <i>[cori]</i> dance-ACT
-l	-V	
<i>el-i</i> <i>[eli]</i> go-ACT	<i>kja-i</i> <i>[cæj]</i> become-ACT	

4 Nouns and nominal morphology

4.1 Introduction

This chapter is dedicated to nouns and nominal morphology. In Bunan, nouns represent a vast and open lexical class of expressions referring to objects, states, beings (both human and non-human) and places. Nouns are characterized as a distinctive word class not only in terms of their semantics but also with respect to their morphological structure. They distinguish themselves from both adjectives and verbs with regard to their derivational morphology. In addition, nouns represent the only word class that employs compounding as a productive process of word formation. It is more difficult to define nouns as a separate lexical class with regard to their syntactic distribution, as there are some grammatical constructions in which the distinction between nouns and adjectives is blurred. However, this issue is not further discussed at this point, but will be addressed in § 6.1, where the lexical class of adjectives is defined.

The following sections deal with phonological and morphosyntactic properties of nouns. § 4.2 describes the general phonotactic properties of nouns, whereas § 4.3 discusses the formation of nouns. § 4.4 gives an overview of nominal morphology, both derivational and inflectional. § 4.5 describes relator nouns and postpositions. § 4.6 briefly introduces honorific nouns borrowed from Tibetan.

4.2 Phonotactic structure

The phonotactic structure of nouns may vary considerably, which implies that their shape is not subject to any rigid constraints. Nouns are prototypically disyllabic. My lexical database contains a total amount of 1465 nouns, 884 (60.3 %) of which consist of two syllables. The second largest group is the class of monosyllabic nouns, which comprises 420 nouns (28.7 %).³⁹ Trisyllabic nouns are less common but are nonetheless robustly attested. 96 nouns (6.6 %) in my database represent this type. Nouns that consist of more than three syllables are exceedingly rare. Nevertheless, there are 31 instances of quadrisyllabic nouns (2.1 %) and two examples of quinesyllabic nouns (0.1 %) in my database. Some polysyllabic nouns are clearly the result of word formation processes such as derivation, reduplication and compounding. However, there is also a considerable amount of polysyllabic nouns that cannot (or no longer) be segmented into smaller meaningful units.

³⁹ Note that the class of monosyllabic nouns does not only consist of monomorphemic nouns, as some of them contain the non-syllabic nominalizing suffix -s, e.g. *pʰja-s* “talk” < *pʰja-* “to talk” (cf. § 4.3.3). Out of 420 monosyllabic nouns, 34 nouns (8.1 %) are morphologically complex.

Table 42: Phonotactic shapes of nouns

Type	Examples	Meaning
monosyllabic	<i>ti</i> <i>lak</i> <i>gjuks</i>	“water” “hand” “ashes”
disyllabic	<i>dzaŋsma</i> <i>nitsi</i> <i>awa</i>	“copper” “sun” “father”
trisyllabic	<i>p^hremalik</i> <i>ts^hwaktumtsi</i> <i>toktoktsi</i>	“butterfly” “seabuckthorn” “elbow”
quadrisyllabic	<i>p^halaŋpjatsi</i> <i>braŋsibujaŋ</i> <i>gjaŋbişwatsi</i>	“bat” “honeybee” “buckwheat”
quinesyllabic	<i>bromolalatsi</i> <i>rikdaŋlentipa</i>	“rainbow” “farmer”

4.3 Derivation

Bunan possesses a number of morphological mechanisms that serve the derivation of nouns. We can distinguish seven classes of morphologically complex nouns based on the underlying process of word formation: (1) nouns formed with the diminutive suffix *-tsi*, (2) nouns formed with the nominalizer *-pa*, (3) nouns formed with the nominalizer *-s*, (4) nouns formed with the gender prefixes *p^ho-* / *mo-*, (5) nouns formed by compounding, (6) nouns formed by reduplication, and (7) nouns that are derived from infinitives. A considerable amount of polysyllabic nouns do not exhibit a transparent morphological structure. This class of non-segmentable nouns mainly consists of archaic compounds and Tibetan loanwords. All these types of derived nouns are discussed in the following subsections.

4.3.1 The diminutive suffix *-tsi*

My lexical database comprises approximately one hundred nouns that exhibit the suffix *-tsi*. This suffix originally served a diminutive function. It is most probably derived from the PTB root **tsa* “child” (Matisoff 2003: 644), which is also attested as a lexical root

in the Bunan word *tsitsi* “child”. The diminutive function of the suffix *-tsi* has only been retained in a few contexts in which the morpheme still denotes that the referent is small (for inanimates and animates) or young (for animates). This is illustrated by the following word pairs, in which simple nouns contrast with morphologically complex diminutive forms.

Diminutive nouns derived from simple nouns

<i>gam-tsi</i>	“small box”	<	<i>gam</i>	“box”
<i>kjut-tsi</i>	“young wether (goat)”	<	<i>kjut</i>	“wether (goat)”
<i>kar-tsi</i>	“young wether (sheep)”	<	<i>kar</i>	“wether (sheep)”
<i>mik-tsi</i>	“eye of a needle”	<	<i>mik</i>	“eye”

Word pairs such as the ones listed above are rare. Most often, nouns that exhibit the diminutive suffix do not possess a corresponding simple form. Sometimes, the lack of a simple form can be explained as a consequence of the inherent semantics of the noun. This is true for the nouns listed below, which refer to beings and objects that are small / young by definition.

Young beings & small objects

<i>kojotsi</i>	“puppy”
<i>gjatsi</i>	“newborn (female)”
<i>rektsi</i>	“kernel”
<i>ɲartsɪ</i>	“pea”

However, there is also a considerable number of diminutive nouns in which the derivational suffix serves no obvious diminutive function. Such “diminutive forms” are especially common in the semantic domains of animals, tools, and bodyparts. Consider the following examples.

Animals

<i>laŋtsi</i>	“bull”
<i>ropotsi</i>	“musk deer”
<i>ɲuktsi</i>	“monkey”
<i>pjatsi</i>	“bird”

Tools

<i>ɬuktsi</i>	“comb”
<i>gumtsi</i>	“bow”
<i>kjutsi</i>	“adze”
<i>prektsi</i>	“besom”

Bodyparts

<i>retsi</i>	“ear”
<i>alkjotsi</i>	“chin”
<i>kʰjutsi</i>	“arm”
<i>kontsi</i>	“backpart of footsole”

In addition, the diminutive suffix derives agent nouns from verb roots in a small number of cases. The resultant agent nouns appear to have a slightly pejorative connotation as compared to agent nouns derived by the nominalizer *-pa* (cf. following section).

Diminutive nouns derived from verbs

<i>rwak-tsi</i>	“shepherd”	<	<i>rwak-men</i>	“to graze”
<i>tso-tsi</i>	“beggar”	<	<i>tso-tɕ-um</i>	“to beg”
<i>tɕap-tsi</i>	“spy”	<	<i>tɕap-tɕ-um</i>	“to put together” ?
		<	<i>tɕap-s-ɕ-um</i>	“to sit close together” ?

Finally, there is also a small number of nouns that display the diminutive suffix, but cannot be related to any of the semantic domains described above.

Isolated instances of diminutive marking

<i>amtsi</i>	“path”
<i>nitsi</i>	“sun”
<i>peltsi</i>	“milk”

As the material discussed so far illustrates, the diminutive suffix does no longer serve a true diminutive function in contemporary Bunan. Rather, it has the status of a nominal word formation suffix. The motivation for this functional shift is not entirely clear. As noted above, disyllabic nouns are the most common type of nouns in Bunan. Based on this observation, one might assume that the morpheme serves the function of making monosyllabic nouns conform to a preferred phonotactic shape. However, this interpretation is at odds with the fact that the diminutive suffix is also found on disyllabic noun stems such as *alkjotsi* “chin” and *ropotsi* “musk deer”. It is more plausible that the morpheme gradually lost its diminutive function in consequence of its frequent use, which in turn triggered its reanalysis as a noun marker. In the course of this process, the suffix seems to have spread across semantic domains in which it had already been common before. In the case of the semantic domain of animals, for example, the morpheme was presumably once used to refer to young animals (e.g. *kakatsi* “lamb”, *kjuttsi* “young ram”)

and was then subsequently extended to nouns designating other animals (e.g. *lan̄tsi* “bull”, *ropotsi* “musk deer”) that are not necessarily young or small.⁴⁰

In this thesis, the diminutive suffix *-tsi* is only analyzed as a separate morpheme when it can be assigned a clear diminutive function, e.g. as in *gam-tsi* “box-DIM”, which contrasts with a corresponding simple form *gam* “box”. In cases in which it serves no obvious semantic function, but rather acts as a noun marker, it is not glossed as a separate morpheme, e.g. as in *lan̄tsi* “bull”, *ɛuktsi* “comb”, *retsi* “ear”.

4.3.2 The nominalizing suffix *-pa*

In Bunan, there is a class of agent nouns that are formed with the nominalizer *-pa*. The morpheme commonly derives agent nouns from active participles (see § 12.7.4 for a discussion of active participles). The resulting nouns refer to a person who performs the action expressed by the verb stem and may either receive a habitual or a progressive construal. A number of examples are given below.

Agent nouns derived from active participles

<i>kel-i-pa</i>	“carrier”	<	<i>kel-men</i>	“to carry”
<i>ipt-ɛ-i-pa</i>	“sleeper”	<	<i>ipt-ɛ-um</i>	“to sleep”
<i>kan-tɛ-i-pa</i>	“watchman, manager”	<	<i>kan-tɛ-um</i>	“to watch”
<i>pʰan-tɛ-i-pa</i>	“tailor”	<	<i>pʰan-tɛ-um</i>	“to sew”

Native speakers reject agentive nouns that are formed from “unaccusative verbs” as ungrammatical, e.g. ***dat-i-pa* “fall-ACT-NZR” “somebody who falls” or ***ɛit-ɛ-i-pa* “die-MID-NZR” “somebody who dies”. This suggests that the use of *-pa* entails that the referent has some degree of control over the action. Nominalizations of unaccusative participles can only be formed with the relativizer *=tsuk*, e.g. *dat-i=tsuk* “fall-ACT=REL” “somebody who falls” or *ɛit-ɛ-i=tsuk* “die-MID=REL” “somebody who dies”. As such constructions have the status of relative clauses (cf. § 19.2.3), they are not further discussed at this point. To be sure, there is a particular periphrastic future construction in which the combination of an unaccusative participle and the nominalizer *-pa* is possible (cf. § 15.3.3.3). However, the usage of the morpheme in this particular construction can be explained as a consequence of an advanced grammaticalization process.

The nominalizer *-pa* does not only occur on verbal participles, but can also attach to nouns. The resulting nouns are not agent nouns in the strict sense, but refer to a per-

⁴⁰ A similar grammaticalization process is documented in the history of Chinese. Norman (1988: 113–114) states that the noun *zǐ* “son, child” (probably a cognate of the diminutive suffix *-tsi* and the nominal root *tsi-* “child” encountered in Bunan) developed into a diminutive marker in Classical Chinese (i.e. before 220 AD). In the post-classical period, it subsequently lost its diminutive function and became a general word formation suffix for the derivation of nouns.

son who is in some way associated with the object referred to be the underlying noun. When *-pa* is attached to a noun that denotes an animal, for example, the resulting noun refers to a person who habitually deals with the animal in question. When the morpheme is suffixed to a place name, this yields a noun that refers to a person who is a resident of the respective place.

Agent nouns derived from active participles

<i>saŋs-pa</i>	“horsekeeper”	<	<i>saŋs</i>	“horse”
<i>leks-pa</i>	“villager”	<	<i>leks</i>	“village”
<i>tot-pa</i>	“person from Tod Valley”	<	<i>tot</i>	“Tod Valley”
<i>kʰunu-pa</i>	“person from Kinnaur”	<	<i>kʰunu</i>	“Kinnaur”

There is also great number of nouns with the nominalizer *-pa* that are not agent nouns, e.g. *kokpa* “garlic”, *thakpa* “rope”, *lumpa* “side valley”, etc. Based on this evidence, one might assume that the suffix does not only derive agent nouns but a range of different noun types. However, on closer examination it becomes clear that these nouns are borrowings from Tibetan, which are discussed in § 4.3.9 in more detail.

4.3.3 The nominalizing suffix *-s*

There is a class of nouns that are derived from verbs by means of the nominalizing suffix *-s*. This suffix is widely attested in Tibeto-Burman languages (cf. LaPolla 2003b: 25; Matisoff 2003: 466–468; Baxter & Sagart 2014: 58). It is possible that there is a diachronic link between the nominalizing suffix *-s* and phonologically similar derivational suffixes of the verbal domain. This hypothesis is discussed in § 12.3.6.1 in more detail.

In combination with some verb roots, the suffix *-s* gives rise to state nouns that refer to the event associated with the respective verb root. Consider the following examples.

State nouns derived with the nominalizing suffix *-s*

<i>deŋ-s</i>	“belief”	<	<i>deŋ-men</i>	“to believe”
<i>dik-s</i>	“agreement”	<	<i>dik-men</i>	“be suitable”
<i>jo-s</i>	“drunkenness”	<	<i>jo-men</i>	“to be drunk”
<i>pʰja-s</i>	“speech”	<	<i>pʰja-men</i>	“to talk”
<i>twa-s</i>	“harvest”	<	<i>twa-men</i>	“to mow”
<i>ʰat-s</i>	“happiness”	<	<i>ʰat-men</i>	“to be happy”
<i>tʂʰat-s</i>	“exhaustion”	<	<i>tʂʰat-men</i>	“to be exhausted”
<i>tak-s</i>	“smell”	<	<i>tak-men</i>	“to smell”
<i>ʂet-s</i>	“laughing”	<	<i>ʂet-men</i>	“to laugh”

In combination with other verb roots, the nominalizing suffix commonly derives instrument nouns that are associated with the event denoted by the respective verb root. This is illustrated by the following list of examples.

Instrument nouns derived with the nominalizing suffix -s

<i>kʰap-s</i>	“cover”	< <i>kʰap-tɕ-um</i>	“to cover”
<i>tik-s</i>	“lid”	< <i>tik-tɕ-um</i>	“to close”
<i>tʰum-s</i>	“wrapping”	< <i>tʰum-tɕ-um</i>	“to wrap”
<i>tɕʰun-s</i>	“binding material”	< <i>tɕʰun-tɕ-um</i>	“to bind together”

At the same time, the nominalizing suffix can also derive objective nouns that refer to the product of a given event. This is demonstrated by the following examples.

Objective nouns derived with the nominalizing suffix -s

<i>grik-s</i>	“joint”	< <i>grik-tɕ-um</i>	“to put together”
<i>kwak-s</i>	“gravy”	< <i>kwak-tɕ-um</i>	“to dip into”
<i>pʰan-s</i>	“seam”	< <i>pʰan-tɕ-um</i>	“to sow”
<i>pʰot-s</i>	“cloth”	< <i>pʰot-ɕ-um</i>	“to dress (with a shirt)”
<i>ruk-s</i>	“cud”	< <i>ruk-tɕ-um</i>	“to chew”
<i>war-s</i>	“fence”	< <i>war-tɕ-um</i>	“to fence in”

In addition, the nominalizing suffix can also be attached to active participles. The resulting nouns are abstract nouns that refer to the event denoted by the respective verb root. A few examples are given below.

Abstract nouns derived from active participles

<i>pʰan-i-s</i>	“benefit”	< <i>pʰan-men</i>	“to be beneficial”
<i>rant-i-s</i>	“weaving”	< <i>rant-men</i>	“to weave”
<i>loŋ-ɕ-i-s</i>	“nausea, vomiting”	< <i>loŋ-ɕ-um</i>	“to vomit”
<i>rwal-ɕ-i-s</i>	“sleepiness”	< <i>rwal-ɕ-um</i>	“to doze off”
<i>ɕat-tɕ-i-s</i>	“story, telling”	< <i>ɕat-tɕ-um</i>	“to tell (a story)”
<i>kan-tɕ-i-s</i>	“sightseeing”	< <i>kan-tɕ-um</i>	“to watch”

Abstract nouns that are derived from active participles play an important role in the formation of temporal and causal adverbial clauses. Such constructions are discussed in § 19.3.1.2 and § 19.3.3, respectively.

When the nominalizing suffix -s is suffixed to a verb root ending in /t/, this gives rise to a syllable final affricate /ts/. According to a morphophonological process described in § 3.2.2.3, such consonant sequences are simplified to a fricative [s].

<i>tʰat-s</i> [<i>tʰas</i>] “happiness”	<	<i>tʰat-men</i>	“to be happy”
<i>tɕʰat-s</i> [<i>tɕʰas</i>] “exhaustion”	<	<i>tɕʰat-men</i>	“to be exhausted”

As the plosive /t/ is entirely deleted, it is not possible to establish its underlying presence based on the pronunciation of the respective noun. The existence of an underlying syllable final affricate can only be deduced from the existence of a corresponding verb root with a final alveo-dental plosive. This raises difficulties in the morphological analysis of derived nouns that possess a corresponding verb stem with a derivational *t*-suffix. In the case of the verb roots *tʰat*- and *tɕʰat*-, it seems safe to assume that the final plosive is an etymological part of the root, as the two verb stems are most probably Tibetan loanwords (cf. WT *thad* “to be enjoyable” and WT *chad* “to be tired”). However, things are different in the case of the noun-verb pair *ip(-t)-s* “sleep” – *ip-t-ɕ-um* “to sleep, to fall asleep”. Both words are clearly derived from a root *ip*- with the basic meaning “(to) sleep”, which goes back to the PTB root **yip* ~ **yup* “sleep, put to sleep, conceal, hide” (Matisoff 2003: 620), which is also reflected in WT *yib* “to hide oneself” and WT *byibs* “to cover, to hide”.

The Bunan verb stem *ip-t*- obviously contains an additional *t*-suffix. It is difficult to determine whether this morpheme represents the verbalizing suffix *-t* (cf. § 12.3.3) or the functionally opaque suffix *-t* (cf. § 12.3.4). However, as the semantics of the derivational morpheme is a separate problem, this issue is not further discussed here. The crucial point is that it is not possible to determine whether the derivational morpheme *-t* is part of the deverbal noun *ip(-t)-s* or not. On the one hand, it is possible that the deverbal noun is derived from the augmented verb stem. Accordingly, the underlying form of the derived noun would be *ipt-s*. I refer to this hypothetical derivational pathway as “scenario A”.

Scenario A

ip- “SLEEP” > *ip-t*- “to sleep” > *ip-t-s* “sleep (n)”

On the other hand, it is also conceivable that the noun and the verb are derived independently from an underlying root *ip*-. In this case, the deverbal noun would have the underlying form *ip-s*. I refer to this hypothesis as “scenario B”.

Scenario B

- a) *ip*- “SLEEP” > *ip-t*- “to sleep”
- b) *ip*- “SLEEP” > *ip-s* “sleep (n)”

Theoretically, there is a third scenario C, in which the verb “to sleep” is derived from the abstract noun *ips*.

Scenario C

ip- “SLEEP” > *ip-s* “sleep (n)” > *ip-s-t*- “to sleep”

However, this hypothesis has two weak points. First, the verb final cluster /*st*/ is not attested in any other Bunan word and it is doubtful whether this consonant sequence would be simplified to [t] instead of [s]. Second, it is rather unlikely that a basic vocabulary item like the verb “to sleep” is derived from an abstract noun. We can thus reject scenario C, which leaves us with scenarios A and B. Based on the evidence considered so far, it is difficult to decide which of the two remaining hypotheses should be preferred. The majority of nouns with the nominalizing suffix -s are clearly derived from verbs (e.g. *phjas* “speech” < *phja*- “to talk”, *taks* “smell” < *tak*- “to smell”). It is thus economical to assume that this is also true for the noun “sleep”, which urges us to favor scenario A. Accordingly, I postulate the underlying form *ipt*-s for the noun “sleep”.

4.3.4 The gender prefixes *pho*- / *mo*-

There are a small number of nouns that exhibit the gender prefixes *pho*- and *mo*-. These morphemes specify the gender of the referent as male (*pho*-) or female (*mo*-). A few examples are given below.

Nouns exhibiting the gender prefixes *pho*- / *mo*-

<i>phokara</i>	“donkey (m)”	< <i>kara</i>	“donkey”
<i>mokara</i>	“donkey (f)”		
<i>phokukuri</i>	“rooster”	< <i>kukuri</i>	“chicken”
<i>mokukuri</i>	“hen”		
<i>phokhju</i>	“dog (m)”	< <i>khju</i>	“dog”
<i>mokhju</i>	“dog (f)”		

Written Tibetan exhibits a similar set of morphemes that are used to distinguish the gender of animals. However, in Tibetan these morphemes are suffixes rather than prefixes, e.g. WT *ra mo* “female goat” vs. WT *ra pho* “male goat” (Beyer 1992: 124). Given the fact that the Tibetan morphemes are suffixed rather than prefixed to their respective head noun, it seems unlikely that Bunan has borrowed the gender prefixes from neighboring Tibetan varieties. Moreover, Sharma (2007a: 33) and Krishan (2001a: 356) describe similar prefixes for the West Himalayish languages Byangsi and Darma, respectively.⁴¹ Accordingly, it is conceivable that the gender prefixes of Bunan may have been inherited from Proto-West Himalayish.

⁴¹ Note, however, that the validity of Krishan’s analysis for Darma has been questioned by Willis (2007a: 127).

4.3.5 Compounding

There are two types of compounds in Bunan: (1) endocentric compounds and (2) coordinative compounds. Endocentric compounds are commonly defined as compounds that incorporate the semantic head to which the compound expression refers, whereas coordinative compounds contain at least two semantic heads that contribute to the meaning of the compound expression in equal measure (Haspelmath 2002: 87–89). Both types of compounds are discussed in the following subsections.

4.3.5.1 Endocentric compounds

The most common type of compounds in Bunan are endocentric compounds, which are almost exclusively righthanded. The term “righthanded” refers to the fact that it is the second rather than the first constituent that represents the semantic head of the compound expression. Some examples are given in the following.

Noun₁ + Noun₂ > Noun₃

<i>lakgɟap</i>	“back of the hand”	< <i>lak</i> “hand” + <i>gɟap</i> “back”
<i>meɛiŋ</i>	“firewood”	< <i>me</i> “fire” + <i>ɛiŋ</i> “wood”
<i>ɕurbuʔa</i>	“cedar”	< <i>ɕur</i> “cedar” + <i>buʔa</i> “tree”
<i>limbuʔa</i>	“pine tree”	< <i>lim</i> “pine” + <i>buʔa</i> “tree”
<i>tinankat</i>	“Tinan (language)”	< <i>tinan</i> “Tinan Valley” + <i>kat</i> “language”
<i>melokkat</i>	“Manchad (language)”	< <i>melok</i> “Pattan Valley” + <i>kat</i> “language”
<i>braŋsibujan</i>	“honeybee”	< <i>braŋsi</i> “honey” + <i>bujan</i> “fly”

Derivational suffixes such as the diminutive suffix *-tsi* and the agentive nominalizer *-pa* are generally retained in compounds, as the following list of examples demonstrates. However, the noun *retsi* “ear” loses its derivational suffix when occurring as the first element of the noun *rekʰolak* “earwax”. It is difficult to determine whether this reflects a general rule, as *rekʰolak* is the only compound that takes a diminutive noun as a first element. It is perfectly possible that the compound was coined at a time when the nominal root **re-* “ear” could still occur as an independent noun without the derivational suffix *-tsi* attached to it.

Noun₁ + Noun₂ > Noun₃

<i>kilbotsi</i>	“middle finger”	< <i>kil</i> “middle” + <i>botsi</i> “finger”
<i>pʰalanpjatsi</i>	“bat”	< <i>pʰalan</i> “?” + <i>pjatsi</i> “bird”
<i>ranjlopameme</i>	“monk from Ranglo”	< <i>ranjlopa</i> “Ranglo person” + <i>meme</i> “monk”
<i>rekʰolak</i>	“earwax”	< <i>retsi</i> “ear” + <i>kʰolak</i> “tsampa dish” ⁴²

Compounds consisting of an adjective followed by a noun are likewise frequently attested in Bunan. There is also an isolated instance of a compound in which the adjective follows the noun. Note that adjectives always lose their second syllable / the modifier marker *-i* in the course of compounding processes. This is illustrated by the following examples.

Adjective + Noun₁ > Noun₂

<i>tebu</i>	“snake”	< <i>tedzi</i> “big” + <i>bu</i> “insect, worm”
<i>pʰunʈi</i>	“hot water”	< <i>pʰundzi</i> “hot” + <i>ti</i> “water”
<i>tʂeʈi</i>	“warm water”	< <i>tʂej</i> “warm” + <i>ti</i> “water”
<i>soti</i>	“(cold) water”	< <i>soj</i> “cold” + <i>ti</i> “water”
<i>manbala</i>	“type of red flower”	< <i>manji</i> “red” + <i>bala</i> “flower”

Noun₁ + Adjective > Noun₂

<i>æemtəunʃ</i>	“princess”	< <i>æema</i> “queen” + <i>təunʃ</i> “small, few”
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Compounds that contain verbal roots are exceedingly rare in Bunan. There are only two instances of this subtype in my data.

Verb + Noun₁ > Noun₂

<i>dzotsa</i>	“dwelling place”	< <i>dzot-</i> “to stay” + <i>sa</i> “place”
<i>butsa</i>	“shelf place”	< <i>but-</i> “to place” + <i>sa</i> “place”

In this thesis, compounds are only glossed as morphologically complex when all constituents of the compound expression are attested as independent words in contemporary Bunan, e.g. as in *lak-gjap* “hand-back”, *kil-botsi* “middle-finger”, *ranjlo-pa-meme* “Ranglo-NZR-monk”. Compounds containing elements that are not (or no longer) used as autonomous syntactic constituents are not segmented into distinct morphemes, e.g. *pʰalanpjatsi* “bat” (< *pʰalan* “?” + *pjatsi* “bird”), *rekʰolak* “earwax” (< **re* “ear” + *kʰolak* “tsampa dish”), *soti* “water” (< **so* “cold” + **ti* “water”).

⁴² The word *kʰolak* is a loanword from a western Tibetan variety and refers to a traditional dish that consists of roasted barley flower (*tsampa*) mixed with butter tea (*tʂadza*). The paste has a sticky and moist consistency, hence the metaphorical association with earwax in the compound *rekʰolak*.

4.3.5.2 Coordinative compounds

There is a small group of coordinative compounds in Bunan. They usually consist of two nouns, although there is one compound that consists of two locational adverbs (*phinan* “inside and outside”). In the case of the compound *ninmun*, the second element is not attested as an independent element, but only occurs in the compound *munḍak* “darkness”.

Coordinative compounds

<i>phinan</i>	“inside and outside”	< <i>phi</i> “outside” + <i>nan</i> “inside”
<i>ninmun</i>	“day and night”	< <i>nin</i> “day” + * <i>mun</i> “night”
<i>amaawa</i>	“parents”	< <i>ama</i> “mother” + <i>awa</i> “father”
<i>atṣ^hobet</i>	“brothers”	< <i>atṣ^ho</i> “oldest brother” + <i>bet</i> “younger brother”
<i>atṣ^henomo</i>	“sisters”	< <i>atṣ^ho</i> “oldest sister” + <i>nomo</i> “younger sister”

4.3.6 Reduplication

There is a small number of disyllabic nouns that consist of reduplicated morphological material. A list of examples is given in the following.

Reduplicated nouns

<i>bubu</i>	“owl”	
<i>tete</i>	“grandfather”	
<i>koko</i>	“feces”	
<i>tsitsi</i>	“child”	
<i>dzakdzak</i>	“back pain”	
<i>dzumdzum</i>	“uneasy feeling”	
<i>meme</i>	“monk”	< WT <i>me me</i> “old man, grandfather”
<i>lala</i>	“song”	

It is not possible to assign any lexical meaning to these reduplicated syllables. The only exception is the noun *tete* “grandfather”, which might be derived from the adjectival root *te-* “big”, which is also attested in the adjective *tedzi* “big”, the noun *tebu* “snake” (lit. “big worm”), and the kinship term *teawa* “eldest father”⁴³. In all other cases, it is doubtful whether the nouns in question represent true instances of reduplication. The noun *tsitsi* “child”, for example, is better analyzed as consisting of a nominal root *tsi* “child”, to which

⁴³ Until the 20th century, polyandry was commonly practiced in Lahaul. This costume has left its mark on the lexicon of Bunan, which has no word for “paternal uncle”. Rather, the brothers of one’s father are also addressed as “fathers”. The appropriate term of address is based on the relative age of one’s natural father as compared to his brothers (cf. § 1.2.3.1).

the diminutive suffix *-tsi* has been attached. The phonological similarity of the two morphemes is most probably not a coincidence. It is likely that the diminutive marker is ultimately derived from the nominal root *tsi* “child” (cf. § 4.3.1 above). The noun *meme*, on the other hand, is a Tibetan loanword going back to WT *me me* “old man, grandfather”. The remaining nouns *bubu* “owl”, *koko* “feces”, *lala* “song”, *dzakdzak* “back pain”, and *dzumdzum* “uneasy feeling” are most probably onomatopoeic formations and thus have to be regarded as special instances of reduplication. As it is not possible to assign any lexical meaning to the underlying syllables, reduplicated nouns are not analyzed as morphologically complex in this thesis.

In addition to the reduplicated nouns discussed above, there are four lexemes consisting of a reduplicated stem to which further morphological constituents are attached. Three such nouns are attested in the semantic domain of body parts, where we find reduplicated noun stems to which the diminutive suffix *-tsi* is attached: *toktoktsi* “elbow”, *pjonpjontsi* “uvula”, and *prenprensi* “spine”. Another isolated instance is attested in the compound *tontonbujan* “bumblebee”, which consists of a reduplicated first element *tonton*, to which the second element *bujan* “fly” is attached. The original meaning of the reduplicated stems is unclear in all four cases. The nouns *pjonpjontsi* “uvula” and *prenprensi* “spine” might be etymologically related to the adjectives *bjonbjon* “dangling” and *phrenphren* “lying in a row”, respectively.

<i>toktoktsi</i>	“elbow”	
<i>pjonpjontsi</i>	“uvula”	
<i>prenprensi</i>	“spine”	
<i>tontonbujan</i>	“bumblebee”	< <i>tonton</i> “?” + <i>bujan</i> “fly”

4.3.7 Deverbal nouns from infinitives

There is a small number of nouns that are derived from infinitives of verbs. In my material, three such nouns are attested, all of which refer to foodstuff or drinks.

<i>dzamen</i>	“food”	< <i>dza-men</i> “eat-INF”
<i>tunmen</i>	“drinks”	< <i>tun-men</i> “drink-INF”
<i>dzarok kwak-tɕ-um</i>	“snack”	< <i>dza=tok kwak-tɕ-um</i> “tea=DAT dip-TR-INF”

It seems no coincidence that these nouns belong to the semantic domain of eating and drinking. Infinitives of verbs that denote ingestive activities appear to have a tendency

to develop into nouns.⁴⁴ The reanalysis of a verbal infinitive as a noun is illustrated by sentences such as the following.

(10) *handok dzamen turmen gidzi brakkata.*

<i>han=tok</i>	<i>dzamen</i>	<i>turmen</i>	<i>gi=dzi</i>
2[SG]=DAT	food	drinks	1SG=ERG.SG

brak-ø-kata
 arrange-TR-FUT.CJ.SG

“It is me who shall provide you with food and drinks.”
 (King Kesar 174)

In the example given above, the lexemes *dza-men* and *tur-men* are potentially ambiguous. It is possible to interpret them as true infinitives and translate the whole sentence as “I shall arrange (things) to eat and to drink for you”. However, we might as well interpret them as nouns, which yields the translation “I shall arrange food and drinks for you.” In this thesis, the words *dza(-)men* and *tur(-)men* are analyzed as simple nouns whenever they bear phrasal stress on the second syllable. This placement of stress indicates that the word is no longer perceived as consisting of a lexical root and a derivational suffix but as a morphologically unsegmentable form (cf. § 2.5.1).

4.3.8 Unanalyzable nouns

There is a great deal of polysyllabic nouns that do not exhibit a morphologically transparent structure or are only partially segmentable into smaller meaningful units. The majority of these unanalyzable nouns may originally have been compounds whose morphological structure became opaque when their individual components were no longer used as independent nouns. A few examples of such nouns are given below.

Unanalyzable nouns

<i>k^hangul</i>	“neck”
<i>k^hwartum</i>	“egg”
<i>berbu</i>	“trousers”
<i>tsemet</i>	“girl”

⁴⁴ A similar word class shift can be observed in German, where infinitives are commonly used as abstract nouns that refer to the process expressed by a verb. However, in the case of the verb *essen* “to eat”, the infinitive cannot only refer to the process of eating but also to food. If one makes a (rather impolite) request for food, one may either say *Gib mir Essen!* “Give me (some) food!” or *Gib mir zu essen!* “Give me (something) to eat!”. The infinitive form *trink-en* “drink-INF”, on the other hand, has not been reanalyzed as a substantive in German. This demonstrated by the fact that the sentence ***Gib mir Trinken!* “Give me (some) drinks!” is ungrammatical. In the case of this verb, the infinitive preposition *zu* is still obligatory, i.e. *Gib mir zu trinken!* “Give me (something) to drink!”.

Although these nouns are not compounds from a synchronic perspective, their compound nature can sometimes be established by internal and / or comparative reconstruction. In the case of *kʰaŋgul* “neck”, the existence of the compound *kʰwaŋɕiŋ* “ox collar” suggests that a simple noun **kʰaŋ* ~ *kʰwaŋ* “neck” may have existed in Proto-Bunan. At a later stage, this noun was compounded with the etymologically opaque element **gul* to form the now established term for “neck” and ceased to be used as a simple noun. The fact that **kʰaŋ* ~ *kʰwaŋ* must originally have had the meaning “neck” can still be derived from the compound *kʰwaŋɕiŋ* “ox collar”, for which we can reconstruct the original meaning “neck-wood”, i.e. “piece of wood that is put around the neck (of an ox)”. Things are different for the noun *kʰwartum* “egg”. In the case of this noun, it is comparative evidence from other West Himalayish languages that implies that **tum* must have been the original word for “egg” in Proto-Bunan. The root is still attested as a simple noun *toom* “egg” in Sunami (Gerard 1842: 487) and occurs as the second element of a compound *pittum* “egg” in Darma (Willis 2007a: 583). The origin of the component **kʰwar*, however, remains unclear. It might be related to the first syllable of the noun *kʰwarek* “pheasant”. This etymology seems plausible given the fact that the traditional homeland of the Bunan speaking community lies in a mountainous area, where in historical times the prototypical source of eggs may not have been domestic chickens but rather wild birds such as pheasants.

Polysyllabic nouns that cannot be segmented into smaller meaningful units without the help of comparative evidence (i.e. internal and / or comparative reconstruction) are not analyzed as morphologically complex in this thesis. Accordingly, words like *kʰaŋgul* and *kʰwartum* are glossed as “neck” and “egg” (rather than “neck-?” and “pheasant-egg”), respectively.

4.3.9 Borrowed nouns

Bunan has borrowed a great number of nouns from neighboring western Tibetan varieties and – to a lesser extent – from the more prestigious Tibetan varieties spoken in Central Tibet. Tibetan loanwords can often be identified because they are part of certain semantic domains, e.g. expressions pertaining to the semantic domains of rule and administration (*kʰral* “tax” < WT *khral* “tax”, *tʰims* “judgement” < WT *khriims* “judgement”, *gja-po* “king” < WT *rgyal po* “king”). In addition, their status as borrowings can often be deduced from their morphological structure, as they may exhibit derivational morphemes that do not occur in Bunan. This borrowed derivational morphology is discussed in the following.

One major class of Tibetan loanwords consists of nouns ending in *-pa* / *-ba* / *-wa* (the three suffixes are allomorphs of one another). This derivational suffix goes back to the WT nominalizer *-pa* / *-ba*, which is ultimately cognate with the Bunan nominalizer *-pa*.

Although the allomorph *-pa* is formally identical to the agentive nominalizer *-pa* in Bunan, it is usually possible to distinguish genuine Bunan words exhibiting the nominalizer *-pa* from Tibetan loanwords ending in *-pa*. The Bunan nominalizer *-pa* only attaches to a comparatively small group of words that also occur as independent nouns (cf. § 4.3.2), e.g. *ṣaṅspa* “horsekeeper” < *ṣaṅs* “horse”, *kʰunupa* “person from Kinnaur” < *kʰunu* “Kinnaur”. The Tibetan loanwords ending in *-pa*, in turn, can usually not be segmented into smaller meaningful units. For example, the underlying nominal in the noun *naṭpa* “patient”, which goes back to WT *nad* “sickness”, does not occur in Bunan as an independent noun, the Bunan word for “sickness” being *dzuk*. Examples of Tibetan loanwords containing the suffix *-pa* / *-ba* / *-wa* are given below.

Tibetan loanwords ending in *-pa* / *-ba* / *-wa*

<i>daṭpa</i>	“belief”	< WT <i>dad pa</i>	“belief”
<i>naṭpa</i>	“patient”	< WT <i>nad pa</i>	“patient”
<i>pemba</i>	“Sunday”	< WT <i>spen ba</i>	“Sunday”
<i>təʰuba</i>	“traditional dress”	< WT <i>chu pa</i>	“traditional dress”
<i>mewa</i>	“mole, birthmark”	< WT <i>dme ba</i> ~ <i>rme ba</i> ~ <i>sme ba</i>	“mole”
<i>rewa</i>	“hope”	< WT <i>re ba</i>	“hope”

There are a few words ending in *-pa* / *-ba* / *-wa* that according to current knowledge are not genuine members of the Bunan lexicon, but for which no Tibetan etymology has been found so far. These are *tampa* “cutting board”, *juspa* “whistling”, *warpa* “hearth area”, *dzeba* “small cracks in walls”, *tampa* “lever”, *dzejba* “temple (body part)”, *mjonba* “shaman”, *toba* “hurry, haste”, *ṣarba* “young man”, and *lawa* “shed for sheep / goats”. Some of these nouns may have been borrowed from the neighboring West Himalayish languages Manchad or Tinan. Further research is needed to clarify their origin.

There is another group of Tibetan loanwords that end in the derivational suffix *-ma*. As Beyer (1993: 125–126) notes, this suffix has two basic functions in Written Tibetan. First, it serves as a formative that indicates that the respective referent is female. In this function, the morpheme stands in opposition to the suffix *-pa*, which is often neutral with regard to gender but may also refer to male referents (e.g. WT *bod pa* “Tibetan, male Tibetan” vs. *bod ma* “female Tibetan”). Second, it functions as a word formation suffix that occurs on nouns. In Bunan, we find loanwords that exemplify both functions of the suffix.

Tibetan loanwords ending in *-ma*

<i>bakma</i>	“bride”	< WT <i>bag ma</i>	“bride”
<i>gotma</i>	“mare”	< WT <i>rgod ma</i>	“mare”
<i>karma</i>	“star”	< WT <i>skar ma</i>	“star”
<i>ṇama</i>	“tail”	< WT <i>mga ma</i>	“tail”

There are two nouns in my corpus that end in *-ma* but do not appear to be borrowings from Tibetan: *lama* “sheep” and *ɬema* “queen”. In the case of *lama* “sheep”, the second syllable of the word might not be the derivational suffix *-ma* but a nominal root that is also attested in WT *ma mo* “female sheep”. In the case of *ɬema* “queen”, the second syllable likely represents the same suffix that is also attested in *bakma* “bride” and *gotma* “mare”. If this noun is not a loanword, it would represent an isolated instance of the gender marking suffix *-ma* in Bunan. However, the possibility that it might have been borrowed from Manchad or Tinan cannot be ruled out at present.

A last major group of Tibetan loanwords exhibit the endings *-po* and *-mo*. Both morphemes are common word formation suffixes in Tibetan, where they occur on both nouns and adjectives (Beyer 1992: 123–125, 127–129). According to Beyer, these suffixes fulfill a function that is similar to the function of the suffixes *-pa* / *-ba* and *-ma*. They can express a gender distinction between male (*-po*) and female (*-mo*) referents or they can function as word formation suffixes that mark nouns and adjectives. Loanwords of both types can be found in the Bunan lexicon. The following list only comprises nouns, as adjectives ending in the suffixes *-po* / *-mo* are discussed in § 6.3.5.

Tibetan loanwords ending in *-po* / *-mo*

<i>grokpo</i>	“river”	< WT <i>grog po</i>	“river”
<i>jokpo</i>	“servant (m)”	< WT <i>g.yog po</i>	“servant (m)”
<i>jokmo</i>	“servant (f)”	< WT <i>g.yog mo</i>	“servant (f)”
<i>rolmo</i>	“cymbals”	< WT <i>rol mo</i>	“cymbals”

The nouns *ʈopo* “cup” and *surmo* “pick-axe” have a morphological structure that gives them the appearance of being Tibetan loanwords. However, I have not been able to find cognates in Tibetan varieties so far. Further research is needed to clarify their etymological origin.

4.4 Morphology of nouns

Bunan possesses a number of derivational and inflectional morphemes that can be attached to nouns. We can classify them into four groups according to their function. First, there are derivational morphemes that modify the lexical meaning of a given noun by specifying its quality or quantity. Second, there are inflectional morphemes that indicate whether a given noun refers to a definite or an indefinite referent. Third, there are morphemes that encode the plurality of a given referent. Fourth and last, there are case markers that specify the role that an argument plays in a given event. These morphemes occur on nouns in the following order:

N = QUALITY / QUANTITY = (IN)DEFINITENESS = NUMBER = CASE

The grammatical categories “number” and “case” are sometimes marked simultaneously by a single portmanteau morpheme. All of the abovementioned morphemes are clitics rather than suffixes. Following the definition of Aikhenvald (2002: 42), I refer to a clitic as a type of morpheme that occupies an intermediate stage between a suffix and an independent phonological word. Clitics differ from suffixes in the respect that they are bound to their morphological host in a rather loose way. At the same time, they are distinct from independent phonological words as they lack some of their fundamental properties. In the case of Bunan, it is not possible to define all clitics on the basis of one unified set of parameters. Rather, the clitic status of every morpheme rests on different features, with some clitics being closer to affixes and others being closer to independent words. I am thus not providing a general definition of clitics at this point. Rather, I discuss the clitic status of single morphemes and groups of morphemes in the following subsections.

Aikhenvald (2002: 43) describes fifteen typological parameters that may be helpful in identifying and describing clitics in a language. The following six parameters have proven useful in establishing the clitic status of nominal clitics in Bunan:

- Selectivity of the morphological host
- Fixed position within the noun phrase
- Relationship with the phonological word
- Relationship with the grammatical word
- Combination of clitics
- Syntactic scope

4.4.1 Qualifying and quantifying clitics

The group of qualifying and quantifying clitics comprises the approximative morpheme *=lek*, the enumerative morpheme *=tsore*, and the semblative morpheme *=asti*. The clitic status of these morphemes rests on a number of different factors. First, they show a low selectivity with regard to their morphological host. Qualifying and quantifying clitics occur on nouns, pronouns, adjectives, and non-finite verbal forms (see below for examples), which is a consequence of the fact that they always attach to the last constituent of a noun phrase, regardless of the lexical class of the respective constituent. Second, qualifying and quantifying clitics never bear lexical stress. Accordingly, they fail to constitute independent phonological words and merge into one phonological word with their morphological host. Fourth, they can attach to each other in which case they combine their respective semantics. These characteristic traits are illustrated by the following example sentences.

(11) *wa ʔanda asti tsore mej apa pʰjakʰa dʒotmen mej.*

<i>wa</i>	<i>ʔanda=asti=tsore</i>	<i>ma-ni:</i>	<i>apa</i>	<i>pʰja-kʰa</i>
FOC	similar=SML=ENR	NEG-EX.NON1SG	AUTH	talk-PROG.PL
<i>dʒot-men</i>	<i>ma-ni:</i>			
sit-INF	NEG-EX.NON1SG			

“She is somewhat different (in her character) and in other respects, she did not use to sit down and talk to other people.”

(Conversation 14.103)

Finally, quantifying and qualifying morphemes can be identified as clitics because of their wide syntactic scope. They do not only take scope over the constituent that they are attached to but over all constituents of a conjoined noun phrase. This is illustrated by the two sentences given below. In (12), the clitic *=tsore* takes scope over *kaltsi* “window” and *pitaŋ* “door”. The phrase *kaltsi pitaŋ=tsore* thus translates as “things like windows and doors” and not as “windows and things like doors”.

(12) *kaltsi pitaŋ tsore tattsum tat.*

<i>kaltsi</i>	<i>pitaŋ=tsore</i>	<i>tat-t̥um</i>	<i>tat</i>
window	door=ENR	make-TR-INF	POSS.NON1PL

“They have to make things like windows and doors (for their new house).”

(Conversation 22.136)

(13) *t̥waŋ nidzajlek kʰjak kurt-dʒi ra-dʒi.*

<i>t̥waŋ</i>	<i>nidzaj=lek</i>	<i>kʰjak</i>	<i>kurt-dʒi</i>	<i>ra-dʒi</i>
fifteen	twenty=APP	here	carry-CVB.SG	come-PST.INFER.DJ.SG

“He brought about fifteen or twenty (pieces of deep-fried flatbread) here.”

(Conversation 39.36)

4.4.1.1 Approximative =lek

The approximative clitic has the phonological shape *=lek*. The morpheme expresses that the quantity indicated by a noun or a noun phrase is only approximate. As a result, the clitic can only occur on nouns that refer to a quantity (e.g. *fut=lek* “about one foot of snow”) or that are modified by a quantifier (e.g. *t̥uj mi=lek* “about ten people”). In absence of a head noun, the approximative clitic is commonly attached to numeral quantifiers (e.g. *t̥uj=lek* “about ten”) or adverbs that refer to a point in time (e.g. *gja:ra=lek=tok=t̥ɕi* “from about 11 p.m. onwards”). Consider the following examples.

- (14) *kjuma fuṭlek radza na wa?*

<i>kjuma</i>	<i>fuṭ_{LN}=lek</i>	<i>ra-dza=na</i>	<i>wa</i>
home	foot=APP	come-PST.DIR.DJ.SG=HS	FOC

“They say that there was about a foot of snow at home.”

(Conversation 30.2)

- (15) *təuj milek kjamən de təuj milek kjaṭəʰok djwak.*

<i>təuj</i>	<i>mi=lek</i>	<i>kja-mən</i>	<i>de</i>	<i>təuj</i>	<i>mi=lek</i>
ten	person=APP	become-INF	ATT.SG	ten	person=APP
<i>kja-ṭəʰok</i>		<i>djwak</i>			
become-PST.INFER.DJ.PL		two.days.ago			

“There will be about ten people (in the monastery), (the number of inhabitants) increased to about ten people recently.”

(Tshechu 2.490)

- (16) *təujlek kurtəi ra təujlek!*

<i>təuj=lek</i>	<i>kurt-dzi</i>	<i>ra-a</i>	<i>təuj=lek</i>
ten=APP	carry-CVB.SG	come-IMP.SG	ten=APP

“Bring about ten, about ten (copies of your book)!”

(Conversation 32.9)

- (17) *phirok da gja:ralektoktəi tsuktəsa.*

<i>phiro=tok</i>	<i>da</i>	<i>gja:ra_{LN}=lek=tok=təi</i>	<i>tsuk-dza</i>
night=DAT	now	eleven=APP=DAT=ABL	begin-PST.DIR.DJ.SG

“At night, from around 11 p.m. onwards it started (to rain).”

(Conversation 29.18)

4.4.1.2 Enumerative =tsore

The enumerative clitic has the phonological shape =*tsore*. In the speech of young people, the morpheme has two allomorphs: [*tsore*], which occurs after consonants, and [*sore*], which occurs after vowels. The enumerative expresses a similar meaning like the English phrase *and so forth*. It portrays the marked referent as a prototypical representative of a more comprehensive semantic domain of which further non-prototypical members are relevant in the present discourse context. In example (19), the clitic refers to the semantic domain of “wooden components of a house”, i.e. windows, doors, beams, etc. In

example (20), it refers to the semantic domain of (Indian) breakfast food, i.e. *pārāṭhā*, *cāy*, and so on.

- (18) *taj len tsoreti kʰontəare kana.*

<i>taj</i>	<i>len=tsore=tiki</i>	<i>kʰon-tə-are</i>	<i>kan-a</i>
3SG.GEN	work=ENR=INDEF	end-TR-PRS.DJ.SG	watch-IMP.SG

“He is finishing his work and all those things (and only afterwards will he be able to deal with your request), you see?”

(Conversation 96.21)

- (19) *kaltsi pitaŋ tsore tattəum tat.*

<i>kaltsi</i>	<i>pitaŋ=tsore</i>	<i>tat-tə-um</i>	<i>tat</i>
window	door=ENR	make-TR-INF	POSS.NON1PL

“They have to make things like windows and doors (for their new house).”

(Conversation 22.136)

- (20) *wa abi para:ṭʰa: sore tatkja daṣi ni: rwakde ea astok.*

<i>wa</i>	<i>abi</i>	<i>para:ṭʰa:LN=tsore</i>	<i>tat-ka</i>
FOC	grandmother	parāṭhā=ENR	prepare-PROG
<i>da-s-ə-i</i>	<i>ni:</i>	<i>rwak-de</i>	<i>el-kʰa=astok</i>
give-DETR-MID-ACT	EX.NON1SG	graze-SUP	go-PROG.PL=SIM

“And grandmother used to prepare *parāṭhā* and things like that and gave them to us when we were on our way to graze (the sheep in the mountains).”

(Tshechu 2.304)

- (21) *daksam iptəa tsore lasmizi ... ranḡa sosoḡ kjumamaŋ gwaŋ ʰirtəak na.*

<i>daksam</i>	<i>ipt-ə-a=tsore</i>	<i>lasmi=əi</i>	<i>ranḡa</i>	<i>soso=ki</i>
now	sleep-MID-SUP=ENR	woman=PL	oneself	each=GEN

<i>kjuma=maŋ</i>	<i>gwaŋ=ʰir-tə-ʰak=na</i>
home=ALL	go.PL=send-TR-PRS.DJ.PL=HS

“Now for sleeping and such, the women each went to their respective homes, they say.”

(Conversation 87.198)

(22) *kjuktsi tsore likdzi daɕi ni:*

kjuktsi=tsore lik-ø-dzi da-s-ɕ-i ni:
 small=ENR make-TR-CVB give-DETR-MID-ACT EX.NON1SG

“(The monk) used to make small (pieces of sweets) and give them to us.”

(Tsechu 2.401)

(23) *da tʰupɕum made nuntsuk tʰara maraj tsorun.*

da tʰup-s-ɕ-um ma-de nuntsuk
 now be.able-DETR-MID-INF NEG-ATT.SG that.kind.of

tʰara maraj=tsore=kun
 that.other bad=ENR=LOC

“Nowadays, it is not possible (anymore for me to go hiking) in that kind of place, a place that is so steep.”

(Conversation 29.18)

The enumerative clitic may be etymologically related to WT *tsho* “multitude, group”, which is attested as a plural marker both in Written Tibetan (Beyer 1992: 230) and Central Tibetan (Haller 2000a: 59–60). The second element likely represent the extended topic clitic =*re* (cf. § 10.2.2). However, Bunan speakers do not perceive the form as morphologically complex, which is why I treat it as a single morpheme in the following.

4.4.1.3 Semblative =*asti*

The semblative clitic has the phonological shape =*asti*. It indicates that the marked referent is similar to the referent that the speaker has in mind, but is not necessarily identical with it. In example (24) below, the speaker describes a plain area where trees are growing. He then goes on by specifying the identity of these trees by referring to them as *tɕaŋmabuɕa=asti* “similar to willow trees”. By attaching the semblative clitic to the noun, the speaker expresses that these trees look like willow trees and might in fact be willow trees, but that he is not entirely certain.

(24) *depdeptikun buɕa tsunati tsukɕi ni: tɕaŋmabuɕa asti tʰadzun.*

depdep=tiki=kun buɕa tsuna=tiki tsuk-s-ɕ-dzi
 plain=INDEF=LOC tree few=INDEF plant-DETR-MID-CVB.SG

ni: tɕaŋma-buɕa=asti tʰadzun
 EX.NON1SG willow-tree=SML there

“There, in a plain area, a few trees have been planted, similar to willow trees.”

(Conversation 87.108)

In example (25), the semblative clitic appears on the place name *dze/lsa* “Kullu”. The resulting form *dze/lsa=asti* “like in Kullu” functions as a modifier of the copula clause and refers to the great number of people in Kullu.

(25) *dze/lsa asti mi gwak apa!*

<i>dze/lsa=asti</i>	<i>mi</i>	<i>gwak</i>	<i>apa</i>
Kullu=SML	person	EX.NON1PL	AUTH

“There were as many people (at the festival) as there are in Kullu !”

(Conversation 22.19)

The semblative clitic can also occur on nouns that refer to points in time or denote time intervals. In this case, the morpheme expresses that the speaker is only vaguely specifying the time during which an event took place. This is illustrated by the following example, in which the semblative clitic occurs on the noun *luŋ* “autumn”.

(26) *æel ta men luŋ asti radza apa.*

<i>æel=ta</i>	<i>men</i>	<i>luŋ=asti</i>	<i>ra-dza</i>
summer=AVS	NEG.EQ.CJ	autumn=SML	come-PST.DIR.DJ.SG

apa

grandmother

“It was not summer though, he came around autumn, grandmother.”

(Conversation 14.79)

The clitic is also attested on adjectives that occur as copula complements. When occurring in this position, the semblative morpheme puts into perspective the quality denoted by the adjective. In sentence (27) below, for example, the morpheme occurs on the adjective *bjaj* “thin, tasteless” and indicates that the food is not entirely tasteless, but that there might somewhat too little salt in it.

(27) *tsʰa bjaj asti de la?*

<i>tsʰa</i>	<i>bjaj=asti</i>	<i>de=la</i>
salt	thin=SML	ATT.SG=Q

“Is there somewhat too little salt in it?”

(Conversation 55.130)

The same function of the clitic *=asti* is also attested in example (28) below, where the morpheme attaches to the converb form *nos-dzi* “(having) cleared up”. By adding the clitic to the converb form, the speaker presupposes that the sky may not be entirely clear, but that it is considerably less cloudy than the day before.

(28) *tʰan nam ɲoɕi asti ni: la?*

<i>tʰan</i>	<i>nam</i>	<i>ɲoɕ-dʒi=asti</i>	<i>ni:=la</i>
today	sky	clear.up-CVB=SML	EX=Q

“Has the sky somewhat cleared up today?”

(Conversation 63.52)

From a diachronic perspective, the semblative clitic *=asti* seems to go back to a root **as-*, to which the indefinite clitic *=tiki* has been attached. However, Bunan speakers do not analyze the form as morphologically complex anymore. The original meaning of the root **as-* cannot be reconstructed. It is conceivable that the morpheme may originally have been a noun with the meaning “kind” or “type”. The root **as-* also seems to underlie the terminative case clitic *=astok* (cf. § 4.4.4.6), which has been augmented with the dative clitic *=tok*, however. The semantic link between the semblative clitic *=asti* and the terminative case clitic *=astok* is still obvious, as the terminative cannot only express motion unto a certain location, but also give a vague indication of a location.

4.4.2 Definiteness / Indefiniteness

4.4.2.1 Definiteness marker

Definiteness is not obligatorily marked in Bunan. If a speaker believes that the identity of a referent has already been sufficiently established in a given discourse context, she / he may utter the respective noun without any overt definiteness marking. However, if the definite status of a given referent needs to be overtly encoded in a particular discourse context, definiteness may be marked with the clitic *=tsuk*. The clitic status of the morpheme mainly rests on one factor, viz. the low selectivity with regard to the word class of its morphological host. The morpheme *=tsuk* attaches to nouns, adjectives, quantifiers, and verbal participles. This low selectivity is a consequence of the fact that the morpheme always attaches to the last constituent of a noun phrase, regardless of the lexical class membership of the respective noun phrase constituent.

Apart from the definiteness marker *=tsuk*, Bunan also possesses another morpheme *=tsuk*, which serves as a marker of relative clause constructions. There can be little doubt that the two morphemes are diachronically related. It is conceivable that Bunan once possessed a demonstrative pronoun **tsuk*, which was then grammaticalized as a definiteness marker and a relativizing morpheme (cf. Heine & Kuteva 2002: 109–111, 113–115; Hendery 2012: 52). This section exclusively focuses on the definiteness marker *=tsuk*, whereas the relativizing clitic *=tsuk* is discussed in § 19.2.

In its function as a definiteness marker, *=tsuk* most commonly occurs on nouns, where it indicates that the marked referent is part of the common ground on which the

current conversation is based. In other words, the morpheme indicates that all discourse participants are familiar with the identity of the respective referent. As mentioned above, =*tsuk* attaches to the last constituent of a noun phrase. A number of example sentences are given in the following.

- (29) *lasmitsuk radzala nampo šešenpaŋ eli jentəʰok.*

lasmi=tsuk *ra-dza=la=nampo* *šešenpa-kun*
 woman=DEF come-PST.SG=ANTER=COM Sheshen-NZR=LOC

el-i=jentəʰok
 go-ACT=EQ.DJ.PL

“After the woman had come, we went to the Sheshenpa family together.”
 (Conversation 22.2)

- (30) *awatsuk ni: ʔakpo domdomti ramen.*

awa=tsuk=ni: *ʔakpo* *domdom=tiki* *ra-men=jen*
 father=DEF=TOP strong fat=INDEF come-INF=EQ.CJ

“As for the father, he is extremely fat.”
 (Conversation 36.105)

- (31) ... *ʰadzu gej dzordzortsuktoktəi gej pjatsi pʰur riŋdʒi pandʒi eldʒi riŋga na.*

ʰadzu *gej* *dzordzor=tsuk=tok=təi* *gej* *pjatsi* *pʰur*
 that eight stump=DEF=DAT=ABL eight bird ONOM

riŋ-dʒi *pan-ə-dʒi* *el-dʒi*
 say-CVB.SG fly-MID-CVB.SG go-PST.INFER.DJ.SG

riŋ-ka=na
 say-PROG.SG=HS

“... from (within) those eight stumps eight birds flew away saying ‘phur’, it is said.”
 (King Kesar 149)

The definiteness marker is also attested on nouns that are already marked as definite by some other syntactic constituent. One such instance has already been presented above in sentence (31). Another example is given in sentence (32) below, in which the noun *awa* “father” takes the definiteness clitic =*tsuk*, despite the fact that it is already marked as definite by the preceding possessive pronoun *ʔaj* “his”.

(32) *taj awatsuk terton jen.*

<i>taj</i>	<i>awa=tsuk</i>	<i>terton</i>	<i>jen</i>
3SG.GEN	father=DEF	terton	EQ.CJ

“His father had been a *terton*⁴⁵.”

(Tulshug Lingpa 34)

In addition, the morpheme *=tsuk* commonly attaches to adjectives that do not occur with an accompanying head noun. In such cases, marked adjectives attain nominal function. In example (33) below, the phrase *tə^hej=tsuk* thus translates into English as “the warm one”. The nominal status of an autonomous adjective marked with *=tsuk* is even more obvious in example (34), where the resulting form *kjuktsi=tsuk=ɛi* receives a plural marker.

(33) *thir, thir, tə^hejtsuk thirni!*

<i>thir-a</i>	<i>thir-a</i>	<i>tə^hej=tsuk</i>	<i>thir-ni</i>
take-IMP.SG	take-IMP.SG	warm=DEF	take-IMP.PL

“Take, take! (All of you), take from the warm one (i.e. curry)!”

(Conversation 55.120)

(34) *wa bronṭəum tsemetbutsaɛi kjuktsitsukɛi.*

<i>wa</i>	<i>bron-tə-um=jen</i>	<i>tsemet-butsa=ɛi</i>	<i>kjuktsi=tsuk=ɛi</i>
FOC	tease-TR-INF=jen	girl-boy=PL	small=DEF=PL

“And (the *turturbak*⁴⁶) teases (them), girls and boys, the small ones.”

(Tshechu 1.24)

Note that *kjuktsi=tsuk=ɛi* cannot be interpreted as a postnominal attribute of the preceding noun for two reasons. First, the plural clitic on the compound *tsemet-butsa=ɛi* indicates that this form is a self-contained noun phrase, as inflectional clitics are always attached to the last constituent of a noun phrase in Bunan. If the compound noun and the adjective were part of the same noun phrase, the plural clitic *=ɛi* would only occur once at the right end of it, yielding the construction ***[tsemet-butsa kjuktsi=tsuk=ɛi]_{NP}*. However, as indicated by the double asterisk, this noun phrase would be ungrammatical, since attributive adjectives are only allowed to occur in postnominal position when their head noun is

⁴⁵ In Tibetan Buddhism, the term *terton* (WT *gter ston* “treasure revealer”) refers to lamas that are said to have discovered hidden Buddhist texts, so called *terma* (WT *gter ma* “treasure”).

⁴⁶ The *turturbak* is one of the masked characters that appear during the religious Tshechu festival. Unlike all other characters, the *turturbak* does not participate in the dance performances, but roams the audience begging people for money.

indefinite (cf. § 9.2). Second, the syntactic autonomy of *kjuktsi=tsuk=ɛi* can be inferred from prosodic evidence. *tsemet-butsa=ɛi* and *kjuktsi=tsuk=ɛi* do not fall under one intonational contour, but constitute two separate intonation units. From the perspective of information structure, we are thus dealing with two separate antitopics that follow the focal predicate and can be translated into English as “... girls and boys, the small ones”.

As mentioned above, the definiteness marker can also be cliticized to verbal participles. This is illustrated in example (35) below. The form *jok-s-ɛ-i=tsuk* can be either translated into English as an adjective (“the bought ones”) or a relative clause (“the ones that we bought”).

(35) *jokɛitsuk kʰej de.*

<i>jok-s-ɛ-i=tsuk</i>	<i>kʰej</i>	<i>de</i>
buy-DETR-MID-ACT=DEF / REL	sweet	ATT.SG

“The bought ones (apples) are sweet. / The ones that we bought are sweet.”
(PA unrec 2)

Note that there are instances of the morpheme *=tsuk* being attached to the pre-nominal modifier instead of the head noun of a noun phrase. Such a construction is exemplified by the following sentence.

(36) *tedzitsuk tete giroktɛi tedzi jen.*

<i>tedzi=tsuk</i>	<i>tete</i>	<i>gi=tok=tɛi</i>	<i>tedzi</i>	<i>jen</i>
big=REL	grandfather	1SG=DAT=ABL	big	EQ.CJ

“The older grandfather (of yours) is older than me.” (lit. “(Your) grandfather, the one who is older,”)
(Conversation 36.112)

At first, the placement of the morpheme *=tsuk* seems to be at odds with the claim that the definite clitic always attaches to the last constituent of a noun phrase (see above). However, on closer examination it becomes clear that it is more appropriate to analyze *=tsuk* as an instance of the relativizing morpheme in the example above. Accordingly, the constituent *tedzi=tsuk* is best interpreted as a verbless restrictive relative clause. A more detailed discussion of such constructions is given in § 19.2.5.

4.4.2.2 Indefiniteness marker

Indefiniteness is marked with the clitic *=tiki*. The clitic has two allomorphs: a full form *=tiki* and a phonologically reduced form *=ti*. I have not been able to identify any conditioning factor that explains the distribution of the two allomorphs. Accordingly, they appear to stand in free variation. From a diachronic perspective, the indefiniteness clitic is

clearly derived from the numeral *tiki* “one”. I analyze the marker as a clitic rather than a suffix for two reasons. First, the morpheme is not selective with regard to its morphological host. Most commonly, it attaches to the last constituent of a noun phrase, no matter whether that constituent is a noun, adjective, quantifier, or verbal participle. However, the morpheme can also occur in other syntactic positions, as will be demonstrated below. Further evidence for the clitic status of *=tiki* comes from the inconsistent word status of the morpheme. The non-reduced form *=tiki* constitutes a morphological word consisting of the numeral root *tik-* followed by the modifier marker *-i*. However, when occurring at the end of a noun phrase, *=tiki* does usually not carry phrasal stress,⁴⁷ which is a defining property of phonological words. In this case, *=tiki* does not constitute a phonological word in its own right but rather forms a phonological word together with its morphological host (cf. § 2.6.4).

The indefiniteness clitic commonly marks referents whose exact identity does not need to be specified in the present discourse context. This function is illustrated by the following example sentences.

(37) *pasan̩ nimati radza.*

<i>pasan̩</i>	<i>nima=tiki</i>	<i>ra-dza</i>
Pasang	day=INDEF	come-PST.DIR.DJ.SG

“Pasang came (to visit me) one day.”

(Conversation 31.2)

(38) *tʰakuti kʰum tʰildok tsakdʒi bura!*

<i>tʰaku=tiki</i>	<i>kʰum</i>	<i>tʰil=tok</i>	<i>tsak-ø-dʒi</i>
knife=INDEF	pillow	bottom=DAT	put.inside-TR-CVB

but-a

put-IMP.SG

“Put a knife under your pillow and keep it there (if you are scared at night)!”

(Conversation 58.14)

In addition, the indefinite clitic marks referents that are not part of the common ground of the discourse participants and have to be established as discourse topics first. Example (39) below is taken from the beginning of a story in which the main protagonist, a Tibetan lama called Tulshug Lingpa, is introduced for the first time. The sentence illus-

⁴⁷ The frequent absence of a phrasal accent on the second syllable has doubtlessly given rise to the phonologically reduced form *=ti*.

trates the low selectivity of the clitic, which occurs once on a noun and once on a passive participle following a noun.

(39) *girok hun kjadza bek patanam botpamemeti tulɕuk liŋpa loɕiti lepɕi ni:*

<i>gi=tok</i>	<i>hun</i>	<i>kja-dza</i>	<i>bek</i>	<i>patanam</i>
1SG=DAT	news	become-PST.DIR.DJ.SG	well	Patanam.Valley
<i>botpa-meme=tiki</i>	<i>thulɕuk liŋpa</i>	<i>lot-s-ɛ-i=tiki</i>		
Tibet-monk=INDEF	Tulshug Lingpa	say-DETR-MID-ACT=INDEF		
<i>lep-s-ɛ-dzi</i>	<i>ni:</i>			
reach-DETR-MID-CVB.SG	EX.NON1SG			

“I came to know that a Tibetan monk, one called Tulshug Lingpa, had arrived in the Patanam Valley.”

(Tulshug Lingpa 3)

In example (40) below, *=tiki* is cliticized to the adjective *epo*, which follows the noun. In this sentence, we also find the phrase *tiki lama epo*, in which *tiki* precedes the noun. However, the syntactic position of the word clearly indicates that it does not represent the indefinite clitic *=tiki*. Rather, this lexeme represents the numeral “one”, which is occasionally exploited to express indefiniteness as well. According to my consultants, the use of the numeral instead of the indefinite clitic adds a sense of emphasis and exclusiveness. The difference between the syntactically independent word *tiki* and the bound post-clitic *=tiki* thus seems to parallel the difference between the numeral *one* and the article *a(n)* in English.

(40) *wa ɕamiliŋpaj mi: naŋnak tiki lama epo meme epoti daɕthup loɕi nindza.*

<i>wa</i>	<i>ɕamiling-pa=ki</i>	<i>mi=ki</i>	<i>naŋnak</i>	<i>tiki</i>	<i>lama</i>
FOC	Shamiling-NZR=GEN	person=GEN	inside	one	lama
<i>epo</i>	<i>meme</i>	<i>epo=tiki</i>	<i>daɕthup</i>	<i>lot-s-ɛ-dzi</i>	
good	monk	good=INDEF	Dathup	say-DETR-MID-CVB.SG	
<i>nindza</i>					
EX.PST.SG					

“And among the people from Shamiling, there was one good lama, a good monk, called Dathup.”

(Tulshug Lingpa 39)

The indefinite marker is also found on nouns that are preceded by a numeral higher than one and, accordingly, refer to several referents. In this case, *=tiki* expresses that the speaker is only providing an approximate number. When used in this function, the

indefinite marker sometimes occurs together in combination with the approximative clitic *=lek* (cf. § 4.4.1.1), as in example (43) below.

(41) ... *wa ranlopameme ŋami trumi tiki meme tal nampo gwak.*

<i>wa</i>	<i>ranlo-pa-meme</i>	<i>ŋa=mi</i>	<i>tru=mi=tiki</i>	<i>meme</i>
FOC	Ranglo-NZR-monk	five=person	six=person=INDEF	monk
<i>tal=nampo</i>	<i>gwak</i>			
3[SG]=COM	EX.NON1PL			

“... and with him there were monks from Ranglo, about five or six people.”
(Tulshug Lingpa 39)

(42) *man dza:re dzotte loḡiḡ gun justati laja nislati.*

<i>man</i>	<i>dza-de</i>	<i>dzot-te</i>	<i>lot-s-ḡ-i=jendzi</i>
medicine	eat-SUP	sit-VOL.SG	say-DETR-MID-ACT=EQ.DJ.SG
<i>gun</i>	<i>justa=tiki</i>	<i>laja</i>	<i>ni=sla=tiki</i>
winter	short.time=INDEF	month	two=month=INDEF

“‘I want to stay (in Manali) for medical treatment’, I said, ‘for a short time in winter, about a month or two.’”
(Conversation 22.362)

(43) *sumgjaklekti kjadza.*

<i>sum=gjak=lek=tiki</i>	<i>kja-dza</i>
three=day=APP=INDEF	become-PST.DIR.DJ.SG

“It were about three days (that he stayed here in Kullu).”
(Conversation 49.16)

The indefinite marker is often cliticized to quantifiers to intensify their meaning. This intensifying function is most probably not derived from the indefinite meaning of *=tiki* but rather from the individuating meaning of the numeral *tiki* “one”. Note that the clitic is exclusively attested in its phonologically reduced form *=ti* when cliticized to quantifiers.

(44) *mu ra:re riŋgare hoəmejti.*

<i>mu</i>	<i>ra-k-are</i>	<i>riŋ-k-are</i>
snow	come-INTR-PRS.DJ.SG	say-INTR-PRS.DJ.SG

hoəmej=tiki
very.much=INDEF

“She says that it is snowing heavily (in Lahaul).”

(Conversation 55.6)

(45) *sasati kʰej de!*

<i>sasa=tiki</i>	<i>kʰej</i>	<i>de</i>
different=INDEF	sweet	ATT.SG

“(This tea) is extremely sweet!” (lit. “This tea is sweet of a different kind!”)

(Conversation 55.89)

4.4.3 Number

In Bunan, the plurality of a noun can be encoded in three different ways: (1) by means of the plural clitic =*əi*, (2) by means of the ergative plural clitic =*tsʰi*, and (3) by means of the postnominal quantifiers =*nama* and *tsʰaŋi* / *tsʰaŋtsʰaŋi*. The three marking strategies are discussed in the following subsections.

4.4.3.1 The plural clitic =*əi*

The morpheme =*əi* is used to express the plurality of animate nouns. The morpheme =*əi* has two allomorphs. It surfaces as [=əi] after voiceless consonants and as [=zi] after vowels and resonants. Before describing the function of the plural morpheme in more detail, we first have to specify the position of the morpheme on the clitic-suffix continuum. In the following, I analyze the plural morpheme =*əi* as a clitic rather than a suffix. The clitic status of the morpheme is mainly based on its wide syntactic scope. Unlike suffixes, which can only have scope over the noun phrase that they are attached to, the plural clitic takes scope over all constituents of a coordinated noun phrase. This is illustrated by the following example sentence.

(46) *lasmi=naŋ kʰjwazok bardo ka.*

<i>lasmi=naŋ</i>	<i>kʰjwa=əi=tok</i>	<i>bardo</i>	<i>ka</i>
woman=CON	man=PL=DAT	hardship	ASS

“(It is) hard for both women and men (to work in the orchards).”

not: “*(It is) hard for the woman and the men (to work in the orchards).”

(Conversation 16.35)

As mentioned above, the plural clitic *=ɛi* can exclusively be used to indicate the plurality of animate nouns, that is human beings and animals. Occasionally, number marking may be extended to noun categories that do not belong to either of the two classes, but may still be regarded as living organisms, e.g. trees. This is the case in (47) below, where the plural clitic *=ɛi* is attached to the noun *buʔa* “tree”. However, most consultants rejected the use of a plural marker with the noun *buʔa* in elicitation and suggested the use of the postcliticized quantifiers *=nama* “all” or *tsʰaŋji* “all” instead (see § 4.4.3.3 below).

(47) ... *the mannaŋ tʰadzu tsore rikkata buʔazok pʰatɕumtsuk ka.*

<i>the</i>	<i>man=nan</i>	<i>tʰadzu=tsore</i>	<i>rik-ø-kata</i>
this	medicine=CON	that=ENR	bring-TR-FUT.CJ.SG
<i>buʔa=ɛi=tok</i>	<i>pʰa-tɕ-um=tsuk</i>	<i>ka</i>	
tree=PL=DAT	spray-TR-INF=REL	ASS	

“I will bring this medicine and all that stuff, (the things) to spray the trees.”

(Conversation 39.72)

Plural marking is not obligatory on nouns that refer to animate beings that prototypically occur in groups. Thus, animal designations such as *lama* “sheep”, *la* “goat”, and *hambu* “cow” are rarely marked with a plural clitic. In (48) below, for example, it is understood that the noun *lama* designates a flock of sheep rather than a single individual, as one does usually not take a single sheep to the grazing grounds in the mountains. The same is true for the noun *mi* “person”, which can often be translated as “people” even if no plural marker is attached to it. This is illustrated in example (49) below, where the noun *mi* occurs in its simple form but still triggers plural number agreement on the predicate.

(48) *butsa tiki lama rwakde eldzi.*

<i>butsa=tiki</i>	<i>lama</i>	<i>rwak-de</i>	<i>el-dzi</i>
boy=INDEF	sheep	graze-SUP	go-PST.INFER.DJ.SG

“A boy went to graze (a flock of) sheep.”

(The Fairies of Kullu 1.12)

(49) *tʰadzu mi noj dzuk liktsʰa.*

<i>tʰadzu</i>	<i>mi</i>	<i>noj</i>	<i>dzuk</i>	<i>lik-ø-tsʰa</i>
that	person	much	pain	do-TR-PST.DIR.DJ.PL

“Those people were very sick.”

(Tulshug Lingpa 45)

If a noun is modified by a syntactic constituent that indicates plurality, it cannot take an additional plural case clitic *=əi*, but has to appear in its unmarked form. This is illustrated by the following examples.

- (50) *hāj itəik hambu / **hambuəi ta:*

<i>hāj</i>	<i>itəik</i>	<i>hambu / **hambu=əi</i>	<i>ta:</i>
2SG.GEN	how.many	cow / **cow=PL	POSS.1SG

“How many cows do you have?”

(NN 10.3 [elicited])

- (51) *hoəmejti mi gwak, aj ama!*

<i>hoəmej=tiki</i>	<i>mi</i>	<i>gwak</i>	<i>aj ama</i>
very.much=INDEF	person	EX.NON1PL	gosh

“Gosh, there were so many people!”

(Conversation 22.46)

- (52) ... *sumi mirok rahul mathek.*

<i>sumi</i>	<i>mi=tok</i>	<i>rahul</i>	<i>mathek</i>
three	person=DAT	Rahul	except

“(It is possible to vote) for three people, not counting Rahul.”

(Conversation 27.12)

- (53) *eraŋ tsʰaŋidok notpa kjaltəi.*

<i>eraŋ</i>	<i>tsʰaŋi=tok</i>	<i>notpa</i>	<i>kjal-tə-i</i>
1PL.INCL	all=DAT	harm	swear-TR-ACT

“(The fairies) do harm to us all (when we disturb them).”

(The Fairies of Kullu 1.88)

4.4.3.2 The ergative plural clitic =tsʰi

The plurality of an argument can also be indicated by the ergative plural marker =tsʰi, which is the plural counterpart of the ergative singular marker =dzi. Like all other case markers, the morpheme =tsʰi is a clitic rather than a suffix. The clitic status of case markers rests on a number of factors that are discussed in § 4.4.4.

Like the plural clitic =əi, the ergative plural clitic =tsʰi only marks plurality on animate nouns, viz. nouns referring to human beings and animals. Inanimate nouns with plural reference are not marked with the ergative plural clitic =tsʰi but the ergative singular

clitic =*dzi*. The ergative plural clitic =*tsʰi* differs from the plural clitic =*ɛi* in one respect. While the plural clitic =*ɛi* cannot cooccur with other syntactic constituents that indicate plurality (e.g. quantifiers or numerals), the plural clitic =*tsʰi* obligatorily cooccurs with such expressions. This is illustrated in the following example sentences, in which the ergative plural clitic is attested in combination with a quantifier, a numeral, and two postnominal quantifiers. Note that all of the sentences below would become ungrammatical if the ergative plural clitic =*tsʰi* were replaced with the ergative singular clitic =*dzi*.

(54) *noj mitsʰi hel-tɕʰak taldok.*

<i>noj</i>	<i>mi=tsʰi</i>	<i>hel-tɕʰak</i>	<i>tal=tok</i>
many	person=ERG.PL	bring.away-TR-PRS.DJ.SG	3[SG]=DAT

“Many people invite him.”

(Conversation 36.85)

(55) *nidzi mitsʰi truj mitsʰi lektɕar datsʰa.*

<i>nidzi</i>	<i>mi=tsʰi</i>	<i>truj</i>	<i>mi=tsʰi</i>	<i>lektɕar_{LN}</i>
seven	person=ERG.PL	six	people=ERG.PL	lecture

da-ø-tsʰa

give-TR-PST.DIR.DJ.PL

“Six or seven people gave a lecture.”

(Conversation 39.4)

(56) *gjapo maskjastan tʰadzu mi jama tsʰanʰtsʰanʰitsʰi loɕi jentɕʰok ...*

<i>gjapo</i>	<i>ma-(s)kja-s=tan</i>	<i>tʰadzu</i>	<i>mi=ɲama</i>
king	NEG-become-NZR=CAUS	that	person=all

tsʰanʰtsʰanʰi=tsʰi *lot-s-ɕ-i=jentɕʰok*

all=ERG.PL say-DETR-MID-ACT=EQ.DJ.PL

“Since there was no king, all of those people were saying: ...

(King Kesar 11)

4.4.3.3 The postnominal quantifiers =*ɲama* and *tsʰanʰi*

The clitics =*ɛi* and =*tsʰi*, which have been discussed in the previous sections, are not the only way to mark the plurality of nouns in Bunan. Often, the function of encoding plural reference is fulfilled by the quantifiers =*ɲama* and *tsʰanʰi* ~ *tsʰanʰtsʰanʰi*, both of which can be translated into English as “all, everybody, everything, whole”. They thus differ from plural case clitics in having a lexical meaning that does not only indicate mere plurality but also a high degree of comprehensiveness.

=nama is a clitic rather than unbound morpheme. Although the disyllabic shape and the lexical meaning suggest that the quantifier is a morphological word, it never bears stress and thus lacks a crucial property of phonological words. Accordingly, it cannot occur as an unbound morpheme but attaches to a head noun with which it merges into one phonological word. The strong syntagmatic ties between *=nama* and its head noun are underlined by the fact that the initial consonant of the clitic assimilates to the final sound of its host. The allomorph [*=nama*] surfaces after nouns ending in a consonant, whereas the allomorph [*=jama*] occurs after nouns with a final vowel.

The quantifier *tsʰaŋi*, which often occurs in its reduplicated form *tsʰaŋtsʰaŋi*, is an independent word. Its word status rests on both morphological and phonological properties. The grammatical word status of *tsʰaŋi* is indicated by its morphological structure. The quantifier consists of a lexical root *tsʰaŋ-* followed by the modifier marker *-i* (cf. § 6.3.1) and thus conforms to the general morphological shape of modifiers in Bunan. The phonological word status of *tsʰaŋi* is reflected by its ability to bear phrasal stress. Interestingly, the reduplicated form *tsʰaŋtsʰaŋi* does not follow the iambic phrasal stress pattern that has been described in § 2.5.1. Rather, the word exhibits a trochaic stress pattern, with stress falling on the first syllable. This unusual placement of phrasal stress suggests that *tsʰaŋi* may be currently losing its status as an independent phonological word. This scenario seems even more probable given the fact that the quantifier already tends to be unstressed when occurring in postnominal position in fast speech.

The quantifiers *=nama* and *tsʰaŋi* serve very similar functions. They commonly indicate the plurality of a noun in absence of the plural clitic *=əi* or the ergative plural clitic *=tsʰi* (see § 4.4.3.1 and § 4.4.3.2 above). They can modify both animate and inanimate nouns, as illustrated in the examples below. This clearly distinguishes them from the plural clitic *=əi* and the ergative plural clitic *=tsʰi*, which only occur on animate nouns.

(57) *mi jama tɕʰospa le!*

<i>mi=nama</i>	<i>tɕʰos-pa</i>	<i>le</i>
person=all	dharma-NZR	make.IMP.SG

“Make all people practitioners of the dharma!”

(Tulshug Lingpa 154)

- (58) *epotsuk rik nama şwatsi tatdzala kʰare liktsum mej.*

epo=tsuk rik=nama şwatsi tat-ø-dza=la
 good=DEF field=all buckwheat put-TR-PST.SG=ANTER

kʰa=re lik-tə-um ma-ni
 what=EXT do-TR-INF NEG-EX.NON1SG

“Having sowed buckwheat on all the fertile fields, nothing is done (to ameliorate the unproductive soil).”

(Conversation 36.112)

- (59) *... hiŋ tsʰaŋtsʰaŋi gjar-təʰi gwajk.*

hiŋ tsʰaŋtsʰaŋi gjar-təʰi gwajk
 1PL.EXCL all be.scared-CVB.PL EX.NON1PL

“All of us had been scared.”

(Conversation 87.410)

- (60) *nimati tʰe pʰja-s tsʰaŋi indzok gjun-əi ramendzi!*

nima=tiki tʰe pʰja-s tsʰaŋi indzi=tok
 day=INDEF this talk-NZR all himself=DAT

gjun-s-ə-dzi ramen=jendzi
 need-DETR-MID-CVB.SG come-INF=EQ.DJ.SG

“One day, he will need all this speech (that he has recorded).”

(Conversation 25.32)

As argued above, the quantifier *tsʰaŋi* differs from *=nama* with regard to its status as an independent phonological word. This autonomous status of *tsʰaŋi* is reflected by the fact that the word may serve as an indefinite pronoun with the meaning “all, everybody, everything”. Consider the following examples.

- (61) *... lik tʰja:t tsʰaŋidok.*

lik=tʰir-ø-kata tsʰaŋi=tok
 make=send-TR-FUT.CJ.SG all=DAT

“... I will do this to all of you!”

(King Kesar 38)

(62) *tsʰaŋtsʰaŋi gwaŋtsʰa.*

tsʰaŋtsʰaŋi *gwaŋ-tsʰa*
all come.PL-PST.DIR.DJ.PL

“Everybody came.”

(Conversation 39.19)

(63) *da kʰjaktɕi eldzala tsʰaŋtsʰaŋi kjuma amaawazok ɕattɕipazi.*

da *kʰjak=tɕi* *el-dza=la* *tsʰaŋtsʰaŋi* *kjuma*
now here=ABL go-PST.SG=ANTER all home

ama-awa=ɕi=tok *ɕat-tɕ-i-pa=jendzi*
mother-father=PL=DAT tell-TR-ACT-NZR=EQ.DJ.SG

“Now, after he will have gone from here, he will tell everything to his parents at home.”

(Conversation 25.67)

Speakers often use *tsʰaŋi* and *=ɲama* simultaneously in one noun phrase when they wish to emphasize the magnitude of an amount. The two quantifiers always occur in the same order, with *=ɲama* directly following the noun and *tsʰaŋi* following *=ɲama*. This complies with the differing word status of *=ɲama* and *tsʰaŋi* as a clitic and an independent phonological word, respectively.

(64) *... leks ɲama tsʰaŋidok lotta ...*

leks=ɲama *tsʰaŋi=tok* *lot-ø-ta*
village=all all=DAT say-TR-PST.INFER.DJ

“... he said to the whole village:”

(King Kesar 17)

(65) *hitik pjatsi ɲama tsʰaŋtsʰaŋi nira panzak.*

hitik *pjatsi=ɲama* *tsʰaŋtsʰaŋi* *nira* *pan-ɕʰak*
other bird=all all daytime fly-MID-PRS.DJ.PL

“All other birds fly during the day.”

(The Lama and the Owl 18)

4.4.4 Case

The following subsections describe the inventory of case markers. Case markers are morphemes that specify what kind of role an argument plays in a given event. In other words, they tell us whether we have to think of an argument as the instigator of an event,

as the undergoer of an event, as the goal towards which an event is directed, as the source from which an event emerges, as the scene where an event takes place, etc. Accordingly, we may think of them as signposts that provide information about the internal dynamics of an event.

From a functional perspective, we may roughly distinguish between two major classes of case categories: (1) “grammatical cases” and (2) “locational cases”. Grammatical cases are cases that most often occur on core arguments⁴⁸ and serve the primary function of specifying the role that a core argument plays within a given event. Bunan possesses three grammatical cases: the absolutive (§ 4.4.4.1), the ergative (§ 4.4.4.2), and the dative (§ 4.4.4.3). Locational cases, in turn, are cases that occur on non-core arguments and specify spatial and temporal relations. Bunan possesses eight locational cases, which may be further subdivided into a group of cases expressing dynamic relations and a group of cases expressing static relations. The cases belonging to the former group are the ablative (§ 4.4.4.4), the allative (§ 4.4.4.5), and the terminative (§ 4.4.4.6). The cases pertaining to the latter group are the locative (§ 4.4.4.7), the interessive (§ 4.4.4.8), the comitative (§ 4.4.4.9), and the genitive (§ 4.4.4.10). The adessive (§ 4.4.4.11) cannot be classified within this dichotomy, as this case morpheme can both receive a dynamic and a static construal depending on the pragmatic context.

There is some functional overlap between the domains of grammatical and locational case marking. This is most obvious in case of the dative clitic =*tok*, which marks core arguments (e.g. the patient arguments of certain bivalent verbs and the recipient of trivalent verbs) as well as non-core arguments (e.g. the goal of a monovalent motion verbs). However, this overlap is a natural consequence of the fact that grammatical cases often develop from locational cases. For example, dative markers frequently derive from allatives (Heine & Kuteva 2002: 37–38), whereas ergative markers (or more generally markers of agentivity) often evolve from ablatives (Heine & Kuteva 2002: 29–30). Accordingly, the multifunctionality of the Bunan dative marker =*tok* may be interpreted as bearing witness to the ongoing functional reanalysis in the course of which the morpheme enters the domain of grammatical case marking, while gradually dropping out of the domain of locational case marking.

Before discussing the function of individual case morphemes, we have to discuss their status in the suffix-clitic continuum. As mentioned earlier, I analyze all case morphemes as clitics rather than suffixes. Their status as clitics rests on a number of properties that all case morphemes share. First, they are not selective with regard to the lexical class membership of their morphological host. This low selectivity is a consequence of

⁴⁸ See § 12.4.1.1 for a discussion and definition of this notion.

their fixed syntactic position. Case morphemes always occur at the end of the noun phrase and attach to its last syntactic constituent. This is demonstrated by the following example sentences, which contain instances of the dative marker =*tok*.

- (66) *taldok su! taldzi inok letkjata.*

tal=tok *su-a* *tal=dzi* *ini=tok*
 3[SG]=DAT ask-IMP.SG 3=ERG.SG 2[SG].HON=DAT

let-ø-kata

teach-TR-ASSER.NON1SG

“Ask him, he will teach you!”

(Conversation 13a.123)

- (67) *... beti tedzi tikok be tedzirok nanṭṭṣi dzotsa likṣidzi.*

be=tiki *tedzi=tiki=tok* *be* *tedzi=tok* *nanṭṭṣi* *dzot-sa*
 rock=INDEF big=INDEF=DAT rock big=DAT inside stay-place

lik-s-ḡ-i=jendzi

make-DETR-MID-ACT=EQ.DJ.SG

“... a rock, at a big one, at a big rock, inside of it he built a dwelling place.”

(Tshechu 2.212)

- (68) *tʰara waṇṭṭṣumtsuk kʰa lottṭṣum e, kjuks waṇṭṭṣumtsuktok?*

tʰara *waṇṭṭṣum=tsuk* *kʰa* *lotṭṣum=jen* *e*
 that.other take.out-TR-INF=REL what say-TR-INF=EQ.CJ hey

kjuks *waṇṭṭṣum=tsuk=tok*

ashes take.out-TR-INF=REL=DAT

“How does one call that (thing) to take out (that other stuff), (the thing) to take the ashes out (of the oven).”

(TD 33.1)

The second reason why case markers should be analyzed as clitics rather than suffixes is their wide syntactic scope. When a case clitic is attached to the last constituent of two coordinated noun phrases, the morpheme takes scope over both of them. This property clearly sets them apart from suffixes, which can only have scope over the noun

they have been suffixed to.⁴⁹ The wide syntactic scope of case markers is illustrated by the two following examples, in which the case clitics =*tok* and =*tsʰi* only occur once at the right end of the second noun phrase, but still take scope over both constituents.

(69) *lasmi=naŋ kʰjwazok bardo ka.*

<i>lasmi=naŋ</i>	<i>kʰjwa=ɕi=tok</i>	<i>bardo</i>	<i>ka</i>
woman=CON	man=PL=DAT	hardship	ASS

“(It is) hard for both women and men (to work in the orchards).”

(Conversation 16.35)

(70) *dordʒe=naŋ dzaŋpo=tsʰi pat brita.*

<i>dordʒe=naŋ</i>	<i>dzaŋpo=tsʰi</i>	<i>pat</i>	<i>bris-ø-ta</i>
Dorje=CON	Zangpo=ERG.PL	letter	write-TR-PST.INFER.DJ

“Dorje and Zangpo wrote a letter.”

(NN 24.9 [elicited])

A small number of case clitics further distinguish themselves from nominal suffixes through their ability to attach to other case morphemes and to form sequences of consecutive clitics. This phenomenon is discussed in more detail in § 4.4.4.3, § 4.4.4.4, and § 4.4.4.12.

4.4.4.1 Absolutive (unmarked)

In Bunan, the absolutive case is not overtly marked. Rather, the case is inherent to any noun to which no other case clitic has been attached. Accordingly, the absolutive is not overtly marked in the interlinear version. The absolutive fulfills a range of very different functions. Most commonly, it marks single core arguments⁵⁰ of monovalent verbs. When occurring in monovalent clauses, the absolutive is not associated with any particular semantic role. The examples below demonstrate that the case can be found on arguments that assume the semantic roles of agents, patients, and experiencers.

⁴⁹ In a coordinate noun phrase like *la=naŋ kjut-tsi* “the she-goat and the young wether”, the diminutive suffix *-tsi* only modifies the basic meaning of *kjut* “wether” but not *la* “she-goat”.

⁵⁰ See § 12.4.1.1 for a discussion of the notion of “core argument”.

(71) *tal ketdzi eldza.*

tal ketdzi el-dza
3[SG] alone go-PST.DIR.DJ.SG

“He went alone.”

(Conversation 14.16)

(72) *han guj dʒotkek?*

han guj dʒot-k-ek.
2[SG] where stay-INTR-PRS.CJ.SG

“Where are you staying?”

(TD 322.2 [elicited])

(73) *tal re dattɛi ma?*

tal=re dat-dʒi ma
3[SG]=EXT fall-PST.INFER.DJ.SG CNS

“He also fell (to his death), right?”

(Conversation 22.221)

(74) *nunaŋ lasmi re gjardʒi.*

nunaŋ lasmi=re gjar-dʒi
then woman=EXT be.scared-PST.INFER.DJ.SG

“Then, the woman even became afraid.”

(King Kesar 92)

The absolutive can also mark the less agentive argument in bivalent constructions. Again, it is the most common case attested in this syntactic function. The absolutive is not tied to a specific semantic role and occurs on arguments that assume the role of patients or stimuli. Consider the following examples.

(75) *taltʃi papu liktɛ^hak.*

tal=tʃi papu lik-tɛ^hak
3=ERG.PL socks make-TR-PRS.DJ.PL

“They make socks.”

(Conversation 16.8)

(76) *hiŋzok gjapo kʰukɕa gjut.*

<i>hiŋ=ɕi=tok</i>	<i>gjapo</i>	<i>kʰuk-s-ɕ-a</i>	<i>gjut</i>
1PL.INCL=PL=DAT	king	find-DETR-MID-SUP	need

“We need to find a king.”

(King Kesar 27)

(77) *... the meme tʰaŋmen gidzi the awa tʰaŋmen.*

<i>the</i>	<i>meme</i>	<i>tʰaŋ-ø-men</i>	<i>gi=dzi</i>	<i>the</i>	<i>awa</i>
this	monk	see-TR-PST.DIR.CJ	1SG=ERG.SG	this	father

tʰaŋ-ø-men

see-TR-PST.DIR.CJ

“... I have seen this monk, I have seen this father.”

(Conversation 36.90)

(78) *... kʰjak eraŋtʰi the purgitsʰa.*

<i>kʰjak</i>	<i>eraŋ=tʰi</i>	<i>the</i>	<i>pur-ø-kitsʰa</i>
here	1PL.INCL=ERG.PL	this	kill-TR-PST.DIR.1PL

“... (see) here, we have killed it.”

(King Kesar 271)

In addition, the absolutive occurs on theme arguments in three-participant events, as the following examples illustrate.

(79) *gidzi handok tʰaps likkata riŋgare.*

<i>gi=dzi</i>	<i>han=tok</i>	<i>tʰaps</i>	<i>lik-ø-kata</i>
1SG=ERG.SG	2[SG]=DAT	ritual	do-TR-FUT.CJ.SG

riŋ-k-are

say-INTR-PRS.DJ.SG

“He said, ‘I shall perform a ritual for you.’”

(Tulshug Lingpa 59)

(80) *ini: nambar girok du ne!*

<i>ini=ki</i>	<i>nambar_{LN}</i>	<i>gi=tok</i>	<i>da-ku-a</i>	<i>ne</i>
2[SG].HON=GEN	number	1SG=DAT	give-UND-IMP.SG	SUG

“Why don’t you give me your number!”

(Conversation 13a.125)

(81) *gidzi t̥ataramdzi t̥i twagek.*

<i>gi=dzi</i>	<i>t̥ataram=dzi</i>	<i>t̥i</i>	<i>twa-k-ek</i>
1SG=ERG.SG	sickle=ERG.SG	grass	mow-INTR-PRS.CJ.SG

“I am mowing grass with a sickle.”

(TD 148.5 [elicited])

The absolutive case may also occur on agent arguments of bivalent and trivalent constructions. This is possible because Bunan exhibits a split-ergative system that licenses the occurrence of absolutive marking on agentive arguments. The phenomenon is discussed in more detailed in § 4.4.4.2 below.

Further, the absolutive is also attested on arguments that refer to locations. However, the absolutive can only assume this function in combination with nouns that refer to highly specific locations, as in (82) and (83) below. The place name *mana:li*, for example, can only refer to the village of the same name in the upper Kullu Valley. The noun *kjuma* likewise has a definite reference because a person usually only has one place that she / he calls “home”. However, the noun *leks* “village” is much more unspecific in this respect, as it can basically refer to any village. Hence, its locative form is expressed with the dative clitic *=tok* (cf. § 4.4.4.3). If this case marker were not attached to the noun, the existential copula *ni:* would take the noun *leks* as its subject, which would result in a sentence with an odd meaning, as permanent locations are predicated with the equative copula *jen-* rather than the existential copula *ni-* (cf. § 14.2.2).

(82) *mana:li dzot̚i gwak.*

<i>mana:li</i>	<i>dzot̚i</i>	<i>gwak</i>
Manali	stay-ACT	EX.NON1PL

“They live in Manali.”

(Conversation 14.141)

(83) *gi kjuma na:*.

<i>gi</i>	<i>kjuma</i>	<i>na:</i>
1SG	home	EX.1SG

"I am at home."

(Conversation 29.13)

(84) *tʰadzu ni: lekstok ni:*.

<i>tʰadzu=ni:</i>	<i>leks=tok</i>	<i>ni:</i>
that=TOP	village=DAT	EX.NON1SG

"As for her, she is in the village."

(Conversation 36.29)

Finally, the absolutive can mark arguments that assume the semantic role of an instrument. This function may also be fulfilled by the ergative or the comitative case (cf. § 4.4.4.2 and § 4.4.4.9). Absolutive marking on instrument nouns is only permissible if the cooccurring patient argument is marked with the dative case, as in (85) and (86). If the patient argument stands in the absolutive case, as in (87), an instrument noun occurring in the same clause has to be marked with either the ergative or the comitative case.

(85) ... *gidzi puʂak ralqiti kʰetdʒi*

<i>gi=dzi</i>	<i>puʂa=tok</i>	<i>ralqi=tiki</i>	<i>kʰet-ø-dʒi</i>
1SG=ERG.SG	head=DAT	sword=INDEF	beat-TR-CVB

"... having beaten (your) head with a sword"

(King Kesar 38)

(86) *wa mi jama tsʰaŋi tʰadzu ʃakar rikdʒi ʃakar kʰetdʒi taldok.*

<i>wa</i>	<i>mi=jama</i>	<i>tsʰaŋi</i>	<i>tʰadzu</i>	<i>ʃakar</i>	<i>rik-ø-dʒi</i>
FOC	person=all	all	that	axe	bring-TR-CVB

<i>ʃakar</i>	<i>kʰet-ø-dʒi</i>	<i>tal=tok</i>
axe	beat-TR-CVB	3[SG]=DAT

"And having brought that axe, the people hit him with the axe."

(Conversation 87.405)

(87) *taldzi t̥ataramdzi / t̥ataramɲampo / **t̥ataram t̥ei twa:re.*

<i>tal=dzi</i>	<i>t̥ataram=dzi / t̥ataram=ɲampo / **t̥ataram</i>	<i>t̥ei</i>
3=ERG.SG	sickle=ERG.SG / sickle=COM / **sickle	grass

twa-k-are

mow-INTR-PRS.DJ.SG

“He is cutting grass with a sickle.”

(TD 148.11 [elicited])

4.4.4.2 Ergative =dzi / =tshi

The ergative is marked with the clitics =dzi in the singular and =tshi in the plural. The singular form =dzi has four allomorphs: [=tsi] after voiceless plosives, [=si] after the fricative /s/, [=dzi] after the nasal /n/, and [=zi] after all other non-vocalic resonants and vowels. The plural form =tshi surfaces as [=tshi] in most environments except after the fricative /s/, where it is reduced to [=si] (see § 3.2.1.2 for a more elaborate discussion of the morphophonological processes that condition these allomorphs).

The most common grammatical function of the ergative is the marking of agent arguments of bivalent or trivalent predicates. As mentioned in the previous section, Bunan exhibits a split-ergative system based on tense. This means that ergative marking on agent arguments is only obligatory in the past tense, where the majority of agent arguments can exclusively be marked with the ergative.⁵¹ In the non-past tenses, agent arguments can take either ergative or absolutive marking, with the distribution of the two cases being governed by pragmatic factors.

In the present tense, the absolutive case is pragmatically unmarked and represents the default choice for marking an agent argument in a bivalent clause. The ergative, on the other hand, is pragmatically marked and portrays the agent as the exclusive instigator of an action. The utterances in (88) and (89) below illustrate the pragmatic nature of differential argument marking in the present tense. The two sentences have a similar syntactic structure, that is to say, they both contain a noun / pronoun referring to a definite agent followed by the interrogative pronoun *kʰa* “what” and an inflected form of the verb

⁵¹ Despite the fact that ergative alignment is a common phenomenon in the past tense domain, one should not forget that plurivalent clauses do not consistently bear witness to ergative alignment in past tense contexts. For one thing, agent arguments of bivalent predicates that follow the intransitive conjugation can either be marked for the absolutive or the ergative case. Accordingly, clauses that are based on such predicates may bear evidence to neutral alignment (S / A / O = absolutive). For another thing, there are bivalent predicates that assign the dative rather than the absolutive to their patient arguments. Clauses that are based on such predicates may thus display accusative alignment (S / A = absolutive; O = dative) or tripartite alignment (S = absolutive; A = ergative; O = dative). A more thorough discussion of different clause structures and different alignment types can be found in § 16.5 and § 17.2, respectively.

lik-tɕ-um “to do”. The only major morphosyntactic difference between the two examples is that the agent in (88) stands in the unmarked absolutive case, whereas the agent in (89) is marked for the ergative case.

(88) *awa kʰa lik-tɕ-are?*

<i>awa</i>	<i>kʰa</i>	<i>lik-tɕ-are</i>
father	what	do-TR-PRS.DJ.SG

“What is father doing?”

(Conversation 53.3)

(89) *handzi kʰa lik-tɕ-ek?*

<i>han=dzi</i>	<i>kʰa</i>	<i>lik-tɕ-ek</i>
2=ERG.SG	what	make-TR-PRS.CJ.SG

“And what are you doing?”

(Conversation 68.6)

The reason for this difference in case marking on the agent argument becomes clear when we consider the pragmatic contexts in which the two sentences were uttered. The utterance given in (88) was recorded during a conversation between several members of my host family who had been sitting in the living room for some time, while the family father and his nephew were preparing dinner in the kitchen. At some point, the nephew came back into the living room and sat down without saying anything. The people sitting there then asked him the question given in (88). In this sentence, the agent *awa* “father” stands in the zero-marked absolutive case, i.e. the pragmatically unmarked form. The person who asked the question obviously did not think that it was necessary to emphasize or disambiguate the agentive role of her father in this statement. Considering the pragmatic context in which the sentence occurred, this is not surprising. All family members except the family father were present in the living room. Thus, there was no other person working in the house from which the family father needed to be distinguished. At the same time, it was obvious to all family members that father was still busy doing something, as he would have been expected to join his family in the living room otherwise. From the perspective of information structure, we may thus analyze (88) as a question with the agent argument *awa* as a topical constituent and the indefinite pronoun *kʰa* and the predicate *lik-tɕ-are* as focal constituents.

The sentence in (89) was uttered in a rather different pragmatic context. The utterance was recorded during a phone conversation between two women, my host mother and her sister-in-law. The conversation had been going on for a few minutes. During that

time, my host mother had been telling her sister-in-law about what she herself and all other family members had been doing recently. Then, she shifted the topic of the conversation by asking her sister-in-law the question given in (89). In this sentence, the agent argument of the predicate is marked with the ergative clitic =*dzi*. In this context, the ergative case clearly fulfills the pragmatic function of marking a contrastive focus. After having been talking about herself and her family, my host mother was eager to hear what her sister-in-law was doing and how her family members were. Thus, she did not use the pragmatically unmarked sentence form *han kʰa lik-tɕ-ek*, which has a primary focus on the interrogative pronoun and the predicate, but the pragmatically marked form *han=dzi kʰa lik-tɕ-ek*, which has a contrastive focus on the second person pronoun.⁵²

In the domain of future tense reference, differential ergative marking has the same pragmatic effect. This is illustrated in (90) below, which has been taken from a short conversation that took place between two of my main consultants – an old man and his much younger nephew – during dinner. We had almost finished our plates when the old man wanted to get up to go to the kitchen and bring us more food. In this moment, his nephew uttered the sentence given in (90). In this example, the ergative case on the first person singular pronoun emphasizes the agentive role that the speaker intends to assume. The nephew pointed out that he himself would get the food and thus urged his grandfather to remain seated without explicitly ordering him to do so.

The sentence given in (91) is taken from a conversation that again involved the same two persons, who were describing the annual *tsʰeɕu* festival for me. At some point, the old man stood up and told us that he was going to prepare food. In this sentence, the first person singular is not marked with the ergative clitic, as the pragmatic context did not demand an overt marking of the agent argument. We were staying at the old man's house and it was understood that he, who was hosting us, would consider it his duty to provide us with food and did not expect us to help him with preparing the dinner. In other words, there was no need for him to emphasize that he was going to cook food, as this was simply what was being expected in that situation.

⁵² Consider the two following English sentences, in which the same differentiation is marked by intonation: "WHAT are you DOING? (focus on interrogative pronoun and predicate) vs. "What are YOU doing?" (contrastive focus on second person pronoun).

(90) *gidzi rikkata kwaks!*

<i>gi=dzi</i>	<i>rik-ø-kata</i>	<i>kwak-s</i>
1SG=ERG.SG	bring-TR-FUT.CJ.SG	dip.into-NZR

“It is me who will bring the gravy (you sit down again)!”

(SA unrec 13)

(91) *pʰjani ne inɪzi! da:stok gi tʰukpa likkata.*

<i>pʰja-ni</i>	<i>ne</i>	<i>ini=ɛi</i>	<i>da:stok</i>	<i>gi</i>	<i>tʰukpa</i>
speak-IMP.PL	SUG	2.HON=PL	meanwhile	1SG	soup

lik-ø-kata
make-TR-FUT.CJ.SG

“You talk (together)! I will make soup in the meantime.”

(Tshechu 2.409)

As mentioned above, Bunan exhibits a split-ergative system based on tense. Accordingly, differential argument marking is much less common in the past tense domain, where verbs belonging to the transitive conjugation exclusively assign the ergative case to their agent argument. The example sentences provided below would all become ungrammatical if their agent argument would stand in the absolutive rather than the ergative case.

(92) *taldzi len epo likdza kʰjak radzi.*

<i>tal=dzi</i>	<i>len</i>	<i>epo</i>	<i>lik-ø-dza</i>	<i>kʰjak</i>
3=ERG.SG	work	good	do-TR-PST.DIR.DJ.SG	here

ra-dzi
come-CVB.SG

“He did good work after he had come here.”

(Conversation 25.53)

(93) *gompa dzoʔj tʰaŋ ma-tʰaŋ hiŋtʰi.*

gompa *dzot-i* *tʰaŋ* *ma-tʰaŋ-ø-men*
 monastery stay-ACT see NEG-see-TR-PST.DIR.CJ

hiŋ=tsʰi

1PL.EXCL=ERG.PL

“We did not see anybody who lived at the monastery.”

(Tshechu 2.398)

(94) *gidzi kulik jotmen.*

gi=dzi *kulik* *jot-ø-men*
 1SG=ERG.SG key lose-TR-PST.DIR.CJ

“I lost the key (unintentionally).”

(TG 13.10 [elicited])

(95) *ruttsi kjum ɕikdza.*

rut=dzi *kjum* *ɕik-ø-dza*
 flood=ERG.SG house tear.down-TR-PST.DIR.DJ.SG

“The flood destroyed the house.”

(TD 131.15 [elicited])

As the sentences above illustrate, verbs belonging to the transitive conjugation do not allow differential argument marking on agent arguments in the past tense. The examples also demonstrate that ergative marking is not sensitive to semantic parameters such as volitionality or animacy in Bunan. In examples (94) and (95), the role of the agent argument is fulfilled by a non-volitional agent and an inanimate force, respectively. Nevertheless, both arguments take ergative marking.

While not depending on semantic factors such as volitionality and animacy, ergative marking is sensitive to differences in semantic transitivity (Hopper and Thompson 1980). As a consequence, a number of bivalent predicates with low semantic transitivity allow differential ergative marking in the past tense. The underlying semantic factors of low semantic transitivity, which determine the class membership of bivalent predicates, are not discussed at this point, as they are described in § 12.4 in more detail. Here, we exclusively focus on the phenomenon of differential argument marking, which is exemplified based on the verbs *tʰuŋ-men* “to drink” and *dza-men* “to eat” below.

(96) *gi ja: dza twat.*

<i>gi</i>	<i>ja:</i>	<i>dza</i>	<i>twat</i>
1SG	yesterday	tea	drink.PST.DIR.CJ

"I drank tea yesterday."

(TG 7.9 [elicited])

(97) *taldzi sita astok tun dza ...*

<i>tal=dzi</i>	<i>sit-a=astok</i>	<i>tun-dza</i>
3=ERG.SG	die-MID-SUP=TERM	drink-PST.DIR.DJ.SG

"He drank (alcohol) until he died ..."

(Conversation 79.10)

(98) *hi dzamen dzat.*

<i>hi</i>	<i>dzamen</i>	<i>dza-et</i>
1PL.EXCL	food	eat-PST.DIR.CJ

"We have eaten."

(Conversation 48.16)

(99) *gidzi dzamen dzat.*

<i>gi=dzi</i>	<i>dzamen</i>	<i>dza-et</i>
1SG=ERG.SG	food	eat-PST.DIR.CJ

"It was me who ate."

(TD 8.6 [elicited])

The choice between the absolutive and ergative case is governed by the same pragmatic factors that have been described for the present and future tenses. The absolutive is pragmatically unmarked, whereas the ergative is pragmatically marked and portrays the marked referent as a focal argument.

The material that we have discussed so far suggests that all agent arguments are either obligatorily marked for ergative case in the past tense or may at least take optional ergative marking. However, there are two bivalent predicates that fail to assign the ergative case to their agent argument even when inflected for past tense: the verb *lep-tə-um* "to reach, to arrive at" and the light verb construction *dzuk lik-tə-um* "to be ill, to be in pain" (lit. "to make pain / to make sickness"). Two example sentences that contain the predicate *lep-tə-um* are given in the following.

(100) *ini lepmen šašur gompak lepmen malepmen?*

<i>ini</i>	<i>lep-ø-men</i>	<i>šašur gompa=tok</i>
2[SG].HON	reach-TR-PST.DIR.CJ	Shashur Gompa=DAT
<i>lep-ø-men</i>	<i>ma-lep-ø-men</i>	
reach-TR-PST.DIR.CJ	NEG-reach-TR-PST.DIR.CJ	

“Have you ever been to Shashur Gompa?”

(Tshechu 1.1)

(101) *rinpotše lepdza la tʰan?*

<i>rinpotše</i>	<i>lep-ø-dza=la</i>	<i>tʰan</i>
Rinpoche	arrive-TR-PST.DIR.DJ.SG	today

“Has the Rinpoche arrived today?”

(Conversation 71.4)

In the examples given above, it is not possible to attach the ergative clitic =*dzi* to the respective agent arguments. The inability of the verb *lep-tə-um* to assign the ergative case to its agent argument can be interpreted as a consequence of the predicate’s low semantic transitivity. The predicate does not denote a prototypical transitive scenario in which an agent argument acts upon a patient argument, but rather profiles the endpoint of a movement process. The argument structure of *lep-tə-um* thus corresponds to the argument structure of atelic motion verbs like *ra-men* “to come” and *el-men* “to go”, which may occur with an additional location argument, but still do not assign the ergative case to their agent argument in such constructions (cf. § 16.4).

The following example sentences illustrate the use of the light verb construction *dzuk lik-tə-um* “to be in pain, to be sick”.

(102) *dzuk likmen gi.*

<i>dzuk</i>	<i>lik-ø-men</i>	<i>gi</i>
illness	make-TR-PST.DIR.CJ	1SG

“I was sick.”

(Conversation 74.63)

(103) *tʰadzu mi noj dzuk liktʰa.*

<i>tʰadzu</i>	<i>mi</i>	<i>noj</i>	<i>dzuk</i>	<i>lik-ø-tʰa</i>
that	person	much	illness	make-TR-PST.DIR.DJ.PL

“Those people were severely ill.”

(Zhangzhung 45)

As the two examples illustrate, the verb *lik-tə-um* fails to assign the ergative case to the subject in this particular light verb construction. The reason for this idiosyncratic behavior seems to be the following: In the case of the light verb construction *dzuk lik-tə-um*, there is an obvious mismatch between the morphosyntactic strategy used to encode the relevant event and the semantics of the event. From the perspective of morphosyntax, the sick person is portrayed as an agent-like argument, whereas the sickness is depicted as a patient-like argument.⁵³ From a semantic perspective, the situation is rather different, as we are dealing with an experiencer argument (sick person) and a stimulus argument (sickness). Such an event involves a “bidirectional transmission of force”, as Croft (2012: 233) argues, since the sick person consciously perceives the sickness, whereas the sickness affects the physical and mental condition of the sick person. Accordingly, the agent arguments in sentences (102) and (103) only exhibit a low degree agentivity, which is why they fail to take ergative marking.

A low degree of agentivity thus seems to be the only semantic parameter that may potentially inhibit the occurrence of the ergative case on an argument that is portrayed as being the agent argument of a construction. However, this should not be taken to mean that all subjects that exhibit a low degree of agentivity fail to take ergative marking. As a matter of fact, the light verb construction *dzuk lik-tə-um* is the only light verb construction that fails to assign the ergative case to its agent argument in the past tense. The argument of the light verb construction *hit lik-tə-um* “to remember” (lit. “to make memory”) always takes ergative marking when the predicate refers to a past tense event (cf. example below) even though the act of remembering is not a prototypically controllable action.

(104) *gidzi hit likmen.*

<i>gi=dzi</i>	<i>hit</i>	<i>lik-ø-men</i>
1SG=ERG.SG	memory	make-TR-PST.DIR.CJ

“I remembered.”

(TD 297.3 [elicited])

⁵³ Note that we can identify the “sick person” as the agent argument, as it is able to trigger syntactic plural agreement on the verb in example (103).

Accordingly, it is not possible to establish clear parameters that account in detail for the presence or absence of ergative marking on agent arguments. Rather, the distribution of ergative marking in constructions such as the ones discussed above is idiosyncratic. The table below summarizes the distribution of differential case marking on agent arguments in a slightly simplified manner.

Table 43: Differential case marking on agent arguments

		Tense		
		Past	Present	Future
Conjugation	INTR	ERG ~ ERG / ABS	ERG / ABS	ERG / ABS
	MID	ERG ~ ERG / ABS	ERG / ABS	ERG / ABS
	TR	ERG	ERG / ABS	ERG / ABS

There are two additional factors that influence the permissibility of differential case marking on agent arguments. One of these factors is person deixis. There is one specific constellation of person values on agent and patient arguments that makes differential case marking on agent arguments impossible. If the agent argument of a bivalent verb is a third person and the corresponding patient argument is a first or second person, the agent argument can only be marked with the ergative case, as the example sentences below demonstrate.

(105) *gi / gidzi taldok k^hettæk.*

gi / gi=dzi *tal=tok* *k^het-tæ-ek*
 1SG / 1SG=ERG.SG 3[SG]=DAT beat-TR-PRS.CJ.SG

“I am beating him / It is me who is beating him.”

(TD 8.34 [elicited])

(106) *gi / gidzi handok k^hettæk.*

gi / gi=dzi *han=tok* *k^het-tæ-ek*
 1SG / 1SG=ERG.SG 2[SG]=DAT beat-TR-PRS.CJ.SG

“I am beating you / It is me who is beating you.”

(TD 8.35 [elicited])

(107) *han / handzi girok kʰettɕare.*

<i>han / han=dzi</i>	<i>gi=tok</i>	<i>kʰet-tɕ-are</i>
2[SG] / 2=ERG.SG	1SG=DAT	beat-TR-PRS.DJ.SG

“You are beating me / It is you who is beating me.”

(TD 13.5 [elicited])

(108) *han / handzi taldok kʰettɕare.*

<i>han / han=dzi</i>	<i>tal=tok</i>	<i>kʰet-tɕ-are</i>
2[SG] / 2=ERG.SG	3[SG]=DAT	beat-TR-PRS.DJ.SG

“You are beating him / It is you who is beating him.”

(TD 13.4 [elicited])

(109) *taldzi / **tal girok kʰettɕare.*

<i>tal=dzi / **tal</i>	<i>gi=tok</i>	<i>kʰet-tɕ-are</i>
3=ERG.SG / **3[SG]	1SG=DAT	beat-TR-PRS.DJ.SG

“He is beating me.”

(TD 13.8 [elicited])

(110) *taldzi / **tal handok kʰettɕare.*

<i>tal=dzi / **tal</i>	<i>han=tok</i>	<i>kʰet-tɕ-are</i>
3=ERG.SG / **3[SG]	2[SG]=DAT	beat-TR-PRS.DJ.SG

“He is beating you.”

(TD 13.7 [elicited])

(111) *tal / taldzi taldok kʰettɕare.*

<i>tal / tal=dzi</i>	<i>tal=tok</i>	<i>kʰet-tɕ-are</i>
3[SG] / 3=ERG.SG	3[SG]=DAT	beat-TR-PRS.DJ.SG

“He_i is beating him_j / It is him_i who is beating him_j.”

(TD 13.6 [elicited])

The second factor that affects differential case marking on agent arguments is related to animacy. Inanimate agent arguments always have to be marked with the ergative case and cannot occur in the unmarked absolutive form. This constraint is illustrated by the following two examples.

(112) *landzi pʰa tʰirtɕi jenmen de tes ra:re girok ni: ka.*

<i>lan=dzi</i>	<i>pʰa=tʰir-tɕ-i</i>	<i>jen-men</i>	<i>de</i>
wind=ERG.SG	scatter=send-TR-ACT	EQ-INF	ATT.SG
<i>tet-s</i>	<i>ra-k-are</i>	<i>gi=tok=ni:</i>	<i>ka</i>
think-NZR	come-INTR-PRS.DJ.SG	1SG=DAT=TOP	ASS

“The wind must be scattering (the sand in the Shakas Nala), that is what I think.”
 (Many people believe that this is the doing of a demon.)
 (Conversation 87.86)

(113) *ridzi / **ri kjum ɕikka ni:*

<i>ri=dzi / **ri</i>	<i>kjum</i>	<i>ɕik-ka</i>
avalanche=ERG.SG / **avalanche	house	collapse-PROG
<i>ni:</i>		
EX.NON1SG		

“The avalanche is causing the house to collapse.”
 (TD 23.3 [elicited])

As noted in the beginning of this subsection, the ergative does not only mark agent arguments, but may also occur on arguments that assume the semantic role of an instrument. We can clearly distinguish these instances of instrumental ergative marking from agent ergative marking, as the instrumental ergative may be replaced with the comitative case clitic =*nampo* and in some cases even with the unmarked absolutive. Absolutive marking on an instrumental noun is, however, only possible if the corresponding patient argument is marked for the dative case (cf. § 16.5.1).

(114) *swiserlenɔ kʰimsa laktsi tʰumtɕum la?*

<i>swiserlenɔ_{LN}</i>	<i>kʰimsa</i>	<i>lak=dzi</i>	<i>tʰum-tɕ-um=jen=la</i>
Switzerland	dirt	hand=ERG.SG	wrap-TR-INF=EQ.CJ=Q

“Do you sweep the floors in Switzerland by hand?”
 (DP unrec 21)

(115) *taldzi t̪ataramdzi / t̪ataramɲampo / **t̪ataram t̪ei twa:re.*

<i>tal=dzi</i>	<i>t̪ataram=dzi / t̪ataram=ɲampo / **t̪ataram</i>	<i>t̪ei</i>
3=ERG.SG	sickle=ERG.SG / sickle=COM / **sickle	grass

twa-k-are

mow-INTR-PRS.DJ.SG

“He is cutting grass with a sickle.”

(TD 148.11 [elicited])

(116) *... gidzi puʂak ralqiti kʰetd̪zi ...*

<i>gi=dzi</i>	<i>puʂa=tok</i>	<i>ralqi=tiki</i>	<i>kʰet-ø-d̪zi</i>
1SG=ERG.SG	head=DAT	sword=INDEF	beat-TR-CVB

“... having beaten (your) head with a sword ...”

(King Kesar 38)

4.4.4.3 Dative =tok

The dative case is marked with the clitic =tok. The marker =tok is subject to the morphophonological alternations discussed in § 3.2.1.1 and surfaces as [=tɔʔkʰ] after voiceless sounds, as [=dɔʔkʰ] after non-vocalic resonants, and as [=ɔʔkʰ] after vowels. In the latter position, the morpheme sometimes only surfaces as a glottalization and lowering of the vowel of the preceding open syllable, e.g. *puʂa=tok* [puʂaɔʔkʰ ~ puʂaʔkʰ]. If the clitic is attached to an open syllable ending in the vowel /i/, this vowel is often changed to [ɔ], e.g. *amtsi=tok* [amtsiɔʔkʰ ~ amtsɔʔkʰ] “on the way”. Such contracted forms are especially common in fast speech. When the dative clitic =tok is preceded by the plural clitic =ɛi, the two morphemes always merge into a single portmanteau allomorph that has two realizations: [=ɛɔʔkʰ] after voiceless consonants and [=zɔʔkʰ] after non-vocalic resonants and vowels.

The clitic =tok represents one of the functionally most versatile morphemes in the case inventory of Bunan and is only surpassed by the absolutive case in this regard. The case clitic can occur on core arguments of two-participant and three-participant events. In combination with bivalent clauses, the dative case may mark two different types of core arguments. For one thing, the case morpheme commonly occurs on experiencer arguments. Such experiencer constructions correspond to what Bickel (2001) has referred to as “experiencer-as-goal” constructions, that is to say, constructions in which experiencers are encoded with the same case morphology that can also be found on patient and location arguments (see below).

Experiencer verbs that follow the intransitive conjugation can exclusively assign the dative case to their experiencer arguments. Ergative marking is not possible in such constructions. This is illustrated by the following examples.

(117) *girok na pura: tankjare na da!*

<i>gi=tok=na</i>	<i>pura:</i>	<i>tant-k-are=na</i>	<i>da</i>
1SG=DAT=HS	fully _{LN}	see-INTR-PRS.DJ.SG=HS	now

“‘I can fully see it now!’ he said.”

(Tulshug Lingpa 163)

(118) *girok gran p^hoktsa.*

<i>gi=tok</i>	<i>gran</i>	<i>p^hok-dza</i>
1SG=DAT	stone	be.hurt-PST.DIR.DJ.SG

“I was hurt by a stone.”

(TD 23.1 [elicited])

Experiencer verbs that pertain to the transitive conjugation, on the other hand, can usually either assign the dative or the ergative case to their experiencer arguments. The choice between dative case and ergative case is governed by the same pragmatic factors that have been described in the preceding section for the opposition of absolutive and ergative case marking on agent arguments. Consider the following example sentences.

(119) *hitik_{ok} mar mak^hukt_{ok}^hak.*

<i>hitik=gi=tok</i>	<i>mar</i>	<i>ma-k^huk-t_{ok}^hak</i>
other=PL=DAT	butter	NEG-find-TR-PRS.DJ.PL

“The others don’t find butter.”

(The Lama and the Owl 54)

(120) *gidzi kulik k^hukt_{ok}ipajendzi.*

<i>gi=dzi</i>	<i>kulik</i>	<i>k^huk-t_{ok}-i-pa=jendzi</i>
1SG=ERG.SG	key	find-TR-ACT-NZR=EQ.DJ.SG

“It is me who will find the key.”

(TD 315.2 [elicited])

(121) *taldok the tʰopa munɕi pujdaki kʰukdza.*

<i>tal=tok</i>	<i>the</i>	<i>tʰopa</i>	<i>munɕi</i>	<i>pujdak=tiki</i>
3[SG]=DAT	this	similar	teacher _{LN}	good=INDEF

kʰuk-ø-dza

find-TR-PST.DIR.DJ.SG

“He found a teacher that was equally skilled.”

(Conversation 25.62)

(122) *taldzi kulik kʰukdza.*

<i>tal=dzi</i>	<i>kulik</i>	<i>kʰuk-ø-dza</i>
3=ERG.SG	key	find-TR-PST.DIR.DJ.SG

“It was him who found the key.”

(TD 314.9 [elicited])

The second type of core arguments in bivalent clauses that may be marked for the dative case are patient arguments of certain agent verbs. If an agent verb assigns the dative case to its patient argument, the relevant patient argument is commonly construed as representing the endpoint of a movement or a process (see § 16.5.1 for a more elaborate discussion of dative marked patient arguments). This is illustrated by the following examples.

(123) *taltʃi girok kʰet thirtsum.*

<i>tal=tʃi</i>	<i>gi=tok</i>	<i>kʰet=thir-tɕ-um=jen</i>
3=ERG.PL	1SG=DAT	beat=send-TR-INF=EQ.CJ

“They will beat me at once.”

(The Lama and the Owl 29)

(124) *... gidzi puɕak ralɕiti kʰetdʒi ...*

<i>gi=dzi</i>	<i>puɕa=tok</i>	<i>ralɕi=tiki</i>	<i>kʰet-ø-dʒi</i>
1SG=ERG.SG	head=DAT	sword=INDEF	beat-TR-CVB

“... having beaten (your) head with a sword”

(King Kesar 38)

Furthermore, the dative case consistently marks recipient / goal arguments in three participant events, as the following example sentences illustrate.

(125) *ini: nambar girok du ne!*

<i>ini=ki</i>	<i>nambar_{LN}</i>	<i>gi=tok</i>	<i>da-ku-a</i>	<i>ne</i>
2[SG].HON=GEN	number	1SG=DAT	give-UND-IMP.SG	SUG

“Give me your phone number!”

(Conversation 13a.125)

(126) *handok dzamen tunmen gidzi brakkata.*

<i>han=tok</i>	<i>dzamen</i>	<i>tunmen</i>	<i>gi=dzi</i>
2[SG]=DAT	food	drinks	1SG=ERG.SG

brak-ø-kata

arrange-TR-FUT.CJ.SG

“It is me who shall provide you with food and drinks.”

(King Kesar 174)

The dative case may also serve a number of other functions. Most prominently, the case clitic marks the experiencer argument in light verb experiencer constructions that are based on the light verb *ra-men* “to come”. Again, such constructions can be subsumed under Bickel’s (2001) term of experiencer-as-goal constructions. This type of light verb construction is exemplified below (see § 16.7.1 for a more elaborate discussion of light verb experiencer constructions).

(127) *nunaŋ wa girok gjar radzi ...*

<i>nunaŋ</i>	<i>wa</i>	<i>gi=tok</i>	<i>gjar</i>	<i>ra-dzi</i>
therefore	FOC	1SG=DAT	fear	come-CVB.SG

“Therefore I have become afraid and ...” (lit. “Therefore fear has come to me ...”)

(The Lama and the Owl 101)

In light verb constructions that are based on the verb *ra-men*, the dative may also mark the stimulus argument that causes a sensation. In such contexts, the dative marked stimulus argument may be additionally augmented with the ablative clitic *=təi*. Consider the following example.

(128) *girok kʰjurok(ɬɛi) gjar ra:re.*

<i>gi=tok</i>	<i>kʰju=tok(=ɬɛi)</i>	<i>gjar</i>	<i>ra-k-are</i>
1SG=DAT	dog=DAT(=ABL)	fear	come-INTR-PRS.DJ.SG

“I am afraid of the dog.” (lit. “Fear comes to me from the dog.”)

(TD 218.6 [elicited])

In addition, the clitic may mark location arguments. In the domain of location marking, the dative case *=tok* stands in functional competition with the locative case *=kun* (cf. § 4.4.4.7). It is difficult to draw a straightforward line between the functions of the two case morphemes. As a general rule, *=tok* locates an object in a two-dimensional space and is thus functionally equivalent to the English prepositions *on* and *at*, whereas *=kun* specifies a location in a three-dimensional space and, accordingly, expresses a meaning that is closer to the semantics of the English prepositions *in* and *inside*. This contrast is illustrated by the following examples.

(129) *ʰadzu kjumdok dzotɬɛhi ...*

<i>ʰadzu</i>	<i>kjum=tok</i>	<i>dzot-ɬɛhi</i>
that	house=DAT	stay-CVB.PL

“They stayed at this house and ...”

(Conversation 22.323)

(130) *nun ʰadzu brakpʰukkuŋ dzotɬɛi nindza tal brakpʰukkuŋ.*

<i>nun</i>	<i>ʰadzu</i>	<i>brakpʰuk=kun</i>	<i>dzot-dzi</i>	<i>nindza</i>	<i>tal</i>
there	that	cave=LOC	stay-CVB.SG	EX.PST.SG	3[SG]

brakpʰuk=kun

cave=LOC

“He had been staying in this cave, he, in the cave.”

(Tulshug Lingpa 28)

Moreover, *=tok* is commonly used to refer to abstract locations. This function is illustrated in the sentences given below.

(131) *ṭʰadzu eraŋkattok kʰandoma lottəum.*

<i>ṭʰadzu</i>	<i>eraŋ-kat=tok</i>	<i>kʰandoma</i>	<i>lot-ø-tə-um=jen</i>
that	1PL.INCL-language=DAT	fairy	say-TR-INF=EQ.CJ

“It is called ‘fairy’ in our language.”

(The Fairies of Kullu 1.2)

(132) *guru rinpotəʰej suŋdok bejul ni:*

<i>guru rinpotəʰe=ki</i>	<i>suŋ=tok</i>	<i>bejul</i>	<i>ni:</i>
Guru Rinpoche	teaching=DAT	Beyul	EX.NON1SG

“In Guru Rinpoche’s teachings, there is a place (called) Beyul.”

(Tulshug Lingpa 164)

Further, *=tok* may be used to indicate the goal of a movement, a semantic concept that can also be expressed by the allative clitic *=maŋ*. However, the two case clitics are attested in rather different contexts. The dative marker *=tok* occurs on nouns that denote generic locations such as villages and houses or non-permanent locations such as assemblies and festivals. The allative marker *=maŋ*, on the other hand, attaches to nouns that refer to specific and permanent locations such as place names. However, the dative marker is also found on specific toponyms, as examples (135) and (136) illustrate. The difference in meaning between the noun forms *bejul=tok* and *bejul=maŋ* is not entirely clear. It is conceivable that my consultant uses both case clitics in combination with this noun because it refers to a legendary location that can both be conceptualized as generic and specific.⁵⁴

(133) *da tsʰeəurok maleptəʰak.*

<i>da</i>	<i>tsʰeəu=tok</i>	<i>ma-lep-tə-ʰak</i>
now	Tshechu=DAT	NEG-reach-TR-PRS.DJ.PL

“Nowadays, (people) do not go to the Tshechu festival anymore.”

(Tshechu 2.72)

⁵⁴ In Tibetan Buddhism, the term “Beyul” (WT *sbas yul* „hidden land“) refers to hidden valleys in the Himalayas that resemble Christian paradise. According to legends, these fertile areas were discovered by Guru Rinpoche and will serve as refuges for Buddhists in times of persecution.

(134) *gi bakstondok elte.*

gi *bakston=tok* *el-te*
1SG wedding=DAT go-VOL.SG

“I want to go the wedding.”

(TD 12.3 [elicited])

(135) *eraŋ nama bejuldok ek^{hek} loŋi.*

eraŋ=nama *bejul=tok* *el-k^{hek}*
1PL.INCL=all Beyul=DAT go-INTR-PRS.CJ.PL

say-DETR-MID-CVB.SG

lot-s-ɛ-dzi

“All of us will go to Beyul’, he said”

(Tulshug Lingpa 131)

(136) *durek dutdzom gut^{ok} goŋmadzi re bejulmaŋ hel^{si} jendzi.*

durek *dutdzom gut^{ok} goŋma=dzi=re* *bejul=maŋ*
earlier Dujom Guthog Gongma=ERG=EXT Beyul=ALL

hel-s-ɛ-i=jendzi

bring-DETR-MID-ACT=EQ.DJ.SG

“In old times, Dujom Guthog Gongma also brought (people) to Beyul.”

(Tulshug Lingpa 106)

The dative clitic is one of the few case clitics that may attach to other case clitics. In my data corpus, =*tok* is attested after the ablative =*tsi*, the allative =*maŋ*, the locative =*kuŋ*, and the adessive =*kat^{saŋ}*. A number of example sentences are given below.

(137) ... *ramšila t^{he}tsi^{ok} t^{ad}zu grokpo kat^{saŋ} kjum kjaŋka mej la apa.*

ramšila *t^{he}=tsi=tok* *t^{ad}zu* *grokpo=kat^{saŋ}* *kjum*
Ramshila this=ABL=DAT that river=ADESS house

kjaŋka *ma-ni=la* *apa*
continuously NEG-EX.NON1SG=EVOC AUTH

“... in the village of Ramshila, down this (riverside), near that river, there was not an uninterrupted row of houses (back in those days) .”

(Conversation 16.29)

(138) *the dzamen kelanmanɔk jen.*

<i>the</i>	<i>dzamen</i>	<i>kelan=man=tok</i>	<i>jen</i>
this	food	Keylong=ALL=DAT	EQ.CJ

“These are provisions for the journey to Keylong.” (lit. “These are provisions for to Keylong.”)

(TD 101.10 [elicited])

(139) *the dzamen amtsunɔk jen.*

<i>the</i>	<i>dzamen</i>	<i>amtsi=kun=tok</i>	<i>jen</i>
this	food	way=LOC=DAT	EQ.CJ

“These are provisions for the journey.” (lit. “These are provisions for in the way.”)

(TD 101.9 [elicited])

(140) *tispunan thadzu bazar katɕanɔk wa theman gwanj jentɕʰok apa.*

<i>tispu=nan</i>	<i>thadzu</i>	<i>bazar_{LN}=katɕan=tok</i>	<i>wa</i>	<i>the=man</i>
mill=CON	that	market=ADESS=DAT	FOC	this=ALL
<i>gwanj-i</i>	<i>jentɕʰok</i>	<i>apa</i>		
go.PL-ACT	EQ.DJ.PL	AUTH		

“In the area close to the watermills and that market, this is where people went (to build their houses).”

(Conversation 16.33)

As the examples illustrate, *=tok* may retain its locative when occurring after another case clitic. In (137), the clitic sequence *=tsi=tok* refers to the bank of the Beas river that stretches from the village of Ramshila downstream and thus denotes an area. In (140), the clitic sequence *=katɕan=tok* refers to an area that lies next to the watermills and the market. In this example, the dative clitic appears to add a stronger static connotation to the adessive, which may both express dynamic and static relations when occurring in isolation. In addition, *=tok* may also serve a more abstract purposive function when attached to other case clitics. This is illustrated in (138) and (139), where the dative indicates for what purpose the provisions in question were prepared.

Finally, the dative marker frequently attaches to supine forms of verbs. In this context, the dative clitic puts additional emphasis on the purpose of the relevant action and thus serves a function similar to the *in order to* construction in English.

(141) *han kekir itɕik dzate daŋ tattɕarok?*

<i>han</i>	<i>kekir</i>	<i>itɕik</i>	<i>dza-te</i>	<i>daŋ</i>
2[SG]	flatbread	how.many	eat-VOL.SG	still

tat-tɕ-a=tok

prepare-TR-SUP=DAT

“How many pieces of flatbread do you want to eat, (I am asking because I want) to make some more?”

(Conversation 22.141)

(142) *hiŋ katɕaŋ kjumamaŋ elderok dzottɕʰi gwantsʰa.*

<i>hiŋ</i>	<i>katɕaŋ</i>	<i>kjuma=maŋ</i>	<i>el-de=tok</i>	<i>dzot-tɕʰi</i>
1PL.EXCL	nearby	home=ALL	go-SUP=DAT	sit-CVB.PL

gwantsʰa

EX.PST.PL

“We had been sitting nearby in order to go home.”

(Tshechu 2.56)

4.4.4.4 Ablative =tɕi

The ablative clitic has the phonological shape =tɕi. The morpheme expresses motion away from a location and can either directly attach to a noun or to the dative clitic =tok, the locative clitic =kuŋ, and the allative clitic =maŋ. The ablative clitic only directly attaches to nouns that refer to a definite location, e.g. place names or expressions such as *kjuma* “home”. When a noun refers to a generic location (e.g. *leks* “village”, *latsi* “mountain”), its ablative form is formed with a clitic string consisting of the dative =tok followed by the ablative =tɕi.

(143) *gi tinantɕi rat kan nwa:stok.*

<i>gi</i>	<i>tinan=tɕi</i>	<i>ra-et</i>	<i>kan-a</i>	<i>nwa:stok</i>
1SG	Tinan=ABL	come-PST.DIR.CJ	watch-IMP.SG	at.that.time

“You see, I came from the Tinan Valley at that time.”

(Conversation 87.95)

(144) *kjumatɕi pʰon radza rintɕengi ŋaro.*

<i>kjuma=tɕi</i>	<i>pʰon_{LN}</i>	<i>ra-dza</i>	<i>rintɕen=ki</i>	<i>ŋaro</i>
home=ABL	phone	come-PST.DIR.DJ.SG	Rinchen=GEN	morning

“There was a phone call from home, from Rinchen, this morning.”

(Conversation 14.134)

(145) *wa nunɕtɕi lekstokɕi ralak eldzala ɲampo ...*

<i>wa</i>	<i>nunɕtɕi</i>	<i>leks=tok=tɕi</i>	<i>ralak</i>	<i>el-dza=la=ɲampo</i>
FOC	then	village=DAT=ABL	left.bank	go-PST.SG=ANTER=COM

“And then, after having gone from the village to the left bank ...”

(Tulshug Lingpa 62)

The clitic string *=tok=tɕi* is also commonly used in metaphorical contexts. In these cases, the noun marked with the case morphemes does not represent the origin of a spatial movement but rather the ultimate origin of a stimulus that instigates a cognitive process.

(146) *handzi taldoktɕi lok ne!*

<i>han=dzi</i>	<i>tal=tok=tɕi</i>	<i>lok-a</i>	<i>ne</i>
2=ERG.SG	3[SG]=DAT=ABL	learn-IMP.SG	SUG

“You learn from him!”

(Conversation 13a.65)

(147) *girok khjurok(tɕi) gjar ra:re.*

<i>gi=tok</i>	<i>khju=tok(=tɕi)</i>	<i>gjar</i>	<i>ra-k-are</i>
1SG=DAT	dog=DAT(=ABL)	fear	come-INTR-PRS.DJ.SG

“I am afraid of the dog.” (lit. “Fear comes to me from the dog.”)

(TD 218.6 [elicited])

(148) *thadzu gjardoktɕi gi nira el maegek.*

<i>thadzu</i>	<i>gjar=tok=tɕi</i>	<i>gi</i>	<i>nira</i>	<i>el</i>
that	fear=DAT=ABL	1SG	daytime	go

ma-el-k-ek

NEG-go-INTR-PRS.CJ.SG

“Because of that fear, I do not go out during the day.”

(The Lama and the Owl 30)

As noted above, the ablative clitic can also follow the locative clitic =*kuŋ*. The resulting sequence =*kuŋ*=*təi* expresses a movement out of a three-dimensional space. This marking strategy has been metaphorically extended to contexts in which there is no actual motion involved, e.g. to the telling of stories or the downloading of information from the internet.

(149) *əakaskuŋtəi ra: ra: ra: gjar tsakəi nindza ...*

<i>əakas=kuŋ=təi</i>	<i>ra-ka</i>	<i>ra-ka</i>	<i>ra-ka</i>
əakas=LOC=ABL	come-PROG.SG	come-PROG.SG	come-PROG.SG
<i>gjar</i>	<i>təak-s-ə-dzi</i>	<i>nindza</i>	
fear	put.inside-DETR-MID-CVB.SG	EX.PST.SG	

“While coming out of the Shakas Nala (which is said to be haunted by a demon), I had become scared ...”

(Conversation 87.277)

(150) *gidzi mi: akkuŋtəi henəitsuk ...*

<i>gi=dzi</i>	<i>mi=ki</i>	<i>ak=kuŋ=təi</i>
1SG=ERG.SG	person=GEN	mouth=LOC=ABL
<i>hen-s-ə-i=tsuk</i>		
hear-DETR-MID-ACT=REL		

“What I have heard from people’s mouths ...” (lit. “What I have heard from within people’s mouths”)

(King Kesar 2)

(151) *ja: gidzi khjak neŋkuŋtəi wandzi ...*

<i>ja:</i>	<i>gi=dzi</i>	<i>khjak</i>	<i>neŋ_{LN}=kuŋ=təi</i>	<i>wan-ə-dzi</i>
yesterday	1SG=ERG.SG	here	internet=LOC=ABL	take.out-TR-CVB

“Yesterday, I downloaded (this form) here from the internet and ...”

(Conversation 13a.4)

In addition, the ablative =*təi* can attach to the allative =*maŋ*. This combination is remarkable from a semantic point of view, as the two morphemes express opposite semantic concepts. According to my consultants, the clitic sequence =*maŋ*=*təi* expresses a perlative, that is, movement through a location. The perlative function of the clitic sequence =*maŋ*=*təi* seems sensible given the fact that the individual morphemes express motion away from a location and motion towards a location.

(152) *kʰjaktɕi tʰajmanɕi eldza.*

<i>kʰjak=tɕi</i>	<i>tʰaj=manɕi</i>	<i>el-dza</i>
here=ABL	up.there=ALL=ABL	go-PST.DIR.DJ.SG

“She went from here through that place up there.” (lit. “She went from here to from up there”).

(Conversation 23.10)

However, in many cases the clitic sequence *=manɕi* cannot be interpreted as expressing a perlocative. When attached to nouns referring to specific and permanent locations, *=manɕi* expresses an ablative, as illustrated in sentence (153) below. In the beginning of this section, I argued that ablatives of location nouns are usually derived from their corresponding locative form, and the allative clitic *=manɕi* commonly serves a locative function in combination with toponyms that refer to vast areas (cf. § 4.4.4.4).

(153) *totkunɕi gwanmen melokmanɕi gwanmen tinanmanɕi gwanmen ...*

<i>tot=kun=tɕi</i>	<i>gwan-men=jen</i>	<i>melok=manɕi</i>
Tod.Valley=LOC=ABL	come.PL-INF=EQ.CJ	Pattan.Valley=ALL=ABL
<i>gwan-men=jen</i>	<i>tinan=manɕi</i>	<i>gwan-men=jen</i>
come.PL-INF=EQ.CJ	Tinan.Valley=ALL=ABL	come.PL-INF=EQ.CJ

“They come out of the Tod Valley, from the Pattan Valley, from the Tinan Valley ...”

(Tshechu 1.12)

Moreover, the clitic sequence *=manɕi* can also express motion away from a deictic center in combination with expressions that do not denote permanent and specific locations, as examples (154) and (155) illustrate. It is conceivable that *=manɕi* has been extended to these contexts from other constructions in which the clitic sequence had already lost the allative semantic component expressed by the case clitic *=manɕi*.

(154) *taldzi tʰamimanɕi rikɕi men wa?*

<i>tal=dzi</i>	<i>tʰami=manɕi</i>	<i>rik-s-ɕ-i</i>
3=ERG.SG	down.there=ALL=ABL	bring-DETR-MID-ACT
<i>men</i>	<i>wa</i>	
NEG.EQ.DJ.SG	FOC	

“He did not bring (the oven) from down there, did he?”

(Conversation 55.191)

(155) ... *gidzi puṣak ralqiti kʰetdʒi, pʰet jasmanṭṣi, pʰet jonmanṭṣi, nisdumbu lik tʰjat lotta.*

<i>gi=dzi</i>	<i>puṣa=tok</i>	<i>ralqi=tiki</i>	<i>kʰet-ø-dʒi</i>	<i>pʰet</i>
1SG=ERG.SG	head=DAT	sword=INDEF	hit-TR-CVB	half
<i>jas=manṭṣi</i>	<i>pʰet</i>	<i>jon=manṭṣi</i>	<i>nis=dumbu</i>	
right=ALL=ABL	half	left=ALL=ABL	two=piece	
<i>lik=tʰir-ø-kata</i>		<i>lot-ø-ta</i>		
make=send-TR-FUT.CJ.SG		say-TR-PST.INFER.DJ		

“... I will hit (your) head with a sword and make two pieces of it, half going to the right, half going to the left.”

(King Kesar 38)

The ablative clitic *=ṭṣi* plays an important role in the formation comparative constructions. This function is discussed in § 6.4 in more detail.

4.4.4.5 Allative =manṭ

The allative case is marked with the clitic *=manṭ* and expresses motion towards a goal. As mentioned in § 4.4.4.3, this function can also be fulfilled by the dative marker *=tok*. *=manṭ* differs from *=tok* in marking movements towards definite and permanent locations.

(156) *ra:re mara:re tes de kjumamanṭ.*

<i>ra-k-are</i>		<i>ma-ra-k-are</i>
come-INTR-PRS.DJ.SG		NEG-come-INTR-PRS.DJ.SG
<i>tet-s</i>	<i>de</i>	<i>kjuma=manṭ</i>
think-NZR	ATT.SG	home=ALL

“‘Will he come home or not?’, I was thinking.”

(Conversation 14.88)

(157) *tal tṣʰandigar=manṭ eldza apa.*

<i>tal</i>	<i>tṣʰandigar=manṭ</i>	<i>el-dza</i>	<i>apa</i>
3[SG]	Chandigarh=ALL	go-PST.DIR.DJ.SG	grandmother

“He went to Chandigarh, grandmother.”

(Conversation 14.11)

In a few cases, *=manṭ* does not express a dynamic movement towards a point in space but simply indicates a permanent location. This locative function is only attested in combination with toponyms that refer to vast areas such as *eraṭ=manṭ* “in Lahaul”, *kud-*

zu=maŋ “in the Kullu Valley”, and *tinan=maŋ* “in the Tinan Valley”. It is not entirely clear how the allative came to indicate a permanent location in combination with toponyms such as the ones listed above. The dynamic meaning of the ablative might have been reanalyzed as a static one because of the vastness of the space that the head noun refers to. Thus, the original meaning “in direction of X” may have been reinterpreted as “in locations that lie on the way to X” and finally “in X”.

(158) *bidzli tʰadzu eraŋmaŋ ni: la tʰik?*

<i>bidzli_{LN}</i>	<i>tʰadzu</i>	<i>eraŋ=maŋ</i>	<i>ni:=la</i>	<i>tʰi:k_{LN}</i>
electricity	that	1PL.INCL=ALL	EX.NON1SG=Q	okay

“The electricity, is there electricity in Lahaul, (is everything) okay?”

(Conversation 29.20)

(159) *kudzumaŋ mi ʂitʂinaŋ kaj de ake?*

<i>kudzu=maŋ</i>	<i>mi</i>	<i>ʂit-ʂ-naŋ</i>	<i>kaj</i>	<i>de</i>
Kullu.Valley=ALL	person	die-MID=COND	difficult	ATT.SG

ake

QUE

“It is difficult if people (belonging to our community) die in Kullu, isn’t it?”

(Conversation 1.1)

4.4.4.6 Terminative =astok

The terminative case is expressed with the clitic =astok. The morpheme serves the primary function of denoting a spatial movement that reaches a certain point. In a metaphorical sense, =astok may also refer to a time interval that lasts unto a certain point in time. This is illustrated by the following example sentences.

(160) *nidzaj nisbiŋ astok tʂetmen nurŋtʂi matʂet.*

<i>nidza=ki</i>	<i>nis=biŋ=astok</i>	<i>tʂet-ø-men</i>	<i>nurŋtʂi</i>
twenty=GEN	two=year=TERM	pull-TR-PST.DIR.CJ	then

ma-tʂet-ø-men

NEG-pull-TR-PST.DIR.CJ

“I smoked until I was twenty-two years old, after that I did not smoke anymore.”

(Conversation 74.56)

(161) *kʰjak ramen men mandʱi astok ramen.*

<i>kʰjak</i>	<i>ra-men</i>	<i>men</i>	<i>mandʱi=astok</i>	<i>ra-men=jen</i>
here	come-INF	NEG.EQ.CJ	Mandi=TERM	come-INF=EQ.CJ

“These trees do not grow here (in Kullu), they can be found up to Mandi.”

(TD unrec 16)

In certain contexts, =*astok* may also denote the vagueness of a location. In example (162) below, the noun phrase *ʰadzu=ki dutɕimaŋ=astok* does not translate as “unto the front of that place” but rather “somewhere in front of that place”, with the terminative clitic indicating the vagueness of the exact position of the object.

(162) *ʰadzuʝ dutɕimaŋ astok niskiŋlek tsʰo astok re gjaragire astok tankja ringa na.*

<i>ʰadzu=ki</i>	<i>dutɕimaŋ=astok</i>	<i>niskiŋ=lek</i>	<i>tsʰo=astok=re</i>
that=GEN	in.front=TERM	two=APP	lake=TERM=EXT
<i>gjaragire=astok</i>	<i>tant-ka</i>	<i>riŋ-ka=na</i>	
circular.thing=TERM	see-PROG.SG	say-PROG.SG=HS	

“Somewhere in front of that, they saw something like two lakes, like two circular things, it is said.”

(King Kesar 228)

(163) ... *bidʒli: maha:devgi gompaj kʰotɕi astok buʈa tedzi tiki ramen bor asti tiki.*

<i>bidʒli: maha:dev=ki</i>	<i>gompa=ki</i>	<i>kʰotɕi=astok</i>	<i>buʈa</i>
Bijli Mahadev=GEN	monastery=GEN	behind=TERM	tree
<i>tedzi=tiki</i>	<i>ra-men=jen</i>	<i>bor=asti=tiki</i>	
big=INDEF	come-INF=EQ.CJ	shrub=SML=INDEF	

“... somewhere behind the temple of Bijli Mahadev, there is a big tree similar to a bush.”

(The Fairies of Kullu 1.82)

From a diachronic perspective, =*astok* can be analyzed as a morphologically complex form that consists of a segment **as-* followed by the dative marker =*tok*. The segment **as-* is also attested in the semblative clitic =*asti*. The etymological origin of **as-* is unclear. In § 4.4.1.3, I speculated that the segment may go back to a noun with the meaning “type, kind”, which was then grammaticalized as a morpheme denoting indeterminacy. This function is still preserved in the semblative clitic =*asti* and is attested for =*astok* as well, as examples (162) and (163) above illustrate. This suggests that the terminative started out as a locative variant of the semblative clitic and originally only indicated the

vagueness of a location. Subsequently, the meaning of the morpheme was extended to contexts in which it expressed movement unto a certain point. This functional extension was likely reinforced by the fact that the dative marker can assume an allative function when occurring on nouns referring to a non-permanent location.

Although it is possible to segment the terminative clitic into smaller meaningful units based on internal reconstruction, the case marker should not be treated as a morphologically complex form. This is reflected by the fact that Bunan speakers are not able to segment the form into smaller meaningful units. In line with the intuition of native speakers, I thus treat the case clitic as monomorphemic and simply gloss it as “TERM” in the following.

Finally, note that the clitic *=astok* is not only attested on nouns. The morpheme may likewise be used to form non-finite adverbial clauses with terminative or simultaneous temporal reference. However, this use of the clitic is not discussed at this point, but is described in § 19.3.1.4 in more detail.

4.4.4.7 Locative *=kun*

The locative case is expressed by the clitic *=kun*. The morpheme is subject to certain morphophonological alternations described in § 3.2.1.1. The case marker surfaces as *[=kun]* after voiceless consonants and as *[=gʊn]* after non-vocalic resonants. When occurring after a vowel, the morpheme has the reduced shape *[=ŋ]*. When directly following the vowel /i/, this vowel is usually changed to [u], hence *amtsi=kun* *[amtsun]* “on the way”, *pʰuk=tiki=kun* *[pʰʊʔkʰtʰʊkun]* “in a cave”.

=kun is not the only case clitic that can denote locations. The dative case *=tok* may serve a similar function. As argued in § 4.4.4.3, the two morphemes differ in the way they specify the position of an object. *=tok* locates an object on a two-dimensional surface, whereas *=kun* specifies the location of an object in three-dimensional space. The function of *=kun* is illustrated by the following example sentences.

(164) *danak hoʔaltikun dzakʰek loʔi jendʒi.*

<i>dana=tok</i>	<i>hoʔal_{LN}=tiki=kun</i>	<i>dza-kʰek</i>
Manali=DAT	hotel=INDEF=LOC	eat-INTR-PRS.CJ.PL
<i>lot-s-ɕ-i=jendʒi</i>		
say-DETR-MID-ACT=EQ.DJ.SG		
“‘We will eat in a hotel in Manali’, he said.”		
(Conversation 14.119)		

(165) *dillit̪ɕi dʒaːskun̪ elte riŋgare.*

<i>dilli=tok=t̪ɕi</i>	<i>dʒaːs_{LN}=kun̪</i>	<i>el-te</i>	<i>riŋ-k-are</i>
Delhi=DAT=ABL	airplane=LOC	go-VOL.SG	say-INTR-PRS.DJ.SG

“He says that he wants to go from Delhi by airplane.”

(Conversation 25.85)

(166) *kʰju tʰas=kun̪ niː.*

<i>kʰju</i>	<i>tʰas=kun̪</i>	<i>niː</i>
dog	garden=LOC	EX.NON1SG

“The dog is in the garden.”

(NN 12.6 [elicited])

In § 4.4.4.3, I stated that the dative suffix *=tok* is commonly used to denote abstract locations (e.g. *eraŋ-kat=tok* “in our language”, *suŋ=tok* “in the prophecy”). However, *=kun̪* may also be used in a metaphorical sense, as demonstrated in the sentences below. In the case of example (167), the locative clitic *=kun̪* is preferred over the dative clitic *=tok* because the latter morpheme would evoke a two-dimensional space, yielding the meaning “on the newspaper”. In example (168), the use of *=kun̪* seems to be idiomatic in the sense that Bunan speaker conceptualize a dream as a three-dimensional space rather than a two-dimensional surface.

(167) *pepargun̪ tankjare.*

<i>pepar=kun̪</i>	<i>tant-k-are</i>
paper=LOC	see-INTR-PRS.DJ.SG

“I saw it in the newspaper.”

(Conversation 27.30)

(168) *maŋskun̪ talʒok kʰanɔma radʒi.*

<i>maŋs=kun̪</i>	<i>tal=ɕi=tok</i>	<i>kʰanɔma</i>	<i>ra-dʒi</i>
dream=LOC	3=PL=DAT	fairy	come-PST.INFER.DJ.SG

“The fairy came to them in dreams.”

(The Fairies of Kullu 2.3)

4.4.4.8 Interessive *=basta* ~ *=bastaŋ*

The interessive clitic *=basta* indicates an unspecified location among the marked referent(s). It thus translates into English as “among” or “within”. Sometimes, speakers use the alternative form *=bastaŋ*. This variant form most probably represents a contraction

of a clitic sequence =*basta*=*kuŋ*, which exhibits an additional locative case clitic. The following sentences illustrate the use of the intercessive.

(169) *gaŋa: tiki basta pã:dʒ minat sasa dʒoʔj mani: tult̪arok.*

gaŋa:LN=tiki=basta *pã:dʒLN* *minatLN* *sasa* *dʒoʔ-i*
hour=INDEF=INTESS five minute different stay-ACT

ma-ni: *tul-t̪-a=tok*
NEG-EX.NON1SG tame-TR-SUP=DAT

“Within an hour she would not stay away (from her husband) for five minutes to teach him manners.”

(Conversation 22.310)

(170) *nima tiki wa tʰadzudzi agu kʰargan ga:ni riŋitsuktsi taldzi lekski tʰaŋji bastan̄ tedzitsuk ɕaŋʈen̄ t̪h̄a:ʈajnan̄ tʰaŋji bastan̄ tedzi taldzi leks ɲama tʰaŋtsʰaŋji tum-ta.*

nima=tiki *wa* *tʰadzu=dzi* *agu kʰargan ga:ni*
day=INDEF FOC that=ERG.SG Agu Khargan Gani

riŋ-i=tsuk=dzi *tal=dzi* *leks=ki* *tʰaŋji=bastan̄*
say-ACT=REL=ERG.SG 3=ERG.SG village=GEN all=INTESS

tedzi=tsuk *ɕaŋʈe=nan̄* *t̪h̄a:ʈa-i=nan̄* *tʰaŋji=bastan̄*
big=REL old.M=CON knowledge=POSS-ACT=CON all=INTESS

tedzi *tal=dzi* *leks=ɲama* *tʰaŋtsʰaŋji*
big 3=ERG.SG village=all all

tum-ø-ta

summon-TR-PST.INFER.DJ

“One day, that one, the one called Agu Khargan Gani, he summoned the most important among the old ones and the wise ones of the village, the important ones among them, he summoned the whole village.”

As example (170) illustrates, the intercessive clitic can be used to form comparative constructions. This function is discussed in § 6.4 in more detail.

4.4.4.9 Comitative =*ɲampo*

The comitative is expressed with the clitic =*ɲampo*, which is likely a loanword from a neighboring Tibetan variety (cf. WT *mnyam po* “together, along with”). The initial nasal is subject to the same morphophonological alternations that have been described for the postnominal quantifier =*ɲama* (cf. § 4.4.3.3), with the allomorphs [=ɲampo] and [=jampo]

occurring after consonants and vowels, respectively. The comitative marker has a range of different functions. When it attaches to an animate noun, it indicates that the referent participates in an action together with the respective participant.

(171) *talzi nampo doŋni loŋak.*

<i>tal=ŋi=nampo</i>	<i>doŋ-ni</i>	<i>lot-s-ŋak</i>
3=PL=COM	come-IMP.PL	say-DETR-MID-PRS.DJ.PL

“They said ‘Come together with us!’”

(Conversation 22.213)

(172) ... *da tʰadzu re ŋaŋs nampo brakŋi paŋza dzukka riŋa na da:stok tsumta tʰaradzi.*

<i>da</i>	<i>tʰadzu=re</i>	<i>ŋaŋs=nampo</i>	<i>brak-s-ŋi</i>
now	that=EXT	horse=COM	join.together-DETR-MID-ACT
<i>pan-ŋ-a</i>	<i>dzuk-ka</i>	<i>riŋ-ka=na</i>	<i>da:stok</i>
fly-MID-SUP	begin-PROG	say-PROG.SG=HS	meanwhile
<i>tsum-ø-ta</i>	<i>tʰara=dzi</i>		
catch-TR-PST.INFER.DJ	that.other=ERG.SG		

“... now as that (boy) was starting to fly together with the horse, it is said, that other one caught him.”

(King Kesar 158)

When attached to inanimate nouns, the comitative denotes that the agent argument uses the marked argument to perform an action. If the marked referent assumes the semantic role of an instrument, as in example (173) below, the comitative may be replaced by the ergative or – in some cases – the absolutive (cf. § 4.4.4.2). However, if the marked noun is a theme / patient rather than an instrument, as in examples (174) and (175) below, only comitative marking is possible.

(173) *taldzi tʰataram nampo tʰi twa:re.*

<i>tal=dzi</i>	<i>tʰataram=nampo</i>	<i>tʰi</i>	<i>twa-k-are</i>
3=ERG.SG	sickle=COM	grass	mow-INTR-PRS.DJ.SG

“He is cutting grass with a sickle.”

(TD 148.11 [elicited])

(174) *peltsi nampo kwatde dadzala takpo neme ra:re the her.*

<i>peltsi=nampo</i>	<i>kwat-de</i>	<i>da-ø-dza=la</i>	<i>takpo</i>	<i>neme</i>
milk=COM	cook-SUP	give-TR-PST.SG=ANTER	strong	tasty
<i>ra-k-are</i>		<i>the</i>	<i>her</i>	
come-INTR-PRS.DJ.SG		this	again	

“Having cooked it together with milk, this (tea) becomes very tasty as well.”

(Conversation 74.53)

(175) *kekir dza kholak nampo dza thir!*

<i>kekir</i>	<i>dza-a</i>	<i>kholak=nampo</i>	<i>dza=thir-a</i>
flatbread	eat-IMP.SG	tsampa.dish=COM	eat=send-IMP.SG

“Eat (more) flatbread, finish them together with the tsampa⁵⁵.”

(Conversation 13a.110)

Often, the comitative clitic *=nampo* occurs in combination with the coordination clitic *=nanj*. The presence of the coordination clitic puts additional emphasis on the argument marked with the comitative.

(176) *thenan nampo nindza kan.*

<i>the=nan=nampo</i>	<i>nindza</i>	<i>kan-a</i>
this=CON=COM	EX.PST.SG	watch-IMP.SG

“Look, (the application form) came together with this (information sheet).”

(Conversation 13a.5)

(177) ... *thadzun tæi kurt dæi tal dæi tharan the lasminan nampo heldæi taj thonman helta.*

<i>thadzun=tæi</i>	<i>kurt-dæi</i>	<i>tal=dæi</i>	<i>tharan</i>	<i>the</i>
there=ABL	carry-CVB.SG	3=ERG.SG	that.other.place	this
<i>lasmi=nan=nampo</i>	<i>hel-ø-dæi</i>	<i>taj</i>	<i>thon=man</i>	
woman=CON=COM	bring-TR-CVB	3SG.GEN	room=ALL	
<i>hel-ø-ta</i>				
bring-TR-PST.INFER.DJ				

“... having carried it from there, having brought it to that other place together with the woman, he brought it inside her house.”

(King Kesar 160)

⁵⁵ See footnote 42.

=*ŋampo* can also attach to a number of non-finite adverbial clauses that denote temporal anteriority, conditionality, or causality. The respective constructions are discussed in § 19.3 in more detail.

4.4.4.10 Genitive =*ki*

The genitive is marked by means of the clitic =*ki*. The morpheme surfaces as [=ki] after voiceless consonants, as [=gi] after non-vocalic resonants, and as [=j] after vowels. The morphonological processes that condition these allomorphs are described in § 3.2.1.1. When following the nominalizer -*pa*, the genitive clitic often replaces the inherent vowel of the suffix, hence *təʰeliŋ-pa=ki* [təʰelɪŋpaj ~ təʰelɪŋpi] ‘of a person from the village of Cheling’.

The genitive marker expresses a number of different but conceptually related semantic relationships between nouns. Its most salient function is the expression of possessive relationships. In such possessive constructions, the case clitic attaches to the possessor, as the following example illustrates.

(178) *gi: nambar inirok da:ta.*

<i>gi=ki</i>	<i>nambar</i> _{LN}	<i>ini=tok</i>	<i>da-ø-kata</i>
1SG=GEN	number	2[SG].HON=DAT	give-TR-FUT.CJ.SG

‘I will give you my number.’

(Conversation 13a.126)

However, the expression of possession only seems to be a subtype of the more general function of establishing a modifying semantic relationship between a dependent noun and a head noun. In other words, the genitive clitic essentially indicates that the head noun belongs to a particular category that is in some way associated with the dependent noun. In example (179), for example, =*ki* expresses that the stories that are currently being told belong to the subgenre of ghost stories. In example (181) =*ki* indicates that the bowl is made of a special material, namely copper.

(179) *hiŋ nispi tʰulgi katəa ɕat-tə-ʰek.*

<i>hiŋ</i>	<i>nispi</i>	<i>tʰul=ki</i>	<i>katəa</i>	<i>ɕat-tə-ʰek</i>
1PL.EXCL	two.HUM	demon=GEN	story	tell-TR-PRS.CJ.PL

‘We two are telling ghost stories.’

(Conversation 87. 295)

(180) *eraŋ tʰaŋi rikdaŋgi len liktəumdʒi.*

<i>eraŋ</i>	<i>tʰaŋi</i>	<i>rik-daŋ=ki</i>	<i>len</i>	<i>lik-tə-um=jendʒi</i>
1PL.INCL	all	field-meadow=GEN	work	do-TR-INF=EQ.DJ.SG

“All of us will do farm work.”

(Tulshug Lingpa 98)

(181) *... niskiŋ dzaŋsma=kɪ kador ta.*

<i>niskiŋ</i>	<i>dzaŋsma=kɪ</i>	<i>kador</i>	<i>ta</i>
two	copper=GEN	bowl	POSS.NON1SG

“(She) has two bowls made of copper.”

(Tshechu 2.378)

In some cases, the genitive also expresses a cause-effect relationship between the dependent noun and its head noun, with *=ki* marking the cause that gives rise to the event expressed by the head noun. This function is illustrated in examples (182) and (183) below, in which the genitive phrases *dziŋs-men=kɪ gatdʒa* (“uproar because of quarreling”) and *kʰres=kɪ bardo* (“hardship because of hunger”) occur.

(182) *dziŋsmengi gatdʒa ma:ni:*

<i>dziŋs-men=kɪ</i>	<i>gatdʒa</i>	<i>ma:ni:</i>
quarrel-INF=GEN	uproar	NEG-EX.NON1SG

“There is no uproar because of quarreling (at the Tshechu festival).”

(Tshechu 2.78)

(183) *kʰreski bardo jendʒi nwa:stok.*

<i>kʰres=kɪ</i>	<i>bardo</i>	<i>jendʒi</i>	<i>nwa:stok</i>
hunger=GEN	hardship	EQ.DJ.SG	at.that.time

“There was hardship back in those days because of hunger.”

(Tshechu 2.413)

In addition, there are a few instances in my corpus in which the genitive is attached to a place name in order to derive a noun referring to a resident of that place. In the example given below, the noun *kudzu=kɪ=ʂi* “Kullu.Valley=GEN=PL” refers to the inhabitants of the Kullu Valley.

(184) *kudzizi re gjarkhak t'herok narsindok.*

<i>kudzu=ki=si=re</i>	<i>gjar-k-hak</i>	<i>t'e=tok</i>
Kullu.Valley=GEN=PL=EXT	be.afraid-INTR-PRS.DJ.PL	this=DAT
<i>narsin=tok</i>		
narsimha=DAT		

“The people from Kullu Valley are also afraid of this (creature), the *narsimha*.”
(Conversation 87.232)

Finally, the genitive also commonly occurs on nouns when they are followed by a postposition. Such constructions will not be described here, as there are discussed in § 4.4.4.10.

4.4.4.11 Adessive =*katɕaŋ*

The adessive case is expressed with the clitic =*katɕaŋ*. The clitic also occurs as an unbound morpheme, which implies that the grammaticalization process of *katɕaŋ* as a case marker has only started in the recent past. When occurring as an independent word, *katɕaŋ* serves as a nominal and verbal modifier with the meaning “close, near”. The bound clitic and the unbound modifier differ in terms of their ability to bear phrasal stress. The clitic =*katɕaŋ* is never stressed and thus merges into one phonological word with its morphological host. The modifier *katɕaŋ*, on the other hand, can bear phrasal stress on its second syllable and, thus, constitutes a phonological word in its own right. The following two examples illustrate the use of *katɕaŋ* as a modifier.

(185) *tal nispi jato gwaj jentɕhok hoɕmej katɕaŋ jato.*

<i>tal</i>	<i>nispi</i>	<i>jato</i>	<i>gwa-i=jentɕhok</i>	<i>hoɕmej</i>
3[SG]	two.HUM	friend	EX.PL-ACT=EQ.DJ.PL	very.much
<i>katɕaŋ</i>	<i>jato</i>			
close	friend			

“There were two friends, very close friends.”
(Conversation 87.310)

(186) *katɕaŋ ta maelet ...*

<i>katɕaŋ=ta</i>	<i>ma-el-et</i>
close=AVS	NEG-go-PST.DIR.CJ

“But I did not go close (to the precipice) ...”
(Tshechu 2.178)

When used as a case clitic, *=katɕaŋ* commonly indicates that the referent is located in spatial proximity to the event described by the predicate, as illustrated in examples (187) and (188). In addition, *=katɕaŋ* can indicate the goal of a motion and thus fulfill a function similar to the dative clitic *=tok* (cf. § 4.4.4.3), as exemplified in (189) and (190). It is not entirely clear in which regard *=katɕaŋ* and *=tok* semantically differ from each other when serving an allative function. It seems that *=katɕaŋ* implies a more careful and respectful way of approaching. This interpretation is in line with the literal semantic of the clitic. The adessive *=katɕaŋ* merely refers to the area where the referent is located and thus indicates that there may be some spatial distance between the approaching participant and the marked referent. The dative *=tok* refers to the referent itself, which suggests a much more direct way of approaching. The following example sentences illustrate the use of *=katɕaŋ* as an adessive case marker.

(187) *tʰadzu braktok brak katɕaŋ ɕurbuʈa tedzi juʝ tiki tedziti nindzi.*

<i>tʰadzu</i>	<i>brak=tok</i>	<i>brak=katɕaŋ</i>	<i>ɕur-buʈa</i>	<i>tedzi</i>	<i>juʝ=tiki</i>
that	rock=DAT	rock=ADESS	pine-tree	big	old=INDEF
<i>tedzi=tiki</i>	<i>ni-i=jendzi</i>				
big=INDEF	EX.SG-ACT=EQ.DJ.SG				

“At that rock, near that rock, there was an old and big pine tree.”
(The Lama and the Owl 3)

(188) ... *tʰadzu ʈakar buttɕum ka ro katɕaŋ.*

<i>tʰadzu</i>	<i>ʈakar</i>	<i>but-tɕ-um=jen</i>	<i>ka</i>	<i>ro=katɕaŋ</i>
that	axe	put-TR-INF=EQ.CJ	ASS	corpse=ADESS

“... they put that axe near the dead body.”
(Conversation 87.399)

(189) ... *wa k^hres radzala meme katɕaŋ eli gwajk ts^hoks t^hwa-tɕ-a*.

wa k^hres ra-dza=la meme=katɕaŋ el-i
 FOC hunger come-PST.SG=ANTER monk=ADESS come-
 ACT

gwajk ts^hoks t^hwa-tɕ-a
 EX.NON1PL consecrated.food beg-TR-SUP

“... and after we had become hungry, we used to go to the monks to beg for consecrated food.”

(Tshechu 2.407)

(190) *tal katɕaŋ dot-de taj kjuma el-i=jendzi*.

tal=katɕaŋ dot-de taj kjuma el-i=jendzi
 3[SG]=ADESS meet-SUP 3SG.GEN house go-ACT=EQ.DJ.SG

“He went to his home to meet him.”

(Conversation 87.320)

4.4.4.12 Sequences of case clitics

In the preceding sections, I have described a number of sequences of consecutive case clitics. This section gives a brief overview of sequences of case clitics that are attested in my data corpus. Consider the following table.

Table 44: Sequences of case clitics

First clitic	Second clitic	Semantics	§
=tɕi	=tok	locative / purposive	4.4.4.3
=maŋ	=tok	locative / purposive	4.4.4.3
=kuŋ	=tok	locative / purposive	4.4.4.3
=katɕaŋ	=tok	locative / purposive	4.4.4.3
=tok	=tɕi	ablative	4.4.4.4
=maŋ	=tɕi	perlative	4.4.4.4
=kuŋ	=tɕi	elative	4.4.4.4

In my corpus, there is one single attestation of a sequence consisting of three consecutive case clitics. The sentence in which the sequence occurs is given below.

(191) *be niskiŋ barlakkuŋmaŋtɕi tʰoŋmaŋ helta na.*

<i>be</i>	<i>niskiŋ</i>	<i>barlak=kuŋ=maŋ=tɕi</i>	<i>tʰoŋ=maŋ</i>
rock	two	intermediate.space=LOC=ALL=ABL	room=ALL

hel-ø-ta=na

bring-TR-PST.INFER.DJ.SG=HS

“They say that (the fairies) brought (him) to their dwelling place through a gap between two rocks.”

(The Fairies of Kullu 1.16)

The fact that the sequence *=kuŋ=maŋ=tɕi* is only attested once in my data corpus indicates that this construction of stacked case morphemes is rather exceptional. Indeed, the combination only seems to be possible because the relator noun *barlak* “intermediate space” is commonly followed by the locative clitic *=kuŋ* (cf. § 4.5.6). Accordingly, a perla-tive form of this relator noun necessarily involves the locative clitic.

4.5 Relator nouns and postpositions

In the following section, I describe a class of morphemes that I refer to as relator nouns and postpositions. Relator nouns and postpositions occur in postnominal position and serve the function of specifying the spatial position of an object or the relative temporal sequence of events. These morphemes do not represent a homogenous and closed class in terms of form and function, but rather constitute a continuum of functionally related forms with variable morphosyntactic and semantic properties. Still, it is possible to define relator nouns and postpositions as an independent class, as they differ in two respects from the postnominal morphemes that have been discussed in the preceding sections. First, relator nouns and postpositions usually bear phrasal stress and thus constitute independent phonological words. Second, they do not usually directly follow a noun but are linked to it by the genitive clitic *=ki*. The use of the genitive is not obligatory, however. My consultants commonly used the genitive marker in elicited sentences, but often dropped it in natural discourse. The inconsistent use of the genitive marker implies that postpositions are on their way to become nominal clitics, which directly follow their head noun.

With regard to their morphosyntactic and semantic properties, relator nouns and postpositions vary along three parameters, which are (1) transparency of morphological structure, (2) degree of syntactic autonomy, and (3) lexicality of semantic content. In Bunan, a prototypical relator noun has a transparent morphological structure and can occur as a syntactic autonomous head noun with lexical meaning. An example is the relator noun *tʰil=tok* “at the bottom of, under”, which consists of the autonomous noun *tʰil* “bottom”

and the dative marker =*tok*. A prototypical postposition, on the other hand, has an opaque morphological structure, can only occur in combination with a head noun, and does not have concrete lexical meaning. An example is *bont^hek* “for the sake of”, which cannot be segmented into smaller meaningful elements, cannot occur as a syntactically autonomous word, and does not have concrete semantic content. The three parameters are summarized in the table below.

Table 45: Prototypical relator nouns and postpositions

	Relator noun	Postposition
Morphological structure	transparent	intransparent
Syntactic status	autonomous	non-autonomous
Semantic content	lexical	grammatical

The majority of morphemes belonging to the class of relator nouns and postpositions do not conform to the two prototypes defined above. Most of them exhibit features of both relator nouns and postpositions. The morpheme =*ki jartok* “above, on top of”, for example, behaves like a postposition with regard to its morphological structure (intransparent) and its semantic content (grammatical). However, it can occur as a syntactically autonomous word and thus also possesses characteristics of a relator noun. Any attempt to draw a strict line between the two categories is thus necessarily arbitrary. In the following, I only refer to morphemes as relator nouns if they are prototypical relator nouns according to the definition given above, i.e. exhibit all three properties depicted in Table 45. All other morphemes will be referred to as postpositions.

4.5.1 *jartok* “on top of”

The postposition *jartok* expresses a locational relation in which the marked referent is placed on top of another object. As mentioned above, the lexeme also occurs as an independent locational adverbial with the meaning “above”.

(192) *pandra mi:lgi jartok brakp^huk tiki ni:*

<i>pandra mi:l=ki</i>	<i>jartok</i>	<i>brakp^huk=tiki</i>	<i>ni:</i>
Pandrah Meel=GEN	above	cave=INDEF	EX.NON1SG

“Above Pandrah Meel there is a cave.”

(Tulshug Lingpa 13)

(193) *kap jartok dzatsʰak buɕi ni:*.

<i>kap_{LN}</i>	<i>jartok</i>	<i>dza-tsʰak</i>	<i>but-s-ɕ-dzi</i>	<i>ni:</i>
cup	above	tea-sieve	put-DETR-MID-CVB.SG	EX.NON1SG

“A tea sieve has been put on top of the cup.”

(SA questionnaire 48 [elicited])

(194) *jartoktɕi rananʔ raden sarok dattɕi na.*

<i>jartok=tɕi</i>	<i>ra=nanʔ</i>	<i>ra=den</i>	<i>sa=tok</i>
above=ABL	come=CON	come=IMMED	ground=DAT

dat-dzi=na

fall-PST.INFER.DJ.SG=HS

“Having come from above, he immediately fell on the ground, it is said.”

(King Kesar 270)

The first syllable of the postposition is most probably cognate with the WT adverb *yar* “above”. It is not clear whether this lexeme is genuine to the Bunan lexicon or a loanword from a neighboring Tibetan variety. The second syllable is reminiscent of the dative clitic =*tok*, but does not undergo the morphophonological voicing assimilation to [=dok], which would be expected after a non-vocalic resonant. In addition, the syllable differs from the dative marker in being able to bear stress. Thus, the second element is clearly not the dative case clitic. It may, however, represent an archaic form of the contemporary marker =*tok*. Whatever the exact origin of the form may be, it is clearly not morphologically complex from a synchronic point of view. Consequently, it is simply glossed as “above”.

4.5.2 *thil=tok* “under”

The relator noun *thildok* indicates that the marked referent is located underneath another object. The form is morphologically complex, consisting of the noun *thil* “bottom, ground” and the dative marker =*tok*. This morphological analysis is in line with phonological evidence. The phrasal accent lies on the first syllable, indicating that the second syllable is a grammatical morpheme. The noun *thil* is cognate with WT *mthil* “bottom, ground” and has most probably been borrowed from a neighboring Tibetan variety.

(195) *kʰatɕikɕi loɕak wa sakjat saj tʰildok dzotmen loɕak.*

<i>kʰatɕik=ɕi</i>	<i>lot-s-ɕ-ʰak</i>	<i>wa</i>	<i>sakjat</i>	<i>sa=ki</i>
some=PL	say-DETR-MID-PRS.DJ.PL	FOC	place	ground=GEN
<i>tʰil=dok</i>	<i>dzot-men=jen</i>	<i>lot-s-ɕ-ʰak</i>		
bottom=DAT	stay-INF=EQ.CJ	say-DETR-MID-PRS.DJ.PL		

“And some people say that the fairies stay in a place below the ground, so it is said.”

(The Fairies of Kullu 1.18)

(196) *tsaku ti kʰum tʰildok tsakdzi bura*

<i>tsaku=tiki</i>	<i>kʰum</i>	<i>tʰil=tok</i>	<i>tsak-ø-dzi</i>
knife=INDEF	pillow	bottom=DAT	put.inside-TR-CVB.SG
<i>but-a</i>			
put-IMP.SG			

“Put a knife under your pillow and keep it there (if you are scared at night).”

(Conversation 58.14)

4.5.3 *dutɕi* ~ *dutɕimaŋ* “in front of, before”

The postposition *dutɕi* ~ *dutɕimaŋ* prototypically describes a locational relation in which an object is located in front of the marked referent. When attached to a word that refers to a point in time or a time interval, it may also assume the temporal meaning “before” and denote that an event took place before the point in time referred to by the respective noun. Additionally, *dutɕi* ~ *dutɕimaŋ* can also occur without a head noun, in which case it functions as an independent locational / temporal adverbial.

(197) *tʰadzuj dutɕimaŋ astok niskiŋlek tsʰo astok re gjaragire astok tankja riŋga na.*

<i>tʰadzu=ki</i>	<i>dutɕimaŋ=astok</i>	<i>niskiŋ=lek</i>	<i>tsʰo=astok=re</i>
that=GEN	in.front=TERM	two=APP	lake=TERM=EXT
<i>gjaragire=astok</i>	<i>tant-ka</i>	<i>riŋ-ka=na</i>	
circular=TERM	see-PROG.SG	say-PROG.SG=HS	

“Somewhere in front of that, they saw something like two lakes, like two circular things, it is said.”

(King Kesar 228)

(198) *gi: kjumgi dutəi tʰas ni:*.

<i>gi=ki</i>	<i>kjum=ki</i>	<i>dutəi</i>	<i>tʰas</i>	<i>ni:</i>
1SG=GEN	house=GEN	in.front.of	garden	EX.NON1SG

“In front of my house there is a garden.”

(NN 12.2 [elicited])

(199) *dutəi darzi: riktəum pʰantəa.*

<i>dutəi</i>	<i>darzi: LN</i>	<i>rik-tə-um=jen</i>	<i>pʰan-tə-a</i>
before	tailor	bring-TR-INF=EQ.CJ	sew-TR-SUP

“Back then, people used to bring tailors (from Kullu) for sewing.”

(Tshechu 2.7)

The proposition *dutəi* is morphologically complex and can be segmented into an element *du* and the ablative marker *=təi*. Often, the allative clitic *=maŋ* is additionally attached to the preposition. As argued in § 4.4.4, the cooccurrence of two case clitics on the same morphological host is a common phenomenon in Bunan. Still, the sequence of the ablative *=təi* and the allative *=maŋ* is remarkable, as this order of case clitics is only attested in the case of the prepositions *dutəimaŋ* “in front of” and *kʰotəimaŋ* “behind”. I have not been able to detect a semantic distinction between the two forms *dutəi* and *dutəimaŋ*. According to my consultants, they do not differ in terms of their meaning.

The lexical element *du*, which is also attested in the temporal adverbial *durek* “earlier, before”, is semantically opaque. Comparative evidence suggests that *du* originally may have been an adverbial or noun with the meaning “in front” or “front side”, respectively (cf. the possible Written Tibetan cognate *mdun* “front side”, which exhibits an additional nominalizing suffix **-n*). Thus, the postposition may have developed in the same way as the English preposition *in front of*. However, given the fact that the original meaning of the lexical element *du* is no longer transparent, I do not analyze the postposition as morphologically complex and simply gloss it as “in.front.of” or “before”. This approach seems all the more legitimate, as most young speakers pronounce the postposition *dutəimaŋ* with phrasal stress on the second syllable. This implies that the members of the young speaker generation no longer perceive *=təi* as a grammatical suffix but rather as the second syllable of a monomorphemic word *dutəi* ~ *dutəimaŋ*.

4.5.4 *kʰokjotəi* ~ *kʰotəi* ~ *kʰotəimaŋ* “behind, after”

Like the postposition *dutəi*, the postposition *kʰokjotəi* can express both spatial and temporal relations. When attached to a word that refers to a location, the postposition indicates that an object is placed behind the marked referent. When attached to a word that

denotes a point in time, the postposition indicates that an event will take place after the indicated point in time. The full form *kʰokjotɕi* is only rarely attested in my material. Most speakers prefer the contracted form *kʰotɕi*, which is often augmented with the allative clitic =*maŋ*. As in the case of the alternating forms *dutɕi* ~ *dutɕimaŋ* “in front, before”, I have not been able to identify any difference in meaning between the two variant forms.

(200) ... *bidʒli: maha:devgi gompaj kʰotɕi astok buʃa tedzi tiki ramen bor asti tiki.*

bidʒli: maha:dev=ki gompa=ki kʰotɕi=astok buʃa
 Bijli Mahadev=GEN monastery=GEN behind=TERM tree

tedzi=tiki ra-men=jen bor=asti=tiki
 big=INDEF come-INF=EQ.CJ shrub=SML=INDEF

“... somewhere behind the temple of Bijli Mahadev, there is a big tree similar to a bush.”

(The Fairies of Kullu 1.82)

(201) *tɕubij tɕwanj bij kʰotɕi tapɕi radʒi nuŋ tʃonj likdʒi kʰotɕi.*

tɕu=bij tɕwanj bij kʰotɕi tap-s-ɕ-dʒi
 ten=year fifteen year after bring.back-DETR-MID-CVB.SG

ra-dʒi tʃonj lik-ɕ-dʒi kʰotɕi
 come-PST.INFER.DJ.SG trade do-TR-CVB after

“After ten, fifteen years, he came back there, having worked as a trader.”

(Conversation 87.319)

(202) *da gi kʰotɕi mabroa dzagek tsunati dzagek.*

da gi kʰotɕi ma-bro-ka dza-k-ek
 now 1SG after NEG-mix-PROG eat-INTR-PRS.CJ.SG

tsuna=tiki dza-k-ek
 little.bit=INDEF eat-INTR-PRS.CJ.SG

“I will eat a little bit of (curd) later, without mixing it (with the stew).”

(Conversation 42.8)

The meaning of the lexical root *kʰokjo-* is unclear. One may speculate that the root may have started out as a noun with the meaning “back, back side”. Accordingly, the construction *X=ki kʰokjo=tɕi* would originally have had the literal meaning “from the back of X”. However, there is not comparative evidence that could corroborate that assumption. I do thus not analyze the expression as morphologically complex, but simply gloss it as “be-

hind, after”. This also seems legitimate in consideration of the fact that most young speakers consistently pronounce *kʰotɕi* with phrasal stress lying on the second syllable. This indicates that they do no longer consider the postposition as consisting of a lexical stem followed by a grammatical suffix, but rather regard it as a monomorphemic word.

4.5.5 *tak=tok* “above”

The postposition *tak=tok* is only attested once in my corpus. It expresses that a referent is located at the upper end of an area, as illustrated by the following example.

(203) *nun asti tʰadzu gonma rikki taktok hoɕmej tʰipsa.*

<i>nun=asti</i>	<i>tʰadzu</i>	<i>gonma</i>	<i>rik=ki</i>	<i>tak=tok</i>	<i>hoɕmej</i>
there=SML	that	upper	field=GEN	above=DAT	very.much

tʰip-s-ɕ-tsʰa
beat-DETR-MID-PST.DIR.DJ.PL

“Somewhere there above that upper field they quarreled very much.”
(Tshechu 2.63)

The postposition consists of a lexical root *tak*, to which the dative clitic *=tok* has been attached. The root *tak* is most probably a cognate of WT *ltag* “up, above, on the top” and may have been borrowed from a neighboring Tibetan variety.

4.5.6 *barlak=kun* “in the space between”

The relator noun *barlak=kun* commonly attaches to conjoined noun phrases and indicates that an object is located between the respective referents. At the same time, *barlak=kun* is also attested as a temporal adverbial with the meaning “in the meantime, meanwhile”.

(204) ... *nepa:l=nan tʰadzu qendzongki barlakkun sakjat tikoktɕi eltɕʰi.*

<i>nepa:l=nan</i>	<i>tʰadzu</i>	<i>qendzong=ki</i>	<i>barlak=kun</i>
Nepal=CON	that	Sikkim=GEN	intermediate.space=LOC

sakjat=tiki=tok=tɕi *el-tɕʰi*
place=INDEF=DAT=ABL go-CVB.PL

“... having gone from a place between Nepal and Sikkim.”
(Tulshug Lingpa 181)

(205) *tal nisbiŋ barlakkun̄ sumbiŋ ka dʒotken pʰarak.*

<i>tal</i>	<i>nis=biŋ</i>	<i>barlak=kun̄</i>	<i>sum=biŋ</i>	<i>ka</i>
3[SG]	two=year	intermediate.space=LOC	three-year	ASS
<i>dʒot-ka=ni</i>		<i>pʰarak_{LN}</i>		
stay-PROG.SG=EX.NON1SG		difference		

“There must be a difference of two, three years between him (and me).”

(Conversation 36.113)

(206) *nanth̄an the th̄ara maskjan̄ epo bete barlakkun̄ ʂitt̄əi ...*

<i>nanth̄an</i>	<i>the</i>	<i>th̄ara</i>	<i>ma-(s)kja=nan̄</i>	<i>epo</i>	<i>bete</i>
if	this	that.other	NEG-become=COND	good	child
<i>barlak=kun̄</i>		<i>ʂit-dʒi</i>			
intermediate.space=LOC		die-CVB.SG			

“If this does not turn out well and the child dies during that time”

(King Kesar 90)

The relator noun consists of a noun *barlak* “intermediate space” and the case clitic =*kun̄*, yielding the literal meaning “in the space between”. The root *bar* is also attested in the temporal adverbial *barbargun̄* “sometimes” and the compound noun *bar-awa* “second eldest father” (lit. “intermediate-father”). It is possible that *bar* is a borrowing from western Tibetan idioms, where reflexes of WT *bar* “intermediate space” are widely attested.

4.5.7 *sep=kun̄* “among”

The postposition *sep=kun̄* indicates that an object is placed between other objects. The postposition is thus functionally contiguous to the postposition *barlak=kun̄*. However, whereas *barlak=kun̄* refers to a specific place between two objects, the meaning of *sep=kun̄* is more vague and only indicates an approximate location between an undefined number of objects. It is thus more suitable to translate *sep=kun̄* as “among”.

(207) *th̄adzun̄ barbargun̄ th̄adzu ʂur-buʂa=ki sep=kun̄ barbargun̄ bubuti radʒi dʒott̄əi.*

<i>th̄adzu=kun̄</i>	<i>barbargun̄</i>	<i>th̄adzu</i>	<i>ʂur-buʂa=ki</i>	<i>sep=kun̄</i>
that=LOC	sometimes	that	pine-tree=GEN	among=LOC
<i>barbargun̄</i>	<i>bubu=tiki</i>	<i>ra-dʒi</i>	<i>dʒot-dʒi</i>	
sometimes	owl=INDEF	sit-CVB.SG	sit-PST.INFER.DJ.SG	

“Sometimes, there, among those trees, an owl came and sat down.”

(The Lama and the Owl 4)

The postposition consist of the lexical root *sep* “among” and the locative clitic *=kuŋ*. Phrasal stress commonly lies on the first syllable of the postposition, which suggests that speakers perceive it as a morphologically complex word rather than a monomorphemic lexeme. However, the root *sep* is not attested as an independent morpheme in Bunan. It is possible that the root is a loanword from western Tibetan varieties, where a postposition *sep* ~ *seps* with the same function is widely attested. This assumption seems especially plausible considering the fact that this postposition is only attested in the speech of my oldest consultants, who are all fluent in Tibetan.

4.5.8 *naŋnak* “into”

The postposition *naŋnak* indicates that an object is placed inside of another object and is thus functionally similar to the locative case marker *=kuŋ*. However, whereas *=kuŋ* refers to static situations and simply expresses the meaning “in”, *naŋnak* has a dynamic connotation and thus translates as “into”.

(208) ... *rikki naŋnak el tʰirɛiʒi*.

<i>rik=ki</i>	<i>naŋnak</i>	<i>el=tʰir-s-ɛ-i=jendʒi</i>
field=GEN	into	go=send-DETR-MID-ACT=EQ.DJ.SG

“... he went into the field.”

(Conversation 87.345)

(209) *nunaŋ laŋ naŋnak pjakdʒi butʒi*

<i>nunaŋ</i>	<i>laŋ</i>	<i>naŋnak</i>	<i>pjak-ø-dʒi</i>	<i>but-ø-dʒi</i>
then	cow.dung	into	hide-TR-CVB	put-TR-CVB

“Then she hid it by putting it into a cow dung and”

(King Kesar 114)

The first element of the postposition clearly goes back to the noun *naŋ* “inside”. The second element *nak* is semantically opaque. The word can thus not be considered as morphologically complex from a synchronic point of view. Accordingly, the postposition is simply glossed as “into” in the following.

4.5.9 *bontʰek* “for the sake of”

The postposition *bontʰek* serves a range of different functions. Prototypically, *bontʰek* expresses that an action is performed for the sake of the marked participant. This rather abstract meaning clearly distinguishes *bontʰek* from the postpositions discussed previously, which express spatial or temporal relations.

(210) *gi ingi: bon^hek t^he likkata.*

<i>gi</i>	<i>ingi=ki</i>	<i>bon^hek</i>	<i>t^he</i>	<i>lik-ø-kata</i>
1SG	myself=GEN	for.the.sake	this	do-TR-FUT.CJ.SG

“I will do this for myself / for my own good.”

(TD 138.3 [elicited])

(211) *gi: bon^hek le!*

<i>gi=ki</i>	<i>bon^hek</i>	<i>le</i>
1SG=GEN	for.the.sake	do.IMP.SG

“Do (it) for my sake!”

(TD 64.1 [elicited])

The postposition *bon^hek* thus marks referents that benefit from an event. As demonstrated in § 4.4.4.3, the dative clitic =*tok* can serve a similar function. However, the case clitic and the postposition do not express exactly the same meaning when attached to recipient arguments. The dative clitic =*tok* indicates that the marked referent is a recipient that will gain a concrete benefit from the action expressed by the predicate. In the following sentence, for example, the dative clitic indicates that the recipient will receive a pair of socks that have been knitted for her / him exclusively.

(212) *t^hadzu tinji manji tal=tok le!*

<i>t^hadzu</i>	<i>tinji</i>	<i>manji</i>	<i>tal=tok</i>	<i>le</i>
those	blue	red	3[SG]=DAT	make.IMP.SG

“Make those blue and red (socks) for him!”

(Conversation 16.3)

The postposition *bon^hek*, on the other hand, portrays the marked referent as a beneficiary without specifying in what way she / he will benefit from the action. Thus, sentence (211) above does not entail that the action performed by the addressee will result in a physical product that will be given to the speaker. The speaker might as well profit in a more abstract way, e.g. by being relieved from an urgent duty.

In addition, the postposition *bon^hek* serves a number of other functions, which appear to have evolved from the unspecified “beneficent relation” described in the paragraph above. For example, *bon^hek* can express a causal relation between two propositions. In this case, the postposition occurs after the demonstrative *t^hadzu*, which anaphorically refers to the preceding proposition.

(213) *tʰadzuɟ bonʰtʰek kanʰanmej tʰertʰwak.*

<i>tʰadzu=ki</i>	<i>bonʰtʰek</i>	<i>kanʰanmej</i>	<i>tʰer-tʰwak</i>
that=GEN	for.the.sake	very.much	be.sad-PST.INFER.DJ.PL

“Because of that they were extremely sad.”

(King Kesar 15)

In addition, *bonʰtʰek* can also denote the purpose of an action. In sentence (214) below, it follows the infinitive form *tʰuks-men* “to settle down”, yielding the complex phrase *tʰuks-men=ki bonʰtʰek* “in order to settle down”. Further, the postposition occurs after supine forms, as in example (215). In this case, the postposition emphasizes the intention of the agent argument to perform an action, a function that can be fulfilled by the dative case clitic *=tok* as well (cf. § 4.4.4.3).

(214) *nun ni: wa mi tʰuksmengi bonʰtʰek soti re mani: ɕiŋ re mani:.*

<i>nun=ni:</i>	<i>wa</i>	<i>mi</i>	<i>tʰuks-men=ki</i>	<i>bonʰtʰek</i>
there=TOP	FOC	person	settle.down-INF=GEN	for.the.sake
<i>soti=re</i>	<i>ma-ni:</i>	<i>ɕiŋ=re</i>	<i>ma-ni:</i>	
water=EXT	NEG-EX.NON1SG	wood=EXT	NEG-EX.NON1SG	

“In that place, there is no water, nor wood for people to settle down.”

(Tulshug Lingpa 146)

(215) *wa tal sarka daɕidʒi tsumtʰa bonʰtʰek rolaŋsi*

<i>wa</i>	<i>tal</i>	<i>sarka_{LN}</i>	<i>da-s-ɕ-i=jendʒi</i>
FOC	3[SG]	road	give-DETR-MID-ACT=EQ.DJ.SG
<i>tsum-tʰa</i>	<i>bonʰtʰek</i>	<i>rolaŋs=dʒi</i>	
catch-TR-SUP	for.the.sake	rolangs=ERG.SG	

“And he ran off (lit. “gave the road”) in order to catch him, the rolangs.”

(Conversation 87.344)

In its purposive function, *bonʰtʰek* also directly attaches to nouns, as in the example given below. In this case, the postposition translates as the English preposition *for*, which shows a similar degree of multifunctionality and may both mark beneficiaries (*I will do it for him*) and purposes (*It is a great day for a walk*).

(216) *win̄tar ʈurisam bon̄tʰek tsʰaŋi basta pujdak sakjat jend̄zi eraŋmaŋ.*

<i>win̄tar ʈurisam_{LN}</i>	<i>bon̄tʰek</i>	<i>tsʰaŋi=basta</i>	<i>pujdak</i>	<i>sakjat</i>
winter.tourism	for.the.sake	all=INTESS	good	place
<i>jend̄zi</i>	<i>eraŋ=maŋ</i>			
EQ.DJ.SG	1PL.INCL=ALL			

“For winter tourism it is the best among all places, Lahaul.”

(Conversation 85.3)

4.6 Honorific nouns

Bunan possesses a small number of honorific nouns. These nouns rarely occur in everyday language. Speakers only use them in discourse contexts in which they are talking about a person with a superior social status, i.e. monks or members of a *tʰakur* family (i.e. the family of a traditional petty chief). Note that the opposition of basic and honorific expressions in Bunan does not equal the contrast between basic and elegant vocabulary items in English (e.g. *to have* vs. *to possess*, *to eat* vs. *to dine*, etc.). The use of honorific expressions is compulsory whenever a speaker refers to a person with a superior social status, regardless of whether the relevant person is present or not. Consider the following example sentence, which contains one honorific noun (*soldza* “tea”) as well as two honorific verbs (*don-men* “to eat, to drink” and *am-men* “to go, to come”).

(217) *meme=gi soldza don-tʰi wa gompamaŋ amtsʰa.*

<i>meme=gi</i>	<i>soldza</i>	<i>don-tʰi</i>	<i>wa</i>	<i>gompa=maŋ</i>
monk=PL	tea.HON	drink.HON-CVB.PL	FOC	monastery=ALL
<i>am-tʰa</i>				
go.HON-PST.DIR.DJ.PL				

“The monks drank tea and then went to the monastery.”

(TD 73.14 [elicited])

If we would replace all honorific expressions with their corresponding basic terms in the example sentence given above, the resulting utterance would sound inappropriate not to say disrespectful to a Bunan speaker.

The honorific vocabulary of Bunan has been borrowed from neighboring Tibetan varieties. Tibetic languages are generally renowned for their intricate systems of honorific expression. The following table gives an overview of the honorific nouns that are attested in my data. Note that this list may not be exhaustive. Individual speakers may have much larger honorific vocabularies depending on their proficiency in Tibetan.

Table 46: Common honorific nouns

Meaning	Basic expression	Honorific expression	WT equivalent
“food”	<i>dzamen</i>	<i>saṅma</i>	<i>bsang ma</i>
“soup”	<i>thukpa</i>	<i>dzam</i>	<i>‘jam</i>
“dead body”	<i>ro</i>	<i>phunpo ~ pur</i>	<i>phung po ~ spur</i>
“tea”	<i>dza</i>	<i>soldza</i>	<i>gsol ja</i>
“liquor”	<i>arak</i>	<i>kem</i>	<i>skyems</i>
“barley beer”	<i>ṭaṅ</i>	<i>kem</i>	<i>skyems</i>
“seat of a lama”	-	<i>thi</i>	<i>khri</i>

5 Pronouns and demonstratives

5.1 Introduction

This section discusses different types of pronouns and demonstratives. The status of pronouns and demonstratives as a distinct lexical class rests on two morphosyntactic criteria. First, pronouns and demonstratives can substitute for and anaphorically refer to whole noun phrases. Second, pronouns and demonstratives cannot be modified by adjectives or relative clauses. With regard to their semantic content, pronouns and demonstratives also distinguish themselves from nouns, as their meaning strongly depends on the pragmatic context. Whereas a noun like *saŋs* “horse” possesses some degree of inherent referential value and evokes connotations of a particular animal species, a demonstrative pronoun like *ʰadzu* “that” is devoid of any specific semantic content and only receives a referential value in the pragmatic context of an utterance. Demonstratives additionally distinguish themselves from pronouns in terms of their strong deictic connotation. The demonstrative expressions of Bunan revolve around a binary opposition of spatial proximity (“this”, “here”, “like this”, “this much”, etc.) vs. spatial remoteness (“that”, “there”, “like that”, “that much”, etc.). However, as I will argue below, these spatial relations have been metaphorically extended to other semantic domains and may likewise express differences in temporal deixis, social deixis, etc.

The chapter is structured in the following manner: In § 5.2, I give an overview of the different types of pronouns. In § 5.3, I discuss the different types of demonstratives that are attested in my data. Note that I follow Diessel (1999: 74) in including demonstrative adverbs of location, manner, quantity and quality in my description of demonstrative expressions.

5.2 Pronouns

5.2.1 Personal pronouns

Personal pronouns are a closed lexical class of words that can substitute for nouns or noun phrases that refer to human beings or, more generally, entities that are conceptualized as human-like, i.e. supernatural beings such as gods, demons, and talking animals. Personal pronouns additionally indicate the speech act role of the substituted referent, i.e. speaker (first person), addressee (second person), or non-participant (third person). All personal pronouns can be marked for plural reference with the plural clitic *=əi*. Dual forms are formed periphrastically by postposing the numeral *nispi* “two (human)” after a pronoun. However, the expression of duality is not obligatory, and it is perfectly possible to use a plural form to refer to a group of two persons.

The first person singular pronoun is *gi*. In the first person plural, there is a distinction between an inclusive form *eraŋ* and an exclusive form *hiŋ*. The inclusive form comprises the speaker and the addressee and may include further non-speech-act participants as well. The exclusive form refers to the speaker and non-speech-act participants, but explicitly excludes the addressee. When standing in the absolutive case, *eraŋ* and *hiŋ* can be optionally marked with the plural clitic *=ɛi*, while they obligatorily have to take the plural marker *=tsʰi* (instead of *=dzi*) when being marked for ergative case. The genitive forms of *eraŋ* and *hiŋ* have the irregular shape *erĩː* and *hĩː*. Table 47 below gives an overview of first person pronoun forms.

Table 47: First person pronouns

	Singular	Plural	
		Exclusive	Inclusive
ABS	<i>gi</i> [gi]	<i>hiŋ ~ hiŋ=ɛi</i> [hiŋ] ~ [hiŋɛi]	<i>eraŋ ~ eraŋ=ɛi</i> [eraŋ] ~ [eraŋɛi]
ERG	<i>gi=dzi</i> [gizi]	<i>hiŋ=tsʰi</i> [hiŋtsʰi]	<i>eraŋ=tsʰi</i> [eraŋtsʰi]
DAT	<i>gi=tok</i> [girok]	<i>hiŋ=ɛi=tok</i> [hiŋɛoʔkˀ]	<i>eraŋ=ɛi=tok</i> [eraŋɛoʔkˀ]
GEN	<i>gi=ki</i> [giː]	<i>hĩː</i> [hĩː]	<i>erĩː</i> [erĩː]

In the expressions *eraŋ-mi* “member of the Bunan speaking community” (lit. “our person”) and *eraŋ-kat* “Bunan language” (lit. “our language”), the first person plural inclusive pronoun occurs as the first constituent of a compound noun. The two concepts may also be referred to as *erĩ mi* and *erĩ kat*, respectively, but the compound expressions are much more common. This is remarkable, as pronouns do not normally occur as constituents of compounds. However, the particular morphological structure of the two nouns might be explicable in terms of their special semantic content. The semantic concepts “person belonging to our community” and “language of our community” are crucial for the identity of an ethnicity, and thus have a high token frequency in natural discourse. Both factors may have encouraged the development of such compound nouns from originally periphrastic forms.

(218) *eraŋmitsʰi maʰuptɕʰak ʰapatsʰi maʰuptɕʰak ʰelekti.*

<i>eraŋ-mi=tsʰi</i>	<i>ma-ʰup-tɕ-ʰak</i>	
1PL.INCL-person=ERG.PL	NEG-be.able-TR-PRS.DJ.PL	
<i>ʰa-pa=tsʰi</i>	<i>ma-ʰup-tɕ-ʰak</i>	<i>ʰe=lek=tiki</i>
India-NZR=ERG.PL	NEG-be.able-TR-PRS.DJ.PL	this=APP=INDEF

“Neither our people, nor Indians are able (to learn) this much (of a foreign language).”

(Conversation 25.23)

(219) *ajna eraŋkat leɕi jendzi wa.*

<i>ajna</i>	<i>eraŋ-kat</i>	<i>let-s-ɕ-i=jendzi</i>	<i>wa</i>
much	1PL.INCL-language	teach-DETR-MID-ACT=EQ.DJ.SG	FOC

“(Grandfather) taught (Manuel) a lot about our language.”

(Conversation 25.16)

(220) *erĩ kat lettɕipa sur magwaj jen ʰan astok.*

<i>erĩ</i>	<i>kat</i>	<i>let-tɕ-i-pa</i>	<i>su=re</i>
1PL.INCL.GEN	language	teach-TR-ACT-NZR	who=EXT
<i>ma-gwa-i=jen</i>	<i>ʰan=astok</i>		
NEG-EX.PL-ACT=EQ.CJ	today=TERM		

“There has not been anybody teaching our language (i.e. Bunan) until today.”

(Conversation 25.58)

The non-honorific second person pronoun form is *han*. As a rule of thumb, people use *han* to address people who are younger than themselves or of the same age. However, it is perfectly possible to address older people with *han* as well, for example, if one stands in an intimate relationship with the addressee. At the same time, older people may address younger persons with the honorific second person pronoun *ini* (see below) instead of *han* if the addressee has a higher social status than themselves. Note that the second person pronoun exhibits the irregular genitive singular form *hãj*. The following table gives an overview of the inflected forms of the second person pronoun *han*.

Table 48: Second person pronouns (non-honorific)

	Singular	Plural
ABS	<i>han</i> [han]	<i>han=ɕi</i> [handʑi]
ERG	<i>han=dzi</i> [handzi]	<i>han=tʂi</i> [hantʂi]
DAT	<i>han=tok</i> [handɔʔkʰ]	<i>han=ɕi=tok</i> [handʑɔʔkʰ]
GEN	<i>hãj</i> [hãj]	<i>han=ɕi=ki</i> [handʑi:]

As the table above illustrates, the pronominal stem *han* occurs in the singular and the plural. Based on the forms given above, one would thus intuitively assume that the unmarked pronominal stem *han* has an inherent singular value. However, on closer examination, it becomes clear that such an analysis is untenable. Consider the following example sentences, which contain instances of the unmarked singular form *han* (absolutive) as well as the plural forms *han=ɕi* (absolutive) and *han=tʂi* (ergative).

(221) *han gujtsuk jen?*

han *guj=tsuk* *jen*
2[SG] where=REL EQ.CJ

“Where are you from?”
(Tshechu 2.46)

(222) *hanʑi kʰantsuk bamtsɛi mi jentɕʰok!*

han=ɕi *kʰantsuk* *bamt-ɕ-i* *mi* *jentɕʰok*
2=PL what.kind.of go.mad-MID-ACT person EQ.DJ.PL

“What kind of crazy people you are!”
(Tulshug Lingpa 207)

(223) *hantshɪ pʰjakʰak kʰa tedzi tarkʰak na.*

<i>han=tshɪ</i>	<i>pʰja-kʰak</i>	<i>kʰa</i>	<i>tedzi</i>
2=ERG.PL	talk-INTR-PRS.DJ.PL	what	big

tar-kʰak=na

do-INTR-PRS.DJ.PL=HS

“How you people are talking and boasting!’, he said.”

(King Kesar 282)

If we assign an inherent singular value to the pronoun form *han*, we are confronted with the problem that the forms *han=ɕi* and *han=tshɪ* have to be glossed as “2SG=PL” and “2SG=ERG.PL”, respectively, although the two forms can impossibly exhibit the mutually exclusive number values “singular” and “plural” at the same time. This suggests that the unmarked pronoun *han* does not possess an inherent singular value. However, if the number value of *han* is not specified, we have to account for the fact that every native speaker of Bunan would confirm that the pronoun *han* in example (221) has a clear singular reference.

Bickel (1996: 13–15) offers a solution to this dilemma. Based on a study of personal pronouns in Belhare⁵⁶, he demonstrates that inconsistent number values of personal pronouns may be the consequence of generalized “scalar implicatures” (see Horn 2004) and argues that the respective pronoun forms are part of so-called “Horn-scales” (Atlas & Levinson 1981). In other words, the meaning of such pronoun forms is not exclusively lexically determined, but likewise depends on the pragmatic context in which they are used, or, more precisely, on the functional oppositions in which they occur.

Let us reconsider example (221) above. As pointed out earlier, Bunan speakers agree on the fact that *han* has a singular value in this sentence. However, Bickel (1996: 13; emphasis original) points out that the use of the “singular” form does not “necessarily restrict the number of referents to a single person. [... .] I am explicit only about the fact that I have **at least** one person in mind, not **at most** one” Thus, the use of the unmarked form *han* does not *a priori* rule out the logical possibility that a statement is referring to several people, but since the speaker does not use the plural form *han=ɕi*, the hearer infers that *han* must have a singular reference. Bickel emphasizes that the speaker would not be lying if she / he were using the unmarked form *han* to refer to several people. However, she / he would then violate Grice’s Maxim of Quantity, which demands that a statement be made as informative as required (Grice 1975: 47). Using *han* in a context

⁵⁶ Belhare is a Tibeto-Burman language of eastern Nepal. It belongs to the Kiranti subgroup of the Tibeto-Burman family (Bickel 1996: 21–22).

in which the speaker is sure that she / he is talking about more than one person would be uncooperative, as the speaker would withhold verified information from the hearer.

We can thus postulate the Horn-scale $\langle \text{PL}, \emptyset \rangle$ for the number value of the personal pronoun *han*. The Maxim of Quantity demands that a speaker always use the highest possible value of the scale (provided that the speaker is cooperative). If a speaker knows that her / his statement refers to more than one person, she / he is obliged to use the plural form. Only if a speaker does not have the evidence that her / his proposition holds for more than one person may she / he use the singular form.

Bickel's approach allows us to explain the seemingly contradictory function of the personal pronoun *han*. Essentially, the morpheme merely exhibits the inherent semantic value "second person". However, because *han* represents the lower-bound value of the Horn-scale $\langle \text{PL}, \emptyset \rangle$, in which it stands in opposition to the upper-bound value *han=ɛi*, it acquires a singular value when occurring without overt plural marking. Note that the Horn-scale $\langle \text{PL}, \emptyset \rangle$ is not only valid for the second person pronoun *han*. It likewise accounts for the function of all other personal pronouns without an inherent number value, i.e. the honorific second person pronoun *ini*, the third person pronoun *tal*, the emphatic pronouns *inggi* (first person), *ini* (second person), and *indzi* (third person), etc.

The analysis presented above has a number of implications for the glossing conventions used in this thesis. As the unmarked pronoun stem *han* does not possess an inherent number value, it will be glossed as "2[SG]" if there are no other syntactic elements in the clause that indicate plurality, e.g. the postnominal quantifiers *=ɲama* or *tsʰaŋji ~ tsʰaŋtsʰaŋji* (cf. § 4.4.3.2).⁵⁷ If a plural case marker *=ɛi*, *=tsʰi* or a postnominal plural quantifier *=ɲama*, *tsʰaŋji ~ tsʰaŋtsʰaŋji* occurs with the pronoun, it will simply be glossed as "2", e.g. *han=ɛi* "2=PL", *han=ɲama* "2=all". The same conventions hold for all other personal pronouns with no inherent number value.

The honorific second person pronoun is *ini*. The pronoun is formally identical with the second person emphatic pronoun and is probably derived from it (cf. § 5.2.2 below). In contrast to *han*, *ini* is polite and expresses the speaker's respect for the addressee. Consequently, speakers generally use the pronoun to address people who are older than themselves, but it is also possible to use *ini* when talking to a younger person. I myself, for example, was often addressed with the honorific pronoun by people who were considerably older than myself. Like the non-honorific second person pronoun *han*, the pronominal stem *ini* does not have an inherent number value. The grammatical category "number" is expressed by clitics that are attached to the pronoun. The following table lists the inflected

⁵⁷ In line with the Leipzig Glossing Rules, I use square brackets to indicate that a grammatical element is not overtly marked on a form.

forms of the second person honorific pronoun. Note that the dative singular clitic =*tok* often merges with the pronominal base *ini* into a short form *inok*.

Table 49: Second person pronouns (honorific)

	Singular	Plural
ABS	<i>ini</i> [ini]	<i>ini=ɛi</i> [inɪzi]
ERG	<i>ini=dzi</i> [inɪzi]	<i>ini=tʃi</i> [inɪtʃi]
DAT	<i>ini=tok ~ inok</i> [inɪɔʔkʰ ~ inɔʔkʰ]	<i>ini=ɛi=tok</i> [inɪɔʔkʰ]
GEN	<i>ini=ki</i> [ini:]	<i>ini=ɛi=ki</i> [inɪzi:]

The third person pronoun has the phonological form *tal*. The pronoun is not specified for gender and can refer to both female and male referents. As mentioned before, pronouns are used to refer to human beings or beings that are portrayed as human-like (e.g. gods, demons, talking animals, etc.). Accordingly, *tal* is not normally used to refer to animals. In such contexts, Bunan speakers commonly use the demonstrative pronouns *the* and *theadzu*. Like the second person pronouns, *tal* does not have an inherent number value. Whether a form possesses singular or plural reference is indicated by the clitics that follow after the pronoun. The following table gives an overview of the inflected forms of the third person pronoun *tal*. Note the irregular genitive singular form, which has the phonological shape *taj*.

Table 50: Third person pronouns

	Singular	Plural
ABS	<i>tal</i> [tal]	<i>tal=ɕi</i> [talɕi]
ERG	<i>tal=dzi</i> [talzi]	<i>tal=tsʰi</i> [taltsʰi]
DAT	<i>tal=tok</i> [talɔʔkʰ]	<i>tal=ɕi=tok</i> [talɕoʔkʰ]
GEN	<i>taj</i> [tæj]	<i>tal=ɕi=ki</i> [talɕi:]

5.2.2 Emphatic / reflexive pronouns

There are three emphatic pronouns in Bunan: *inggi* for the first person, *ini* for the second person, and *indzi* for the third person. The three forms are derived from a pronominal stem **in-*, to which other morphemes have been suffixed.⁵⁸ The first person form seems to be a compound form consisting of **in-* and the first person pronoun *gi*. The second person pronoun consists of **in-* followed by an element *-i*, which is probably the modifier marker *-i* (cf. § 6.3.1). The third person pronoun is a combination of **in-* and an element *dzi*, which might go back to the ergative singular clitic *=dzi*. However, Francke (1909: 86) reports a third person emphatic pronoun *inzi* in Tinan, which looks rather similar. The word thus might as well be a borrowing.

The three emphatic pronouns do not have an inherent person value. All of them have short forms for the dative singular. Consider the following tables.

⁵⁸ This pronominal stem is widely attested in West Himalayish languages, e.g. Manchu *ena* “third person singular emphatic pronoun” (Francke 1909: 78), Tinan *ingga* “first person singular emphatic pronoun” and *inzi* “third person singular emphatic pronoun” (Francke 1909: 86), Standard Kinnauri *ānes* “self, myself, yourself, etc.” (Bailey 1910: 695), Shumcho *ɛn*, *ɛzn* “third person reflexive pronoun” (Huber 2013a: 257).

Table 51: Emphatic first person pronoun

	Singular	Plural
ABS	<i>in̩gi</i> [ɪŋji]	<i>in̩gi=ɛi</i> [ɪŋjiɛi]
ERG	<i>in̩gi=dzi</i> [ɪŋjiɛzi]	<i>in̩gi=tsʰi</i> [ɪŋjitʰi]
DAT	<i>in̩gi=tok ~ in̩gok</i> [ɪŋjiɾɔʔkʰ ~ ɪŋgɔʔkʰ]	<i>in̩gi=ɛi=tok</i> [ɪŋjiɛɔʔkʰ]
GEN	<i>in̩gi=ki</i> [ɪŋji:]	<i>in̩gi=ɛi=ki</i> [ɪŋjiɛi:]

Table 52: Emphatic second person pronoun

	Singular	Plural
ABS	<i>ini</i> [ini]	<i>ini=ɛi</i> [iniɛi]
ERG	<i>ini=dzi</i> [inizi]	<i>ini=tsʰi</i> [initʰi]
DAT	<i>ini=tok ~ inok</i> [iniɾɔʔkʰ ~ inɔʔkʰ]	<i>ini=ɛi=tok</i> [iniɛɔʔkʰ]
GEN	<i>ini=ki</i> [ini:]	<i>ini=ɛi=ki</i> [iniɛi:]

Table 53: Emphatic third person pronoun

	Singular	Plural
ABS	<i>indzi</i> [indzi]	<i>indzi=ɛi</i> [indziɛi]
ERG	<i>indzi=dzi</i> [indzizi]	<i>indzi=tsʰi</i> [indzitsʰi]
DAT	<i>indzi=tok ~ indzoʔkʰ</i> [indziɾoʔkʰ ~ indzoʔkʰ]	<i>indzi=ɛi=tok</i> [indziɛiɾoʔkʰ]
GEN	<i>indzi=ki</i> [indzi:]	<i>indzi=ɛi=ki</i> [indziɛi:]

As suggested by their name, emphatic pronouns accentuate the identity of a referent. Sentence (224) below, for example, was recorded while having dinner with my host family. Most family members had already finished eating and there were a number of empty plates on the floor. However, one child was still hungry, so his mother gave him another small portion of rice in the plate that she had been eating from before and uttered the sentence given below. With these words, she assured her son that only she herself and nobody else in the room had been using this plate.⁵⁹

(224) *the ingi: ɛul jen.*

the ingi=ki ɛul jen
this myself=GEN trace EQ.CJ

“These traces (of food in the plate) are my own.”

(Conversation 55.56)

(225) *han ini re doŋ tʰira ringare.*

han ini=re doŋ=tʰir-a riŋ-k-are
2[SG] yourself=EXT come.IMP=send-IMP.SG say-INTR-PRS.DJ.SG

“‘You yourself come with us as well!’, he said.”

(Tulshug Lingpa 212)

⁵⁹ People from Lahaul (and from India in general) are extremely reluctant to using dishes or water bottles that have already been used by other persons. The use of the same dish entails a high degree of intimacy. I have only observed it between parents and their children.

(226) *gi ingi ni astok erĩ: dzamen dzaj na: khjak ni astok.*

<i>gi</i>	<i>ingi</i>	<i>ni=astok</i>	<i>erĩ:</i>	<i>dzamen</i>	<i>dza-i</i>
1SG	myself	EX.SG=SIM	1PL.INCL.GEN	food	eat-ACT
<i>na:</i>	<i>khjak</i>	<i>ni=astok</i>			
EX.1SG	here	EX.SG=SIM			

“When I am on my own, I eat our food (i.e. traditional Bunan food), when I am here (in the Kullu Valley).”

(Conversation 70.4)

(227) *mjonmanj indzi elde thuptare wa.*

<i>mjon=manj</i>	<i>indzi</i>	<i>el-de</i>	<i>thup-tare</i>	<i>wa</i>
downstairs=ALL	herself	go-SUP	be.able-TR-PRS.DJ.SG	FOC

“She can go downstairs on her own (i.e. without the help of another person).”

(Conversation 68.14)

At the same time, the emphatic pronoun can also occur in “direct reflexive” and “indirect reflexive” constructions. According to Kemmer (1993: 42–43), a prototypical direct reflexive is an event that involves two participants, an agent / experiencer and a patient, both of which refer to the same entity. An indirect reflexive involves three participants, an agent, a theme, and a recipient, with the agent and the recipient referring to the same entity. A number of example sentences in which emphatic pronouns serve a reflexive function are given in the following.

(228) *gidzi ingi aræi: nanjak thajmen.*

<i>gi=dzi</i>	<i>ingi</i>	<i>aræi=ki</i>	<i>nanjak</i>
1SG=ERG.SG	myself	mirror=GEN	inside

thaj-ø-men
see-TR-PST.DIR.CJ

“I saw myself in the mirror.”

(TD 323.18 [elicited])

(229) *gi ingi: bonthek the likkata.*

<i>gi</i>	<i>ingi=ki</i>	<i>bonthek</i>	<i>the</i>	<i>lik-ø-kata</i>
1SG	myself=GEN	for.the.sake	this	do-TR-FUT.CJ.SG

“I will do this for myself / for my own good.”

(TD 138.3 [elicited])

In addition to the emphatic pronouns discussed above, there is an emphatic pronoun *raŋ* in Bunan. *raŋ* is most probably a loanword from a neighboring Tibetan variety (cf. WT *rang* “one(self)”). The same is true for the augmented variant form *ranga* (cf. WT *rang ga* “one(self)”), which is attested several times in my corpus as well. In Classical Tibetan and modern Tibetan dialects, *rang* is a pronoun that expresses reflexive, emphatic or indefinite meaning (Beyer 1992: 218; Huber 2005: 67; Zemp 2014: 281–287). In Bunan, *raŋ* is commonly used as an emphatic indefinite pronoun with the meaning “one(self)” (see examples below). A table that lists the inflected forms of the pronominal root is given below. Note the irregular genitive singular form *rāj*.

Table 54: Inflected forms of the emphatic pronoun *raŋ*

	Singular	Plural
ABS	<i>raŋ</i> [<i>raŋ</i>]	<i>raŋ=ɛi</i> [<i>raŋʒi</i>]
ERG	<i>raŋ=dzi</i> [<i>raŋzi</i>]	<i>raŋ=tshi</i> [<i>raŋtshi</i>]
DAT	<i>raŋ=tok</i> [<i>raŋɔʔkʰ</i>]	<i>raŋ=ɛi=tok</i> [<i>raŋʒɔʔkʰ</i>]
GEN	<i>rāj</i> [<i>rāj</i>]	<i>raŋ=ɛi=ki</i> [<i>raŋʒi:</i>]

(230) *raŋdzi ɲoŋdʒi menaŋ lottɕa gjaksmentsuk made.*

<i>raŋ=dzi</i>	<i>ɲoŋ-ø-dʒi</i>	<i>menaŋ</i>	<i>lot-tɕ-a</i>
self=ERG.SG	experience-TR-CVB	unless	say-TR-SUP
<i>gjaks-men=tsuk</i>	<i>ma-de</i>		
agree-INF=REL	NEG-ATT.SG		

“When one has not experienced (a story) personally, it is not possible to say (whether it is true or not).”

(Conversation 87.55)

(231) *rāj meme kjanaŋ sare nuntsuk k^{ha} kaj apa?*

<i>rāj</i>	<i>meme</i>	<i>kja=naŋ=sare</i>	<i>nuntsuk</i>	<i>k^{ha}</i>
self.GEN.SG	monk	become=COND=EMPH	that.kind.of	what
<i>kaj</i>	<i>apa</i>			
difficult	AUTH			

“If (everybody) had own monks, that kind of difficulties would not occur.”

(Tshechu 2.484)

5.2.3 Interrogative pronouns

Bunan possesses a number of different interrogative pronouns. The respective forms are listed in the following.

Interrogative pronouns

<i>k^{ha}</i>	“what”
<i>k^{ha}=tok</i>	“for what reason, for what purpose”
<i>k^{ha}antsuk</i>	“of what quality”
<i>k^{ha}anak</i>	“in what manner”
<i>k^{ha}alak</i>	“for what reason”
<i>guj</i>	“where”
<i>su</i>	“who, which”
<i>itəik</i>	“how many”
<i>itgjak</i>	“how many days”
<i>itbiŋ</i>	“how many years”
<i>ika ~ uka</i>	“when”

The interrogative pronoun *k^{ha}* is used in questions referring to the identity of non-human arguments, as in (232) and (233). It can also substitute for complement clauses of verbs of saying, as in (234).

(232) *k^{ha} liktə^{hak}?*

<i>k^{ha}</i>	<i>lik-tə^{hak}</i>
what	do-TR-PRS.DJ.PL

“What are they doing?”

(Conversation 16.194)

(233) *kʰar pata: mani: otɕirok kʰa ramen la?*

<i>kʰa=re</i>	<i>pata:LN</i>	<i>ma-ni:</i>	<i>otɕi=tok</i>	<i>kʰa</i>
what=EXT	clue	NEG-EX.NON1SG	tomorrow=DAT	what

ra-men=jen=la

come-INF=EQ.CJ=Q

“There is no way of knowing what might happen tomorrow.”

(Conversation 22.118)

(234) *kʰa riŋgare?*

<i>kʰa</i>	<i>riŋ-k-are</i>
what	say-INTR-PRS.DJ.SG

“What does he say?”

(Conversation 47d.64)

In exclamatory contexts, *kʰa* can also occur in what looks like an adnominal position, as in (235) below. However, *kʰa* should not be interpreted as a modifier in this sentence. In such contexts, the pronoun rather functions as a discourse marker that introduces a particular kind of question which expresses the speaker’s surprise over an event. This use of *kʰa* usually also indicates disapproval on behalf of the speaker.

(235) *kʰa gjar ramen kontɕok!*

<i>kʰa</i>	<i>gjar</i>	<i>ra-men=jen</i>	<i>kontɕok</i>
what	fear	come-INF=EQ.CJ	gosh

“Gosh, why should one be afraid of this?”

(Conversation 58.2)

The interrogative pronoun *kʰa* “what” serves as a derivational base for a number of morphologically complex interrogative pronouns. These are the pronouns *kʰa=tok* “for what reason”, *kʰantsuk* “of what kind, of what quality”, *kʰanak* “in what manner”, and *kʰalak* “why”. The only form that is still morphologically transparent in contemporary Bunan is the dative form *kʰa=tok*, which is composed of the stem *kʰa* “what” and the dative clitic =*tok*. The fact that phrasal stress usually falls on the first syllable of the pronoun indicates that speakers perceive the second syllable as a grammatical morpheme. *kʰa=tok* can be used in questions referring to the cause of an event, in which case the pronoun can be translated into English as “for what reason?”, as in (236), or in questions referring to the expected outcome of an event, in which case it translates into English as “for what purpose”, as in

(237). This distinguishes *kʰa=tok* from *kʰalak*, which can only refer to the cause but not the expected outcome of an action (see below).

(236) *kʰarok dzuk ra:re?*

<i>kʰa=tok</i>	<i>dzuk</i>	<i>ra-k-are</i>
what=DAT	pain	come-INTR-PRS.DJ.SG

“Why are you in pain?”

(Conversation 32.3)

(237) *kelanman kʰarok elte?*

<i>kelan=man</i>	<i>kʰa=tok</i>	<i>el-te</i>
Keylong=ALL	what=DAT	go-VOL.SG

“For what purpose do you want to go to Keylong?”

(NN 10.15 [elicited])

The interrogative pronoun *kʰantsuk* “of what quality” consists of the stem *kʰa* “what” followed by an obscure element *-n*, to which the definiteness marker *=tsuk* has been attached.⁶⁰ This pronoun commonly takes phrasal stress on the second syllable, which indicates that speakers do not consider *=tsuk* as a grammatical suffix anymore. Therefore, I do not segment *kʰantsuk* into individual morphemes, but analyze it as a monomorphemic interrogative pronoun. *kʰantsuk* usually occurs in adnominal position and refers to the quality of an object, as in (238) below. As illustrated in (239) and (240), *kʰantsuk* can also be used in declarative speech acts to emphasize the exceptional quality of an event or an object. In this case, the pronoun can also assume the function of an intensifying adverb.

(238) *kaʃi: kʰantsuk de?*

<i>kaʃi:LN</i>	<i>kʰantsuk</i>	<i>de</i>
curry	of.what.quality	ATT.SG

“How does the curry taste?”

(Conversation 16.147)

⁶⁰ It is conceivable that the opaque element *-n* goes back to the copula *ni:*. This would entail that the pronoun *kʰantsuk* represents a contraction of an old relative clause construction *kʰa ni:=tsuk* “(something) that is like what”.

(239) *da kʰa likkata tetkja kʰantsuk tʰerga dzoʔn.*

<i>da</i>	<i>kʰa</i>	<i>lik-ø-kata</i>	<i>tet-ka</i>	<i>kʰantsuk</i>
now	what	do-TR-FUT.CJ.SG	think-PROG.SG	of.what.quality
<i>tʰer-ka</i>		<i>dzot-i=jen</i>		
grieve-PROG.SG		sit-ACT=EQ.CJ		

“Thinking, ‘What will I do now?’, he was sitting there in great distress.”

(King Kesar 60)

(240) *tʰan kʰantsuk nam ra:re!*

<i>tʰan</i>	<i>kʰantsuk</i>	<i>nam</i>	<i>ra-k-are</i>
today	of.what.quality	sky	come-INTR-PRS.DJ.SG

“How heavily it is raining today!”

(Conversation 58.9)

The interrogative pronoun *kʰanak* “in what manner” consists of the stem *kʰa* followed by an element *-nak*, which also occurs in the demonstrative adverbs *henak* “in this manner” and *honak* “in that manner”. The etymology of this morphological segment is not clear. *kʰanak* is used to ask in which manner an action is performed. Accordingly, it only occurs in preverbal position.

(241) *diksak nampo pʰjat la kʰanak likmen.*

<i>diksak=nampo</i>	<i>pʰja-et=la</i>	<i>kʰanak</i>	<i>lik-ø-men</i>
sister-in-law=COM	talk-PST.DIR.CJ=Q	how	do-TR-PST.DIR.CJ

“Have you talked to sister-in-law (about) how she did it?”

(Conversation 96.4)

The interrogative pronoun *kʰalak* is composed of the stem *kʰa* and an element *-lak*, whose etymological origin is obscure. As illustrated in (242) below, the pronoun commonly refers to the reason that caused an event. The pronoun shows a partial semantic overlap with the interrogative pronoun *kʰa=tok*, which, however, can also be used in questions pertaining to the expected outcome of an action (see above).

(242) *hāj mik lej kʰalak kjadza?*

<i>hāj</i>	<i>mik</i>	<i>lej</i>	<i>kʰalak</i>	<i>kja-dza</i>
2SG.GEN	eye	yellow	why	become-PST.DIR.DJ.SG

“Why have your eyes become yellow?”

(The Lama and the Owl 47)

The pronominal stem *guj* “where” is used when a speaker requires information about the location of an object or the whereabouts of a person. The form consists of a pronominal root *gu-*, to which the modifier marker *-i* has been attached.

(243) *ʰadzu kulik guj buəi ni: e?*

<i>ʰadzu</i>	<i>kulik</i>	<i>guj</i>	<i>but-s-ə-dzi</i>	<i>ni:</i>
that	key	where	put-DETR-MID-CVB.SG	EX.NON1SG

e

hey

“Hey, where has that key been put?”

(Conversation 63.62)

Several additional interrogative pronouns are derived from the basic stem *guj* “where”. For example, there is an ablative form *guj=təi*, which is composed of *guj* and the ablative clitic *=təi*. *guj=təi* can be used to ask the direction from which somebody or something is coming, as in (244), or to the place from which somebody or something was brought to its current location, as in (245). In addition, it can be used in a metaphorical sense in questions referring to the cause of an event, as illustrated in (246).

(244) *tal gujtəi ra:re?*

<i>tal</i>	<i>guj=təi</i>	<i>ra-k-are</i>
3[SG]	where=ABL	come-INTR-PRS.DJ.SG

“Where is he coming from?”

(NN 10.10 [elicited])

(245) *ho, the gujt̪ɕi rikmen?*

<i>ho</i>	<i>tʰe</i>	<i>guj=t̪ɕi</i>	<i>rik-ø-men</i>
yes	this	where=ABL	bring-TR-PST.DIR.CJ

“Yes, where did you bring this (cheese) from?”

(Conversation 59.78)

(246) *tʰe dan gujt̪ɕi radza?*

<i>tʰe</i>	<i>dan</i>	<i>guj=t̪ɕi</i>	<i>ra-dza</i>
this	belly	where=ABL	come-PST.DIR.DJ.SG

“Where is this belly coming from?” (said to a pregnant woman)

(King Kesar 66)

The form *guj=tsuk* is transparently formed from the pronominal stem *guj* and the relativizing clitic *=tsuk*. *guj=tsuk* has the basic meaning “from where” and thus seems to be functionally similar to the ablative form *guj=t̪ɕi*. However, the two forms express quite different meanings. The ablative form *guj=t̪ɕi* pertains a strong sense of movement towards the speaker. When used in a question such as in (244), it asks for the place where a person stayed before she / he arrived at the present location. *guj=tsuk*, on the other hand, has no such dynamic connotation. As illustrated in (247), this interrogative pronoun relates to a person’s place or country of origin. At the same time, *guj=tsuk* can also have the meaning “what kind of” or “which (one)”, which is illustrated in (248) and (249), respectively. The two latter meanings have likely developed from the more basic meaning “from where” due to a metonymical extension. This is illustrated in (248), which is ambiguous and can be translated into English as both “What kind of medicine do you take?” or “Where is the medicine that you take from?”. The metonymy that caused this semantic extension is rather obvious. If one is familiar with the origin of an object, one can easily distinguish it from other objects with a different origin.

(247) *han gujtsuk jen?*

<i>han</i>	<i>guj=tsuk</i>	<i>jen</i>
2[SG]	where=REL	EQ.CJ

“Where are you from?”

(SA unrec 27)

(248) *man gujtsuk dza:na wa?*

<i>man</i>	<i>guj=tsuk</i>	<i>dza-k-ana</i>	<i>wa</i>
medicine	where=REL	eat-INTR-PRS.2SG	FOC

“What kind of medicine do you take?”

(Conversation 32.12)

(249) *the tete the leks gujtsuk jendzi?*

<i>the</i>	<i>tete</i>	<i>the</i>	<i>leks</i>	<i>guj=tsuk</i>	<i>jendzi</i>
this	grandfather	this	village	where=REL	EQ.DJ.SG

“This, grandfather, this village (in the picture) – which one is it?”

(Conversation 79.11)

The allative form *gu=mar* “whereto” is composed of the pronominal root *gu* and the allative clitic *=mar*. Remarkably, this pronoun is formed from the bare root *gu* without the additional modifier marker *-i*, which occurs in *guj=tei* and *guj=tsuk*. *gu=mar* is used to ask about the direction in which a person or an object is moving. It is often heard in the common greeting expression *gu=mar el-te*, which is given in the example below.

(250) *gumar elte?*

<i>gu=mar</i>	<i>el-te</i>
where=ALL	go-VOL.SG

“Hello!” (lit. “Where do you want to go?”)

(RZ unrec 1)

The interrogative pronoun *su* “who” is used when a speaker requires information about the identity of a human being. Different case clitics can attach to this pronominal stem, yielding forms such as *su=dzi* “who, by whom”, *su=tok* “to whom”, *su=tok=tei* “from whom”, *su=ki* “whose”. Like the second and third person pronouns *han* and *tal*, the interrogative pronoun *su* does not have an inherent number value.

(251) *theadzu butsa su jen?*

<i>theadzu</i>	<i>butsa</i>	<i>su</i>	<i>jen</i>
that	boy	who	EQ.CJ

“Who is that boy?”

(Conversation 13a.19)

(252) *suʔ pʰon radza?*

<i>su=ki</i>	<i>pʰon_{LN}</i>	<i>ra-dza</i>
who=GEN	phone.call	come-PST.DIR.DJ.SG

“Who called?” (lit. “Whose phone came?”)

(Conversation 55.1)

The interrogative pronoun *itəik* “how many, how much, how long” is used in questions about the size of a group of objects, the length of a distance, or the duration of a time period. In addition, it can be used in declarative speech acts to emphasize the size of a quantity, the vastness of a distance, or the length of a time period. For questions about time periods involving days and years, there are two special interrogative pronouns *itgjak* “how many days” and *itbiŋ* “how many years”. These special forms represent contractions of the interrogative pronouns *itəik* and the nouns *gjak* “calendar day” and *biŋ* “year (of age)”.

(253) *kekir itəik dzate?*

<i>kekir</i>	<i>itəik</i>	<i>dza-te</i>
flatbread	how.many	eat-VOL.SG

“How many pieces of flatbread do you want to eat?”

(Conversation 22.142)

(254) *itəik ba:r dat!*

<i>itəik</i>	<i>ba:r_{LN}</i>	<i>dat-et</i>
how.many	how.many	fall-PST.DIR.CJ

“So many times have I fallen (from the trees in the orchard)!”

(TP unrec 3)

When asking about a point in time at which an event occurred, the interrogative pronoun *ika* ~ *uka* “when” is used. According to my consultants, *uka* is a highly archaic form that is no longer common in contemporary Bunan. It is not attested in my corpus of natural language, but was mentioned as a variant form of *ika* by my older consultants during elicitation sessions.

(255) *ika gwaŋtʰek na?*

ika *gwaŋ-tʰek=na*
when come.PL-VOL.PL=HS

“When did they say that they would like to come?”

(Conversation 58.32)

5.2.4 Indefinite pronouns

The following list gives an overview of the indefinite pronouns that are attested in my data corpus.

Indefinite pronouns

<i>kʰatɕik</i>	“some, someone”
<i>kʰamoʃi</i>	“something”
<i>kʰa=re</i>	“whatever” / “nothing” (with negated predicate)
<i>su=re</i>	“whoever” / “nobody” (with negated predicate)
<i>hitik</i>	“other”
<i>ika=re</i>	“whenever” / “never” (with negated predicate)

The indefinite pronoun *kʰatɕik* “some(one)” may substitute for individuals and objects that form a subset within a larger group and whose identity does not need to be further specified. This is illustrated in (256) and (257) below. Like its English counterpart *some*, *kʰatɕik* may also occur in adnominal position, as illustrated in (258). The pronoun is a Tibetan loanword (cf. WT *kha cig* “some(one)”).

(256) *kʰatɕik dzanare tat matsʰwaɕitsukɕi.*

kʰatɕik *dzanare* *tat*
some very.much POSS.NON1PL

ma-tsʰwa-s-ɕ-i=tsuk=ɕi
NEG-share-DETR-MID-ACT=REL=PL

“Some (families) own a great deal of land, the ones that have not divided it up among themselves.”

(Conversation 16.25)

(257) *kʰatɕik melokkattok ni:*

<i>kʰatɕik</i>	<i>melok-kat=tok</i>	<i>ni:</i>
some	Pattan-language=DAT	EX.NON1SG

“Some (Zhangzhung words) exist in Manchad.”

(Zhangzhung 79)

(258) *wa kʰatɕik mi mi maraj kʰatɕik tɕaŋ arak tuŋ-dza=la noj ...*

<i>wa</i>	<i>kʰatɕik</i>	<i>mi</i>	<i>mi</i>	<i>maraj</i>	<i>kʰatɕik</i>
FOC	some	person	person	bad	some

<i>tɕaŋ</i>	<i>arak</i>	<i>tuŋ-dza=la</i>	<i>noj</i>
barley.beer	liquor	drink-PST.SG=ANTER	much

“And some people, bad people, having drunken a lot of barley beer and liquor”

(Tshechu 2.49)

The indefinite pronoun *kʰamoŋi* “something” refers to objects whose exact identity cannot or does not need to be specified in the present discourse context. The pronoun is most probably derived from the pronominal root *kʰa* “what”. The etymology of the following two syllables is not clear. *kʰamoŋi* can only substitute for whole noun phrases. It cannot occur in adnominal position as a part of complex noun phrase.

(259) *lik-tɕ-a=ta nospok indzi=maŋ=tɕi tiki=maŋ=tɕi el-dzi kʰamoŋi lik-ø-kata tet-ka*

<i>lik-tɕ-a=ta</i>	<i>nospok</i>	<i>indzi=maŋ=tɕi</i>	<i>tiki=maŋ=tɕi</i>
make-TR-SUP=AVS	true	himself=ALL=ABL	one=ALL=ABL

<i>el-dzi</i>	<i>kʰamoŋi</i>	<i>lik-ø-kata</i>	<i>tet-ka</i>
go-CVB.SG	something	make-TR-FUT.CJ.SG	think-PROG.SG

“‘But to make (my plan) come true by myself, I will go to one (political party) and do something (with their support),’ he thought.”

(Conversation 84.60)

The pronouns *kʰa=tiki* ~ *kʰa=re* ~ *kʰa=tiki=re* express the meaning “whatever”. They consist of the interrogative pronoun *kʰa* “what”, to which the indefinite clitic *=tiki* and / or the topic extension clitic *=re* are attached. In case of the variant form *kʰa=re*, the final vowel of the clitic *=re* is often dropped in fast speech, yielding the pronunciation [*kʰar*]. The indefinite pronoun can replace whole noun phrases or occur in adnominal position as a part of noun phrase. Consider the following examples.

(260) *pande kʰar kʰar kjuma tsʰaŋtsʰaŋi liktʰare.*

pant-de kʰa=re kʰa=re kjuma tsʰaŋtsʰaŋi
spin-SUP what=EXT what=EXT home all

lik-tʰare

make-TR-PRS.DJ.SG

“Spinning, whatever (kind of work), she does it all at home.”

(Tshechu 2.319)

(261) *kʰar pata: mani: otʰirok kʰa ramen la.*

kʰa=re pata:LN ma-ni: otʰi=tok kʰa
what=EXT clue NEG-EX.NON1SG tomorrow=DAT what

ra-men=jen=la

come-INF=EQ.CJ=Q

“There is no way of knowing what will happen tomorrow.”

(Conversation 22.118)

(262) *kʰa kʰa tiki jen tsʰol-gata tetkja nindza.*

kʰa kʰa=tiki jen tsʰol-ø-kata
what what=INDEF EQ.CJ search-TR-FUT.CJ.SG

tet-ka

nindza

think-PROG.SG

EX.PST.SG

“‘Whatever it is, I will look for it’, I thought.”

(Conversation 87.116)

When combined with a negated verb, the variant forms *kʰa=tiki* ~ *kʰa=re* ~ *kʰa=tiki=re* become negative indefinite pronouns with the meaning “anything”.

(263) *kʰar madza!*

kʰa=re ma-dza
what=EXT NEG-eat

“I do not want to eat anything at all!”

(Conversation 14.7)

There is evidence that the construction *kʰa=re ma-V* is currently undergoing a metanalysis (cf. Campbell [1998] 2013: 102–103) in the course of which its structure is

being reanalyzed as *kʰarma* V. First, this is implied by prosodic evidence. Speakers sometimes put phrasal stress on the negation prefix instead of the interrogative pronoun *kʰa(=re)*, which implies that they perceive [*kʰarmæ*] as a single phonological word. Second, this is suggested by the interjection *kʰarma:stok* “No problem!, Never mind!”, which consists of the indefinite pronoun *kʰa=re* and the negation prefix *ma-*, to which the terminative clitic *=astok* has been added. The terminative suffix does not express a directional meaning here, but rather adds a notion of vagueness (cf. § 4.4.4.6). The expression thus translates into English as “(It is) like nothing.”

The indefinite pronoun with the meaning “whoever” has the form *su=tiki* ~ *su=re* ~ *su=tiki=re*. It consists of the interrogative pronoun *su* “who” followed by the indefinite clitic *=tiki* and / or the extended topic clitic *=re*. In fast speech, the form *su=re* is commonly pronounced as [*sur*]. All variants of the pronoun can substitute for whole noun phrases, as in (264), or occur in adnominal position as a part of a complex noun phrase, as in (265).

(264) *wa tiki ek ba:r mi tiki su tikidzi rikɕi jen la.*

<i>wa</i>	<i>tiki</i>	<i>ek_{LN}</i>	<i>ba:r_{LN}</i>	<i>mi=tiki</i>	<i>su=tiki=dzi</i>
FOC	one	one	time	person=INDEF	who=INDEF=ERG.SG

rik-s-ɕ-i=jen=la

bring-DETR-MID-ACT=EQ.CJ=EVOC

“And one day, one person, whoever (it may have been), brought (that stick).”

(Conversation 87.245)

(265) *su tiki re lasmi su tiki re dan taj kja-kʰa ...*

<i>su=tiki=re</i>	<i>lasmi</i>	<i>su=tiki=re</i>	<i>dan</i>	<i>ta-i</i>
who=INDEF=EXT	woman	who=INDEF=EXT	belly	POSS-ACT

kja-kʰa

become-PROG.PL

“Whoever of you women, whoever becomes pregnant”

(King Kesar 35)

When combined with a negated verb, the pronoun *su=tiki* ~ *su=re* ~ *su=tiki=re* becomes a negative indefinite pronoun with the meaning “nobody, anybody”.

(266) *erĩ kat leṭəipa sur magwaj jen tʰan astok.*

<i>erĩ</i>	<i>kat</i>	<i>let-ṭə-i-pa</i>	<i>su=re</i>
1PL.INCL.GEN	language	teach-TR-ACT-NZR	whoever
<i>ma-gwak-i=jen</i>		<i>tʰan=astok</i>	
NEG-EX.PL-ACT=EQ.CJ		today=TERM	

“There has never been anybody who taught our language (to foreigners) to the present day.”

(Conversation 25.58)

The indefinite pronoun *ika=re* is formed from the pronominal root *ika* “when” and the extended topic clitic *=re*. The pronoun refers to an unspecific moment in time and thus translates into English as “whenever”. It is transparently formed from the pronominal root *ika* “when” and the extended topic clitic *=re*.

(267) *ikare gi gardzaman̄ helikoptardok elet ...*

<i>ika=re</i>	<i>gi</i>	<i>gardza=man̄</i>	<i>helikoptar_{LN}=tok</i>
when=EXT	1SG	Lahaul=ALL	helicopter=DAT
<i>el-et</i>			
go-PST.DIR.CJ			

“Whenever I have gone to Lahaul by helicopter”

(TD 100.10 [elicited])

When used together with a negated verb, the pronoun *ika=re* is turned into a negative indefinite pronoun with the meaning “never”.

(268) *ikare kat amarok tshikti kat tedzi wanṭəa mamjan̄dza rin̄gare.*

<i>ika=re</i>	<i>kat</i>	<i>ama=tok</i>	<i>tshik=tiki</i>	<i>kat</i>	<i>tedzi</i>
when=EXT	language	mother=DAT	word=INDEF	language	big
<i>wan-ṭə-a</i>		<i>ma-mjan̄-ø-dza</i>		<i>rin̄-k-are</i>	
take.out-TR-SUP		NEG-taste-TR-PST.DIR.DJ.SG		say-INTR-PRS.DJ.SG	

“‘Never have you heard me speaking a bad word to my mother’, she said.”

(Conversation 22.70)

The last pronominal stem to be discussed in this section is the indefinite pronoun *hitik*. The pronoun *hitik* can be translated into English as “other”. The following table gives an overview of the inflected forms of *hitik*.

Table 55: Inflected forms of *hitik*

	Singular	Plural
ABS	<i>hitik</i> [hitʔkʰ]	<i>hitik=ɕi</i> [hitʔɕi]
ERG	<i>hitik=dzi</i> [hitʔkʰtsi]	<i>hitik=tʃi</i> [hitʔkʰtʃi]
DAT	<i>hitikok</i> [hitʔkʰkʰ]	<i>hitik=ɕi=tok</i> [hitʔɕi=kʰ]
GEN	<i>hitik=ki</i> [hitʔki]	<i>hitik=ɕi=ki</i> [hitʔɕi:]

The following sentences illustrate the use of the indefinite pronoun *hitik*. As the sentences given in (269) and (270) demonstrate, *hitik* can function both as an autonomous noun phrase and as an adnominal modifier.

(269) *hitikok dan maskjasnaŋ da tʰe jenmen de tettɕi.*

hitik=ɕi=tok *dan* *ma-(s)kja-s=taŋ* *da* *tʰe*
 other=PL=DAT belly NEG-become-NZR=CAUS now this
jen-men *de* *tet-dʒi*
 EQ-INF ATT.SG think-PST.INFER.DJ.SG

“Now, as the others have not become pregnant, this (woman) must be the one (who will give birth to our new king)’, he thought.”
 (King Kesar 82)

(270) *hitik mi jama tɕjar liktɕʰek.*

hitik *mi=pama* *tɕjar_{LN}* *lik-tɕʰek*
 other person=all ready do-TR-PRS.CJ.PL

“We are getting all the other people ready.”
 (Conversation 79.7)

5.2.5 Distributive pronouns

In my corpus of language data, the following two distributive pronouns are attested.

Distributive pronouns

re ~ rere “each, everyone”

raŋga soso “each their own”

The distributive pronoun *re ~ rere* has the meaning “each, everyone”. This pronoun seems to be a loanword from a neighboring Tibetan variety (cf. WT *re ~ re re* “each, everyone”). The pronoun refers to groups consisting two or more individuals. However, unlike the quantifier *tsʰaŋi*, which simply refers to a group as a single whole, the pronoun *rere* conceptualizes each member of the group as a single individual. Consider the two following examples.

(271) *kekir rere dzatʰi ekʰek loʂidʒi.*

<i>kekir</i>	<i>rere</i>	<i>dza-tʰi</i>	<i>el-kʰek</i>
flatbread	each	eat-CVB.PL	go-INTR-PRS.CJ.PL

lot-s-ɛ-i=jendʒi

say-DETR-MID-ACT=EQ.DJ.SG

“Each (of us two) will eat (some) flatbread and then we will leave’, he said.”

(Conversation 22.148)

(272) *nunʈɕi nunʈɕi rere da tʰospa likni riŋi ni.*

<i>nunʈɕi</i>	<i>nunʈɕi</i>	<i>rere</i>	<i>da</i>	<i>tʰos-pa</i>	<i>lik-ni</i>
then	then	each	now	dharma-NZR	make-IMP.PL

riŋ-i ni:

say-ACT EX.NON1SG

“And then he used to say to everybody, ‘Become followers of the Dharma now!’”

(Tshechu 2.514)

In the example below, the distributive pronoun occurs in its monosyllabic form *re* as well as in its disyllabic form *rere*. The two pronoun forms are conjoined by the conjunction clitic *=naŋ* into the phrase *re=naŋ rere*, which translates into English as “one by one”.

(273) *nunṭṣei gi re=naŋ rere taldok ʈoldzi daṣi jendzi.*

<i>nunṭṣei</i>	<i>gi</i>	<i>re=naŋ</i>	<i>rere</i>	<i>tal=tok</i>	<i>ʈol-ø-dzi</i>
then	1SG	each=CON	each	3[SG]=DAT	explain-TR-CVB

da-s-ṣ-i=jendzi

give-DETR-MID-ACT=EQ.DJ.SG

“Then I explained it to him one by one.”

(Zhangzhung 73)

There is another distributive pronoun *raŋga soso* with the meaning “each their own”. *raŋga soso* cannot be considered as a single pronoun, but rather must be analyzed as a combination of the indefinite pronoun *raŋga* “oneself” (cf. § 5.2.4) and the pronominal stem *soso* “each”. The two pronominal stems as well as the construction that combines them into a distributive pronoun have been borrowed from a neighboring Tibetan variety (cf. Zemp (2014: 309–311), who describes a distributive pronoun *raŋkʰa soso* “each their own” for the Tibetan dialect of Kargil). There is only one instance of this pronoun in my data. The respective example is given below.

(274) *daksam iptṣ-a=tsore lasmi=ṣi raŋga soso=ki kjumamaŋ gwaŋ ʈirtṣak na.*

<i>daksam</i>	<i>ipt-ṣ-a=tsore</i>	<i>lasmi=ṣi</i>	<i>raŋga</i>	<i>soso=ki</i>
now	sleep-MID-SUP=ENR	woman=PL	oneself	each=GEN

kjuma=maŋ gwaŋ=ʈir-tṣ-ʰak=na

home=ALL go.PL=send-TR-PRS.DJ.PL=HS

“Now for sleeping and such, [...] the women each went to their respective homes, they say.”

(Conversation 87.198)

5.3 Demonstratives

5.3.1 Demonstrative pronouns / determiners

In Bunan, there are three demonstrative pronouns, which also occur as demonstrative determiners: *ʈe* “this”, *ʈadzu* “that”, and *ʈara* “that other”.

Demonstrative pronouns / determiners

ʈe “this”

ʈadzu “that”

ʈara “that other” (new topic)

Speakers use *ʈe* to refer to objects and beings that are located in their immediate vicinity. In a figurative sense, the demonstrative may indicate that an entity is conceptual-

ized as being close to the speaker, e.g. *the miks* “this story (that I am going to tell)” (cf. *theadzu katəa* “that story (that somebody else told)” in (279) below). The demonstrative can function as a noun phrase in its own right or occur as a demonstrative determiner in pre-nominal position. The following examples illustrate these two functions.

(275) *gidzi the ki tja:ta.*

<i>gi=dzi</i>	<i>the</i>	<i>ki=thir-ø-kata</i>
1SG=ERG.SG	this	wash=send-TR-FUT.CJ.SG

“It is me who will wash this (plate).”

(Conversation 36.133)

(276) *the miks lij kesar gjapoj miks jendzi.*

<i>the</i>	<i>miks</i>	<i>lij</i>	<i>kesar</i>	<i>gjapo=ki</i>	<i>miks</i>	<i>jendzi</i>
this	story	lij	Kesar	king=GEN	story	EQ.DJ.SG

“This story is the story of King Kesar of Ling.”

(King Kesar 1)

The demonstrative *theadzu* “that” is the functional counterpart of *the* and refers to objects and beings that are located further away from the speaker. *theadzu* can also be used in a metaphorical sense and indicate that there is a conceptual distance between the speaker and the modified entity, e.g. *theadzu katəa* “that story (that somebody else told)” (cf. *the miks* “this story (that I am going to tell)” in (276) above). Like the proximate demonstrative *the*, *theadzu* can serve as an independent noun phrase or as a demonstrative determiner in prenominal position. Consider the following examples.

(277) *theadzuj pʰon radza.*

<i>theadzu=ki</i>	<i>pʰon_{LN}</i>	<i>ra-dza</i>
that=GEN	phone.call	come-PST.DIR.DJ.SG

“That (person) called.”

(Conversation 13a.1)

(278) *gi taldok phjadzi phja: phja: thadzu peltsi lwasta:*.

<i>gi</i>	<i>tal=tok</i>	<i>phja-dzi</i>	<i>phja-ka</i>	<i>phja-ka</i>
1SG	3[SG]=DAT	speak-CVB.SG	speak-PROG.SG	speak-PROG.SG

<i>thadzu</i>	<i>peltsi</i>	<i>lwat-s-ɛ-dzi=ta:</i>
that	milk	forget-DETR-MID-CVB.SG=POSS.1SG

“I was talking with her and because we kept talking for some more time I have forgotten (to bring) that milk.”

(Conversation 16.4)

(279) *wa taldzi dzanare thadzu katɕa ɕattɕi ni:*.

<i>wa</i>	<i>tal=dzi</i>	<i>dzanare</i>	<i>thadzu</i>	<i>katɕa</i>	<i>ɕat-tɕ-i</i>
FOC	3=ERG.SG	very.much	that	story	tell-TR-ACT

ni:

EX.NON1SG

“And he used to tell a lot of those stories.”

(Tulshug Lingpa 31)

The demonstratives *the* and *thadzu* are often used instead of the third person pronoun *tal* to refer to non-speech-act participants. This is, however, only common if the person in question is not present, as it is considered rude to refer to an attending person with a demonstrative pronoun. With regard to information structure, the demonstrative pronouns *the* and *thadzu* refer to given and established information. They indicate topic-continuity and thus stand in functional opposition to the indefinite pronoun *thara*, which (re)introduces a non-topical referent into discourse (see below).

(280) A: *saŋtara: mani: la? saŋtara: dza ini!*

B: *ni: re ni: madza daksam. kwaɕi eldza. tʰe noj kʰej de. tʰe dan noj kja:re.*

<i>saŋtara:LN</i>	<i>ma-ni:=la</i>	<i>saŋtara:LN</i>	<i>dza-a</i>	<i>ini</i>
orange	NEG-EX.NON1SG=Q	orange	eat-IMP.SG	2.HON[SG]
<i>ni:=re</i>	<i>ni:</i>	<i>ma-dza</i>	<i>daksam</i>	
EX.NON1SG=EXT	EX.NON1SG	NEG-eat	now	
<i>kwas-dʒi</i>	<i>el-dza</i>	<i>tʰe</i>	<i>noj</i>	<i>kʰej</i>
become.full-CVB.SG	go-PST.DIR.DJ.SG	this	too.much	sweet
<i>de</i>	<i>tʰe</i>	<i>dan</i>	<i>noj</i>	<i>kja-k-are</i>
ATT.SG	this	belly	too.much	become-INTR-PRS.DJ.SG

A: “Aren’t there any oranges (left)? You eat an orange (as well)!”

B: “There are still some, but I don’t want to eat any. I am full. This is too sweet. This is too much for my stomach.”

(Conversation 74.39)

(281) *kesar gjapo riŋnaŋ nuŋtsuk taj gjapo. tʰadzu gjapo kʰanak kinzi jen lotnaŋ sare tal tʰuŋsi jen lotnaŋsare tʰadzuj miks jendʒi.*

<i>kesar</i>	<i>gjapo</i>	<i>riŋ=naŋ</i>	<i>nuŋ=tsuk</i>	<i>ta-i</i>	<i>gjapo</i>
Kesar	king	say=COND	there=REL	POSS-ACT	king
<i>tʰadzu</i>	<i>gjapo</i>	<i>kʰanak</i>	<i>kin-ɕ-i=jen</i>	<i>lot=naŋ=sare</i>	
that	king	how	be.born-MID-ACT=EQ.CJ	say=COND=EMPH	
<i>tal</i>	<i>tʰuŋs-i=jen</i>	<i>lot=naŋ=sare</i>	<i>tʰadzu=ki</i>	<i>miks</i>	
3[SG]	be.reborn-ACT=EQ.CJ	say=COND=EMPH	that=GEN	story	
<i>jendʒi</i>					
EQ.DJ.SG					

“Speaking of King Kesar, he was the king possessing that country. How that king was born and how he was reborn, it is the story of that.”

(King Kesar 5)

Finally, Bunan possesses a third demonstrative pronoun *tʰara*. When asked to translate *tʰara* into English, my consultants told me that this word had the same meaning as the English phrase *that other*. I follow their suggestion and give the translation “that other” in the interlinear version. However, this translation does not do justice to the complex function of the pronoun. Bunan speakers do not simply use *tʰara* to indicate that the referent that they are currently talking about is different from the referent that other

speech-act participants may have in mind. Rather, they use the pronoun to introduce new referents or reintroduce old but non-topical referents into discourse. *thara* thus acts as a “signpost” in discourse that signals that the following referent is either totally new in the discourse context or has been out of the conversational focus of attention for a while. The pronoun can only replace whole noun phrases. It never occurs in adnominal position as a part of a more complex noun phrase.

Some examples that illustrate the function of *thara* are given in the following. Example (282) below is taken from a telephone conversation between my main consultant and his daughter. The two had been talking about the snowfall and the rain that the Kullu Valley had been experiencing in the preceding days when my main consultant suddenly changed the topic of the conversation and asked about his nephew *anjkur*. Before introducing *anjkur* as a new referent, he used *thara* to signalize to his daughter that he was going to talk about a new referent. Note that *thara*, although occurring in what seems to be an adnominal position, has to be interpreted as an independent noun phrase. This syntactic autonomy of the pronoun is indicated by the fact that *thara* and *anjkur* occur under two separate intonation contours.

(282) *ja: nindza than dradzi eldza ɛilti radza. atə:a wa thara anjkur kʰa liktəare?*

<i>ja:</i>	<i>nindza</i>	<i>than</i>	<i>dras-ø-dzi</i>		
yesterday	EX.PST.SG	today	disperse-TR-CVB		
go-PST.DIR.DJ.SG	<i>ɛilti</i>	<i>ra-dza</i>		<i>atə:a_{LN}</i>	<i>wa</i>
<i>el-dza</i>	rain	come-PST.DIR.DJ.SG		okay	FOC
<i>thara</i>	<i>anjkur</i>	<i>kʰa</i>	<i>lik-tə-are</i>		
that.other	Angkur	what	do-TR-PRS.DJ.SG		

“Yesterday there was (snow), today it melted (because) it rained. I see, and that other one, Angkur, what is he doing?”

(Conversation 31.24)

Example (283) below is taken from the story of King Kesar. More precisely, the sentence is taken from the passage that describes the birth of King Kesar, who was not born as a human being but as a peculiar shapeless something with eight strange stumps. Being afraid of this strange creature, his mother decided to hide it in a piece of cow dung. Sometime later, the local chief Agu Khargan Gani came to visit the woman in order to see whether she given birth to the child whose birth had been foretold. At this point in the story, Agu Khargan Gani is already an established main character. However, Agu Khargan Gani has not been mentioned for a while and is thus reintroduced with the pronoun *thara*.

The demonstrative signals to the hearer that the following referent is different from King Kesar's mother, who has been the most topical protagonist in this passage so far.

(283) *nunanj lanj nanjak pjakdži butdži nimati her tapši radži thara agu khargan ga:ni.*

<i>nunanj</i>	<i>lanj</i>	<i>nanjak</i>	<i>pjak-ø-dži</i>	<i>but-ø-dži</i>
then	cow.dung	inside	hide-TR-CVB	put-TR-CVB
<i>nima=tiki</i>	<i>her</i>	<i>tap-s-ø-dži</i>		
day=INDEF	again	bring.back-DETR-MID-CVB.SG		
<i>ra-dži</i>		<i>thara</i>	<i>agu khargan ga:ni</i>	
come-PST.INFER.DJ.SG		that.other	Agu Khargan Gani	

"Then, after she had hidden (the creature) in the cow dung, one day, that other one came back, Agu Khargan Gani."

(King Kesar 114)

In stories, *thara* is commonly used to create and increase tension. In example (284) below, Agu Khargan Gani is telling his fellow villagers that he will lead them to a holy place where they will pray for the birth of a new king. The narrator introduces this holy place in a stylistically intricate way. First, he refers to the location with the locative demonstrative *tharanj*. This demonstrative represents a contraction of the pronoun *thara* and the locative clitic *=kunj* and is commonly used to introduce new locations into discourse (cf. § 5.3.2 below). Then, he describes the location with the equally unspecific phrase *sat=ki thara=tiki* "that other (thing) of a god" before finally revealing the identity of the place.

(284) *da eranj el-tšhi tharanj thaj satki tharati ni: dzagati ni:.*

<i>da</i>	<i>eranj</i>	<i>el-tšhi</i>	<i>tharanj</i>	<i>thaj</i>	<i>sat=ki</i>
now	1PL.INCL	go-CVB.PL	that.other.place	up.there	god=GEN
<i>thara=tiki</i>	<i>ni:</i>	<i>dzaga_{LN}=tiki</i>	<i>ni:</i>		
that.other=INDEF	EX.NON1SG	place=INDEF	EX.NON1SG		

"Now we will go to that other place and there will be that other (thing) of a god, the abode of a god."

(King Kesar 19)

At the same time, *thara* can also be used as a stylistic device to arrange events in a temporal sequence. In examples (285) and (286) below, the phrases *thara lik-ø-kata* and *thara lik-ø-dži* function as transitional utterances between two main clauses that denote separate events.

- (285) *gi thadzu phos tsuna tsakkata thara likkata. da:stok handzinaŋ taldzi thara handzi taldoktɕi loka ne!*

<i>gi</i>	<i>thadzu</i>	<i>phot-s</i>	<i>tsuna</i>	<i>tsak-ø-kata</i>
1SG	that	put.on-NZR	little.bit	wash-TR-FUT.CJ.SG
<i>thara</i>	<i>lik-ø-kata</i>	<i>da:stok</i>	<i>han=dzi=naŋ</i>	
that.other	do-TR-FUT.CJ.SG	meanwhile	2=ERG.SG=CON	
<i>tal=dzi</i>	<i>thara</i>	<i>han=dzi</i>	<i>tal=tok=tɕi</i>	<i>lok-a</i>
3=ERG.SG	that.other	2=ERG.SG	3[SG]=DAT=ABL	learn-IMP.SG
<i>ne</i>				
SUG				

“I will wash clothes for a little while, that is what I will do. In the meantime, you and he (do) that other (stuff) ... you learn from him!”

(Conversation 13a.121)

- (286) *wa ra ra losak wa nuŋ wa hĩ: rinpotɕe ni: losak thara likdzi wa gi nima tiki nuŋ solantɕi nima tiki eidza.*

<i>wa</i>	<i>ra-a</i>	<i>ra-a</i>	<i>lot-s-ɕ-hak</i>		
FOC	come-IMP.SG	come-IMP.SG	say-DETR-MID-PRS.DJ.PL		
<i>wa</i>	<i>nuŋ</i>	<i>wa</i>	<i>hĩ:</i>	<i>rinpotɕe</i>	<i>ni:</i>
FOC	there	FOC	1PL.EXCL.GEN	Rinpoche	EX.NON1SG
<i>lot-s-ɕ-hak</i>		<i>thara</i>	<i>lik-ø-dzi</i>	<i>wa</i>	<i>gi</i>
say-DETR-MID-PRS.DJ.PL		that.other	do-TR-CVB	FOC	1SG
<i>nima=tiki</i>	<i>nuŋ</i>	<i>solan=tɕi</i>	<i>el-kidza</i>		
day=INDEF	there	Solan=ABL	go-PST.DIR.1SG		

“And they said, ‘Come! Come!’, and they said ‘Our Rinpoche will be there (to receive you).’ So they said, and I went from there, from Solan, one day (to visit the Bonpo monastery at Dolanji).”

(Zhangzhung 19)

Finally, speakers also often use *thara* as a “filler” (Fox 2010: 1) in the middle of an unfinished utterance to indicate that they are just thinking about what to say next. This is illustrated by the following example, in which *thara* is inserted between two main clauses to signalize that the current speaker has not yet finished speaking.

(287) *hiŋ taldoktɕi tɕʰos re dzutɕi gwajk wa barbarguŋ tʰara tɕʰaŋtɕʰaŋi nampo kja-tɕʰi tɕʰoks re pʰultɕi gwajk.*

<i>hiŋ</i>	<i>tal=tok=tɕi</i>	<i>tɕʰos=re</i>	<i>dzu-tɕ-i</i>		
1PL.EXCL	3[SG]=DAT=ABL	Dharma=EXT	request-TR-ACT		
<i>gwajk</i>	<i>wa</i>	<i>barbarguŋ</i>	<i>tʰara</i>	<i>tɕʰaŋtɕʰaŋi</i>	<i>nampo</i>
EX.NON1PL	FOC	sometime	that.other	all	together
<i>kja-tɕʰi</i>	<i>tɕʰoks=re</i>	<i>pʰul-tɕ-i</i>	<i>gwajk</i>		
become-CVB.PL	ceremony=EXT	offer-TR-ACT	EX.NON1PL		

“We used to request religious teachings from him and from time to time ... uhm ... we all used to get together and offer *tɕʰoks* ceremonies.”
(Tulshug Lingpa 86)

5.3.2 Demonstratives of location

In my materials, there are a number of different locational demonstratives, all of which are listed in the following.

Demonstratives of location

<i>kʰjak</i> ~ <i>tʰjak</i>	“here”
<i>tʰadzun</i>	“there” (distal)
<i>tʰaraŋ</i>	“that other place” (new topic)
<i>nun</i>	“there” (neutral)
<i>tʰami</i>	“down there”
<i>tʰaj</i>	“up there”

The proximal locative demonstrative is *kʰjak* ~ *tʰjak*. *kʰjak* represents the more common form, whereas the form *tʰjak* was only used by one of my older consultants. Research on speech sound perception has demonstrated that velar plosives are often perceived as (alveo-)dental plosives before high front vowels (Chang, Plauché & Ohala 2001: 80–81). It is thus likely that *kʰjak* is the more archaic form and has been changed to *tʰjak* in the idiolect of the respective individual.

The locational demonstrative *kʰjak* refers to places or objects that are conceptualized as being close to the speaker. Prototypically, the demonstrative is used to point to things that are situated in the immediate vicinity of the speaker. Consider the following example.

(288) *khjak ni: ama sokəitsuk peltsi.*

<i>khjak</i>	<i>ni:</i>	<i>ama</i>	<i>sok-s-ə-i=tsuk</i>	<i>peltsi</i>
here	EX.NON1SG	mother	send-DETR-MID-ACT=REL	milk

“Here it is, the milk that mother sent (to us).” (said when opening the fridge and taking out a bottle of milk)

(TD unrec 30)

However, *khjak* may likewise be used to point to objects that are not in the immediate vicinity of the speaker, but are relatively close in comparison to another object. The referent does not necessarily need to be visible at the moment of utterance. Thus, sentence (289) below can both refer to a person who is in the same room with the speaker or in a different room of the same house. In sentence (290), *khjak* metonymically refers to Himachal Pradesh as opposed to other Indian states.

(289) *anjkur khjak ni:*

<i>anjkur</i>	<i>khjak</i>	<i>ni:</i>
anjkur	here	EX.NON1SG

“Angkur is here (next to me / in the same house).”

(Conversation 71.27)

(290) *the khjaksuk nambar jen la?*

<i>the</i>	<i>khjak=tsuk</i>	<i>nambar_{LN}</i>	<i>jen=la</i>
this	here=REL	number	EQ.CJ=Q

“Is this a local phone number?”

(Conversation 13a.127)

The distal locational demonstrative is *theadzuŋ*. From a diachronic perspective, the demonstrative clearly represents a contraction of the demonstrative pronoun *theadzu* and the locative case clitic *=kuŋ*. *theadzuŋ* refers to places that are neither close to the speaker nor to the addressee. The denoted location may be visible or invisible at the moment of utterance.

(291) *theadzuŋ buṭa epo jendzi ka tedzi kja-i.*

<i>theadzuŋ</i>	<i>buṭa</i>	<i>epo</i>	<i>jendzi</i>	<i>ka</i>	<i>tedzi</i>	<i>kja-i</i>
there	tree	good	EQ.DJ.SG	ASS	big	become-ACT

“The trees are good there, they become big.”

(Conversation 16.126)

In addition to the proximate demonstrative *kʰjak* ~ *tʰjak* and the distal demonstrative *tʰadzu*, there is another demonstrative adverb *nun*. The form is a contraction of the obsolete demonstrative stem **nu* “that”, which is also attested in the demonstrative adverbs *nu=lek* “that much” and *nuntsuk* “that kind of”, and the locative clitic *=kun*. The demonstrative translates into English as “there”. However, unlike the distal demonstrative adverb *tʰadzun* “there”, *nun* is neutral with regard to the deictic parameter of spatial proximity / distance. The pronoun does thus not imply that the indicated place is necessarily far away from the speaker or the addressee. This is demonstrated by example (293), in which the adverbial phrase *hāj nun* “over there in your place” is found.

(292) *eraŋ nun ekʰek*.

<i>eraŋ</i>	<i>nun</i>	<i>el-k-ʰek</i>
1PL.INCL	there	go-INTR-PRS.CJ.PL

“We will go there.”

(Tulshug Lingpa 177)

(293) *mu radzala tʰan hāj nun?*

<i>mu</i>	<i>ra-dza=la</i>	<i>tʰan</i>	<i>hāj</i>	<i>nun</i>
snow	come-PST.DIR.DJ.SG	today	2SG.GEN	there

“Was there any snowfall over there in your place today?”

(Conversation 31.19)

Another demonstrative adverb is *tʰaraŋ*, which is a contraction of the indefinite pronoun *tʰara* “that other” and the locative case clitic *=kun*. Like the indefinite pronoun *tʰara*, *tʰaraŋ* is used to (re)introduce non-topical referents into discourse (cf. § 5.2.4). This function is illustrated in the following example sentence, in which the speaker introduces a new location (the town of Hamirpur) with the demonstrative adverb *tʰaraŋ*.

(294) *djwak durek tʰaraŋ elet hamirpur nindza*.

<i>djwak</i>	<i>durek</i>	<i>tʰaraŋ</i>	<i>el-et</i>	<i>hamirpur</i>
two.days.ago	before	that.other.place	go-PST.DIR.CJ	Hamirpur

nindza

EX.PST.SG

“Some time ago I went to that other place, I was in Hamirpur.”

(Conversation 49.41)

The demonstrative adverbs *kʰjak* ~ *tʰjak*, *tʰadzun*, and *nun* stand in functional opposition to *tʰaraŋ* in the sense that they refer to topical and established information. This is

illustrated by the following example, in which a specific place (the abode of a god) is first introduced with the demonstrative adverb *tharaŋ* and subsequently referred to with *thadzun*.

- (295) *da eraŋ eltehi tharaŋ thaj satki tharati ni: dzagati ni: thadzun eltehi eraŋtshi kontsoktok molam tatkathek. [...] thaj thadzu satki dzaga astok eltehi ...*

<i>da</i>	<i>eraŋ</i>	<i>el-tehi</i>	<i>tharaŋ</i>	<i>thaj</i>	<i>sat=ki</i>
now	1PL.INCL	go-CVB.PL	that.other.place	up.there	god=GEN
<i>thara=tiki</i>	<i>ni:</i>	<i>dzaga_{LN}=tiki</i>	<i>ni:</i>		
that.other=INDEF	EX.NON1 SG	place=INDEF	EX.NON1 SG		
<i>thadzun</i>	<i>el-tehi</i>	<i>eraŋ=ts^{hi}</i>	<i>kontsok=tok</i>	<i>molam</i>	
there	go-CVB.PL	1PL.INCL=ERG.PL	god=DAT	prayer	
<i>tat-ø-kathek</i>	<i>[...]</i>	<i>thaj</i>	<i>thadzu</i>	<i>sat=ki</i>	
perform-TR-FUT.CJ.PL	[...]	up.there	that	god=GEN	
<i>dzaga_{LN}=astok</i>	<i>thadzun</i>	<i>el-tehi</i>			
place=TERM	there	go-CVB.PL			

“Now we will go to that other place and there will be that other (thing) of a god, the abode of a god. We will go there and perform a prayer for the god. [...] They went up there, to that god’s place, there and ...”

(King Kesar 19)

When occurring in their basic unmarked form, the four demonstrative adverbs *kʰjak*, *thadzun*, *nun*, and *tharaŋ* can either refer to a location where an event takes place or a location that represents the goal of a movement. When referring to the origin of a movement, the demonstrative adverbs have to be marked with the ablative clitic *=tehi*. Consider the following examples, which are based on the proximate demonstrative adverb *kʰjak* “here”.

- (296) *taldzi len epo likdza kʰjak radzi.*

<i>tal=dzi</i>	<i>len</i>	<i>epo</i>	<i>lik-ø-dza</i>	<i>kʰjak</i>
3=ERG.SG	epo	good	do-TR-PST.DIR.DJ.SG	here
<i>ra-dzi</i>				
come-CVB.SG				

“He did good work after he had come here.”

(Conversation 25.53)

(297) *hiŋ nispi kʰjaktɕi amtɕa elʰɛk.*

<i>hiŋ</i>	<i>nispi</i>	<i>kʰjak=tɕi</i>	<i>amt-ɕ-a</i>	<i>el-ʰɛk</i>
1PL.EXCL	two.HUM	here=ABL	walk-MID-SUP	go-VOL.PL

“The two of us want to go hiking from here.”

(SA unrec 9)

The two remaining locational demonstrative adverbs to be discussed in this section are *ʰaj* “up there” and *ʰami* ~ *ʰamiŋ* “down there”. I have not been able to detect a difference in function between the variant forms *ʰami* and *ʰamiŋ*. The latter may go back to an original locative form **ʰami=kun*, which was later contracted to *ʰamiŋ*.

The locational demonstrative *ʰaj* is used to point to a location that is higher than the current location of the speaker, whereas *ʰami* ~ *ʰamiŋ* refers to a location that is lower than the current location of the speaker. The two demonstrative adverbs do not indicate how close or far the speaker is to the respective location, nor whether or not the location is visible at the moment of speaking. Like the demonstrative adverbs *kʰjak*, *ʰadzun*, *nun*, and *ʰaraŋ* (see above), *ʰaj* and *ʰami* ~ *ʰamiŋ* may refer to the scene of an event or the endpoint of a movement. When *ʰaj* and *ʰami* ~ *ʰamiŋ* refer to the origin of a movement, the ablative clitic =*tɕi* has to be attached to them. Consider the following example sentences.

(298) *mu tapɕi radza la ʰaj re?*

<i>mu</i>	<i>tap-s-ɕ-dʒi</i>	<i>ra-dza=la</i>
snow	bring.back-DETR-MID-CVB.SG	come-PST.DIR.DJ.SG=Q

ʰaj=re
up.there=EXT

“Did it snow again up there as well?”

(Conversation 44.6)

(299) *lak tsore henak ajna kʰjopɕi eldza ʰaj leptɕa astok.*

<i>lak=tsore</i>	<i>henak</i>	<i>ajna</i>	<i>kʰjops-dʒi</i>
hand=ENR	like.this	very.much	go.numb-CVB.SG

<i>el-dza</i>	<i>ʰaj</i>	<i>lep-tɕ-a=astok</i>
go-PST.DIR.DJ.SG	up.there	reach-TR-SUP=TERM

“By the time we reached up there, my hands and limbs had gone numb.”

(Conversation 44.4)

(300) *tʰajtɕi bas hoɕmej gjokpa rikdza ka.*

<i>tʰaj=tɕi</i>	<i>bas_{LN}</i>	<i>hoɕmej</i>	<i>gjokpa</i>	<i>rik-ø-dza</i>
up.there=ABL	bus	very	fast	bring-TR-PST.DIR.DJ.SG

ka
ASS

“The bus brought us very fast from up there.”

(Conversation 22.345)

(301) *memerok loɕi da tʰamiŋ rolaŋs ɕensa!*

<i>meme=tok</i>	<i>lot-s-ɕ-dʒi</i>	<i>da</i>	<i>tʰamiŋ</i>	<i>rolaŋs</i>
monk=DAT	say-DETR-MID-CVB.SG	now	down.there	rolangs

ɕen-s-ɕ-dza
rise-DETR-MID-PST.DIR.DJ.SG

“They said to the monk, ‘A rolangs has awoken down there.’”

(Conversation 87.409)

(302) *hit rajpadʒi tʰami eldzala taldok.*

<i>hit</i>	<i>ra-i-pa=jendʒi</i>	<i>tʰami</i>	<i>el-dza=la</i>
memory	come-ACT-NZR=EQ.DJ.SG	down.there	go-PST.SG=ANTER

tal=tok
3[SG]=DAT

“He will remember (us), after having gone down there.”

(Conversation 25.97)

(303) *men men likɕitsuk tʰamiŋtɕi rikɕi jendʒi.*

<i>men</i>	<i>men</i>	<i>lik-s-ɕ-i=tsuk</i>	<i>tʰamiŋ=tɕi</i>
NEG.EQ.CJ	NEG.EQ.CJ	make-DETR-MID-ACT=REL	down.there=ABL

rik-s-ɕ-i=jendʒi
bring-DETR-MID-ACT=EQ.DJ.SG

“No, no, he is bringing (the ovens) that are made (in the factory) from down there.”

(Conversation 55.175)

5.3.3 Demonstratives of manner

In Bunan, there are two demonstrative adverbs that denote the manner in which something is done: *henak* “like this, in this manner” and *honak* “like that, in that manner”.

Demonstratives of manner

henak “like this, in this manner”

honak “like that, in that manner”

The proximate form *henak* is used when the speaker is describing an event that she / he conceptualizes as close to herself / himself. This vague notion of “closeness” may be based on temporal proximity (i.e. present tense), spatial proximity (i.e. physical affect- edness) or direct cognitive accessibility (i.e. direct evidence, personal experience). Accordingly, *henak* is prototypically used in first person narratives in which the speaker is talking about events and situations that she / he has experienced herself.

(304) *təolga rikkudza henak.*

<i>təol-ka</i>	<i>rik-ø-ku-dza</i>	<i>henak</i>
shake-PROG	bring-TR-UND-PST.DIR.DJ.SG	like.this

“(The bus) brought us down here, shaking (us) like this.”

(Conversation 22.205)

(305) *henak jen riŋgare henak jen riŋgare.*

<i>henak</i>	<i>jen</i>	<i>riŋ-k-are</i>	<i>henak</i>	<i>jen</i>
like.this	EQ.CJ	say-INTR-PRS.DJ.SG	like.this	EQ.CJ

riŋ-k-are

say-INTR-PRS.DJ.SG

“‘It is (cold) like this (in Switzerland)’, he said, ‘It is like this’, he said.”

(Conversation 1.34)

When the current speaker is illustrating an event, she / he will likely use the proximate demonstrative adverb *henak*. The following example is taken from a conversation in which a woman talked about another person who had been injured. She had not witnessed the accident herself, but as she illustrated the injury on her own body (by pointing to the injured body part), she still used the proximate form.

(306) *kʰjak pʰoktɕi henak ka apa.*

<i>kʰjak</i>	<i>pʰok-dʒi</i>	<i>henak</i>	<i>ka</i>	<i>apa</i>
here	be.hurt-PST.INFER.DJ.SG	like.this	ASS	AUTH

“He was hurt here like this.” (said while pointing to the injured body part)
(Conversation 22.92)

henak can also be used as an intensifying adverb. In this case, the demonstrative adverb expresses a meaning similar to the English adverbs *so*, *very*, *extremely*. Again, its use implies that the speaker directly witnessed the respective event.

(307) *manu henak tʰattsa.*

<i>manu</i>	<i>henak</i>	<i>tʰat-dza</i>
Manuel	like.this	be.happy-PST.DIR.DJ.SG

“Manuel was so happy!”
(Conversation 25.66)

Finally, *henak* often occurs with the dative clitic =*tok* attached to it. The resulting adverb *henak=tok* expresses the meaning “just like this” and indicates that an action is performed without a specific reason or without a specific outcome in mind.

(308) *henaktok pʰja: pʰja: letdʒi.*

<i>henak=tok</i>	<i>pʰja-ka</i>	<i>pʰja-ka</i>	<i>let-ø-dʒi</i>
like.this=DAT	speak-PROG.SG	speak-PROG.SG	teach-TR-CVB

“(By) talking, talking (to me), they thought me (to speak Manchad) just like this.”
(Conversation 28.15)

The distal demonstrative manner adverb *honak* represents the functional counterpart of *henak*. *honak* is used to describe events that are portrayed as taking place further away from the current or reported speaker. The adverb prototypically occurs when the speaker is talking about past events that she / he did not directly witness.

(309) *honak nindza.*

<i>honak</i>	<i>nindza</i>
like.that	EX.PST.SG

“(The trade) was (done) like that.” (The speaker heard about the event, but did not witness the event herself)
(Conversation 22.326)

(310) *honak loak ne[kuŋ nulekti ni: otəi mani:.*

<i>honak</i>	<i>lot-s-ə-hak</i>	<i>ne[_{LN}=kuŋ</i>	<i>nu=lek=tiki</i>
like.that	say-DETR-MID-PRS.DJ.PL	internet=LOC	that=APP=INDEF
<i>ni:</i>	<i>otəi</i>	<i>ma-ni:</i>	
EX.NON1SG	tomorrow	NEG-EX.NON1SG	

“They say it like that on the internet, ‘(Today) there will be that much (rain), tomorrow there won’t be any.’”

(Conversation 25.48)

Like *henak*, *honak* can be used as an intensifying adverb as well. Again, the use of *honak* implies that the speaker did not experience or witness the event herself / himself.

(311) *honak dzer taɪ jendzi ka.*

<i>honak</i>	<i>dzer</i>	<i>tat-s-ə-i=jendzi</i>	<i>ka</i>
like.that	nail	put-DETR-MID-ACT=EQ.DJ.SG	ASS

“She was in such severe pain.” (The speaker did not see the sick person)

(Conversation 68.12)

5.3.4 Demonstratives of quantity

Bunan possesses two demonstratives of quantity, both of which are listed below.

Demonstratives of quantity

<i>the=lek</i>	“this much”
<i>nu=lek</i>	“that much”

The demonstrative *the=lek* is transparently formed from the proximal demonstrative pronoun *the* “this” and the approximative clitic *=lek*. The distal form *nu=lek* consists of the obsolete demonstrative pronoun **nu* (cf. *nuŋ* “there” and *nuntsuk* “that kind of”) and the approximative clitic *=lek*. The two demonstratives prototypically refer to concrete quantities such as specific amounts of solid material or liquids, but they can also indicate abstract quantities such as physical or temporal distance. *the=lek* and *nu=lek* both occur as independent noun phrases, in adnominal position (e.g. *nulek=tiki kʰartəa* “that amount of expenses”), and as modifiers of adjectives (e.g. *thelek waj* “this far”). The two demonstratives are often augmented with the indefinite clitic *=tiki*, which fulfills an individuating function in this context and emphasizes the extraordinary extent of the described quantity (cf. § 4.4.2.2).

The distribution of *the=lek* and *nu=lek* parallels the distribution of the manner demonstratives *henak* and *honak* (see above). The proximal form *the=lek* portrays a quan-

tity as being somehow “close” to the speaker. This “closeness” may either be based on spatial proximity, temporal proximity, or cognitive accessibility (i.e. direct evidence or personal experience). In example (312) below, the use of the proximal form *the=lek* is possible because the speaker had tried the tea herself and thus had first-hand knowledge about the sweetness of the tea. In example (313), the adverb *the=lek* portrays the speaker’s house as the endpoint of my journey from Europe to India. The spatial proximity of the speaker’s house to my travel route licensed the use of the proximal form, although the speaker had never travelled abroad in her life and thus must have had a rather vague idea of the distance between India and Europe.

(312) *thelekti thi:k jendzi ake?*

<i>the=lek=tiki</i>	<i>thi:k_{LN}</i>	<i>jendzi</i>	<i>ake</i>
this=APP=INDEF	okay	EQ.DJ.SG	QUE

“This amount of sugar (in the tea) is okay, isn’t it?” (The speaker has tried the tea)
(Conversation 55.80)

(313) *thelek waj radzi.*

<i>the=lek</i>	<i>waj</i>	<i>ra-dzi</i>
this=APP	far	come-PST.INFER.DJ.SG

“(Manuel) came such a long distance (from Europe).”
(Conversation 25.48)

The demonstrative adverb *nu=lek*, on the other hand, refers to concrete or abstract quantities that are conceptualized as being further away from the speaker. The distance between the speaker and the quantity may be based on spatial distance, temporal distance, or a lack of direct cognitive accessibility (i.e. lack of direct evidence, lack of personal experience). In example (314) below, *nu=lek* appears in a reported speech context. The reported sentence reflects the viewpoint of the meteorologists, who had no direct cognitive access to their own weather forecast. Thus, the current speaker used the distal form *nu=lek*, although she herself could clearly see how much rain was falling.

(314) *honak loʔak neʔkuŋ nulekti ni: otəi mani:.*

<i>honak</i>	<i>lot-s-ɕʰak</i>	<i>neʔ_{LN}=kuŋ</i>	<i>nu=lek=tiki</i>
like.that	say-DETR-MID-PRS.DJ.PL	internet=LOC	that=APP=INDEF
<i>ni:</i>	<i>otəi</i>	<i>ma-ni:</i>	
EX.NON1SG	tomorrow	NEG-EX.NON1SG	

“They say it like that on the internet, ‘(Today) there will be that much (rain), tomorrow there won’t be any.’”

(Conversation 25.48)

5.3.5 Demonstratives of quality

In Bunan, there are two demonstrative adverbs that describe the quality of objects. They are listed in the following.

Demonstratives of quality

<i>ʰentsuk</i>	“this kind of, such”
<i>nuntsuk</i>	“that kind of, such”

The form *ʰentsuk* consists of the proximal demonstrative *ʰe*, an obscure element *n*, and the definiteness marker *=tsuk*. The form *nuntsuk* consists of the obsolete distal demonstrative stem **nu*, the same obscure element *-n*, and the definiteness marker. Accordingly, the two demonstratives exhibit the same morphological structure as the interrogative pronoun *kʰantsuk* “what kind of” (cf. § 5.2.3). Although *ʰentsuk* and *nuntsuk* can be segmented into smaller morphological segments, they are simply glossed as “this kind of” and “that kind of” in the following, as speakers of Bunan do no longer consider these forms as morphologically complex. This can be deduced from the placement of phrasal stress, which always lies on the second syllable (i.e. */ʰen. 'tsuk/* and */nun. 'tsuk/*). This indicates that the definiteness marker is no longer interpreted as a grammatical suffix in these two words (cf. § 2.5.1).

Like the demonstratives of quantity, *ʰe=lek* and *nu=lek*, *ʰentsuk* and *nuntsuk* both appear as autonomous noun phrases, in adnominal position (e.g. *ʰentsuk ken* “this kind of porridge”), and in adverbial position (*ʰentsuk=tiki soj* “so cold”). Speakers often attach the indefinite marker *=tiki* to *ʰentsuk* and *nuntsuk* to emphasize the quality of an object or a state. This individuating function of the indefiniteness marker is described in more detail in § 4.4.2.2.

The semantic difference between *ʰentsuk* and *nuntsuk* is analogous to the opposition of the manner adverbs *henak* “like this” and *honak* “like that” or the quantity adverbs *ʰe=lek* “this much” and *nu=lek* “that much” (see above). The proximal adverb *ʰentsuk*

expresses the conceptual proximity of the speaker to the respective quality (spatial proximity, temporal proximity, direct cognitive accessibility). In the examples below, the speaker uses the proximal form, as she / he has immediate spatial, temporal, and cognitive access to the object that she / he is describing.

(315) *thentsuk matajtikuŋ gjapoti kinəa marəik tiki tettəi.*

<i>thentsuk</i>	<i>ma-ta-i=tiki=kun</i>	<i>gjapo=tiki</i>
this.kind.of	NEG-POSS-ACT=INDEF=LOC	king=INDEF
<i>kin-ə-a</i>	<i>marəik=tiki</i>	<i>tet-dzi</i>
be.born-MID-SUP	different=INDEF	think-PST.INFER.DJ.SG

“‘It is a strange thing that a king should be born in such a poor place’, he thought.”
(King Kesar 81)

(316) *thentsuk ken təunji ta makjadza la?*

<i>thentsuk</i>	<i>ken</i>	<i>təunji=ta</i>	<i>ma-kja-dza=la</i>
this.kind.of	porridge	little=AVS	NEG-become-PST.DIR.DJ.SG=Q

“But you did not get too little of this kind of porridge?”
(Conversation 70a.5)

The distal form *nuntsuk*, on the other hand, indicates that there is a conceptual distance between the speaker and the respective quality, e.g. in terms of spatial distance, temporal distance, or lack of direct cognitive accessibility. The speaker who uttered the sentence given below was well acquainted with manual fieldwork. However, as he was not doing this kind of work at the moment of speaking or seeing another person nearby working in a field, he used the distal demonstrative *nuntsuk*.

(317) *sakjattsuk nuntsuk lenmen jenmen made talzi ake?*

<i>sakjat=tsuk</i>	<i>nuntsuk</i>	<i>lent-men</i>	<i>jen-men</i>	<i>ma-de</i>
land=DEF	that.kind.of	work-INF	EQ-INF	NEG-ATT.SG
<i>tal=əi</i>	<i>ake</i>			
3=PL	QUE			

“They might not be doing that kind of (manual) field work, the people (in Europe), right?”
(Conversation 70b.2)

6 Adjectives

6.1 Introduction

This section describes the word class of adjectives. In Bunan, adjectives represent a lexical class that serves the basic propositional act of modification (cf. Croft [1990] 2003: 184–185). In the following, adjectives are defined as a distinct word class based on their morphological structure and morphosyntactic properties. With regard to their morphological structure, we can characterize adjectives based on a number word formation processes that are employed to derive them, viz. the suffixation of the modifier marker *-i* (cf. § 6.3.1), the suffixation of the modifier marker *-na* (cf. § 6.3.2), or the reduplication of the underlying root (cf. § 6.3.3). These derivational processes clearly set adjectives apart from both noun and verbs. However, they do not allow us to separate adjectives from numerals and adverbials, as these lexical items may be derived by means of the same mechanisms.

In terms of their morphosyntactic properties, we can define adjectives based on a number of constructions in which they occur. Dixon (2004: 9–12) lists four functional contexts that may be helpful in establishing adjectives as a lexical class distinct from both nouns and verbs. According to him, adjectives may (but do not necessarily have to) be characterized by their ability to ...

- (a) assign properties to nominal heads (predicative use).
- (b) specify the identity of nominal heads (attributive use).
- (c) serve as the “parameter of comparison” (comparative use).
- (d) modify the meaning of verbs (adverbial use).

In Bunan, adjectives may serve all of the four functions listed above. The respective constructions that are used to encode these functions are illustrated in the examples below, all of which contain the adjective *tedzi* “big”. In example (318), the adjective *tedzi* occurs as the complement of the copula *de*. In example (319), the same adjective modifies the meaning of the noun *be* “rock”. In example (320), *tedzi* serves as the parameter of comparison in a comparative construction, and in example (321), it modifies the verb *tar-men* “to do”.

(318) *ajna tedzi de ake?*

<i>ajna</i>	<i>tedzi</i>	<i>de</i>	<i>ake</i>
very	big	ATT.SG	QUE

“He is very tall, isn’t he?”

(Conversation 36.99)

(319) *be tedzirok nanṭṭei dṣotsa likṭei jendṣi.*

<i>be</i>	<i>tedzi=tok</i>	<i>nanṭṭei</i>	<i>dṣot-sa</i>	<i>lik-s-ṭ-i=jendṣi</i>
rock	big=DAT	inside	stay-place	do-DETR-MID-ACT=EQ.DJ.SG

“He made a dwelling place inside a big rock.”

(Tshechu 2.214)

(320) *tedzitsuk tete giroktṭei tedzi jen.*

<i>tedzi=tsuk</i>	<i>tete</i>	<i>gi=tok=ṭṭei</i>	<i>tedzi</i>	<i>jen</i>
big=REL	grandfather	1SG=DAT=ABL	big	EQ.CJ

“The older grandfather (of yours) is older than me.”

(Conversation 36.112)

(321) ... *tḥadzu gjapo jama tsḥanṭṣḥanji tedzi tarkḥa gwak na.*

<i>tḥadzu</i>	<i>gjapo=nama</i>	<i>tsḥanṭṣḥanji</i>	<i>tedzi</i>	<i>tar-kḥa</i>
that	king=all	all	big	do-PROG.PL

gwak=na

EX.NON1PL=HS

“... all those kings were boasting in a big manner, it is said.”

(King Kesar 275)

However, the functions exemplified above are only partially suitable for defining adjectives as a separate word class. This is illustrated by the following table, which gives an overview of different word classes in relation to their ability to occur in the functional contexts (a) through (d) without any additional morphosyntactic marking.

Table 56: The distribution of lexical classes with regard to four constructions

	Context (a) Predicative	Context (b) Attributive	Context (c) Comparative	Context (d) Adverbial
Adjectives	x	x	x	x
Quantifiers	x	x	x	x
Adverbials	x	-	x	x
Nouns	x	-	-	-
Verbs	-	-	-	-

The table above demonstrates that there are several functional overlaps between adjectives and other lexical classes. Quantifiers, for example, may also occur in the four types of constructions exemplified above. Adverbials likewise show a large functional overlap with adjectives. However, we can still set adverbials apart from adjectives, as they cannot modify a nominal referent without further morphosyntactic marking. The considerable functional similarities between adjectives, quantifiers, and adverbials are not surprising. All three lexical classes essentially serve one basic function: the modification of a referent. A more comprehensive discussion of the status of quantifiers and adverbials as lexical classes distinct from adjectives is given in § 7.1 and § 8.1, respectively.

Constructions (a) through (d) are more suitable for distinguishing adjectives from verbs and nouns. Verb stems cannot occur in any of the four constructions without any further morphosyntactic adjustments. Nouns, on the other hand, show a slight functional overlap with adjectives, as they may serve the function of assigning a property to a nominal head in predicate constructions. This statement seems paradoxical, as the prototypical functions of nouns is reference to entities, not the modification of entities (cf. Croft [1990] 2003: 185). However, the functional overlap becomes explicable when considering the grammatical domains of predicate nominals and predicate adjectives in more detail.

In Bunan, non-verbal predicates⁶¹ are formed with a number of copulas, which are introduced and discussed in § 14. For the purpose of the present section, I confine myself to a brief and condensed description of the equative copula *jen-*. The equative copula possesses the forms *jen*, *jendzi*, and *jentɕʰok*. *jen* is a conjunct form and expresses that the speaker possesses personal knowledge about the predicated fact, whereas *jendzi* (singular) and *jentɕʰok* (plural) are disjunct forms that indicate that the speaker does not have any exclusive knowledge about the relevant facts (see § 13.3 for a detailed descrip-

⁶¹ See Payne (1997: 111) for a discussion of non-verbal predication.

tion of the conjunct-disjunct opposition).⁶² The equative copula is prototypically used to form predicate nominals that express equation (“He is my father.”) and proper inclusion (“He is a thief.”), but may also be used to form predicate adjectives (“He is tall”) and predicate locatives (“This village is in the Kullu Valley.”) if the predicated attribute / location is an intrinsic and permanent property of the referent.

Now consider example (322) below, which contains the two lexemes *saŋte* and *saɾba*. The lexical class membership of these two words is unclear, which is reflected in the interlinear gloss and the English translation. Both lexemes may be interpreted as referring expressions (“old man” / “young man”) or modifying expressions (“old (m)” / “young (m)”).

(322) *tal saŋte jendzi eraŋ saɾba jentɕʰok.*

<i>tal</i>	<i>saŋte</i>	<i>jendzi</i>	<i>eraŋ</i>
3[SG]	old.M / old.man	EQ.DJ.SG	1PL.EXCL
<i>saɾba</i>	<i>jentɕʰok</i>		
young.M / young.man	EQ.DJ.PL		

“He is old / an old man, (whereas) we are young / young men.”

(SA unrec 26)

The ambiguity of the lexemes *saŋte* and *saɾba* results from the fact that the copula clause does not display any morphosyntactic marking that indicates whether the copula complement expresses the identity of the referent (“He is an old / young man”) or assigns a quality to the referent (“He is old / young”).⁶³ It is thus possible to interpret the copula clause as either expressing proper inclusion or attribution. As a result of the functional ambiguity of the two word forms, *saŋte* and *saɾba* can both be used as referring expressions (i.e. nouns) and modifying expressions (i.e. adjectives) in other grammatical constructions. This is illustrated in examples (323) and (324) below, both of which contain the lexeme *saŋte*. In the first example sentence, the word clearly acts as a noun with the meaning “old man”. In the second example sentence, it functions as an adjective with the meaning “old (m)”.

⁶² For readers familiar with Standard Tibetan, it may be helpful to say that the opposition of *jen* vs. *jendzi* / *jentɕʰok* in Bunan essentially parallels the opposition of *yin* vs. *red* in Standard Tibetan.

⁶³ Cf. the Germanic languages English and German, where the distinction between predicate adjectives (*He is old* – *Er ist alt*) and predicate nominals (*He is an old one* – *Er ist ein Alter*) is made overt by additional morphosyntactic marking (indefinite article & numeral *one* in English, indefinite article combined with nominative case marking on head noun in German).

(323) *wa tsʰaŋtsʰaŋi kantɕum tsemet butsa lasmi kʰjwa ɕaŋtɕe ɕaŋdzi tsʰaŋtsʰaŋi.*

<i>wa</i>	<i>tsʰaŋtsʰaŋi</i>	<i>kan-tɕ-um=jen</i>	<i>tsemet</i>	<i>butsa</i>
FOC	all	watch-TR-INF=EQ.CJ	girl	boy
<i>lasmi</i>	<i>kʰjwa</i>	<i>ɕaŋtɕe</i>	<i>ɕaŋdzi</i>	<i>tsʰaŋtsʰaŋi</i>
woman	man	old.man	old.woman	all

“And everybody watches (the ceremony), girls, boys, women, men, old men, old women, all of them.”

(Tshechu 1.14)

(324) *ɕaŋtɕe mi gi tes de ɕawa kunmak ɕorgata da henak.*

<i>ɕaŋtɕe</i>	<i>mi</i>	<i>gi</i>	<i>tet-s</i>	<i>de</i>	<i>ɕawa</i>
old.M	person	1SG	think-NZR	ATT.SG	money
<i>kunma=tok</i>	<i>ɕor-ɕ-kata</i>		<i>da</i>	<i>henak</i>	
thief=DAT	lose-TR-ASSER.NON1SG		now	like.this	

“‘The old man’, I thought, ‘will surely lose his money to a thief just like this.’”

(Conversation 14.38)

The words *ɕaŋtɕe* and *ɕarba* thus belong to both the lexical classes of nouns and adjectives, and it is no longer possible to determine their original word class membership based on their synchronic distribution. The two lexemes are not the only words with an inconsistent word class membership. Since Bunan possesses a grammatical construction that neutralizes the distinction between nouns and adjectives, this has given rise to a number of words whose lexical class is no longer fully determined. Some examples are given below.

Table 57: Lexemes with nominal and adjectival properties

Lexeme	Propositional act		Original word class
	Reference	Modification	
<i>ɕaŋdzi</i>	“old woman”	“old (f)”	?
<i>ɕaŋtɕe</i>	“old man”	“old (m)”	?
<i>ɕarba</i>	“young man”	“young (m)”	?
<i>soj</i>	“coldness”	“cold”	adjective
<i>tʰi:</i>	“liquid”	“fluid”	adjective
<i>dzordzor</i>	“stump, stub”	“poking out”	adjective

<i>gjaragire_{LN}</i>	“circular thing”	“circular”	adjective
<i>tsʰatpa_{LN}</i>	“heat, body heat”	“hot”	noun
<i>num_{LN}</i>	“grease, oil”	“greasy”	noun
<i>bardo_{LN}</i>	“hardship”	“hard, difficult”	noun

This list is not exhaustive. The group of lexemes that may be interpreted as both predicate nominals and predicate adjectives is larger. However, it is important to emphasize that words like *saŋdzi*, *saŋte*, and *saɾba*, which can serve the full spectrum of nominal and adjectival function, are rare cases. Most nouns and adjectives whose word class membership has been extended in predicative contexts do not acquire all functions of adjectives or nouns, respectively. In some cases, the neutralization of the noun-adjective distinction does not even entail an extension of the respective lexeme to new functional contexts different from predicate nominals or predicate adjectives. It is thus usually possible to determine the original word class membership of a lexeme. Consider the two example sentences given below, which exemplify the adjectival and nominal use of the lexeme *soj* “cold”.

(325) *soj bras kjaŋka*.

soj bras kjaŋka
cold rice continuously

“(They eat) cold rice all the time.”

(Conversation 36.20)

(326) *wa her ŋarok pʰitok sojdzi kʰaras kjamendzi larlar*.

wa her ŋaro=tok pʰitok soj=dzi kʰaras
FOC again morning=DAT evening cold=ERG.SG frost

kja-men=jendzi larlar
become-INF=EQ.DJ.SG slippery

“And again, in the morning and in the evening there will be frost because of the cold, (it will be) slippery.”

(Conversation 68.39)

Even though the word *soj* can serve both as a noun and as an adjective, the original word class membership of the lexical item can still be determined. The word contains the derivational suffix *-i*, which is commonly used to derive modifiers in Bunan (cf. § 6.3.1). Further, the lexeme cannot fulfill the full range of nominal functions. For example, it cannot partake in certain nominal derivational processes without further morphological adjust-

ments. When serving as the first element of a compound, it loses its derivational morpheme *-i*, cf. *so-ti* “water” (lit. “cold-water”), and not ***so-i-ti* “cold-MOD-water”. This clearly distinguishes *soj* from full-fledged nouns, which do not lose their derivational morphology when they occur as the first element of a compound (cf. § 4.3.5), and indicates that the word originally started out as an adjective and not as a noun.

Another example of a lexical item with multiple lexical class membership is *tsʰatpa*. This word can either be translated as “heat” or “hot” depending on the construction in which it occurs. Consider the following examples.

(327) *tsʰatpaj nattsɿ ɕittsa.*

<i>tsʰatpa=ki</i>	<i>nat=dzi</i>	<i>ɕit-ɕ-dza</i>
heat=GEN	sickness=ERG.SG	die-MID-PST.DIR.DJ.SG

“He died from fever.”

(TD 202.3 [elicited])

(328) *tsʰatpa noj de tʰan ake?*

<i>tsʰatpa</i>	<i>noj</i>	<i>de</i>	<i>tʰan</i>	<i>ake</i>
hot	very	ATT.SG	today	QUE

“It is very hot today, isn’t it?”

(Conversation 36.122)

In example(327), *tsʰatpa* clearly serves as a noun, as it is augmented with the genitive clitic =*ki*. In example (328), on the other hand, *tsʰatpa* serves as an adjective. This is suggested by the fact that it cooccurs with the attributive copula *de*, which cannot be used to form predicate nominals (cf. § 14.4). Still, the lexeme *tsʰatpa* is clearly a noun in the first place and can only partially fulfill adjectival functions. This is implied by the fact that *tsʰatpa* cannot directly modify a noun. As example (327) above demonstrates, *tsʰatpa* has to be linked to a head noun with the genitive clitic =*ki*, hence *tsʰatpa=ki nat* “fever” (lit. “sickness of heat”), and not ***tsʰatpa nat* “***hot sickness”.

Finally, note that Bunan has borrowed a great number of lexemes from neighboring Tibetan varieties, in which the distinction between nouns and adjectives is even less rigid than in Bunan (cf. Zemp 2014: 108–112). It is thus conceivable that words like *num* “grease” – “greasy”, *tsʰatpa* “heat” – “hot”, etc. already covered both functional domains when they were borrowed from Tibetan.

6.2 Phonotactic structure

The phonotactic structure of adjectives is not subject to any rigid restrictions. However, there is a preferred phonotactic shape for adjectives: In Bunan, adjectives are prototypically disyllabic. My lexical database contains 226 adjectives, 175 (77.4 %) of which consist of two syllables. However, it is questionable whether this preferred phonotactic shape is not just a consequence of the morphological structure of adjectives. The lexical roots from which adjectives are derived are usually monosyllabic, and the derivational suffixes that attach to these adjectival roots are exclusively monosyllabic. The combination of monosyllabic lexical roots with monosyllabic derivational suffixes thus automatically gives rise to a great number of disyllabic adjectives. Monosyllabic adjectives are comparatively rare, but do exist nonetheless. 40 adjectives (17.6 %) represent this phonotactic type. Many of them are loanwords from Tibetan. Adjectives consisting of more than two syllables are exceedingly rare. There are only five trisyllabic (3.1 %) and four quadrisyllabic adjectives (1.8 %) in my corpus. Most of them are Tibetan loanwords as well.

Table 58: Phonotactic shapes of adjectives

Type	Examples	Meaning
monosyllabic	<i>soj</i> <i>num</i> <i>bik</i>	“cold” “greasy” “full”
disyllabic	<i>ɕuri</i> <i>mulna</i> <i>sasa</i>	“sour” “lukewarm” “different”
trisyllabic	<i>kʰaʔaki</i> <i>pʰetsetsi</i> <i>sotekdʒi</i>	“bitter” “young (of babies)” “careful”
quadrisyllabic	<i>rabarobe</i> <i>tʰamatʰome</i> <i>tsalatsele</i>	“rough” “careless” “fuzzy”

6.3 Derivation

6.3.1 The modifier marker *-i*

The morpheme *-i* is found on 55 adjectives (24.3 %) in my lexical database. This suffix does not only occur on adjectives, but is also attested on lexical and numeral quantifiers (e.g. *sum-i* “three”, *tru-i* “six”, *no-i* “a lot of, much”, *tsuŋ-i* “a little, few”), adverbs (e.g. *ŋa-i* “early”), and even pronouns (e.g. *gu-i* “where”). Accordingly, the morpheme fulfills the function of marking lexemes that serve the propositional act of modification. For this reason, I use the term “modifier marker” to refer to this derivational suffix.

The modifier marker *-i* is most probably etymologically related to the active participle suffix *-i*, which is attached to verb stems to form active participles, e.g. *tur-i* “drink-ACT” “drinking”, *lik-ts-i* “do-TR-ACT” “doing”. From a synchronic point of view, the two derivational suffixes are, however, clearly functionally distinct. Unlike the active participle suffix, the modifier marker *-i* is not a productive derivational morpheme in contemporary Bunan. Unsurprisingly, Bunan speakers do not consider the modifier marker as a meaningful element, but rather perceive it as an integral part of the respective modifier. In line with the intuition of native speakers, I have chosen not to gloss the modifier marker as a separate morpheme in this thesis, unless it is necessary to emphasize its status as a derivational morpheme. In such cases, the morpheme will be glossed as “MOD” (for “modifier”).

The modifier marker *-i* commonly attaches to monosyllabic roots. The resulting adjectives are mostly disyllabic. However, if the root to which the morpheme is attached ends in a plosive /t, k/, a nasal /ŋ/, or a vowel, the resulting adjective is pronounced as a monosyllabic word. When occurring after a final plosive /t, k/ or a final nasal /ŋ/, the suffix merges with the vowel of the first syllable into a glottalized or nasalized diphthong, respectively (cf. § 3.2.5 and § 2.3.5.5). When attached to a root ending in a vowel, the suffix *-i* is realized as a glide [j], which gives rise to a syllable final diphthong [ej, aj, oj, uj] or the long vowel [i:] (cf. § 2.3.4).

Adjectives exhibiting the derivational suffix *-i*

<i>lok-i</i>	[lɔʔj]	“weak-MOD”
<i>tsan-i</i>	[tsani]	“sharp-MOD”
<i>dzam-i</i>	[zami]	“smooth-MOD”
<i>maŋ-i</i>	[mãj]	“red-MOD”
<i>so-i</i>	[soj]	“cold-MOD”
<i>li-i</i>	[li:]	“heavy-MOD”

Note that adjectives with the modifier marker *-i* lose the derivational suffix when they occur as the first part of a compound noun or a compound adjective. This is illustrated by the following examples.

Adjective roots ending in *-i* occurring in compound nouns

<i>bo-ti</i>	“whey” (“fat-water”)	< <i>bo-i</i>	“fat-MOD”
<i>maŋ-bala</i>	“type of flower” (“red-flower”)	< <i>maŋ-i</i>	“red-MOD”
<i>so-ti</i>	“water” (“cold-water”)	< <i>so-i</i>	“cold-MOD”

Adjective roots ending in *-i* occurring in compound adjectives

<i>tsʰaŋ-tsʰaŋ-i</i>	“everboy, all” (“all-all-MOD”)	< <i>tsʰaŋ-i</i>	“all-MOD”
<i>maŋ-bu-i</i>	“dark red” (“red-?-MOD”)	< <i>maŋ-i</i>	“red-MOD”

However, in the compound adjective *təʰoʝboj* “healthy” (cf. *təʰo-i* “healthy-MOD” and *bo-i* “fat-MOD”), the first adjective retains its derivational suffix. The reason for this unexpected behavior of the first constituent is not entirely clear. The retention of the suffix may be the result of an immediate model, i.e. an analogical process that induces or preserves the similarity of paradigmatically or syntagmatically related sound sequences (Campbell [1998] 2013: 97–99).

The majority of roots that take the modifier marker *-i* are only attested in the lexical class of adjectives. There are, however, seven roots that also occur in other lexical classes. These roots are listed in the table below.

Table 59: Roots occurring in adjectives and other word classes

Adjective	Noun	Verb
<i>tʰi-i</i> liquid-MOD “liquid”	-	<i>tʰi-ɕ-um</i> melt-MID-INF “to melt”
<i>tʰo-i</i> high-MOD “high”	-	<i>tʰo-s-men</i> be.high-STAT-INF “be high”
<i>kju-i</i> long-MOD “long”	-	<i>kju-s-men</i> become.long-STAT-INF “to become long”

<i>kʰjo-i</i> dry-MOD “dry”	-	<i>kʰjo-t-men</i> become.dry-T-INF “to become dry”
<i>tɕʰe-i</i> warm-MOD “warm”	-	<i>tɕʰe-s-men</i> become.warm-STAT-INF “to become warm”
<i>so-i</i> cold-MOD “cold”	-	<i>so-s-men</i> become.cold-STAT-INF “to become cold”
<i>ɕaŋ-i</i> old-MOD “old (of animals)”	<i>ɕaŋ-s</i> become.old-NZR “old age”	<i>ɕaŋ-s-men</i> become.old-STAT-INF “to grow old”

6.3.2 The modifier marker *-na*

Another common morpheme that derives adjectives from lexical roots is the suffix *-na*. This morpheme is attested on 49 adjectives (21.7 %) in my database. Like the modifier marker *-i*, the suffix *-na* is not only attested on adjectives but also on other types of modifiers such as quantifiers (e.g. *aj-na* “much-MOD”) and adverbials (e.g. *tɕak-na* “daily-MOD”). In the following, I refer to this morpheme as a “modifier marker” as well. The suffix *-na* mainly attaches to monosyllabic roots, which gives rise to disyllabic adjectives. The only trisyllabic adjectives with the ending *-na* in my corpus are *tarakna* “proper” and *sirikna* “entire”.

Like the modifier marker *-i*, the suffix *-na* does not modify or specify the meaning of the adjective root to which it attaches. Rather, it represents a word formation suffix that indicates that the relevant word belongs to the word class of adjectives or – more generally – modifiers. Native speakers do not perceive *-na* as a meaningful morphological element, but consider it as an inherent part of the respective modifier. In my analysis, I adopt the viewpoint of native speakers and do not gloss *-na* as an independent morpheme, unless it is necessary to emphasize the status of the suffix as an independent morphological element. In such cases, the morpheme is glossed as “MOD” (for “modifier marker”). A few examples of adjective roots that take the modifier marker *-na* are given in the following.

Adjectives exhibiting the derivational suffix *-na*

<i>tat-na</i>	“small-MOD”
<i>tarak-na</i>	“properly-MOD”
<i>tɕeŋ-na</i>	“upright-MOD”
<i>mul-na</i>	“lukewarm-MOD”

Approximately one third of all adjectives with the modifier marker *-na* exhibit a corresponding reduplicated form. According to my consultants, suffixed and reduplicated forms usually have exactly the same meaning. However, there are a small number of cases in which there is a slight difference in meaning between an adjective in *-na* and its reduplicated counterpart (e.g. *bokna* “undulating over a short distance” vs. *bokbok* “undulating over a long distance”, *phreṅna* “standing in a row” vs. *phreṅphreṅ* “lying in a row”).

***na*-adjectives with reduplicated counterparts**

<i>tat-na</i>	“small-MOD”	~ <i>tattat</i>	“small”
<i>thop-na</i>	“unthoughtful-MOD”	~ <i>thopthop</i>	“unthoughtful”
<i>tseṅ-na</i>	“upright-MOD”	~ <i>tseṅtseṅ</i>	“upright”
<i>bok-na</i>	“undulating-MOD”	~ <i>bokbok</i>	“undulating (long distance)”

There is no similar derivational relationship between adjectives in *-na* and adjectives in *-i*. The only lexical root that is attested in both groups of adjectives is *saṅ-* “good, well, pure”, which occurs in combination with the suffix *-na* (*saṅna* “physically well”) and the suffix *-i* (*saṅi* “ritually purified”).

Only few adjectives ending in *-na* are derived from a lexical root that is attested in another major lexical class. There are three instances of *na*-adjectives that appear to have been derived from verbal roots.

Verb roots taking the derivational suffix *-na*

<i>tʰejtuṅna</i>	“lukewarm”	< <i>tuṅ-</i>	“to drink”
<i>ra:na</i>	“often coming”	< <i>ra-</i>	“to come”
<i>ea:na</i>	“often going”	< <i>el-</i>	“to go”

In addition, there are the adjectives *phreṅna* “standing in a row” ~ *phreṅphreṅ* “lying in a row” and *bjoṅna* ~ *bjoṅbjoṅ* “dangling”, which are most probably cognates of the nouns *preṅpreṅtsi* “spine” and *pjoṅpjoṅtsi* “uvula”, respectively. The phonological mismatches between the initial consonants cannot be accounted for, however.

6.3.3 Reduplication

There are two classes of reduplicated adjectives in Bunan: disyllabic reduplicated adjectives and quadrisyllabic reduplicated adjectives. Adjectives of the first type consist of a monosyllabic lexical root that is fully reduplicated. 42 adjectives (18.5 %) in my corpus are formed in this way. As mentioned above, disyllabic reduplicated adjectives often have a corresponding non-reduplicated form that ends in the modifier marker *-na*. Approximately half of all disyllabic reduplicated adjectives have a corresponding form ending in *-na*.

Disyllabic reduplicated adjectives

<i>tattat</i>	“small”	~ <i>tat-na</i>	“small-MOD”
<i>tæŋtæŋ</i>	“upright”	~ <i>tæŋ-na</i>	“upright-MOD”
<i>tseltsel</i>	“round”		
<i>sasa</i>	“different”		

Quadrissyllabic reduplicated adjectives are derived from disyllabic roots. The process of reduplication differs from the formation of disyllabic reduplicated adjectives discussed above, as only the consonant template of the root is faithfully reduplicated, whereas the vowels in the reduplicated syllable are changed from a pattern *CaCa* ~ *CaCe* to a pattern *CoCe* ~ *CeCe* ~ *CiCe*. Some examples of this type of adjectives are given in the following.

Quadrissyllabic reduplicated adjectives

<i>tʰamathome</i>	“carless”
<i>gjaragire</i>	“circular”
<i>tsalatsele</i>	“fuzzy”
<i>rabarobe</i>	“rough”

In his grammar of Purik Tibetan, Zemp (2014: 158–166) describes a large class of adjectives and nouns that are formed in exactly the same manner. It is thus highly probable that Bunan has borrowed this class of adjectives from neighboring Tibetan varieties, the more so as quadrissyllabic reduplicated adjectives are exceedingly rare in Bunan. There are only seven instances of this type of adjectives in my database, which corresponds to a percentage of 3.1 %.

6.3.4 Unanalyzable adjectives

There is a small number of adjectives that do not belong to one of the three major classes described above (i.e. adjectives ending in the modifier marker *-i*, adjectives ending in the modifier marker *-na*, and reduplicated adjectives) and according to current knowledge have not been borrowed from neighboring languages.

Other types of adjectives

<i>pʰetsetsi</i> ⁶⁴	“young”	cf. Tinan <i>phyeci</i> “small” (Sharma 1989b: 181)
<i>pʰundzi</i>	“hot”	
<i>tedzi</i>	“big”	
<i>tunik</i>	“short”	

⁶⁴ The adjective *pʰetsetsi* „young“ is clearly cognate with the adjective *phyeci* “small” in Tinan (Sharma 1989b: 181). However, it is not possible to say whether one language has borrowed the word from the other. It is equally possible that it represents an inherited lexeme from Proto-West Himalayish in both languages.

<i>ketdzi</i>	“alone”
<i>kjuktsi</i>	“small”
<i>kjultar</i>	“bold”
<i>neme</i>	“tasty”
<i>linḡa</i>	“naughty”
<i>sotekdzi</i>	“careful”
<i>ṣaṇṭe</i>	“old (m)”
<i>ṣaṇdzi</i>	“old (f)”

Some of these adjectives may originally have been nouns that became reanalyzed as modifiers in predicative constructions that are based on the equative copula. This assumption seems plausible given the fact that words like *ṣaṇṭe* and *ṣaṇdzi* can both function as adjectives with the meaning “old (m)” / “old (f)” and as nouns with the meaning “old man” / “old woman” (cf. § 6.1). Moreover, the adjectives *pʰetsetsi* “young” and *kjuktsi* “small” exhibit a final element *-tsi*. This element most probably represents the diminutive suffix, which usually only occurs on nouns (cf. § 4.3.1).

6.3.5 Borrowed adjectives

Bunan has borrowed a great deal of adjectives from neighboring Tibetan varieties. These adjectives can often be identified as borrowings because they are monosyllabic and, accordingly, do not conform to the preferred disyllabic shape of adjectives or because they exhibit derivational morphemes that are common in Tibetan, but do not occur in Bunan. One group of borrowed adjectives are monosyllabic adjectives that do not exhibit any kind of overt marking that would identify them as modifiers. A number of examples are given below.

Borrowed monosyllabic adjectives

<i>ḡik</i>	“suitable”	WT <i>grig</i>	“suitable”
<i>ḡiṇ</i>	“middle”	WT <i>bring</i>	“middle, mediocre”
<i>jas</i>	“to the right”	WT <i>g.yas</i>	“to the right”
<i>num</i>	“greasy”	WT <i>snum</i>	“greasy”

In addition, there are two monosyllabic adjectives *bik* “full” and *tsʰek* “dirty”. These adjectives do not have Tibetan etymologies, but might be borrowings from neighboring West Himalayish languages (cf. Tinan *jək* “dirty”; Sharma 1989b: 149).

Further, there is a small class of disyllabic adjectives that exhibit the Tibetan derivational suffix *-po*, which sometimes stands in opposition to a morpheme *-mo*. The opposition of *-po* and *-mo* indicates whether the referent is male or female.

Borrowed adjectives ending in -po / -mo

<i>kitpo</i>	“prosperous”	WT <i>skyid po</i>	“prosperous”
<i>tampo</i>	“reliable, firm”	WT <i>brtan po</i>	“reliable, firm”
<i>ḡaṅpo</i>	“clever (m)”	WT <i>spyang po</i>	“clever (m)”
<i>ḡaṅmo</i>	“clever (f)”	WT <i>spyang mo</i>	“clever (f)”

Moreover, there is a minor class of disyllabic adjectives that display the derivational suffix *-pa*. This suffix also exists in Bunan, but is only used to form nouns (cf. § 4.3.2). In Tibetan, however, the suffix has a much broader range of functions and can be used to derive different types of nouns and adjectives (Beyer 1992: 130–131).

Borrowed adjectives ending in -pa

<i>toṅpa</i>	“empty”	WT <i>stong pa</i>	“empty”
<i>gjaspa</i>	“elaborate”	WT <i>rgyas pa</i>	“elaborate”
<i>gʷjok(s)pa</i>	“fast”	WT <i>mgyogs pa</i>	“fast”
<i>tʰampa</i>	“hard-working”	WT <i>khram pa</i>	“hard-working”

A last group of borrowed adjectives are the adjectives ending in *-tṣan*. In Written Tibetan, the morpheme *can* expresses that the referent possesses the quality that is denoted by the lexical root, e.g. *dbang* “power” + *can* “possessing” > *dbang can* “powerful” (lit. “possessing power”) (Beyer 1992: 121–122).

Borrowed adjectives ending in -tṣan

<i>dzokstṣan</i>	“skillful”	WT <i>bzhogs can</i>	“skillful”
<i>ṅattṣan</i>	“strong”	WT <i>ngad can</i>	“strong”
<i>ḡaṅtṣan</i>	“noticing”	WT <i>spyang can</i>	“agile, playful”
<i>aṅtṣan</i>	“arrogant, bossy”	WT <i>dbang can</i>	“powerful”

6.4 Comparative constructions

As noted in § 6.1, Bunan adjectives distinguish themselves from other parts of speech through their ability to serve as the parameter of comparison in comparative constructions. According to Stassen (1985: 24–25), a comparative construction can be defined as a construction that serves the function of “assigning a graded (i.e. non-identical) position on a predicative scale to two (possibly complex) objects.” Following Stassen’s (1985, 2005) terminology, I refer to the object that serves as a the reference point for the comparison as the “standard noun phrase” and to the object that is located on a gradable scale in relation to the reference point as the “comparee noun phrase”.

All comparative constructions that are attested in my corpus belong to the Stassen’s type of “fixed-case-comparatives”. In such constructions, the comparee noun phrase is always assigned the same case, which in Bunan is the absolutive. Further, Bunan com-

parative constructions can be characterized as “locational comparatives”, as they are always based on a case that serves a locative function (cf. Stassen 2005: 490). The most common comparative construction in Bunan is based on the ablative case and hence belongs to Stassen’s (2005) type of “*from*-comparatives”. In such constructions, the standard noun phrase is marked with the ablative case or a clitic sequence containing the ablative case, whereas the comparee noun phrase stands in the unmarked absolutive case. Superlatives are formed by attaching the clitic sequence =*tok=tɛi* to the quantifier *tsʰaŋji* ~ *tsʰaŋtsʰaŋji* “all”. Some examples are given in the following.

(329) *tedzitsuk tete giroktɛi tedzi jen.*

<i>tedzi=tsuk</i>	<i>tete</i>	<i>gi=tok=tɛi</i>	<i>tedzi</i>	<i>jen</i>
big=REL	grandfather	1SG=DAT=ABL	big	EQ.CJ

“The older grandfather (of yours) is older than me.” (lit. “(Your) grandfather, the one who is older, is old from me.”)

(Conversation 36.112)

(330) *ɕaŋska ɕaŋska ken tsʰaŋjido ktɛi puɟdak tsʰorɕare da.*

<i>ɕaŋs-ka</i>	<i>ɕaŋs-ka</i>	<i>ken</i>	<i>tsʰaŋji=tok=tɛi</i>
grow.old-PROG.SG	grow.old-PROG.SG	tsampa	all=DAT=ABL
<i>puɟdak</i>	<i>tsʰor-s-ɕ-are</i>	<i>da</i>	
good	feel-DETR-MID-PRS.DJ.SG	now	

“As you become old, *ken* becomes the best food.” (lit. “As you become old, *ken* feels good from all (other food).”)

(Conversation 70a.65)

Ablative comparative constructions cannot only be formed with nouns but also with adjectives and adverbials. In this case, the clitic sequence =*tok=tɛi* attaches to a modifier, which is then again repeated. A construction like *gɟokpa=tok=tɛi gɟokpa* thus literally translates as “fast from fast”, i.e. “in the fastest possible manner”. Consider the following examples.

(331) *the gjokparoktəi gjokpa purtəatrok ...*

<i>the</i>	<i>gjokpa=tok=təi</i>	<i>gjokpa</i>	<i>pur-tə-a=tok</i>
this	fast=DAT=ABL	fast	kill-TR-SUP=DAT

“In order to kill this (demon) in the fastest possible manner ...”

(King Kesar 260)

(332) *ʈel maliktəʰak lojdoktəi loj.*

<i>ʈel</i>	<i>ma-lik-təʰak</i>	<i>loj=tok=təi</i>	<i>loj</i>
care	NEG-do-TR-PRS.DJ.PL	easy=DAT=ABL	easy

“They do not do in a proper way, (they do it) in the easiest possible manner.”

(Tshechu 2.441)

Alternatively, comparative constructions can also be formed by attaching the inter-essive clitic *=basta* ~ *=bastaŋ* to the standard noun phrase. This type of comparative construction belongs to Stassen’s (2005) type of “*at*-comparatives”. The use of interessive comparative constructions is, however, only possible when the compared noun phrase refers to a group of objects rather than an individual object.

(333) *tal eraŋ basta noj təʰa: ʈaj kjadza.*

<i>tal</i>	<i>eraŋ=basta</i>	<i>noj</i>	<i>təʰa:=ʈa-i</i>
3[SG]	1PL.INCL=INTESS	much	knowledge=POSS-ACT

kja-dza

become-PST.DIR.DJ.SG

“He has become the most knowledgeable among us.”

(Conversation 25.17)

(334) *winʈar turisam bonʈʰek tsʰaŋi basta pujdak sakjat jendzi eraŋmaŋ.*

<i>winʈar turisam_{LN}</i>	<i>bonʈʰek</i>	<i>tsʰaŋi=basta</i>	<i>pujdak</i>	<i>sakjat</i>
winter.tourism	for.the.sake	all=INTESS	good	place

<i>jendzi</i>	<i>eraŋ=maŋ</i>
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EQ.DJ.SG	1PL.INCL=ALL
----------	--------------

“For winter tourism our area (i.e. Lahaul) is the best among all places.”

(Conversation 85.3)

7 Quantifiers

7.1 Introduction

Quantifiers constitute a small group of lexical items that indicate the number or the quantity of the referent that they modify. In the following, I distinguish between two types of quantifiers: (1) lexical quantifiers and (2) numeral quantifiers. Lexical quantifiers are defined as quantifying expressions that possess lexical meaning (e.g. *noj* “much”, *hoəmej* “very much”, *təunj* “little”) and, accordingly, merely give a relative indication of an amount. Numeral quantifiers, on the other hand, are defined as quantifying expressions that possess a numeric value (e.g. *tiki* “one”, *niskinj* “two”, *təuj* “ten”) and thus specify an amount in an accurate and absolute manner.

The status of quantifiers as a distinct word class mainly rests on their primary semantic function, i.e. the specification of quantities. This distinguishes them from adjectives, which assign qualities to referents. With regard to their morphological structure, quantifiers do not differ from adjectives. Most of them are derived by means of the morphemes that are also used to derive adjectives and adverbials, that is to say, the modifier marker *-i* (cf. § 6.3.1) and the modifier marker *-na* (cf. § 6.3.2), e.g. *no-i* “many, much, very”, *təunj-i* “few, little”, *tʃaŋ-i* “all, everybody”, *tik-i* “one”, *sum-i* “three”, *aj-na* “many, much”, *tsu-na* “a little bit”. With regard to their syntactic properties, quantifiers likewise are similar to adjectives, as they can occur in identical morphosyntactic constructions (cf. § 6.1). They may occur as complements of copulas and copula-like verbs, as modifiers of nouns, as the parameter of comparison in a comparative construction, or as modifiers of predicates. All these functions are illustrated in the following example sentences with the quantifier *noj* “much, many, very”.

(335) *taldok dʒutəipa noj kjatsʰa kʰorek.*

<i>tal=tok</i>	<i>dʒu-tə-i-pa</i>	<i>noj</i>	<i>kja-tsʰa</i>
3[SG]=DAT	request-TR-ACT-NZR	many	become-PST.DIR.DJ.PL
<i>kʰorek</i>			
later			

“Later, the people who requested (teachings) from him became many.”

(Tulshug Lingpa 90)

(336) *wa tʰe tʰopa noj miks ramen.*

<i>wa</i>	<i>tʰe</i>	<i>tʰopa</i>	<i>noj</i>	<i>miks</i>	<i>ra-men=jen</i>
FOC	this	similar	many	story	come-INF=EQ.CJ

“And there are many stories like this one.”

(The Fairies of Kullu 1.71)

(337) *nuj rajtsuk mu a:da: fuʈtoktʰei noj ni: la ma?*

<i>nuj</i>	<i>ra-i=tsuk</i>	<i>mu</i>	<i>a.da:LN</i>	<i>fuʈLN=tok=tʰei</i>	<i>noj</i>
new	come-ACT=REL	snow	half	foot=DAT=ABL	much
<i>ni:=la</i>		<i>ma</i>			
EX.NON1SG=Q		CNS			

“The snow that has newly fallen is higher than half a foot, right?”

(Conversation 29.5)

(338) *noj dzot-i ta mani:.*

<i>noj</i>	<i>dzot-i=ta</i>	<i>ma-ni:</i>
much	stay-ACT=AVS	NEG-EX.NON1SG

“But she did not use to stay for a long time.”

(Conversation 84.82)

Like all other adjectives, quantifiers can also function as autonomous noun phrases in absence of a cooccurring head noun. This is illustrated by the following examples, in which the quantifiers *noj* “much, many, very” and *tiki* “one” appear as the subject and object of a predicate, respectively.

(339) *ʒel re noj gwanipajentʰok.*

<i>ʒel=re</i>	<i>noj</i>	<i>gwan-i-pa=jentʰok</i>
summer=EXT	many	come.PL-ACT-NZR=EQ.DJ.PL

“Also in summertime many (tourists) will come.”

(Conversation 85.4)

(340) *daruŋ tiki dza!*

<i>daruŋ</i>	<i>tiki</i>	<i>dza-a</i>
still	one	eat-IMP.SG

“Have another one (i.e. a cookie)!”

(Conversation 36.46)

However, there is one construction that defines a functional slot that can exclusively be filled by lexical quantifiers but not by adjectives: the adjective modification construction. In the adjective modification construction, an adjective is preceded by a lexical quantifier that modifies the adjective. Consider the following two examples.

(341) ... *hoɕmej kantsipa hoɕmej mi gwaŋmen tʰadzun.*

<i>hoɕmej</i>	<i>kan-tɕ-i-pa</i>	<i>hoɕmej</i>	<i>mi</i>
very.many	watch-TR-ACT-NZR	very.many	person
<i>gwaŋ-men=jen</i>		<i>tʰadzun</i>	
come.PL-INF=EQ.CJ		there	

“... very many spectators, very many people come there.”

(Tshechu 1.26)

(342) *hoɕmej epo tatmo ramen.*

<i>hoɕmej</i>	<i>epo</i>	<i>tatmo</i>	<i>ra-men=jen</i>
very	good	festival	come-INF=EQ.CJ

“It is a very good festival!”

(Tshechu 1.35)

In example (341), the quantifier *hoɕmej* indicates the vast number of spectators that attend the Tshechu Festival. It thus clearly serves as a nominal modifier in this sentence. In example (342), however, *hoɕmej* does not modify the noun *tatmo* “festival”. Rather, it modifies the meaning of the adjective *epo* and expresses that the Tshechu Festival is not just “good” but “very good”.⁶⁵ Lexical quantifiers are the only lexemes that can modify the meaning of adjectives (and some adverbs). This ability thus distinguishes them from adjectives, which can only modify the meaning of nouns.

Numeral quantifiers, on the other hand, can be distinguished from adjectives based on their ability to occur with the approximative clitic *=lek* attached to them (cf. §

⁶⁵ As the quantifier *hoɕmej* can modify both nouns and adjectives, example (342) could also have the possible meaning “There are many good festivals” in an appropriate pragmatic context. However, the semantic interpretation described above represents the less marked one.

4.4.1.1), as adjectives cannot be marked with this derivational clitic. Consider the following example sentences.

(343) *təujlek kurtəi ra təujlek!*

<i>təuj=lek</i>	<i>kurt-dzi</i>	<i>ra-a</i>	<i>təuj=lek</i>
ten=APP	carry-CVB.SG	come-IMP.SG	ten=APP

“Bring about ten, about ten (copies of your book)!”

(Conversation 32.9)

(344) *təwan nidzajlek khjak kurtəi radzi.*

<i>təwan</i>	<i>nidzaj=lek</i>	<i>khjak</i>	<i>kurt-dzi</i>
fifteen	twenty=APP	here	carry-CVB.SG

ra-dzi

come-PST.INFER.DJ.SG

“He brought about fifteen or twenty (pieces of deep-fried flatbread) here.”

(Conversation 39.36)

7.2 Lexical quantifiers

Some lexical quantifiers have already been discussed in preceding sections, i.e. *ɲama* “all, everybody” and *tʃaŋi* “all, everybody” (cf. § 4.4.3), *khataik* “some(one)” (cf. § 5.2.4), as well as *tʰe=lek* “this much” and *nu=lek* “that much” (cf. § 5.3.4). In the following, I discuss a number of further lexical quantifiers that have not been described so far. The following list gives an overview of them.

Lexical quantifiers

<i>noj</i>	“(too) many, (too) much, very”
<i>ajna</i>	“many, much, very”
<i>dzanare</i>	“many, much, very”
<i>hoɕmej</i>	“very many, very much, extremely”
<i>kanɲanmej</i>	“very many, very much, extremely”
<i>təuŋi</i>	“(too) few, (too) little”
<i>tsuna(=tiki)</i>	“few, little (solid substances)”
<i>tikna(=tiki)</i>	“few, little (liquid substances)”

Note that lexical quantifiers are not sensitive to the semantic distinction of countable nouns and uncountable nouns in Bunan. All of the quantifiers listed above can be used to modify both count nouns and mass nouns.

The quantifier *noj* indicates that a number or quantity is large or overly large. The exact meaning of the quantifier depends on the context of utterance. The following example sentences illustrate the use of the quantifier *noj*.

(345) *noj mitsʰi hel-tɕʰak taldok.*

<i>noj</i>	<i>mi=tsʰi</i>	<i>hel-tɕʰak</i>	<i>tal=tok</i>
many	person=ERG.PL	bring-TR-PRS.DJ.PL	3[SG]=DAT

“A lot of people bring him (to their homes).”

(Conversation 36.85)

(346) *tʰe noj kʰej de tʰe dan noj noj kja:re.*

<i>tʰe</i>	<i>noj</i>	<i>kʰej</i>	<i>de</i>	<i>tʰe</i>	<i>dan</i>	<i>noj</i>
this	very	sweet	ATT.SG	this	belly	too.much

<i>noj</i>	<i>kja-k-are</i>
too.much	become-INTR-PRS.DJ.SG

“This is too sweet, it is far too much for my stomach.”

(Conversation 74.41)

The quantifiers *ajna* and *dzanare* have almost the same meaning as the quantifier *noj*. However, whereas *noj* can indicate that a quantity is perceived as either large or too large, *ajna* and *dzanare* merely express that a quantity is large.

(347) *tʰan ajna soj kjadʒi eldʒi.*

<i>tʰan</i>	<i>ajna</i>	<i>soj</i>	<i>kja-dʒi</i>	<i>el-dʒi</i>
today	very	cold	become-CVB.SG	go-PST.INFER.DJ.SG

“Today, it has become very cold.”

(Conversation 44.1)

(348) *kʰatɕik dzanare tat matsʰwaɕitsukɕi.*

<i>kʰatɕik</i>	<i>dzanare</i>	<i>tat</i>	<i>ma-tsʰwa-s-ɕ-i=tsuk=ɕi</i>
some	much	POSS.NON1PL	NEG-share-DETR-MID-ACT=REL=PL

“Some (families) own a great deal (of land), the ones that have not divided it up among themselves.”

(Conversation 16.25)

The quantifiers *hoəmej* and *kanʃanmej* conceptualize a quantity not just as large but as enormous and are thus best translated into English as “very much, very many, extremely”. The connotation of extensiveness that is inherent to both quantifiers is explicable in terms of their etymology. The quantifier *hoəmej* is composed of the Indo-Aryan loan-word *hōś* “wisdom, consciousness, sense” and the negated existential copula *mej* < *ma-ni*. The quantifier *kanʃanmej* is a contraction of the noun *kanʃan* “imagination” and the negated form of the existential copula. The two quantifiers thus originally expressed the meaning “beyond understanding” and “beyond imagination”, respectively.

(349) *hoəmejti mi gwak aj ama!*

<i>hoəmej=tiki</i>	<i>mi</i>	<i>gwak</i>	<i>aj ama</i>
very.many=INDEF	person	EX.NON1PL	gosh

“Gosh, there were so many people!”

(Conversation 22.46)

(350) *wa kanʃanmej lan katkjure na.*

<i>wa</i>	<i>kanʃanmej</i>	<i>lan</i>	<i>kat-k-are=na</i>
FOC	very.much	wind	blow-INTR-PRS.DJ.SG=HS

“And they say that it is extremely windy.”

(Conversation 31.12)

The adjectives *sasa* and *marəik*, both of which possess the literal meaning “different”, are also often used as quantifiers. Like the quantifiers *hoəmej* and *kanʃanmej*, they indicate that a quantity is considered as enormously large. Often, the indefinite clitic *=tiki* is attached to them, expressing an additional sense of emphasis (cf. § 4.4.2.2 for this individuating function of the indefiniteness clitic). This is illustrated by the following examples.

(351) *sasati kʰej de!*

<i>sasa=tiki</i>	<i>kʰej</i>	<i>de</i>
different=INDEF	sweet	ATT.SG

“(This tea) is extremely sweet!”

(Conversation 55.89)

(352) *wa tal awanaŋ ama katəŋ leptəipadzi wa sasa tʰatipadzi!*

<i>wa</i>	<i>tal</i>	<i>awa=naŋ</i>	<i>ama=katəŋ</i>
FOC	3[SG]	father=CON	mother=COM

<i>lep-tə-i-pa=jendzi</i>	<i>wa</i>	<i>sasa</i>
reach-TR-ACT-NZR=EQ.DJ.SG	FOC	different

tʰat-i-pa=jendzi

be.happy-ACT-NZR=EQ.DJ.SG

“And when he will get back to his parents, he will be so happy!”

(Conversation 16.88)

(353) *wa eraŋmar marəik mu ni: na dan̄ta.*

<i>wa</i>	<i>eraŋ=mar</i>	<i>marəik</i>	<i>mu</i>	<i>ni:=na</i>	<i>dan̄ta</i>
FOC	1PL.INCL=ALL	different	snow	EX.NON1SG=HS	still

“And in Lahaul, there is said to be a lot of snow still.”

(Conversation 68.27)

The quantifier *təuŋi* represents the functional counterpart of *noj*. It expresses that a number or quantity is either small or too small. The exact semantic interpretation of *təuŋi* depends on the pragmatic context. Consider the following examples.

(354) *ini kwasa la? təuŋi dzadza!*

<i>ini</i>	<i>kwasa-dza=la</i>	<i>təuŋi</i>	<i>dza-dza</i>
2[SG].HON	become.full-PST.DIR.DJ.SG=Q	little	eat-PST.DIR.DJ.SG

“Are you full? You only ate a little amount (of rice).”

(Conversation 42.41)

(355) *tʰentsuk ken təuŋi ta makjadza la?*

<i>tʰentsuk</i>	<i>ken</i>	<i>təuŋi=ta</i>	<i>ma-kja-dza=la</i>
this.kind.of	porridge	little=AVS	NEG-become-PST.DIR.DJ.SG=Q

“But you did not get too little of this porridge?”

(Conversation 70a.5)

The quantifier *tsuna* “little, few” also denotes a quantity as being small. However, unlike *təuŋi*, it cannot express that a quantity is perceived as being too small. Speakers often attach the indefinite clitic =*tiki* to *tsuna* to add an additional sense of emphasis (cf. § 4.4.2.2 for this individuating function of the indefiniteness clitic). The quantifier *tsuna* pro-

tototypically refers to amounts of solid substances, such as rice, bread, etc. However, the use of *tsuna* has been extended to more abstract contexts such as a small amount of words, a small amount of time, or the slightness of a feeling. Consider the following example sentences.

(356) *kekir dza, tsuna tsuna dza!*

<i>kekir</i>	<i>dza-a</i>	<i>tsuna</i>	<i>tsuna</i>	<i>dza-a</i>
flatbread	eat-IMP.SG	little.bit	little.bit	eat-IMP.SG

“Eat a piece of flatbread, eat a little little bit!”

(Conversation 42.8)

(357) *gi re tsunati lotkidza.*

<i>gi=re</i>	<i>tsuna=tiki</i>	<i>lot-ø-kidza</i>
1SG=EXT	little.bit=INDEF	say-TR-PST.DIR.1SG

“I also said a few words.”

(Conversation 39.5)

(358) *tsuna dzot^{hi} ek^{hek}.*

<i>tsuna</i>	<i>dzot-t^{hi}</i>	<i>el-k^{hek}</i>
little.bit	stay-CVB.PL	go-INTR-PRS.CJ.PL

“We will stay for a little bit longer and then we will go.”

(Conversation 44.20)

(359) *tsunati gjardza.*

<i>tsuna=tiki</i>	<i>gjar-dza</i>
little.bit=INDEF	be.afraid-PST.DIR.DJ.SG

“He became a little bit afraid.”

(Conversation 87.91)

Like *tsuna*, the quantifier *tikna* “little, few” indicates that a quantity is small. It often occurs with the indefinite clitic =*tiki* attached to it as well. This quantifier is only used to refer to amounts of liquids, e.g. tea, soup, gravy, etc.

(360) ... *marnaŋ tiknati dʒaʰaŋ asti tiknati ʰirtəʰak*.

mar=naŋ *tikna=tiki* *dʒaʰaŋ=asti* *tikna=tiki*
 butter=CON little.bit=INDEF black.tea=SML little.bit=INDEF

ʰir-təʰak

send-TR-PRS.DJ.PL

“... they mix butter and a little bit of black tea or the like.”

(Tshechu 2.427)

7.3 Numeral quantifiers

7.3.1 Cardinal numerals

7.3.1.1 Syntactically autonomous cardinal numerals

The following table lists the Bunan numbers from one through twenty. Note that there are two forms for the number “two”. The form *niskiŋ* is used with non-animate referents, whereas the form *nispi* is restricted to animate referents. The number “twenty” is both attested as *nidza* and *nidzaj* in my data. The variant with the final glide /j/ likely represents the genitive clitic =*ki*. The genitive marker is commonly attached to the numeral to form numbers higher than twenty (see below). In the course of time, the genitive clitic may have been reanalyzed as an etymological part of the numeral in the course of a metanalysis (cf. Campbell [1998] 2013: 102–103). The fact that many single-figure numbers exhibit the modifier marker *-i* (e.g. *tik-i* “one”, *sum-i* “three”, *ŋa-i* “five”, etc.) may have facilitated this development.

Table 60: Bunan cardinal numerals 1 through 20

Numeral	Meaning	Numeral	Meaning
<i>tiki</i>	“one”	<i>təutik</i>	“eleven”
<i>niskiŋ</i> / <i>nispi</i>	“two”	<i>təunis</i>	“twelve”
<i>sumi</i>	“three”	<i>təusum</i>	“thirteen”
<i>pi:</i>	“four”	<i>təupi</i>	“fourteen”
<i>ŋaj</i>	“five”	<i>təwaŋ</i>	“fifteen”
<i>truŋ</i>	“six”	<i>təusdruk</i>	“sixteen”
<i>nidʒi</i>	“seven”	<i>təurnis</i>	“seventeen”
<i>gej</i>	“eight”	<i>təopgjat</i>	“eighteen”
<i>gu</i>	“nine”	<i>təurgu</i>	“nineteen”

<i>təuj</i>	“ten”	<i>nidza ~ nidzaj</i>	“twenty”
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(361) *niskinj sumi hela!*

niskinj sumi hel-a
two three take.away-IMP.SG

“Take two or three (pieces of apple)!”

(Conversation 36.11)

(362) *solan eldži girok nima tiki nispi meme dottsa.*

solan el-dži gi=tok nima=tiki nispi meme
Solan go-CVB.SG 1SG=DAT day=INDEF two.HUM monk

dot-dza
meet-PST.DIR.DJ.SG

“After I had come to Solan, one day I meet two monks.”

(Zhangzhung 4)

(363) *kʰatəik pi: ŋaj bi:ga: matat.*

kʰatəik pi: ŋaj bi:ga:LN ma-tat
some four five bīghā NEG-POSS.NON1PL

“Some people do not (even) own four or five *bīghā* of land.”

(Conversation 16.24)

The following two tables list the numbers “twenty” through “forty” and the decimal numbers “forty” through “one hundred”. As the data illustrate, numbers between “twenty” and “ninety-nine” follow a vigesimal system. This means that amounts are counted in groups of twenty rather than ten. For example, the number for “thirty”, *nidza=ki təuj*, literally translates into English as “ten of twenty”, whereas the number for “forty”, *niskinj nidza*, has the literal meaning “two twenties”. The number “ninety-five” is expressed as *pi: nidza=ki təwaŋ* (lit. “fifteen of four twenties”).

Table 61: Bunan numerals 20 through 40

Numeral	Meaning	Numeral	Meaning
<i>nidza=ki tiki</i>	“twenty-one”	<i>nidza=ki təutik</i>	“thirty-one”
<i>nidza=ki niskinj</i>	“twenty-two”	<i>nidza=ki təunis</i>	“thirty-two”
<i>nidza=ki sumi</i>	“twenty-three”	<i>nidza=ki təusum</i>	“thirty-three”

<i>nidza=ki pi:</i>	“twenty-four”	<i>nidza=ki tɕupi</i>	“thirty-four”
<i>nidza=ki ŋaj</i>	“twenty-five”	<i>nidza=ki tɕwan</i>	“thirty-five”
<i>nidza=ki truj</i>	“twenty-six”	<i>nidza=ki tɕusdruk</i>	“thirty-six”
<i>nidza=ki nidzi</i>	“twenty-seven”	<i>nidza=ki tɕurnis</i>	“thirty-seven”
<i>nidza=ki geɟ</i>	“twenty-eight”	<i>nidza=ki tɕupgɟat</i>	“thirty-eight”
<i>nidza=ki gu</i>	“twenty-nine”	<i>nidza=ki tɕurgu</i>	“thirty-nine”
<i>nidza=ki tɕuj</i>	“thirty”	<i>niskiŋ nidza</i>	“forty”

Table 62: Bunan decimal numerals 40 through 100

Numeral	Meaning	Numeral	Meaning
<i>niskiŋ nidza=ki tɕuj</i>	“fifty”	<i>pi: nidza</i>	“eighty”
<i>sum nidza</i>	“sixty”	<i>pi: nidza=ki tɕuj</i>	“ninety”
<i>sum nidza=ki tɕuj</i>	“seventy”	<i>gja</i>	“one hundred”

The vigesimal system is rarely used in everyday life, however. Usually, speakers only use the traditional Bunan numeral system to count up to twenty. For higher numbers, they prefer to use the Tibetan numeral system, and occasionally, they use Tibetan numbers to count amounts lower than twenty as well. The Tibetan numbers from “one” to “twenty” are given in the table below.

Table 63: Tibetan numerals 1 through 20

Numeral	Meaning	Numeral	Meaning
<i>tɕik</i>	“one”	<i>tɕuktɕik</i>	“eleven”
<i>ni</i>	“two”	<i>tɕuni</i>	“twelve”
<i>sum</i>	“three”	<i>tɕusum</i>	“thirteen”
<i>dzi</i>	“four”	<i>tɕupdzi</i>	“fourteen”
<i>ŋa</i>	“five”	<i>tɕoŋa</i>	“fifteen”
<i>ɕuk</i>	“six”	<i>tɕuɕuk</i>	“sixteen”
<i>dun</i>	“seven”	<i>tɕupdun</i>	“seventeen”
<i>gɟat</i>	“eight”	<i>tɕopgɟat</i>	“eighteen”
<i>gu</i>	“nine”	<i>tɕurgu</i>	“nineteen”

<i>təu</i>	“ten”	<i>niəu</i>	“twenty”
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The table below lists the Tibetan numbers from “twenty” through “one hundred”. As becomes clear from the data, the Tibetan numeral system differs from the Bunan numeral system in being decimal rather than vigesimal. This means that numbers are counted in groups of ten instead of twenty. The number “forty”, for example, is expressed as *dziptəu* (lit. “four tens”) in Tibetan but *niskinj nidza* (lit. “two forties”) in Bunan. A peculiar feature of the Tibetan numeral system is that an additional morpheme is inserted between the position of tens and the position of units. Every unit of tens has its own specific connecting morpheme. For example, the twenties take the connecting morpheme *-tsa*, whereas the thirties exhibit the connecting morpheme *-so*. As a consequence, speakers normally only use the connecting morpheme and the unit when counting and do not mention the respective ten at all. The Tibetan numeral system that is used in Bunan was most probably borrowed from a Tibetan variety of Lahaul or Spiti.

Table 64: Tibetan numerals 20 through 100

Numeral	Meaning	Numeral	Meaning
<i>niəu</i>	“twenty”	<i>(niəu)tsaŋa</i>	“twenty-five”
<i>(niəu)tsaktəik</i>	“twenty-one”	<i>(niəu)tsaɖuk</i>	“twenty-six”
<i>(niəu)tsakni</i>	“twenty-two”	<i>(niəu)tsapdun</i>	“twenty-seven”
<i>(niəu)tsaksum</i>	“twenty-three”	<i>(niəu)tsapgjat</i>	“twenty-eight”
<i>(niəu)tsapdzi</i>	“twenty-four”	<i>(niəu)tsargu</i>	“twenty-nine”
<i>sumtəu</i>	“thirty”	<i>(sumtəu)soŋa</i>	“thirty-five”
<i>(sumtəu)soktəik</i>	“thirty-one”	<i>(sumtəu)soɖuk</i>	“thirty-six”
<i>(sumtəu)sokni</i>	“thirty-two”	<i>(sumtəu)sopdun</i>	“thirty-seven”
<i>(sumtəu)soksum</i>	“thirty-three”	<i>(sumtəu)sopgjat</i>	“thirty-eight”
<i>(sumtəu)sopdzi</i>	“thirty-four”	<i>(sumtəu)sorgu</i>	“thirty-nine”
<i>dziptəu</i>	“forty”	<i>(dziptəu)dzaŋa</i>	“forty-five”
<i>(dziptəu)dzaktəik</i>	“forty-one”	<i>(dziptəu)dzaɖuk</i>	“forty-six”
<i>(dziptəu)dzakni</i>	“forty-two”	<i>(dziptəu)dzapdun</i>	“forty-seven”
<i>(dziptəu)dzaksum</i>	“forty-three”	<i>(dziptəu)dzapgjat</i>	“forty-eight”
<i>(dziptəu)dzapdzi</i>	“forty-four”	<i>(dziptəu)dzargu</i>	“forty-nine”

<i>ɲaptɕu</i>	“fifty”	<i>(ɲaptɕu)ɲaŋa</i>	“fifty-five”
<i>(ɲaptɕu)ɲaktɕik</i>	“fifty-one”	<i>(ɲaptɕu)ɲaɖuk</i>	“fifty-six”
<i>(ɲaptɕu)ɲakni</i>	“fifty-two”	<i>(ɲaptɕu)ɲapdun</i>	“fifty-seven”
<i>(ɲaptɕu)ɲaksum</i>	“fifty-three”	<i>(ɲaptɕu)ɲapgjat</i>	“fifty-eight”
<i>(ɲaptɕu)ɲapdʒi</i>	“fifty-four”	<i>(ɲaptɕu)ɲargu</i>	“fifty-nine”
<i>ɖuktɕu</i>	“sixty”	<i>(ɖuktɕu)reŋa</i>	“sixty-five”
<i>(ɖuktɕu)rektɕik</i>	“sixty-one”	<i>(ɖuktɕu)reɖuk</i>	“sixty -six”
<i>(ɖuktɕu)rekni</i>	“sixty-two”	<i>(ɖuktɕu)repdun</i>	“sixty-seven”
<i>(ɖuktɕu)reksum</i>	“sixty-three”	<i>(ɖuktɕu)repgjat</i>	“sixty-eight”
<i>(ɖuktɕu)repdʒi</i>	“sixty-four”	<i>(ɖuktɕu)rergu</i>	“sixty-nine”
<i>duntɕu</i>	“seventy”	<i>(duntɕu)donŋa</i>	“seventy-five”
<i>(duntɕu)dontɕik</i>	“seventy-one”	<i>(duntɕu)donɖuk</i>	“seventy-six”
<i>(duntɕu)donni</i>	“seventy-two”	<i>(duntɕu)dondun</i>	“seventy-seven”
<i>(duntɕu)donsum</i>	“seventy-three”	<i>(duntɕu)dongjat</i>	“seventy-eight”
<i>(duntɕu)dondʒi</i>	“seventy-four”	<i>(duntɕu)dongu</i>	“seventy-nine”
<i>gjatɕu</i>	“eighty”	<i>(gjatɕu)gjaŋa</i>	“eighty-five”
<i>(gjatɕu)gjaktɕik</i>	“eighty-one”	<i>(gjatɕu)gjaɖuk</i>	“eighty-six”
<i>(gjatɕu)gjakni</i>	“eighty-two”	<i>(gjatɕu)gjapdun</i>	“eighty-seven”
<i>(gjatɕu)gjaksum</i>	“eighty-three”	<i>(gjatɕu)gjapgjat</i>	“eighty-eight”
<i>(gjatɕu)gjapdʒi</i>	“eighty-four”	<i>(gjatɕu)gjargu</i>	“eighty-nine”
<i>guptɕu</i>	“ninety”	<i>(guptɕu)goŋa</i>	“ninety-five”
<i>(guptɕu)goktɕik</i>	“ninety-one”	<i>(guptɕu)goɖuk</i>	“ninety-six”
<i>(guptɕu)gokni</i>	“ninety-two”	<i>(guptɕu)gopdun</i>	“ninety-seven”
<i>(guptɕu)goksum</i>	“ninety-three”	<i>(guptɕu)gopgjat</i>	“ninety-eight”
<i>(guptɕu)gopdʒi</i>	“ninety-four”	<i>(guptɕu)gorgu</i>	“ninety-nine”

The following example demonstrates that Tibetan numbers are clearly preferred over the traditional numeral system of Bunan when referring to amounts higher than twenty. The utterance refers to “twenty or thirty people” (*nidzaj sumtɕu mi*) that were suffering

from jaundice. The speaker who uttered this sentences used the traditional Bunan word *nidzaj* “twenty” but the Tibetan loanword *sumtəu* for “thirty”.

da tʰe baktak nidzaj sumtəu mi dzejnat kʰukəi gwak.

da tʰe baktak= tok nidzaj sumtəu mi dzejnat
now this time=DAT twenty thirty person jaundice

kʰuk-s-ə-təʰi gwak
find-DETR-MID-CVB.PL EX.NON1PL

“Now, at this time, twenty our thirty people were suffering from jaundice.”
(Tulshug Lingpa 46)

The cardinal numbers for “hundred” (*gja*) and “thousand” (*ton*) have most likely been borrowed from Tibetan as well (cf. WT *brgya* “hundred”, *stong* “thousand”). The numerals from “hundred” through “thousand” are listed in the following table.

Table 65: Hundreds from 100 through 1000

Numeral	Meaning	Numeral	Meaning
<i>gja</i>	“one hundred”	<i>trujgja</i>	“six hundred”
<i>nipgja</i>	“two hundred”	<i>nidzigja</i>	“seven hundred”
<i>sumgja</i>	“three hundred”	<i>gejgja</i>	“eight hundred”
<i>dzipgja</i>	“four hundred”	<i>gugja</i>	“nine hundred”
<i>ŋapgja</i>	“five hundred”	<i>ton</i>	“one thousand”

The numerals from 100 through 500 appear to be borrowings from Tibetan. This is especially obvious in the case of *dzipgja* “four hundred”, which does not contain the Bunan numeral *pi*: “four” but a reflex of WT *bzhi* “four” (cf. WT *bzhi brgya* “four hundred”). The numerals 600 through 900 are compounds of the respective Bunan numerals *truj* “six”, *nidzi* “seven”, *gej* “eight”, and *gu* “nine”. Note that *gugja* cannot be a reflex of WT *dgu brgyad* “nine hundred”, as we would then expect the form ***gupgja*, with the complex onset of the second syllable being partially preserved in syllable-internal position.

Apart from the traditional Bunan numeral system and the borrowed Tibetan numeral system, Bunan speakers also often use the numeral system of Hindi, which has become the dominant contact language since the mid-20th century (cf. § 1.2.3.2). Especially young speakers frequently use Hindi numbers, but they are attested in the speech of old speakers as well. This is demonstrated by the following sentence, which was recorded from my main consultant (*1936).

(364) *mana:li ti:n fuʈ radza na.*

mana:li *ti:n_{LN}* *fuʈ_{LN}* *ra-dza=na*
 Manali three foot come-PST.DIR.DJ.SG=HS

“In Manali there were three feet (of snow).”

(Conversation 28.56)

7.3.1.2 Cliticized cardinal numerals

Some cardinal numerals possess special precliticized short forms that occur in combination with certain nouns. The numeral *niskin* “two” loses its second syllable and surfaces as *nis=*, whereas the numerals *sumi* “three”, *pi* “four”, *ɲaj* “five”, and *təuj* “ten” lose the modifier marker *-i* and surface as *sum=*, *pi=*, *ɲa=*, and *təu=*, respectively. The numerals *truj* “six” and *gej* “eight” also lose the modifier marker *-i*, which is replaced by a velar plosive /k/ in the case of *truj* and an alveo-dental plosive /t/ in the case of *gej*, yielding the cliticized forms *truk=* and *get=*, respectively. Note that these archaic syllable final consonants are also preserved in the numerals *təusdruk* “sixteen” and *təopgjat* “eighteen”. The numeral *nidzi* “seven” does not have a cliticized short form and always occurs in its full form.

In my corpus, precliticized numerals are attested in combination with the nouns *(s)la* “month”, *gjak* “day”, *bin* “year”, *mi* “person”, *dumbu* “piece”, and *ser* “time”. The following table illustrates precliticized numerals on the nouns *(s)la* “month”, *gjak* “day”, and *bin* “year”. The respective forms were elicited from my main consultant. As the table illustrates, the paradigm is not entirely regular. The numbers *gej* “eight” and *təuj* “ten” precliticize to the nouns *gjak* “day” and *bin* “year”, while they occur in their full form when preceding the noun *(s)la* “month”, hence *gej (s)la* “eight months” (instead of ***get=(s)la*) and *təuj (s)la* “ten months” (instead of ***təu=(s)la*).

Table 66: Cliticized numerals 2 through 10

number	<i>(s)la</i> “month”	<i>gjak</i> “day”	<i>bin</i> “year”
“two”	<i>nis=(s)la</i> [<i>nislæ</i>] “two months”	<i>nis=gjak</i> [<i>nizɔʔkʰ</i>] “two days”	<i>nis=bin</i> [<i>nizbɪŋ</i>] “two years”
“three”	<i>sum=(s)la</i> [<i>sumslæ</i>] “three months”	<i>sum=gjak</i> [<i>sumɔʔkʰ</i>] “three days”	<i>sum=bin</i> [<i>sumbɪŋ</i>] “three years”
“four”	<i>pi=(s)la</i> [<i>pislæ</i>] “four months”	<i>pi=gjak</i> [<i>pɪɔʔkʰ</i>] “four days”	<i>pi=bin</i> [<i>pibɪŋ</i>] “four years”

“five”	<i>ŋa=(s)la</i> [ŋaslə̃] “five months”	<i>ŋa=gjak</i> [ŋaʝaʔkʰ] “five days”	<i>ŋa=biŋ</i> [ŋabiŋ] “five years”
“six”	<i>truk=(s)la</i> [truʔxslə̃] “six months”	<i>truk=gjak</i> [truʔʝaʔkʰ] “six days”	<i>truk=biŋ</i> [truʔgʰbiŋ] “six years”
“seven”	<i>nidzi (s)la</i> [nizi lə̃] “seven months”	<i>nidzi gjak</i> [nizi ʝaʔkʰ] “seven days”	<i>nidzi biŋ</i> [nizi biŋ] “seven years”
“eight”	<i>gej (s)la</i> [ʝej lə̃] “eight months”	<i>get=gjak</i> [ʝeʔdʰʝaʔkʰ] “eight days”	<i>get=biŋ</i> [ʝeʔdʰbiŋ] “eight years”
“nine”	<i>gu=(s)la</i> [guslə̃] “nine months”	<i>gu=gjak</i> [guʝaʔkʰ] “nine days”	<i>gu=biŋ</i> [gubiŋ] “nine years”
“ten”	<i>təuj (s)la</i> [təyj lə̃] “ten months”	<i>təu=gjak</i> [təyʝaʔkʰ] “ten days”	<i>təu=biŋ</i> [təubiŋ] “ten years”

(365) *sumslalek dzot.*

sum=(s)la=lek *dzot-et*
three=month=APP stay-PST.DIR.CJ

“I stayed for about three months.”

(Conversation 371.22)

(366) *ŋajak trukgjaktok.*

ŋa=gjak *truk=gjak=tok*
five=day six=day=DAT

“In five or six days.”

(Conversation 63.105)

(367) *sumbiŋ pibiŋ kjadza da.*

sum=biŋ *pi=biŋ* *kja-dza* *da*
three=year four=year become-PST.DIR.DJ.SG now

“It has been three or four years now.”

(Conversation 14.29)

The clitic status of the numerals listed above rests on morphological and phonological factors. First, they lose the derivational suffix *-i* (cf. § 6.3.1) when modifying the nouns *(s)la* “month”, *gjak* “day”, or *biŋ* “year”. Accordingly, they are defective words from a morphological point of view, as they lose the derivational morpheme that specifies their lexical

class membership. Second, they never bear phrasal stress. Rather, phrasal stress always lies on the head noun. The quantifier and its head noun thus form a compound noun rather than two distinct words from a phonological perspective. Furthermore, the strong syntagmatic ties between the cliticized quantifiers and their head nouns are indicated by peculiar mutations of the final consonants of some numerals as well as the initial consonants of some modified nouns. For example, the cardinal numerals *truj* “six” and *gej* “eight” possess the cliticized forms *truk=* and *get=*, respectively. The noun *(s)la* “month”, on the other hand, surfaces with an initial *s*-suffix, which is never present if the word appears as a fully independent noun, whereas the noun *gjak* “day” loses its initial velar plosive when preceded by the precliticized quantifiers *pi=* or *ŋa=*.

7.3.2 Ordinal numerals

Ordinal numerals are formed by attaching the definiteness clitic *=tsuk* to the respective numeral, i.e. *niskin=tsuk* “(the) second (one)”, *sumi=tsuk* “(the) third (one)”. The ordinal numeral “first” is not derived from the cardinal numeral *tiki* “one” but from the suppletive stem *gomak*, which is a Tibetan loanword (cf. WT *mgo ma* ~ ‘*go ma* “first”), hence *goma=tsuk* “(the) first (one)”. Interestingly, there are no ordinal numerals attested in my data corpus. In the stories and conversations that I recorded, speakers either used Hindi ordinal numbers or English ordinal numbers.

7.3.3 Collective numerals

Collective numerals are derived from cardinal numerals by attaching the extended topic marker *=re* (cf. § 10.2.2) to them, e.g. *nispi=re* “both”, *sumi=re* “the three of them, all three”. In fast speech, the final vowel of the clitic is often deleted, giving rise to the short forms *[nispir]*, *[sumir]*, etc.

(368) *wa tal nispir gjar-t^{hi}.*

<i>wa</i>	<i>tal</i>	<i>nispi=re</i>	<i>gjar-t^{hi}</i>
FOC	3[SG]	two.HUM=EXT	be.afraid-PST.INFER.DJ.PL

“And both of them became afraid.”

(Conversation 87.131)

(369) *eraŋ sumir gwaŋ-k^{hek}.*

<i>eraŋ</i>	<i>sumi=re</i>	<i>gwaŋ-k^{hek}</i>
1PL.INCL	three=EXT	go.PL-INTR-PRS.CJ.PL

“The three of us will go together.”

(TD unrec 32)

7.3.4 Fractional numerals

In my data, there are only two fractional numerals attested, i.e. *p^het* “half” and *janp^het* “quarter”. The numeral *p^het* is a borrowing from Tibetan (cf. WT *phyed* “half”). The element *jan* in *janp^het* is also seems to be a Tibetan loanword being connected with WT *yang* “again, once more”. Thus, the literal meaning of *janp^het* is “half once more”.

(370) *the nun tsakdʒi bura p^het menaŋ madza.*

<i>the</i>	<i>nun</i>	<i>tsak-ø-dʒi</i>	<i>but-a</i>	<i>p^het</i>	<i>menaŋ</i>
this	there	put.inside-TR-CVB.SG	put-IMP.SG	half	except.for
<i>ma-dza</i>					
NEG-eat					

“Keep these (pieces of flatbread) there (in the box), I will not eat more than half (of the one that I already got here).”

(Conversation 42.16)

8 Adverbs

8.1 Introduction

Adverbs constitute a group of lexical items that modify the meaning of verbs. In Bunan, we may distinguish between four different classes of adverbs. First, there are adverbs of location, which indicate where an event takes place. Second, there are adverbs of time, which specify the point in time at which an event occurs or the time interval during which an event takes place. Third, there are adverbs of manner, which specify the fashion in which an action is performed. Fourth, there are epistemic adverbs that specify the speaker's attitude towards an event, e.g. the speaker's assessment of the probability that a given event will occur or the speaker's belief in the necessity that an event should occur.

As mentioned in § 6.1, adverbs share certain properties with adjectives and quantifiers. For example, they contain the same derivational morphemes, i.e. the modifier marker *-i* (cf. § 6.3.1) (e.g. *ph-i* “late-MOD”, *ɲa-i* “early-MOD”) or the modifier marker *-na* (cf. § 6.3.2) (e.g. *tɕak-na* “daily-MOD”, *juk-na* “immediately-MOD”). Moreover, there is a considerable functional overlap between the three different word classes. Like adjectives and quantifiers, adverbs may occur as copula complements in predicative constructions, as the parameter of comparison in comparative constructions, and as modifiers of predicates (cf. § 6.1 and § 7.1). These three functions are illustrated by the following examples, which contain the temporal adverb *kʰorek* “after, later”.

(371) *dzanare kʰorek jen.*

<i>dzanare</i>	<i>kʰorek</i>	<i>jen</i>
very.much	after	EQ.CJ

“This was much later.”

(Tshechu 2.154)

(372) *nunɲɕi tɕaŋ matwat nidzaj nisbiŋdɕokɕi kʰorek.*

<i>nunɲɕi</i>	<i>tɕaŋ</i>	<i>ma-twat</i>	<i>nidza=ki</i>
then	beer	NEG-drink.PST.DIR.CJ	twenty=GEN

<i>nis=biŋ=tok=tɕi</i>	<i>kʰorek</i>
two=year=DAT=ABL	after

“Then I did not drink beer anymore, after my twenty-second birthday.”

(Conversation 84.82)

(373) *atɛːha wa kʰorek gidzi likkata.*

<i>atɛːha</i> _{LN}	<i>wa</i>	<i>kʰorek</i>	<i>gi=dzi</i>	<i>lik-ø-kata</i>
okay	FOC	after	1SG=ERG.SG	make-TR-FUT.CJ.SG

“Okay, I will do that later.”

(Conversation 97.10)

However, adverbs distinguish themselves from adjectives and quantifiers in one crucial point: They cannot occur in noun-modifying constructions without further morpho-syntactic adjustments. In order to be able to modify a noun, an adverb has to be augmented with the relativizing clitic =*tsuk* (cf. section § 19.2.5).

(374) *kʰorektsuk / **kʰorek bastok ekʰek.*

<i>kʰorek=tsuk / **kʰorek</i>	<i>bas</i> _{LN} = <i>tok</i>	<i>el-k-ʰek</i>
after=REL / **after	bus=DAT	go-INTR-PRS.CJ.SG

“We will go with the next bus.”

(TD unrec 12)

The following subsections describe the different types of adverbs in more detail. § 8.2 describes adverbs of location, while § 8.3 deals with adverbs of time. § 8.4 is dedicated to adverbs of manner. § 8.5 gives an overview of epistemic adverbs.

8.2 Locational adverbs

Locational adverbs that possess a deictic value (e.g. *thaj* “up there”, *thami* “down there”) have already been described in § 5.3.2 under the label “demonstratives of location”. This section deals with the remaining locational adverbs, which do not serve as demonstrative expressions. The respective adverbs are given below.

Locational adverbs

<i>jorok</i>	“upstairs, one floor above”
<i>mjoŋ</i>	“downstairs, one floor below”
<i>jotɕi</i>	“higher (in a seating arrangement)”
<i>metɕi</i>	“lower (in a seating arrangement)”

Note that these adverbs can both occur with stative predicates as well as with dynamic predicates. This is illustrated by the following examples.

(375) *t̪æi mjoŋ ni:*.

<i>t̪æi</i>	<i>mjoŋ</i>	<i>ni:</i>
Tashi	downstairs	EX.NON1SG

“Tashi is downstairs.”

(NN 12.19 [elicited])

(376) *da mjoŋ mæeare.*

<i>da</i>	<i>mjoŋ</i>	<i>ma-el-k-are</i>
now	downstairs	NEG-come-INTR-PRS.DJ.SG

“She is not coming downstairs now.”

(Conversation 63.51)

If locational adverbs occur with a dynamic predicate, the direction of the movement may be additionally specified by the case clitics *=maŋ* or *=t̪æi*. However, as example (376) above demonstrates, locational adverbs may also occur without such case markers and still describe a dynamic event.

(377) *mjoŋmaŋ indzi elde t̪up-t̪æ-are wa.*

<i>mjoŋ=maŋ</i>	<i>indzi</i>	<i>el-de</i>	<i>t̪up-t̪æ-are</i>	<i>wa</i>
downstairs=ALL	herself	go-SUP	be.able-TR-PRS.DJ.SG	FOC

“She can go downstairs on her own (i.e. without the help of another person).”

(Conversation 68.14)

(378) *ipt-s epo ma-ra=naŋ jorok=t̪æi dukdzas tsunati daw lora re.*

<i>ipt-s</i>	<i>epo</i>	<i>ma-ra=naŋ</i>	<i>jorok=t̪æi</i>	<i>dukdzas</i>
sleep-NZR	good	NEG-come=COND	upstairs	soporific

<i>tsuna=tiki</i>	<i>da-ku-a</i>	<i>lot-a=re</i>
little.bit=INDEF	give-UND-IMP.SG	say-IMP.SG=EXT

“If she cannot sleep, tell (the people) from upstairs to give you some soporific.”

(Conversation 58.12)

In addition to the adverbs that are listed above, there are also a small number of postpositions that can occur as adverbs, i.e. *jartok* “above”, *dut̪æi* “in front of”, and *k̪ot̪æi* “behind” (cf. § 4.5). Two examples that illustrate the use of these postpositions as adverbs are given below.

(379) *jartoktɕi ranan raden sarok dattɕi na.*

<i>jartok=tɕi</i>	<i>ra=nan</i>	<i>ra=den</i>	<i>sa=tok</i>
above=ABL	come=CON	come=IMMED	ground=DAT

dat-dzi=na

fall-PST.INFER.DJ.SG=HS

“Having come from above, he immediately fell on the ground, it is said.”

(King Kesar 270)

(380) *kʰotɕimanɕtɕi henak aldzi ...*

<i>kʰotɕi=manɕ=tɕi</i>	<i>henak</i>	<i>al-ø-dzi</i>
behind=ALL=ABL	like.this	open-TR-CVB.SG

“You open (the stove) from behind like this and”

(Conversation 55.192)

Note that *dutɕi* and *kʰotɕi* most often express a temporal rather than a spatial relation. This temporal use of the two adverbs is described in the following section.

8.3 Temporal adverbs

Temporal adverbs specify a point in time at which an event takes place or a time interval during which an event occurs. The following table gives an overview of general temporal adverbs that are attested in my data.

General temporal adverbs

<i>bar</i>	“sometimes”
<i>barbargun</i>	“sometimes”
<i>da</i>	“now”
<i>da:stok</i>	“meanwhile”
<i>daksam</i>	“now”
<i>danpo</i>	“once, a long time ago”
<i>danɕa</i>	“still”
<i>datle</i>	“just now”
<i>dinɕki</i>	“always”
<i>durek</i>	“earlier”
<i>dutɕi</i>	“before”
<i>gjundok</i>	“always”
<i>her</i>	“again”
<i>jukna</i>	“right now”
<i>kjanɕka</i>	“continuously”

<i>kʰorek</i>	“later”
<i>kʰotɕi</i>	“after”
<i>lodʒuŋ</i>	“every year”
<i>naŋsmettok</i>	“suddenly”
<i>nwa:stok</i>	“at that time”
<i>ŋaj</i>	“early”
<i>otok</i>	“in the future”
<i>pʰasna</i>	“suddenly”
<i>pʰi:</i>	“late”
<i>tɕakna</i>	“daily”
<i>tsaptsap</i>	“sometimes”
<i>tsʰattsʰat</i>	“from time to time”

A considerable number of these adverbs are also attested in Tibetan, e.g. *bar* (WT *bar* “intermediate space, between”), *da* (WT *da* “now”), *danpo* (WT *dang po* “first, earlier”), *gjundok* (WT *rgyun* “perpetually, always”), and it is likely that some of them have been borrowed from neighboring Tibetan varieties. However, it is difficult to decide which of these lexical items represent loanwords and which are genuine to the Bunan lexicon.

Some adverbs contain reflexes of nominal clitics. The adverb *gjundok* “always” contains a reflex of the dative clitic =*tok*, while the adverbs *da:stok* “meanwhile” and *nwa:stok* “at that time” go back to forms derived with the terminative clitic =*astok*, i.e. **da=astok* “now=TERM” and **nu=astok* “that=TERM”. However, the fact that these adverbs commonly bear stress on the second rather than on the first syllable suggests that speakers do no longer consider these clitics as grammatical morphemes (cf. § 2.5.1). In the case of the adverb *barbarguŋ* “always”, which is derived from a complex form **barbar=kun* “intermediate.space=LOC” “in between”, it is more difficult to say whether the last syllable should be regarded as a grammatical clitic or not, as the third syllable of a word never bears stress. Following the intuition of my consultants, who perceive the form as one word rather than a morphologically complex form, I shall gloss the form as “sometimes” rather than “intermediate.space=LOC”. For similar reasons, the final syllable of the adverb *naŋsmettok* is treated as an integral part of the word and not as a grammatical clitic.

As mentioned in the previous section, the adverbs *dutɕi* “before that” and *kʰotɕi* “after that” also occur as postpositions (cf. § 4.5.3 and § 4.5.4, respectively). *dutɕi* and *kʰotɕi* can be used as spatial adverbs with the meaning “in front of” and “behind”, respectively, but most often indicate the temporal sequence of events. Note that the adverbs *dutɕi* and *durek* do not have exactly the same meaning. *dutɕi* “before” entails the existence of another event that follows the event denoted by the modified predicate. *durek* “earlier”, on

the other hand, does not have a similar connotation, but simply indicates that an event took place sometime in the past. Consider the following examples.

(381) *dutəi dardzi rik-tə-um pan-tə-a.*

<i>dutəi</i>	<i>dardzi_{LN}</i>	<i>rik-tə-um=jən</i>	<i>pan-tə-a</i>
before	tailor	bring-TR-INF=EQ.CJ	sew-TR-SUP

“Before that (i.e. before Lahaul was connected to Kullu Valley by a mountain road) people used to bring tailors (from Kullu) to sew (clothes for them).”

(Tshechu 2.7)

(382) *durek guru rinpotəej bakta bejul ni: jendzi.*

<i>durek</i>	<i>guru rinpotəe=ki</i>	<i>bakta_{LN}</i>	<i>bejul</i>	<i>ni-i=jendzi</i>
earlier	Guru Rinpoche=GEN	time	Beyul	EX.SG- ACT=EQ.DJ.SG

“In days of old, in the time of Guru Rinpoche, there was a country Beyul.”

(Tulshug Lingpa 94)

A similar difference in meaning exists between the adverbs *kʰotəi* “after” and *kʰorek* “later”. *kʰotəi* necessarily profiles the modified event against a preceding event, whereas *kʰorek* does not possess such a connotation. This is illustrated by the following examples.

(383) *daksam her gwan-ni rin-k-are kʰotəi.*

<i>daksam</i>	<i>her</i>	<i>gwan-ni</i>	<i>rin-k-are</i>	<i>kʰotəi</i>
now	again	come.PL-IMP.PL	say-INTR-PRS.DJ.SG	after

“‘Come back again’, she said, ‘after (the ceremony).’”

(Conversation 22.6)

(384) *kʰorek ama nampo phja-de gjut-s de.*

<i>kʰorek</i>	<i>ama=nampo</i>	<i>phja-de</i>	<i>gjut-s</i>	<i>de</i>
later	mother=COM	talk-SUP	need-NZR	ATT.SG

“I will need to talk with mother sometime later.”

(Conversation 97.13)

Bunan possesses a considerable number of temporal expressions to refer to the different parts of the day. The respective lexemes are listed below. When these words are used in discourse, the dative clitic =*tok* is often attached to them, which suggests that they are ultimately nouns. However, because of their quasi-adverbial status, I have decided to discuss these nouns nonetheless.

Temporal adverbs referring to parts of the day

<i>jaŋstok</i>	“last night”
<i>otɕʰak</i>	“(in the) early morning”
<i>ɲaro</i>	“(in the) morning”
<i>nimapʰet</i>	“(at) noon”
<i>joldzi</i>	“(in the) early afternoon”
<i>nira</i>	“(in the) afternoon”
<i>ɕotni</i>	“(in the) late afternoon”
<i>phitok</i>	“(in the) evening”
<i>phiro</i>	“(at) night”
<i>munphet</i>	“(at) midnight”

Bunan likewise possess an elaborate set of temporal adverbs to express how many days ago an event took place or in how many days an event is supposed to occur. These expressions are listed below.

Temporal adverbs referring to days

<i>dangjaks</i>	“in six days”
<i>tsʰengjaks</i>	“in five days”
<i>kʰongjaks</i>	“in four days”
<i>bajaks</i>	“in three days”
<i>mingjaks</i>	“in two days”
<i>otɕi</i>	“tomorrow”
<i>ʰan</i>	“today”
<i>ja:</i>	“yesterday, recently”
<i>djwak</i>	“two days ago, some time ago”
<i>mudjwak</i>	“three days ago”

The adverbs *mingjaks* “in two days”, *bajaks* “in three days”, *kʰongjaks* “in four days”, *tsʰengjaks* “in five days”, and *dangjaks* “in six days” are obviously old compound forms containing the noun *gjak* “(calendar) day” as a second element. The first syllables of the forms do not have any obvious etymology, however.⁶⁶ Apart from the temporal adverbs listed above, which are anchored with regard to the deictic center “today” and thus possess an absolute deictic value, there is a form *wajak*, which translates as “on the next day” and accordingly exhibits a relative deictic value.

⁶⁶ Zoller (1983: 43) describes the cognate forms *miŋgya* “in two days”, *ba:gya* “in three days”, and *kʰwingya* ~ *ʰingya* “in four days” for the closely related West Himalayish language Rongpo. This suggests that these adverbial compounds must be of considerable age.

Further, it is important to note that the adverbs *ja:* and *djwak* do not always refer to “yesterday” and “the day before yesterday”, respectively. Speakers often use these adverbs in a less specific manner to refer to events that happened recently but not necessarily one or two days ago. I have tried to capture this unspecific use of the two adverbs by adding the translations “recently” for *ja:* and “some time ago” in the case of *djwak*.

In addition to the temporal adverbs that anchor an event on a specific day in the past or the future, there is a set of temporal adverbs that locate an event in past or future years. This set of adverbs is less elaborate than the system of temporal adverbs referring to days, but still covers six different time stages ranging from “three years ago” to “in two years”. The respective forms are given below.

Temporal adverbs referring to years

<i>nubin</i>	“in two years”
<i>oræk</i>	“in one year”
<i>tʰansun</i>	“this year”
<i>nek</i>	“one year ago”
<i>dwan</i>	“two years ago”
<i>mudwan</i>	“three years ago”

Temporal adverbs that refer to a point in time rather than a time period may be augmented with the clitic *=æk*, which adds a sense of vagueness to the meaning of the adverb and reduces its specificity. If the morpheme *=æk* is cliticized to the adverb *tʰan* “today”, for example, the meaning of the adverb will change to “these days, currently”. Some examples are given below.

(385) *soj de kʰjak tʰanæk.*

<i>soj</i>	<i>de</i>	<i>kʰjak</i>	<i>tʰan=æk</i>
cold	ATT.SG	here	today=about

“It is cold here these days.”

(Conversation 1.31)

(386) *loktəipajentəʰok otokæk ake?*

<i>lok-tə-i-pa=jentəʰok</i>	<i>otok=æk</i>	<i>ake</i>
study-TR-ACT-NZR=EQ.DJ.PL	in.the.future=about	QUE

“They will study sometime in the future, won’t they?”

(Conversation 25.41)

(387) *tʰansuŋɛk memeɛi nwak lik maliktɕʰak.*

<i>tʰansuŋ=ɛk</i>	<i>meme=ɛi</i>	<i>nwak</i>	<i>lik</i>	<i>ma-lik-tɕʰak</i>
this.year=about	monk=PL	so	do	NEG-do-TR-PRS.DJ.PL

“The monks don’t do it that way nowadays.”

(Tshechu 2.419)

The clitic *=ɛk* is interesting from the perspective of phrasal intonation. Unlike other clitics in Bunan, it is able to bear stress when it attaches to a monosyllabic adverb, e.g. */tʰanˈɛk/* “these days”, */nekˈɛk/* “sometime last year”, etc. The resulting forms thus have the appearance of lexical compounds, which implies that native speakers assign a concrete lexical meaning rather than an abstract derivational function to the morpheme. However, the morpheme cannot occur independently, but can only appear as a cliticized element on a morphological host. In order to capture the special status of this morphological element, I have decided not to gloss it with an abstract functional abbreviation but to give it the lexical translation “about”.

The reason for the peculiar intonational behavior of the clitic *=ɛk* are not entirely clear. It is conceivable that the element only recently acquired its status as a clitic and has retained a great deal of its lexical meaning including the ability to bear phrasal stress. However, it is also possible that the morpheme has not developed into a more prototypical clitic (i.e. a clitic that does not bear phrasal stress), because it only occurs with a comparatively small set of words that all have a very similar meaning. Accordingly, the syntagmatic relationships between the potential morphological hosts and the clitic may be entrenched to such a high degree that the resulting forms are lexicalized. The lexicalization of morphologically complex forms commonly triggers a shift of phrasal stress, as we have seen in the beginning of this section, cf. *daːstok* “meanwhile” (*/daːsˈtok/*) < **da=astok* “*now=TERM” (cf. § 2.5.1).

8.4 Manner adverbs

Manner adverbs are lexemes that specify the way in which an action is performed. There are only a small number of exclusive manner adverbs in my data. The respective forms are given below.

Manner adverbs

<i>daltok</i>	“slowly”
<i>qanda</i>	“equally”
<i>pʰasta</i>	“by chance”
<i>sonna</i>	“slightly”
<i>tsukna</i>	“straight, directly”

In § 7.2, it was noted that lexical quantifiers are commonly used as manner adverbs to intensify an action. Two examples of this use of lexical quantifiers are given below.

(388) *ajna lenmen abi ka tʰaj.*

<i>ajna</i>	<i>lent-men=jen</i>	<i>abi</i>	<i>ka</i>	<i>tʰaj</i>
very.much	work-INF=EQ.CJ	grandmother	ASS	up.there

“Grandmother works hard up there.”

(Tshechu 2.318)

(389) *tʰadzuj bonʰek kanʃanmej tʰertʰwak.*

<i>tʰadzu=ki</i>	<i>bonʰek</i>	<i>kanʃanmej</i>	<i>tʰer-tʰwak</i>
that=GEN	for.the.sake	very.much	be.sad-PST.INFER.DJ.PL

“Because of that they were extremely sad.”

(King Kesar 15)

The small number of manner adverbs in my material seems to be a consequence of the fact that speakers of Bunan prefer to use other strategies to specify the manner in which an action is performed. For example, Bunan speakers frequently use non-finite verb forms to indicate the fashion in which something is done. This strategy is exemplified by the idiomatic phrase *kan-ka el-a* “watch-PROG go-IMP.SG”, which is the most common way of saying “goodbye” in Bunan. The phrase consists of the progressive participle of the verb *kan-tʰ-um* “to watch” and the imperative form of the verb *el-men* “to go”. The meaning of the phrase is thus “Go carefully!”, or in a more literal sense “Go while watching!”.

(390) *kangja el!*

<i>kan-ka</i>	<i>el-a</i>
watch-PROG	go-IMP.SG

“Go carefully!” (lit. “Go while watching!”)

(TD unrec 53)

(391) *da kʰa likkata tetkja kʰantsuk tʰerga dzoʔn.*

<i>da</i>	<i>kʰa</i>	<i>lik-ø-kata</i>	<i>tet-ka</i>	<i>kʰantsuk</i>
now	what	do-TR-FUT.CJ.SG	think-PROG.SG	of.what.quality
<i>tʰer-ka</i>	<i>dzot-i=jen</i>			
grieve-PROG.SG	sit-ACT=EQ.CJ			

“Thinking, ‘What will I do now?’, he was sitting there in great distress.”

(King Kesar 60)

Converb clauses may likewise serve an adverbial function. This is illustrated by the two following examples.

(392) *tʰadzunʔtʰei pjatsiti pʰur rinʔdzi pandzi eldzi.*

<i>tʰadzunʔ=tʰei</i>	<i>pjatsi=tiki</i>	<i>pʰur</i>	<i>rinʔ-dzi</i>	<i>pan-ø-dzi</i>
there=ABL	bird=INDEF	ONOM	say-CVB.SG	fly-MID-CVB.SG
<i>el-dzi</i>				
go-PST.INFER.DJ.SG				

“From there, a bird flew up, saying ‘phur’.”

(King Kesar 147)

(393) *tʰwanʔ nidzajlek kʰjak kurtʰei radzi.*

<i>tʰwanʔ</i>	<i>nidzaj=lek</i>	<i>kʰjak</i>	<i>kurt-dzi</i>
fifteen	twenty=APP	here	carry-CVB.SG
<i>ra-dzi</i>			
come-PST.INFER.DJ.SG			

“He brought about fifteen or twenty (books) here.”

(Conversation 39.36)

8.5 Epistemic adverbs

With epistemic adverbs, speakers specify their personal attitude towards a statement, for example by indicating the degree of certainty that an event will occur or by expressing the necessity that an event should occur. Epistemic adverbs are extremely rare in Bunan. In my material, there is only one single lexeme that qualifies as an epistemic adverb: *tantan* “truly, surely, definitely”. The use of *tantan* is exemplified by the examples below.

(394) *taldok tantan dot na tʰadzu.*

<i>tal=tok</i>	<i>tantan</i>	<i>dot-et=na</i>	<i>tʰadzu</i>
3[SG]=DAT	truly	meet-PST.DIR.CJ=HS	that

“I truly met her, that (fairy)’, he said.”

(The Fairies of Kullu 1.69)

(395) *tantan sara kʰa jen!*

<i>tantan</i>	<i>sar-a</i>	<i>kʰa</i>	<i>jen</i>
truly	tell-IMP.SG	what	EQ.CJ

“Tell me truly what it is!”

(King Kesar 71)

At first sight, the absence of a more elaborate system of epistemic adverbs may seem peculiar. However, the almost complete lack of epistemic adverbs becomes understandable when we consider the verbal system of Bunan. A major part of the Bunan verbal morphology encodes the grammatical categories “evidentiality” and “conjunct-disjunct” (cf. § 13.2.1). Although these categories do not primarily express modal-like concepts such as certainty or necessity, they can acquire epistemic and deontic overtones in certain pragmatic contexts. Accordingly, the language has no need for lexical counterparts of the English adverbs “evidently”, “presumably”, “maybe”, etc. In addition, we should keep in mind that Bunan is not (and most probably never was) a written language. The members of the Bunan speaking community have been relying on oral communication amongst themselves for centuries. It seems sensible that a the language of such a community does not possess an elaborate system of epistemic adverbs for the simple reason that such words are not very relevant in everyday face-to-face communication.

9 The structure of the noun phrase

9.1 Introduction

The order of morphemes that are directly attached to nouns has already been discussed in § 4.4. In this section, I describe the order of independent syntactic element that may occur within a noun phrase. A noun phrase is defined as a sequence of syntactic constituents that consist of a head noun and further noun-modifying constituents i.e. determiners, quantifiers, adjectives and genitive phrases. The chapter is structured in the following way: § 9.2 describes the basic order of constituents in a noun phrase, § 9.3 discusses the phenomenon of noun phrase coordination, and § 9.4 addresses the phenomenon of noun phrase disjunction.

9.2 Basic order of constituents

In his grammatical sketch of Bunan, Sharma (1989b: 224–225) states that adjectives normally follow their head nouns, but may also occur in prenominal position. He claims that the first pattern is the more basic and original one and assigns the latter pattern to recent Indo-Aryan influence. The distribution of adjectives in my data, however, suggests that the reverse is true. In Bunan, noun-modifying elements usually precede their head nouns. Quantifiers, interrogative pronouns and adjectives may also follow their head nouns, but this is only possible if the respective head noun is indefinite. We may represent both syntactic patterns with the schemes given below.

dominant pattern: DET QNT ADJ / N=GEN N

restricted pattern: N QNT ADJ

Sharma is most probably right when assigning the inconsistent syntactic position of quantifiers and adjectives to language contact. However, it seems that the prenominal placement of noun-modifying elements must be older, as it occurs more often and is not restricted to specific grammatical contexts. This assumption is also corroborated by comparative evidence, as modifiers generally precede their nominal heads in West Himalayish languages. At least, this is the case in Rongpo (Zoller 1983: 98) and Darma (Willis 2007a: 316). Sharma (1989b: 68–69, 151) states that the same is true for Manchad and Tinan,⁶⁷ and the material provided by Bailey (1909) indicates that Standard Kinnauri also follows this pattern. This suggests that the optional postnominal placement of quantifiers, inter-

⁶⁷ It is of course questionable whether Sharma is a reliable source, given the fact that his account of adjective placement in Bunan proves to be erroneous. However, we have to acknowledge the fact that he captured the inconsistent placement of adjectives in Bunan, although he may have described it in an inappropriate way. He does not report similar inconsistencies for Manchad or Tinan, which is why I assume that we can trust his description in this case.

rogative pronouns, and adjectives in Bunan is a consequence of the longstanding contact with Tibetan speaking communities (cf. § 1.2.3.2). In Tibetan varieties, noun-modifying elements usually follow their head nouns (Beyer 1992: 204–206; Huber 2005: 53).

In examples (396) through (399) below, all noun modifying expressions precede their head noun. These sentences exemplify the dominant pattern of prenominal placement of noun-modifying elements.

(396) *ajna tedzi ophisarti ni: ringare.*

<i>ajna</i>	<i>tedzi</i>	<i>ophisar_{LN}=tiki</i>	<i>ni:</i>	<i>riŋ-k-are</i>
very	big	officer=INDEF	EX.NON1SG	say-INTR-PRS.DJ.SG

“He_i said that he_j is a very high officer.”

(Conversation 36.65)

(397) *... niskiŋ dzaŋsmaj kador ta.*

<i>niskiŋ</i>	<i>dzaŋsma=ki</i>	<i>kador</i>	<i>ta</i>
two	copper=GEN	big.bowl	POSS.NON1SG

“... she has two big copper bowls.”

(Tshechu 2.378)

(398) *it̪aik mahi:na: d̪zot la?*

<i>it̪aik</i>	<i>mahi:na:_{LN}</i>	<i>d̪zot-et=la</i>
how.many	month	stay-PST.DIR.DJ=Q

“How many months did you stay?”

(Conversation 25.10)

(399) *gidzi t̪an t̪e niskiŋ juj pet̪əa haŋiŋt̪əi jokd̪zi rikmen.*

<i>gi=dzi</i>	<i>t̪an</i>	<i>t̪e</i>	<i>niskiŋ</i>	<i>juj</i>	<i>pet̪əa</i>
1SG=ERG.SG	today	this	two	old	book
<i>haŋi_{LN}=kuŋ=t̪əi</i>	<i>jok-ø-d̪zi</i>	<i>rik-ø-men</i>			
market=LOC=ABL	buy-TR-CVB	bring-TR-PST.DIR.CJ			

“Today, I bought these two old books in the market.”

(TD 129.5 [elicited])

In examples (400) through (403) below, quantifiers and adjectives follow their head nouns. These sentences exemplify the restricted pattern of postnominal placement of noun-modifying elements, which is only possible if the respective head noun is indefinite.

(400) ... *kupat tedzi tikun tʰara likdzi.*

<i>kupat</i>	<i>tedzi=tiki=kun</i>	<i>tʰara</i>	<i>lik-ø-dzi</i>
stone.pot	big=INDEF=LOC	that.other	make-TR-CVB

“... in a big stone pot they had made that other stuff (i.e. soup).”
(Conversation 87.171)

(401) ... *eraŋ lekstok gompā kjuktsi tiki dzaŋsi tʰajk.*

<i>eraŋ</i>	<i>leks=tok</i>	<i>gompā</i>	<i>kjuktsi=tiki</i>
1PL.INCL	village=DAT	monastery	small=INDEF

<i>dzaŋ-s-ø-dzi</i>	<i>tajk</i>
build.HON-DETR-MID-CVB.SG	POSS.1PL

“... we have built a small monastery in our village.”
(Tulshug Lingpa 67)

(402) ... *dzejnat dzanare maraj tiki waŋsi ni.*

<i>dzejnat</i>	<i>dzanare</i>	<i>maraj=tiki</i>	<i>waŋs-dzi</i>
jaundice	very.much	bad=INDEF	come.out-CVB.SG

ni:
EX.NON1SG

“A very severe jaundice epidemic has occurred (in our village).”
(Tulshug Lingpa 44)

(403) *kekir itʰik dzate?*

<i>kekir</i>	<i>itʰik</i>	<i>dza-te</i>
flatbread	how.many	eat-VOL.SG

“How many pieces of flatbread do you want to eat?”
(Conversation 22.142)

9.3 Coordination

Individual noun phrases may be coordinated to form a superordinate noun phrase by means of the conjunction clitic =*naŋ*. The clitic resembles the case clitics described in § 4.4.4 with regard to its morphosyntactic behavior, as it always attaches to the last element of a noun phrase, regardless of the word class of the respective element. This is illustrated by the following examples.

(404) *talnaŋ su eltsʰa apa?*

<i>tal=naŋ</i>	<i>su</i>	<i>el-tsʰa</i>	<i>apa?</i>
3[SG]=CON	who	go-PST.DIR.DJ.PL	grandmother

“He and who went, grandmother?”

(Conversation 14.15)

(405) *tʰadzu torna sorenaŋ tsʰaŋtsʰaŋi dʒaŋdʒi ...*

<i>tʰadzu</i>	<i>torna=tsore=naŋ</i>	<i>tsʰaŋtsʰaŋi</i>	<i>dʒaŋ-ø-dʒi</i>
that	sacrificial.statues=ENR=CON	everything	make.HON-TR-CVB

“Having made those sacrificial statues and such stuff and everything necessary, ...

(Conversation 87.41)

(406) *... sweŋar tikiŋaŋ kami:s ...*

<i>sweŋar=tiki=naŋ</i>	<i>kami:s</i>
sweater=INDEF=CON	shirt

“... a sweater and shirts ...”

(Conversation 71.15)

This consistent syntactic placement at the right edge of a noun phrase is the first factor indicating that *=naŋ* is a clitic rather than a suffix. Furthermore, the clitic *=naŋ* resembles case clitics in the sense that it cannot bear stress and thus fails to constitute a phonological word in its own right.

=naŋ can coordinate more than two noun phrases according to the recursive pattern $NP_1=naŋ \dots NP_n=naŋ NP_{n+1}$. The maximum of conjoined noun phrases in my data is three, as illustrated in (407) below. When occurring in longer sequences, noun phrases are usually just juxtaposed without any additional morphosyntactic marking. This strategy is exemplified in (408).

(407) *pʰetse_{nan} beten_{an} tsʰaŋi nuŋ gwaŋi jentɕʰok bjanmon_{an}.*

<i>pʰetse=nan</i>	<i>bete=nan</i>	<i>tsʰaŋi</i>	<i>nuŋ</i>
second.youngest.uncle=CON	child=CON	all	there
<i>gwaŋ-i=jentɕʰok</i>	<i>bjanmo=nan</i> ⁶⁸		
come.PL-ACT=EQ.DJ.PL	wife=CON		

“Uncle and the children and all of them came there with the wife.”

(Conversation 71.15)

(408) *wa tsʰaŋtsʰaŋi kantɕum tsemet butsa lasmi kʰjwa ɕaŋte ɕaŋdzi tsʰaŋtsʰaŋi.*

<i>wa</i>	<i>tsʰaŋtsʰaŋi</i>	<i>kan-tɕ-um=jen</i>	<i>tsemet</i>	<i>butsa</i>	<i>lasmi</i>
FOC	all	watch-TR-INF=EQ.CJ	girl	boy	woman
<i>kʰjwa</i>	<i>ɕaŋte</i>	<i>ɕaŋdzi</i>	<i>tsʰaŋtsʰaŋi</i>		
man	old.man	old.woman	all		

“And everybody watches (the ceremony), girls, boys, women, men, old men, old women, all of them.”

(Tshechu 1.14)

If coordinated noun phrases are inflected for case, the whole superordinate noun phrase usually only receives one case marker. However, if noun phrases differ in terms of their number values, each one of them is marked separately. Consider the following example sentences.

(409) *lasmin_{an} kʰjwazok bardo ka.*

<i>lasmi=nan</i>	<i>kʰjwa=ɕi=tok</i>	<i>bardo</i>	<i>ka</i>
woman=CON	man=PL=DAT	hardship	ASS

“(It is) hard for both women and men (to work in the orchards).”

(Conversation 16.35)

⁶⁸ The comitative use of the conjunction clitic =*nan* is described below.

(410) *taldzinaŋ tal nama tsʰaŋitsʰi tsʰoks pʰultʰak.*

<i>tal=dzi=naŋ</i>	<i>tal=nama</i>	<i>tsʰaŋi=tsʰi</i>	<i>tsʰoks</i>
3=ERG.SG=CON	3=all	all=ERG.PL	tshogs.ritual

pʰul-tʰak

perform-TR-PST.DIR.DJ.PL

“He and all of them performed a *tsʰoks* ritual.”

(Conversation 16.176)

Adjectives may likewise be coordinated with the conjunction clitic *=naŋ*. This is, however, only common with predicate adjectives that occur as the complement of a copula, as in example (411) below. In attributive position, adjectives are usually simply juxtaposed, as example (412) illustrates.

(411) *tʰadzu gjapo nama tsʰaŋtsʰaŋi tʰadzu janʰondoktsukʷi ajna tedzinaŋ ʂaŋtʰe tʰara kʰa lottʷum ʂarba gjapo gwaj jentʰwak.*

<i>tʰadzu</i>	<i>gjapo=nama</i>	<i>tsʰaŋtsʰaŋi</i>	<i>tʰadzu</i>	<i>janʰon=tok=tsuk=ʷi</i>	
that	king=all	all	that	surrounding=DAT=REL=PL	
<i>ajna</i>	<i>tedzi=naŋ</i>	<i>ʂaŋtʰe</i>	<i>tʰara</i>	<i>kʰa</i>	<i>lot-tʷum=jen</i>
very	big=CON	old.M	that.other	what	say-TR-INF=EQ.CJ
<i>ʂarba</i>	<i>gjapo</i>	<i>gwa-i</i>	<i>jentʰwak</i>		
young.M	king	EX.PL-ACT	EQ.DJ.PL		

“All those kings, those from the surrounding (areas), were old and very old and that other thing – how does one say – young kings.”

(King Kesar 190)

(412) *tʰadzu tiŋi maŋi taldok le!*

<i>tʰadzu</i>	<i>tiŋi</i>	<i>maŋi</i>	<i>tal=tok</i>	<i>le</i>
those	blue	red	3[SG]=DAT	make.IMP.SG

“Make those blue and red (socks) for him!”

(Conversation 16.3)

The conjunction clitic *=naŋ* cannot only be used to coordinate simple nouns or adjectives. It can likewise coordinate other syntactic constituents, e.g. relative clauses or non-finite verbal forms. Examples that illustrate this function are given in the following.

(413) *midzi likəitsuknanəj midzi tʰupəitsuk ...*

<i>mi=dzi</i>	<i>lik-s-ə-i=tsuk=nanəj</i>	<i>mi=dzi</i>
person=ERG.SG	make-DETR-MID-ACT=REL=CON	person=ERG.SG
<i>tʰup-s-ə-i=tsuk</i>		
be.able-DETR-MID-ACT=REL		

“What a person does and what a person is able (to do) ...”

(Conversation 20.14)

(414) *tal təʰos durek bris-tə-a=nanəj lok-tə-a dzanare kʰaspa tiki re de.*

<i>tal</i>	<i>təʰos</i>	<i>durek</i>	<i>bris-tə-a=nanəj</i>	<i>lok-tə-a</i>
3[SG]	religion	early	write-TR-SUP=CON	read-TR-SUP
<i>dzanare kʰaspa=tiki=re de</i>				
very.much	experienced=INDEF=EXT	ATT.SG		

“He back then also was a great expert in writing and reading of religious texts.”

(Tulshug Lingpa 4)

The main function of the clitic =*nanəj* is clearly the conjunction of individual syntactic constituents into superordinate phrases. However, the morpheme also occurs in contexts in which it serves case-like functions. For example, it is commonly inserted between head nouns and the comitative case clitic =*nampo* (cf. § 4.4.4.9), as illustrated in the examples below.

(415) *tʰe=nanəj=nampo nindza.*

<i>tʰe=nanəj=nampo</i>	<i>nindza</i>
this=CON=COM	EX.PST.SG

“This (application form) came together with this form.”

(Conversation 13a.5)

(416) *da kʰanak jenənəsare da tʰadzuj nunəj amanəj nampo nunəj butkjata tetkja.*

<i>da</i>	<i>kʰanak</i>	<i>jenənəsare</i>	<i>da</i>	<i>tʰadzu=ki</i>	<i>nunəj</i>
now	how	however=EMPH	now	that=GEN	there
<i>ama=nanəj=nampo nunəj but-ø-kata tet-ka</i>					
mother=CON=COM		there	put-TR-FUT.CJ.SG		think-PROG.SG

“‘Now, however this may be, now I will keep (the boy) at her place together with the mother’, he thought.”

(Conversation 13a.5)

I have not been able to identify any difference between the simple comitative =*ɲampo* and the augmented comitative =*naŋ=ɲampo*. Thus, one might argue that =*naŋ* does not fulfill any case-like function in this context, but simply represents an additional morphological element that is inserted between the head noun and the case marker. However, there is a small number of examples in which =*naŋ* clearly assumes an instrumental or comitative function. Consider the following examples.

(417) *tʂaʈni:naŋ neme ramen.*

<i>tʂaʈni:LN=naŋ</i>	<i>neme</i>	<i>ra-men=jen</i>
chutney=CON	tasty	come-INF=EQ.CJ

“Together with chutney it is tasty.”

(Conversation 55.65)

(418) *tʂaʈni:naŋ marnaŋ dzani!*

<i>tʂaʈni:LN=naŋ</i>	<i>mar=naŋ</i>	<i>dza-ni</i>
chutney=CON	butter=CON	eat-IMP.PL

“Eat it with chutney and butter!”

(Conversation 55.158)

It is conceivable that =*naŋ* has acquired this instrumental / comitative function in contexts in which it occurs as an additional element before the simple comitative =*ɲampo*. The clitic chain =*naŋ=ɲampo* is rather long for a case-marking element and is thus likely to be truncated in fast speech, which may eventually trigger the reanalysis of =*naŋ* as being the actual case marker.

The conjunction clitic =*naŋ* is also attested in the verbal domain, where it serves as a clause-chaining morpheme that expresses temporal consecution or conditionality (§ 19.3.1.1 and § 19.3.2). These functions are not discussed at this point, as they pertain to the clause-level rather than the phrase-level.

9.4 Disjunction

The disjunction of noun phrases is usually not indicated by a special clitic or particle but simply by juxtaposition of the respective noun phrases. This is demonstrated by the following examples.

(419) *sumbiŋ pibiŋ kjadza da.*

<i>sum=biŋ</i>	<i>pi=biŋ</i>	<i>kja-dza</i>	<i>da</i>
three=year	four=year	become-PST.DIR.DJ.SG	now

“It has been three or four years now.”

(Conversation 14.29)

(420) *keska nospok jendzi la?*

<i>keska</i>	<i>nospok</i>	<i>jendzi=la</i>
lie	true	EQ.DJ.SG=Q

“Is it a lie or is it true?”

(Zhangzhung 70)

In questions, disjunction is often expressed by placing the respective noun phrases in two separate interrogative clauses. Needless to say, this strategy goes beyond the level of the noun phrase, which we are concerned with in this chapter.

(421) *kelanɽei elet la danakɽei elet la?*

<i>kelanɽ=ɽei</i>	<i>el-et=la</i>	<i>dana=tok=ɽei</i>	<i>el-et=la</i>
Keylong=ABL	go-PST.DIR.DJ=Q	Manali=DAT=ABL	go-PST.DIR.DJ=Q

“Did you go from Keylong or from Manali?”

(TD 101.1 [elicited])

Apart from the strategies mentioned so far, the disjunction of noun phrases may also be expressed by the disjunctive particle *jaŋna*, which is placed between the relevant noun phrases. The particle most probably represents a borrowing from a neighboring Tibetan variety (cf. WT *jang na* “or, either”). *jaŋna* cannot only express the disjunction of noun phrases but also the disjunction of clauses (cf. § 19.5.1). In its function as a particle for the disjunction of noun phrases, *jaŋna* is not attested in my corpus of natural language data, but only occurs in elicited sentences. Two examples are given below.

(422) *ini šimla jaŋna tɕʰandigar loktɕek la?*

<i>ini</i>	<i>šimla</i>	<i>jaŋna</i>	<i>tɕʰandigar</i>	<i>lok-tɕ-ek=la</i>
2[SG].HON	Shimla	or	Chandigarh	study-TR-PRS.CJ.SG=Q

“Do you study in Shimla or Chandigarh?”

(TD 323.1 [elicited])

(423) *badza:rdoktɕi tiŋi jaŋna maŋi papu re!*

<i>badza:r_{LN}=tok=tɕi</i>	<i>tiŋi</i>	<i>jaŋna</i>	<i>maŋi</i>	<i>papu</i>	<i>re</i>
market=DAT=ABL	blue	or	red	sock	bring.IMP.SG

“Bring blue or red socks from the market!”

(TD 323.2 [elicited])

10 Discourse clitics and discourse particles

10.1 Introduction

This chapter discusses the word classes of discourse clitics and discourse particles. These lexical classes have in common that they serve a pragmatic and discourse-structuring function. In line with Birner (2013: 2), I use the term “pragmatics” to refer to the study of context-dependent and non-literal meaning (as opposed to “semantics”, which is defined as the study of non-context-dependent and literal meaning).⁶⁹ Accordingly, the word classes in question do not affect the literal meaning of phrases or propositions, but rather situate them in a given discourse context. We may roughly distinguish between four functional domains in which they operate: (1) information-structure, (2) illocutionary force, (3) social deixis, and (4) epistemology. Needless to say, it is not always possible to separate these functions in a straightforward manner, as some of the word classes in question belong to more than one functional domain. The particle *ka*, for example, marks a proposition as an assertion, but at the same time also indicates an intimate social relationship between the speaker and the addressee. Accordingly, the particle simultaneously relates to the domains of illocutionary force and social deixis.

The differentiation between particles and clitics is based on phonological considerations. Particles are commonly stressed and thus constitute phonological words in their own right. Clitics, on the other hand, do not usually bear stress and, accordingly, merge into one phonological word with their host. In the following subsections, pragmatic particles and clitics are discussed in more detail. The chapter has the following structure: § 10.2 describes the inventory of discourse clitics, while § 10.3 gives an overview of discourse particles.

10.2 Discourse clitics

This section discusses the word class of discourse clitics. Discourse clitics constitute a small group of monosyllabic morphemes that serve a discourse-structuring function. The clitic status of these morphemes rests on two factors. First, they are never stressed and merge with their morphological host into one phonological word. Second, they are not selective with regard to their morphological host, which entails that they can attach to a wide range of different word classes (e.g. nouns, verbs, adjectives, etc.) and may occur in different syntactic positions within a clause. When occurring in combination with nominal clitics (cf. § 4.4), discourse clitics always attach to the rightmost nominal clitic. The following example sentences illustrate this on the basis of the extended topic clitic *=re*.

⁶⁹ See Birner (2013: 28–34) for a more detailed definition of the boundary between the disciplines of “semantics” and “pragmatics” and the discussion of some problematic boundary phenomena.

(424) *eraŋʒok re tʰas radza.*

<i>eraŋ=ɕi=tok=re</i>	<i>tʰat-s</i>	<i>ra-dza</i>
1PL.INCL=PL=DAT=EXT	be.happy-NZR	come-PST.DIR.DJ.SG

“We too were happy.”

(Conversation 25.54)

In the following subsections, the discourse clitics that are attested in my data corpus are described in more detail.

10.2.1 *=ni*: “topic clitic”

The morpheme *=ni* may be used to mark the topic of a proposition (see § 16.2.2.1 for a definition of the term “topic”). As a matter of fact, topical referents are only rarely marked with the clitic *=ni*, however. This indicates that the clitic does not simply mark topics in general, but rather serves the function of singling out a specific topic in pragmatic contexts where several potential topics are available. Accordingly, the morpheme often marks contrastive topics. The fact that the topic marker *=ni* is homophonous with the existential copula *ni* suggests that the two forms may have a common origin, and that the topic marker may have been grammaticalized from the copula. This scenario is discussed in more detail in § 2.3.2.

The following example, which is taken from the traditional story of King Kesar, illustrates the use of the topic clitic. The sentence is taken from the passage that describes how Agu Khargan Gani, the ruler of the country of Ling, interrogates the mother of King Kesar about her sudden and inexplicable pregnancy. He asks her several questions in a row (“What family are you from?”, “Who is your husband?”, “What kind of person are you?”, “How have you become pregnant?”), and the intimidated woman answers with the sentence given below. In this proposition, the first person pronoun *gi* is topicalized with the clitic *=ni*. Here, the use of *=ni* is licensed by the fact that Agu Khargan Gani has raised many possible discourse topics by asking several questions. As the woman can only answer one question at a time, she chooses to identify the topic that she is going to talk about with the topic marker.

(425) *kʰorek wa tʰadzu lasmi=dzi tantan lotta gi ni: kʰar kʰar mataj lasmiti jengja.*

<i>kʰorek</i>	<i>wa</i>	<i>tʰadzu</i>	<i>lasmi=dzi</i>	<i>tantan</i>
later	FOC	that	woman=ERG.SG	sure
<i>lot-ø-ta</i>		<i>gi=ni:</i>	<i>kʰa=re</i>	<i>kʰa=re</i>
say-TR-PST.INFER.DJ		1SG=TOP	what=EXT	what=EXT
<i>ma-ta-i</i>		<i>lasmi=tiki</i>	<i>jen-gja</i>	
NEG-POSS-ACT		woman=INDEF	EQ-1SG	

“Then this woman assured him, ‘As for me, I am a woman possessing nothing at all.’”

(King Kesar 73)

The topic marker *=ni:* commonly occurs on syntactic constituents that stand at the very beginning of a clause. In § 16.2.2, I argue that such topical constituents are not part of the actual clause, but occur in a pre-clausal slot. This claim is based on two observations. First, topical constituents hardly ever occur clause-internally, which indicates that they are in fact not part of the clause. Second, topical constituents tend to fall under a separate intonation contour that is distinct from the intonation contour of the clause. Both observations suggest that the pre-clausal slot represents a syntactic position that is dissociated from the following clause.

The clitic *=ni:* may attach to any kind of nominal constituent regardless of its grammatical function, as the following example sentences demonstrate. The marker occurs on an agent argument marked with the ergative clitic *=dzi* in (426), on a recipient argument marked with the dative clitic *=tok* in (427), and on a location argument marked with the allative clitic *=marj* in (428).

(426) *gerger kja-dzi nindza gi=dzi=ni: dzanare tʰojti de butsa ta la tes de.*

<i>gerger</i>	<i>kja-dzi</i>	<i>nindza</i>	<i>gi=dzi=ni:</i>	
ponderous	become-CVB.SG	EX.PST.SG	1SG=ERG=TOP	
<i>dzanare</i>	<i>tʰoj=tiki</i>	<i>de</i>	<i>butsa</i>	<i>ta=la</i>
very.much	high=INDEF	ATT.SG	boy	POSS.NON1SG=Q
<i>tet-s</i>	<i>de</i>			
think-NZR	ATT.SG			

“She had become ponderous. As for me, I thought, ‘(Her belly) is extremely big. Is she having a boy?’”

(Conversation 68.50)

- (427) *ko:kboʃalti peltsi, gja ʃaŋkʰa, biskiʃti wa ʰadzu jama daʕidʒi wa. detæendok ni: anɖa:j tsaps a:dʰa: kilo miʰa:j jokmen.*

ko:k_{LN}-boʃal_{LN}=tiki *peltsi* *gja* *ʃaŋkʰa* *biskiʃ_{LN}=tiki* *wa*
 coke-bottle=INDEF milk hundred rupees biscuit=INDEF FOC

ʰadzu=jama *da-s-ɛ-i=jendʒi* *detæen=tok=ni:*
 that=all give-DETR-MID-ACT=EQ.DJ.SG Dechen=DAT=FOC

anɖa:_{LN}=ki *tsaps* *a:dʰa:_{LN}* *kilo_{LN}* *miʰa:j_{LN}* *jok-ø-men*
 egg=GEN substitute half kilo sweets buy-TR-PST.DIR.CJ

“A coke bottle of milk, one hundred rupees, (a package of) biscuits – I gave all that (to Cheme Angmo). As for Dechen, I brought her half a kilo of sweets instead of eggs.”

(Conversation 63.137)

- (428) ... *kanpanmej va:kipʰ tiki magwak na. eraŋmaŋ ni: pu:ra: madat likkata na.*

kanpanmej *va:kipʰ_{LN}=tiki* *ma-gwak=na* *eraŋ=maŋ=ni:*
 very.much familiar=INDEF NEG-EX.NON1PL=HS 1PL.INCL=ALL=TOP

pu:ra:_{LN} *madat_{LN}* *lik-ø-kata=na*
 full support make-TR-FUT.CJ.SG=HS

“... (he said), ‘(The persons in charge in Kullu) are not very familiar (with me, so I will not be able to speak to them on your behalf), but with regard to Lahaul (where I have good connections), I will give you my full support’.”

(Conversation 96.8)

So far, we have only discussed instances in which the topic marker is attached to nouns. However, nouns are not the only lexemes that may serve as morphological hosts for the topic clitic. In the following example, the morpheme attaches to the locative demonstrative *nuŋ* “there”.

- (429) *nuŋ ni: wa mi tʰuksmengi bonʰek soti re mani: ɕiŋ re mani:.*

nuŋ=ni: *wa* *mi* *tʰuks-men=ki* *bonʰek*
 there=TOP FOC person settle.down-INF=GEN for.the.sake

soti=re *ma-ni:* *ɕiŋ=re* *ma-ni:*
 water=EXT NEG-EX.NON1SG wood=EXT NEG-EX.NON1SG

“In that place, there is no water, nor wood for people to settle down.”

(Tulshug Lingpa 146)

The topic marker is also often found on non-finite conditional forms of verbs.⁷⁰ In this case, the morpheme usually indicates that there is a contrast between the proposition made in the preceding sentence and the proposition made in the conditional clause. This is illustrated in the example below, which is taken from a short description of Gewa Gjatso, a spirit residing in a statue at Shashur Gomba. The speaker states that Gewa Gjatso is pleased when the people perform a ritual dance for him. However, he also states that Gewa Gjatso at times does not approve of the ritual dance. He will then show his disfavor by throwing away his hat, that is to say, the hat that has been put on the statue. The contrast between the statement of the first sentence (*thatmen hoəmej*) and the statement of the second sentence (*ma-that=nanj*) is additionally emphasized by cliticizing the topic marker to the conditional form.

(430) *wa gewa gjatso thatmen hoəmej. matthatnanj ni: wa topitsuk juk thirtsi jendzi.*

<i>wa</i>	<i>gewa gjatso</i>	<i>that-men=jen</i>	<i>hoəmej</i>
FOC	Gewa Gyatso	be.happy-INF=EQ.CJ	much
<i>ma-that=nanj=ni:</i>		<i>wa</i>	<i>topi=tsuk juk=thir-tə-i</i>
NEG-be.happy=COND=TOP		FOC	hat=DEF throw=send-TR-ACT
<i>jendzi</i>			
EQ.DJ.SG			

“And then (when the people dance) Gewa Gyatso is very pleased. However, if he is not pleased, he throws his hat away.”

(Tshechu 1.33)

10.2.2 =re “extended topic clitic”

The clitic =re marks a referent as topical and is thus functionally related to the topic clitic =ni:, which has been discussed in the preceding section. However, in contrast to ni:, which simply indicates that a referent is topical, =re denotes that an additional referent is included into an already established topic. The clitic hence extends the scope of a topic. Accordingly, I refer to the morpheme as the “extended topic clitic” in the following. Note that morphemes that fulfill similar functions are most often referred to as “additives” in descriptive and typological studies (cf. König 1991: 62–97).

The sentence given in (431) below illustrates the use of the morpheme. The example has been taken from a passage of the traditional epic of King Kesar in which the events that follow the birth of King Kesar are described. Agu Khargan Gani, the ruler of

⁷⁰ Haiman (1978) points out that there is a cross-linguistic tendency for topical referents and conditional clauses to be marked with similar morphology. According to Haiman, this tendency can be explained as a consequence of the fact that both topics and conditional clauses “are presuppositions of their sentences” (p. 585).

the country of Ling, admonishes the mother of Kesar to take good care of her son, as it has been foretold that he will eventually become the ruler of the country. At this point, Kesar clearly is the topic of the story. Agu Khargan then extends the established topic by uttering the two sentences given below, in which he introduces Thuru Gyalmo, the horse of King Kesar. He orders Kesar's mother to watch after the horse as well and raise it together with her child. When the animal is first mentioned, it occurs with the extended topic clitic attached to it. When it is referred to for the third time at the beginning of the second sentence, it is again marked with the morpheme.

(431) *the saŋstok re epoti thara likka taldok tɕhak asti kjot asti tsutsuna da! taldok re tedzi le lotkja lotta.*

<i>the</i>	<i>saŋs=tok=re</i>	<i>epo=tiki</i>	<i>thara</i>	<i>lik-ka</i>
this	horse=DAT=EXT	good=INDEF	that.other	do-PROG
<i>tal=tok</i>	<i>tɕhak=asti</i>	<i>kjot=asti</i>	<i>tsutsuna</i>	<i>da-a</i>
3[SG]=DAT	cereal.fodder=SML	hay=SML	very.little	give-IMP.SG
<i>tal=tok=re</i>	<i>tedzi</i>	<i>le</i>	<i>lot-ka</i>	
3[SG]=DAT=EXT	big	make.IMP.SG	say-PROG	
<i>lot-ø-ta</i>				
say-PST.INFER.DJ.SG				

“Take good care of this horse as well, give small amounts of things like cereals and hay to it! Raise it too!’, he said, it is said.”

(King Kesar 176)

The extended topic marker can be attached to any noun in a sentence regardless of its grammatical function. This is demonstrated by the following sentences. In (432), *=re* occurs on an agent argument in the (unmarked) absolutive, in (433), the clitic attaches to an agent argument in the ergative, and in (434), it occurs on a location argument in the allative.

(432) *gi re tsunati lotkidza.*

gi=re tsuna=tiki lot-ø-kidza
 1SG=EXT little.bit=INDEF say-TR-PST.DIR.1SG

“I also said a few words.”

(Conversation 39.5)

(433) *durek dudzom gutʰok gonmadzi re bejulmanj heləi jendzi.*

durek dudzom gutʰok gonma=dzi=re bejul=manj
 before Dujom Guthog Gongma=ERG.SG=EXT Beyul=ALL

hel-s-ə-i=jendzi

bring-DETR-MID-ACT=EQ.DJ.SG

“In old times, Dujom Guthog Gongma also brought (people) to Beyul.”

(Tulshug Lingpa 106)

(434) *wa kʰorek hiŋmanj re eraŋ tʰe bunanmanj re gidzi dʒudʒi rikmen.*⁷¹

wa kʰorek hiŋ=manj=re eraŋ tʰe
 FOC later 1PL.INCL=ALL 1PL.EXCL this

bunan=manj=re gi=dzi dʒu-ø-dʒi
 Gahr.Valley=ALL=EXT 1SG=ERG.SG request-TR-CVB

rik-ø-men

bring-TR-PST.DIR.CJ

“And later, I also requested (teachings from the Rinpoche) and brought him to our place ... our ... this (area), to the Bunan Valley as well.”

(Tulshug Lingpa 88)

The morphological host for the clitic =*re* does not need to be a noun. The clitic can likewise occur on adjectives. This is demonstrated in the following example, which is taken from a conversation in which a speaker was praising the climate of Mumbai, which

⁷¹ In this example, the speaker was obviously not sure whether he should use the inclusive or the exclusive form of the first person plural pronoun. His confusion resulted from the fact that the Gahr Valley and Lahaul in general are referred to as *eraŋ=manj* “1PL.INCL=ALL”, lit. “(in) our place” in Bunan. This expression is highly lexicalized as a toponym, which is demonstrated by the fact that speakers also use this designation when talking to me, i.e. an outsider. However, in this particular instance, my consultant had become aware of the literal meaning of *eraŋ=manj*. He realized that the use of the inclusive form *eraŋ=manj* was not licensed in the present discourse situation, since I am not a member of an indigenous community of Lahaul. Therefore, he used the exclusive form *hiŋ=manj* “1PL.EXCL=ALL”. This ad-hoc form, however, is not lexicalized and accordingly sounds odd to Bunan speakers. Eventually, he used the Tibetan exonym *bunan=manj*.

according to him is much milder than the climate of Delhi. This sentence additionally illustrates that =*re* can also express a disjunction similar to English *neither ... nor* when occurring on two opponents and combined with a negative verb or copula form.

(435) *tʰej re mej soj re mej tʰi:k.*

<i>tʰej=re</i>	<i>ma-ni:</i>	<i>soj=re</i>	<i>ma-ni:</i>	<i>tʰi:k_{LN}</i>
warm=EXT	NEG-EX.NON1SG	cold=EXT	NEG-EX.NON1SG	okay

“It is neither too warm, nor too cold, just right.”

(Conversation 28.44)

So far we have only discussed instances in which the extended topic clitic takes scope over noun phrases or adjectives. However, the morpheme does not only operate on the level of phrases, but may also have scope over whole propositions. In this case, the clitic is attached to the predicate, as illustrated in the example below. This sentence is taken from a conversation between my main consultant and his nephew about the Bonpo religion. My main consultant told his nephew that he could not tell him much about the history of this religion. Then he added that the Bonpos themselves would not be able to tell him much either.

(436) *nuntsuk ʔattʰa re ma^{tʰup}tʰak wa ake?*

<i>nuntsuk</i>	<i>ʔat-tʰa=re</i>	<i>ma-tʰup-tʰak</i>	<i>wa</i>
that.kind.of	tell-TR-SUP=EXT	NEG-be.able-TR-PRS.DJ.PL	FOC

ake

QUE

“(I cannot tell you much about the history of the Bon religion, but the Bonpos) cannot give you that kind of (information about their religion) either, well, can they?”

(Conversation 84.32)

In some cases, the morpheme =*re* does not only widen the scope of the topic, but also implies that the extended topic has a surprising and / or extreme quality. In such contexts, the morpheme is more appropriately translated as “(not) even”.⁷² This use of =*re* is clearly secondary and seems to be the result of a hypoanalysis (Croft 2000: 126–127) in the course of which the contextual feature of surprise / extremity (“Also, **I cannot go outside!**”) was reanalyzed as being expressed by the extended topic clitic (“I cannot **even** go outside!”). This use of =*re* is illustrated by the following example.

⁷² In the terminology of König (1991: 68), this usage of =*re* would correspond to a “scalar additive”.

(437) *gi philak wanste re mat^huptæare.*

<i>gi</i>	<i>philak</i>	<i>wanste-de=re</i>	<i>ma-t^hup-tæ-are</i>
1SG	outside	go-SUP=EXT	NEG-be.able-TR-PRS.DJ.SG

“I cannot even go outside.”

(King Kesar 78)

The extended topic clitic marker also occurs on conditional clauses. In this case, it implies that the proposition made in the finite clause will (or will not) hold true, regardless of the precondition denoted by the conditional clause. Consider the following examples.

(438) *ri lalun galdzi elnanre thaj barlak k^hukæum made.*

<i>ri</i>	<i>lalun</i>	<i>gal-ø-dzi</i>	<i>el=nanre</i>	<i>thaj</i>
mountain	pass	cross-TR-CVB	go=COND=EXT	up.there
<i>barlak</i>	<i>k^huk-s-æ-um</i>	<i>ma-de</i>		
between	find-DETR-MID-INF	NEG-ATT.SG		

“Even if you cross mountains and passes, you will not find (the promised land Beyul) up there between (the mountains).”

(Tulshug Lingpa 148)

(439) *darun petæa tsuna kjanan re re na thadzu.*

<i>darun</i>	<i>petæa</i>	<i>tsuna</i>	<i>kja=nanre</i>	<i>re=na</i>
still	book	little.bit	become=COND=EXT	bring.IMP.SG=HS
<i>thadzu</i>				
that				

“‘Even if there are just a few books left, bring them’, he said.”

(Conversation 32.8)

When the non-finite conditional clause to which =*re* is cliticized contains an interrogative pronoun (e.g. *su* “who”, *k^ha* “what”, *ika* “when”), the respective pronoun is no longer interpreted as interrogative but as indefinite. This semantic shift is not surprising, as indefinite pronouns are generally derived by attaching the clitic =*re* to the corresponding interrogative pronoun (e.g. *su=re* “whoever”, *k^ha=re* “whatever”, *ika=re* “whenever”) (see § 5.2.4). Two examples are given in the following.

(440) *ika elnaŋ re qik.*

<i>ika</i>	<i>el=naŋ=re</i>	<i>qik</i>
when	go=COND=EXT	okay

“Whenever you will go (to visit them), it will be fine with me.”

(TD unrec 29)

(441) *kʰa liknaŋre tɕomozi tʰuptɕi gwak.*

<i>kʰa</i>	<i>lik=naŋ=re</i>	<i>tɕomo=ɕi</i>	<i>tʰup-tɕ-i</i>	<i>gwak</i>
what	do=COND=EXT	nun=PL	be.able-TR-ACT	EX.NON1PL

“Whatever (work there is) to do, the nuns can do it (themselves).”

(Tshechu 2.531)

10.2.3 =*ta* “adversative clitic”

The adversative clitic =*ta* expresses that a given statement stands in contrast to some other statement. The morpheme thus expresses a meaning similar to the English adversative conjunction *but*. This is illustrated by the following sentence.

(442) *gi ta kʰjak laŋɕi kekir dzaj na:. apa dzaj mani:.*

<i>gi=ta</i>	<i>kʰjak</i>	<i>laŋ-s-ɕ-dzi</i>	<i>kekir</i>	<i>dza-i</i>
1SG=AVS	here	raise-DETR-MID-CVB.SG	flatbread	eat-ACT
<i>na:</i>	<i>apa</i>	<i>dza-i</i>	<i>ma-ni:</i>	
EX.1SG	grandmother	eat-ACT	NEG-EX.NON1SG	

“But I eat flatbread that is made of leavened dough (when I am) here (in Kullu). Grandmother does not eat it.”

(Conversation 74.29)

The example given above consists of two propositions. A first proposition in which the speaker states that he eats flatbread made of leavened dough, and a second proposition in which the speaker states that his wife does not eat this kind of flatbread. By adding the adversative clitic =*ta* to the first person pronoun, the speaker emphasized the contrast between his own eating habits and the eating habits of his wife.

The adversative clitic always attaches to the lexical item on which the contrastive quality of the entire proposition is based. The morphological host may be a noun, an adjective or an adverb. Note that verbs cannot be marked with the adversative clitic, as adversative relations between whole proposition are indicated by the discourse coordinator *jende* (cf. § 19.5.3). Consider the following examples.

(443) *gart̥sam ta mara:re la?*

gart̥sam=ta *ma-ra-k-are=la*
cold=AVS NEG-come-INTR-PRS.DJ.SG=Q

“But you are not sick, are you?”

(DP unrec 20)

(444) *t̥entsuk ken t̥unji ta makjadza la?*

t̥entsuk *ken* *t̥unji=ta* *ma-kja-dza=la*
this.kind.of porridge little=AVS NEG-become-PST.DIR.DJ.SG=Q

“But you did not get too little of this kind of porridge?”

(Conversation 70a.5)

(445) *daksam ta matungare ka apa.*

daksam=ta *ma-tun-k-are* *ka* *apa*
now=AVS NEG-drink-INTR-PRS.DJ.SG ASS AUTH

“But now he does not drink alcohol anymore.”

(Conversation 22.313)

(446) *t̥akpoti radza. eraŋman ja: ta maradzi.*

t̥akpo=tiki *ra-dza* *eraŋ=man* *ja:=ta*
strong=INDEF come-PST.DIR.DJ.SG 1PL.INCL=ALL yesterday=AVS

ma-ra-dzi
NEG-come-PST.INFER.DJ.SG

“We had quite a bit of snow (here in Kullu), but there hasn’t been any snowfall in Lahaul recently.”

(Conversation 39.55)

As (443) and (444) illustrate, the adversative clitic frequently occurs in questions in which the speaker expresses her / his concern. In such contexts, the clitic *=ta* indicates that the proposition contrasts with the speaker’s expectation and that speaker hopes that her / his concerns are unfounded.

10.2.4 *=na* “hearsay clitic”

The hearsay clitic *=na* indicates that a proposition is based on reported evidence (see § 13.4.4 for the discussion of the morpheme in the context of reported evidentiality). The clitic can both mark propositions that are based on an unspecified epistemic source

(i.e. “People say that ...” or “It is said that ...”) and propositions that are based on an individuated and known epistemic source (i.e. “Mother said that ...”). The morpheme prototypically occurs on verbs, but is also attested on other syntactic constituents such as nouns and interjections. This is illustrated by the following examples.

(447) *girok na pura: tankjare na da!*

<i>gi=tok=na</i>	<i>pura:LN</i>	<i>tant-k-are=na</i>	<i>da</i>
1SG=DAT=HS	fully	see-INTR-PRS.DJ.SG=HS	now

“‘I can fully see it now’, he said.”

(Tulshug Lingpa 163)

(448) *at̪a:ra unnis bi:stok na.*

<i>at̪a:raLN</i>	<i>unnisLN</i>	<i>bi:sLN=tok=na</i>
eighteen	nineteen	twenty=DAT=HS

“He said (that he had arrived in Kullu) around February 18, 19, 20.”

(Conversation 49.29)

(449) ... *kʰat̪en na.*

kʰat̪en=na
don’t.know=HS

“He said, ‘I don’t know!’”

(The Fairies of Kullu 1.45)

The morpheme can be freely combined with finite verb forms that are inflected for evidentiality. In this case, the evidential category that is marked on the predicate reflects the perspective of the reported source rather than the perspective of the reporting speaker. Consider the following examples.

(450) *mana:li ti:n fuṭ radza na.*

<i>mana:li</i>	<i>ti:nLN</i>	<i>fuṭLN</i>	<i>ra-dza=na</i>
Manali	three	foot	come-PST.DIR.DJ.SG=HS

“They say that they have three feet of snow in Manali.”

(Conversation 30.2)

(451) *kja: kja: kja: kja: da:stok nitsi dzertæi na.*

<i>kja-ka</i>	<i>kja-ka</i>	<i>kja-ka</i>	
become-PROG.SG	become-PROG.SG	become-PROG.SG	
<i>kja-ka</i>	<i>da:tsok</i>	<i>nitsi</i>	<i>dzert-dzi=na</i>
become-PROG.SG	meanwhile	sun	rise-CVB.SG=HS

“And little by little, meanwhile, the sun rose, it is said.”

(King Kesar 297)

(452) *meme gomtæen tiki phuktikuŋ dzottæi ni: jendzi na.*

<i>meme</i>	<i>gomtæen=tiki</i>	<i>phuk=tiki=kun</i>	<i>dzot-dzi</i>
monk	hermit=INDEF	cave=INDEF=LOC	stay-CVB.SG
<i>ni-i=jendzi=na</i>			
EX.SG-ACT=EQ.DJ.SG=HS			

“An eremitic monk once lived in a cave, it is said.”

(The Lama and the Owl 1)

The hearsay clitic *=na* can also be attached to speech verbs. This stacking of evidential constructions is not discussed again at this point, however, as the phenomenon is described in § 13.4.4 in more detail.

10.2.5 *=la* “question clitic”

The clitic *=la* is used to mark interrogative clauses. Most often, the clitic occurs on verbs. The use of the clitic is obligatory whenever an interrogative clause does not contain an interrogative pronoun. Two example sentences are given below.

(453) *apa tʰi:k ni: la?*

<i>apa</i>	<i>tʰi:k_{LN}</i>	<i>ni:=la</i>
grandmother	alright	EX.NON1SG=Q

“Is grandmother alright?”

(Conversation 29.11)

(454) *rinpotæ lepdza la tʰan?*

<i>rinpotæ</i>	<i>lep-ø-dza=la</i>	<i>tʰan</i>
Rinpoche	arrive-TR-PST.DIR.DJ.SG=Q	today

“Has the Rinpoche arrived today?”

(Conversation 71.4)

If a clause contains an interrogative pronoun, the clitic *=la* is usually not attached to it. However, it is still possible to use the question clitic in a clause that contains an interrogative pronoun. Consider the following examples.

(455) *itɕik mahi:na: dzot la?*

<i>itɕik</i>	<i>mahi:na:LN</i>	<i>dzot-et=la</i>
how.many	month	stay-PST.DIR.CJ=Q

“How many months did you stay?”

(Conversation 25.10)

(456) *han rajsentɕi ika rate?*

<i>han</i>	<i>rajsen=ɕi</i>	<i>ika</i>	<i>ra-te</i>
2[SG]	Raisen=ABL	when	come-VOL.SG

“When do you want to come from Raisen?”

(Conversation 46.8)

(457) *sunil guj lepdza?*

<i>sunil</i>	<i>guj</i>	<i>lep-ø-dza</i>
Sunil	where	reach-TR-PST.DIR.CJ

“Sunil, how far have you come?” (said by a speaker who was talking to his nephew on the phone and asked him where he currently was)

(Conversation 65.1)

In rare cases, the clitic *=la* is also attached to other syntactic constituents than verbs. However, my material suggests that this is only possible in verbless clauses. An example in which *=la* is cliticized to a personal pronoun is given below.

(458) *gi la?*

gi=la
1SG=Q

“Are you asking about myself?”

(DP unrec 38)

10.2.6 *=la* “evocative clitic”

The evocative clitic *=la* always attaches to the finite verb at the end of a sentence. The morpheme indicates that a proposition introduces an important fact that other discourse participants may not be familiar with or about which they may have forgotten. In certain contexts, the *=la* may express the speaker’s astonishment about the addressee’s

lack of knowledge and, accordingly, may have a slightly reproachful connotation. The following sentences illustrate the use of the evocative clitic.

(459) *gidzi kela: madzaj jen la.*

<i>gi=dzi</i>	<i>kela:LN</i>	<i>ma-dza-i</i>	<i>jen=la</i>
1SG=ERG.SG	banana	NEG-eat-ACT	EQ.CJ=EVOC

“I do not eat bananas (as you should know).”
(TD unrec 36)

(460) *nunṭṭei kʰorek tʰadzutshɪ re maliktəʰak la.*

<i>nunṭṭei</i>	<i>kʰorek</i>	<i>tʰadzu=tshɪ=re</i>	<i>ma-lik-tə-ʰak=la</i>
then	later	that=ERG.PL=EXT	NEG-do-TR-PRS.DJ.PL=EVOC

“Then, those people did not make (an effort) either.”
(Conversation 84.64)

(461) *hertsuk pʰurpaj butsa jendzi la.*

<i>her=tsuk</i>	<i>pʰurpa=ki</i>	<i>butsa</i>	<i>jendzi=la</i>
again=REL	Phurpa=GEN	son	EQ.DJ.SG=EVOC

“There is another son of the Phurpa family (I thought you knew that).”
(Conversation 22.385)

(462) *tʰe kʰwame barbargun təʰetəa gjunṭei lektəa gjunṭei bjaj kjanan her tʰadzu kwatde datəa gjunṭei tətəa gjunṭei jendzi la.*

<i>tʰe</i>	<i>kʰwame</i>	<i>barbargun</i>	<i>təʰe-tə-a</i>	<i>gjun-s-ə-dzi</i>
this	red.dye	sometimes	warm.up-TR-SUP	need-DETR-MID-CVB.SG
<i>lek-tə-a</i>	<i>gjun-s-ə-dzi</i>	<i>bjaj</i>	<i>kja=nan</i>	
change-TR-SUP	need-DETR-MID-CVB.SG	thin	become=COND	
<i>her</i>	<i>tʰadzu</i>	<i>kwat-de</i>	<i>da-tə-a</i>	<i>gjun-s-ə-dzi</i>
again	that	boil-SUP	give-TR-SUP	need-DETR-MID-CVB.SG
<i>təe-tə-a</i>	<i>gjun-s-ə-dzi</i>	<i>jendzi=la</i>		
warm.up-TR-SUP	need-DETR-MID-CVB.SG	EQ.DJ.SG=EVOC		

“From time to time it is necessary to warm up this red dye and when it becomes thin, it needs to be boiled again, it needs to be heated up (as people should know).”
(Tshechu 2.438)

The fact that the evocative clitic is homophonous with the question clitic suggests that the two morphemes may have a common origin. It seems conceivable that the evocative clitic developed out of the question clitic in rhetorical questions with a reminding or admonitory function.

10.3 Discourse particles

This section discusses the word class of discourse particles. Like discourse clitics, discourse particles serve a discourse-structuring function. The main difference between discourse clitics and discourse particles lies in their status as phonological words. Whereas discourse clitics are commonly unstressed and fuse into one phonological word with their morphological host, discourse particles usually carry a prominent stress and, accordingly, constitute independent phonological words. Discourse particles prototypically occur in clause-final position following the predicate. However, they may also occur in other syntactic positions. This is especially true for the focus particle *wa*, which frequently occurs in clause-initial and clause-medial position as well.

In the following subsections, I provide descriptions of the discourse particles that are attested in my data corpus.

10.3.1 *wa* “focus particle”

The focus particle *wa* commonly occurs before clauses that have focal status and provide new information about a topic with which the discourse participants are already familiar (see § 16.2.2.2 for a definition of the term “focus”). This use of the particle *wa* is illustrated by the following examples.

(463) *nitsi ranaŋ wa soj ramen men apa.*

<i>nitsi</i>	<i>ra=naŋ</i>	<i>wa</i>	<i>soj</i>	<i>ra-men</i>	<i>men</i>
sun	come=COND	FOC	cold	come-INF	NEG.EQ.CJ

apa
AUTH

“When the sun comes out, it will not be cold anymore.”
(Conversation 22.201)

(464) *tʰadzu tʰaŋtʰaŋi tɪspu loʂak durek. tɪspuj dʒaga wa daksam kjum likɛɪ.*

<i>tʰadzu</i>	<i>tʰaŋtʰaŋi</i>	<i>tɪspu</i>	<i>lot-s-ɛ-ʰak</i>	<i>durek</i>
that	all	water.mill	say-DETR-MID-PRS.DJ.PL	earlier

<i>tɪspu=ki</i>	<i>dʒaga_{LN}</i>	<i>wa</i>	<i>daksam</i>	<i>kjum</i>
water.mill=GEN	place	FOC	now	house

lik-s-ɛ-i=jendʒi

make-DETR-MID-ACT=EQ.DJ.SG

“All of those (buildings by the river were) water mills back then, they say. (It was a place of water mills, now they have built houses (there)).”

(Conversation 16.31)

(465) *tʰukpa likɛi taj jendʒi. tʰukpa kʰjaktɛi tunʒi bik tunʒi elet wa tʰaj twat matwat apa. nunʒi datle wa tʰadzun eli jentɕʰok.*

<i>tʰukpa</i>	<i>lik-s-ɛ-i</i>	<i>ta-i=jendʒi</i>	<i>tʰukpa</i>
soup	make-DETR-MID-ACT	POSS-ACT=EQ.DJ.SG	soup

<i>kʰjak=tɛi</i>	<i>tunʒ-dʒi</i>	<i>bik</i>	<i>tunʒ-dʒi</i>	<i>el-et</i>
here=ABL	drink-CVB.SG	full	drink-CVB.SG	go-PST.DIR.C

<i>wa</i>	<i>tʰaj</i>	<i>twat</i>	<i>ma-twat</i>	<i>apa</i>
FOC	up.there	drink.PST.DIR.CJ	NEG-drink.PST.DIR.CJ	AUTH

<i>nunʒi</i>	<i>datle</i>	<i>wa</i>	<i>tʰadzun</i>	<i>el-i</i>	<i>jentɕʰok</i>
then	right.now	FOC	there	go-ACT	EQ.DJ.PL

“She had prepared soup. I had had soup, a full (bowl) of soup, before we went from here, so I did not have any up there. And then we went there.”

(Conversation 22.4)

In addition, the focus particle often occurs at the end of sentences that establish a new discourse topic that has not been touched on earlier. In this case, the particle often possesses a strong querying connotation, as the speaker expects a reaction from other discourse participants. Accordingly, *wa* often occurs in combination with the querying particle *ake* or the consent particle *ma* when serving this purpose. The following sentences exemplify this use of the focus particle.

(466) *paʔan beli jendʒi tʰe wa?*

<i>paʔan beli</i>	<i>jendʒi</i>	<i>tʰe</i>	<i>wa</i>
Pattan.Valley	EQ.DJ.SG	this	FOC

“This (valley in this old photograph) is the Pattan Valley, right?”
(Conversation 72.6)

(467) *butsa noj ɕittsʰa wa ake?*

<i>butsa</i>	<i>noj</i>	<i>ɕit-ɕ-tsʰa</i>	<i>wa</i>	<i>ake</i>
boys	many	die-MID-PST.DIR.DJ.PL	FOC	QUE

“Many young men have died (recently), isn’t it?”
(Conversation 14.174)

(468) *tʰamasamaj tsemet kindʒi ma wa?*

<i>tʰamas-ama=ki</i>	<i>tsemet</i>	<i>kin-ɕ-dʒi</i>
Thamas-mother=GEN	daughter	give.birth-MID-PST.INFER.DJ.SG
<i>ma</i>	<i>wa</i>	
CNS	FOC	

“The mother of the Thamas family has given birth to a girl, right?”
(Conversation 68.46)

The focus particle can not only follow finite clauses, but can also occur after noun phrases, as the following example illustrates.

(469) A: *kela dzani!*

B: *ini wa tete?*

<i>kela</i>	<i>dza-ni</i>	<i>ini</i>	<i>wa</i>	<i>tete</i>
banana	eat-IMP.PL	2[SG].HON	FOC	grandfather

A: “You guys have a banana!”

B: “What about you, grandfather (won’t you have one)?”

(Conversation 74.34)

(470) *hitik wa tʰi:k ma?*

<i>hitik</i>	<i>wa</i>	<i>tʰi:k_{LN}</i>	<i>ma</i>
other	FOC	alright	CNS

“What about the others? (They are) alright, I assume?”
(Conversation 96.24)

Finally, the focus particle is often used to express approval of somebody else's statements. This is illustrated by the following sentences.

(471) A: *rere kullu loktəa gwaŋmen.*

B: *wa.*

<i>rere</i>	<i>kullu</i>	<i>lok-tə-a</i>	<i>gwaŋ-men=jen</i>	<i>wa</i>
everyone	Kullu	study-TR-SUP	come-INF=EQ.CJ	FOC

A: “Everybody comes to Kullu to study.”

B: “That’s how it is.”

(Tshechu 2.23)

10.3.2 *ma* “consent particle”

Speakers use the particle *ma* after declarative statements to request the consent of the addressee. The particle thus fulfills a function similar to sentence-final *right* in English. Note that *ma* implies that the speaker is rather certain that the proposition is true and that she / he does not expect the addressee to disagree. Some examples that illustrate the use of the particle are given below.

(472) *pʰetsej nwak bete ta ma?*

<i>pʰetse=ki</i>	<i>nwak</i>	<i>bete</i>	<i>ta</i>	<i>ma</i>
uncle=GEN	thus	child	POSS.NON1SG	CNS

“So uncle has children, right?”
(Conversation 14.22)

(473) *apa tʰi:k ni: ma?*

<i>apa</i>	<i>tʰi:k_{LN}</i>	<i>ni:</i>	<i>ma</i>
grandmother	okay	EX.NON1SG	CNS

“Grandmother is well, right?”
(Conversation 29.23)

(474) *tʰaraŋ dzat ma ini?*

<i>tʰaraŋ</i>	<i>dza-et</i>	<i>ma</i>	<i>ini</i>
that.other.place	eat-PST.DIR.CJ	CNS	2[SG].HON

“You ate at that other place, right?”

(Conversation 74.20)

Etymologically, the particle *ma* is clearly related to the negation prefix *ma-* (see § 12.6). The particle most probably developed from a negated tag question that followed a declarative statement, e.g. “He milked the cow, did he not?”. In the course of time, this tag question was reduced to its focal constituent, that is, the negation prefix.

10.3.3 *ake* “querying particle”

The particle *ake* is functionally reminiscent of the consent particle *ma*. The particle occurs after declarative statements and indicates that the speaker requests some kind of reaction on part of the addressee. However, whereas the consent particle presupposes that the proposition in question is true and that the addressee will agree, the querying particle implies that the speaker is not entirely sure whether or not the respective proposition is true and that it is possible that the addressee will disagree. A few examples that illustrate the use of the particle are given in the following.

(475) *ajna tedzi de ake?*

<i>ajna</i>	<i>tedzi</i>	<i>de</i>	<i>ake</i>
very.much	old	ATT.SG	QUE

“He is very old, isn’t he?”

(Conversation 36.99)

(476) *tʰe kardəŋ gompə jendʒi ake?*

<i>tʰe</i>	<i>kardəŋ gompə</i>	<i>jendʒi</i>	<i>ake</i>
this	Kardang Monastery	EQ.DJ.SG	QUE

“This (building in the picture) is Kardang Monastery, isn’t it?”

(Conversation 72.17)

10.3.4 *ne* “suggestive particle”

The suggestive particle fulfills a range of different but semantically contiguous functions. In combination with declarative speech acts, the particle expresses that the speaker is making a suggestive statement, without expecting any substantial objection from the addressee.

(477) *gi nimati ragek ne loŋi jendzi*

<i>gi</i>	<i>nima=tiki</i>	<i>ra-k-ek</i>	<i>ne</i>
1SG	day=INDEF	come-INTR-PRS.CJ.SG	SUG

lot-s-ɛ-i=jendzi

say-DETR-MID-ACT=EQ.DJ.SG

‘I will come (visit you guys) someday’, I said”

(Zhangzhung 16)

(478) *gidzi daruŋ dza likkata ne.*

<i>gi=dzi</i>	<i>daruŋ</i>	<i>dza</i>	<i>lik-ø-kata</i>	<i>ne</i>
1SG=ERG.SG	still	tea	make-TR-FUT.CJ.SG	SUG

“I will make some more tea.”

(DP unrec 3)

The suggestive particle often occurs after imperative forms. In this context, the particle expresses an emphatic but friendly request to perform the action denoted by the verb. Consider the following examples.

(479) *dzani dzani ne!*

<i>dzani</i>	<i>dzani</i>	<i>ne</i>
eat-IMP.PL	eat-IMP.PL	SUG

“Do eat, do eat!”

(Conversation 55.214)

(480) *tantan le ne!*

<i>tantan</i>	<i>le</i>	<i>ne</i>
sure	make.IMP.SG	SUG

“Do make sure (that there will be enough people in the audience)!”

(Conversation 79.15)

In combination with future tense forms, the suggestive particle may also express a “prohibitive of concern”. With this construction, the speaker expresses her / his concern about the fact that the event denoted by the verb might occur.

(481) *datkjana ne!*

<i>dat-k-ana</i>	<i>ne</i>
fall-INTR-PRS.2SG	SUG

“(Watch out) you may fall!”

(DP unrec 24)

(482) *taldzi kulik jotkjata ne!*

<i>tal=dzi</i>	<i>kulik</i>	<i>jot-ø-kata</i>	<i>ne</i>
3=ERG.SG	key	lose-TR-ASSER.NON1SG	SUG

“He will lose the key!”

(TD 303.7 [elicited])

10.3.5 *ka* “assertive particle”

Speakers use the assertive particle *ka* to express their conviction that the information contained in a given proposition is correct. In addition, the use of the particle also entails that there is a close social relationship between the speaker and the addressee. The particle commonly occurs in sentence final position after the verb, as the following example sentences demonstrate.

(483) *sasati kaj jendzi ka.*

<i>sasa=tiki</i>	<i>kaj</i>	<i>jendzi</i>	<i>ka</i>
different=INDEF	difficult	EQ.DJ.SG	ASS

“It is very difficult indeed.”

(Conversation 14.63)

(484) *daksam ta matungare ka apa.*

<i>daksam=ta</i>	<i>ma-tuŋ-k-are</i>	<i>ka</i>	<i>apa</i>
now=AVS	NEG-drink-INTR-PRS.DJ.SG	ASS	AUTH

“But now he does not drink alcohol anymore.”

(Conversation 22.313)

(485) *saŋtara tsore dikkare ka.*

<i>saŋtara_{LN}=tsore</i>	<i>dik-k-are</i>	<i>ka</i>
orange=ENR	be.suitable-INTR-PRS.DJ.SG	ASS

“Oranges and other fruits make good desserts!”

(Conversation 79.1)

However, *ka* may also occur immediately follow a syntactic constituent. In this case, the particle commonly expresses a corrective focus, as in the example given below.

(486) *mingjaks ka ot̕i men mingjaks.*

<i>mingjaks</i>	<i>ka</i>	<i>ot̕i</i>	<i>men</i>	<i>mingjaks</i>
in.two.days	ASS	tomorrow	NEG.EQ.CJ	in.two.days

“(It is) in two days (that we will come to your place), not tomorrow, in two days.”

(Conversation 69.17)

Finally, the particle can also follow after imperatives. In this context, the particle expresses the speaker’s conviction that the addressee should perform the action denoted by the verb. Consider the following example.

(487) *ane su ka!*

<i>ane</i>	<i>su-a</i>	<i>ka</i>
paternal.aunt	ask-IMP.SG	ASS

“You should ask auntee!”

(SA unrec 11)

11 Interjections and conventionalized communicative expressions

11.1 Introduction

This chapter discusses the word classes of interjections and conventionalized communicative expressions. These word classes share in common that they are associated with highly specific communicative acts. Interjections serve the primary function of communicating the speaker's internal emotional state. Conventionalized communicative expressions, in turn, serve the primary function of denoting basic acts of interpersonal communication such as greeting, thanking, apologizing, etc.

In the following subsections, interjections and conventionalized communicative expressions are described in more detail. § 11.2 gives an overview of the interjections that are attested in my data corpus. § 11.3 describes the use of kinship terms as markers of authoritativeness. § 11.4, finally, deals with conventionalized communicative expressions.

11.2 Interjections

Bunan possesses a class of lexical items that are used to express a speaker's emotional reaction to a statement, an observation, or a sensation. In keeping with established terminology, I will refer to these lexical items as “interjections” (Dixon 2010: 27–30). Interjections cannot be defined in terms of their relative syntactic distribution, as they most often occur in isolation and do not depend on other syntactic constituents.

The following lists give an overview of the interjections that are attested in my data corpus.

Anger and misfortune

<i>hak</i>	“damn!”
<i>hatɕi</i>	expression of forgetfulness
<i>o</i>	“oops!”

Surprise, disgust, and pitying

<i>aj (kontɔok)</i>	“gee!”, “gosh!”
<i>aj (ama)</i>	“gee!”, “gosh!”
<i>ama jo</i>	“gee!”, “gosh!”
<i>ɕupala</i>	expression of physical effort
<i>kʰamlɔks</i>	“gross!”
<i>nantsuk</i>	“poor wretch!”
<i>papa</i>	“wow!”

Well-being

ahahaha expression of well-being

Pain

ara “ouch!” (expression of dull pain)

atsʰa “ouch!” (expression of burning pain)

atɕʰu “ouch!” (expression of freezing pain)

11.3 Authoritative use of kinship terms

In the Bunan society, it is common to address other persons with kinship terms rather than with their given name. It is only possible to address other people with their given name if they are considerably younger than oneself. In other contexts, the use of given names is considered to be rude. Note that this cultural convention does not only apply in situations in which one is directly addressing a person. Kinship terms are also used when talking about persons who are not present at the moment of speaking. I myself was admonished several times by my host family not to refer to my main consultant with his given name *tsʰerinj dordʒe* but to call him *mjas-tete* “Myas-grandfather”, that is, “grandfather of the house Myas”.

The following two examples are taken from recordings in which one of my younger consultants addresses his grandparents. As the sentences illustrate, he addresses them as *tete* “grandfather” and *apa* “grandmother”.

(488) *dʒa likki la tete?*

<i>dʒa</i>	<i>lik-ki=la</i>	<i>tete</i>
tea	make-CONSUL=Q	grandfather

“Should I make tea, grandfather?”

(Conversation 23.12)

(489) *tal tɕʰandɨgarmanj eldza apa.*

<i>tal</i>	<i>tɕʰandɨgar=manj</i>	<i>el-dza</i>	<i>apa</i>
3[SG]	Chandigarh=ALL	go-PST.DIR.DJ.SG	grandmother

“He went to Chandigarh, grandmother.”

(Conversation 14.11)

However, kinship terms do not only serve as terms of address and reference in Bunan. In my corpus of natural language data, there are a great number of context in which the wife of my main consultant uses the kinship term *apa* “grandmother” when talk-

ing to her nephew. In this case, the kinship term clearly does not serve as a term of address or reference, but rather appears to fulfill the function of an interjection expressing authoritativeness. Consider the following examples, all of which were uttered by my main consultants wife while talking to her nephew.

(490) *dza dza dza apa!*

<i>dza-a</i>	<i>dza-a</i>	<i>dza-a</i>	<i>apa</i>
eat-IMP.SG	eat-IMP.SG	eat-IMP.SG	AUTH

“Eat, eat, eat!”

(Conversation 1.28)

(491) *epo likta ho apa!*

<i>epo</i>	<i>lik-ø-ta</i>	<i>ho</i>	<i>apa</i>
good	do-TR-PST.INFER.DJ	yes	AUTH

“Yes, he did a good job indeed!”

(Conversation 14.51)

(492) *aj apa but thirtsumdzi aj kontsok kharok rikmen apa?!*

<i>aj</i>	<i>apa</i>	<i>but=thir-tə-um=jendzi</i>	<i>aj kontsok</i>
gosh	AUTH	put.down=send-TR-INF=EQ.DJ.SG	gosh
<i>kha=tok</i>	<i>rik-ø-men</i>	<i>apa</i>	
what=DAT	bring-TR-PST.DIR.CJ	AUTH	

“Gosh! You shouldn’t have brought (these things for me)! Gosh! Why did you bring these things?”

(Conversation 13a.45)

(493) *tsẽẽi daj la apa?*

<i>tsẽẽ-s-dzi</i>	<i>da-ki=la</i>	<i>apa</i>
warm.up-DETR-CVB.SG	give-CONSUL=Q	AUTH

“(The water) has become warm, (so) should I give you some?”

(Conversation 16.231)

As the examples given above illustrate, my main consultants wife uses the kinship term *apa* in different contexts that range from commands and statements to questions. As noted above, the word *apa* does clearly not serve as a term of address or reference here. Rather, the lexeme seems to function as a discourse particle that adds an authoritative overtone to a given statement or question. In this context, it is important to keep in mind

that old age is one of the major sources of authority in South Asian societies. Accordingly, my consultant's wife seems to emphasize that she has an authoritative social position in relation to her nephew, who is more than fifty years younger than her. This interpretation is corroborated by the fact that she never uses the word *apa* when talking to her husband.

Several consultants have told me that the use of the kinship terms *apa* "grand-mother" and *tete* "grandfather" as authoritative particles is common throughout the Bunan speaking community. However, I have never witnessed the authoritative use of a kinship term from a person different from my main consultant's wife. It is thus not clear how common this phenomenon is and whether it only occurs in particular social contexts.

11.4 Conventionalized communicative expressions

Bunan possesses a class of lexemes that are associated with basic communicative acts such as greeting, apologizing, offering, etc. I refer to this word class as "conventionalized communicative expressions". Conventionalized communicative expressions are similar to interjections in the respect that they do not syntactically depend on other constituents and hence most often occur in isolation. However, the two word classes are clearly distinct in terms of their function, as interjections describe the speaker's emotional state, whereas conventionalized communicative expressions are uttered during a specific communicative interaction between human beings.

A list of conventionalized communicative expressions is given below.

Approving and dismissing

<i>deno</i>	"right", "that's true"
<i>ho</i>	"yes"
<i>hũ</i>	"no"
<i>kʰatæn</i>	"don't know", "no idea"

Apologizing and allaying

<i>kʰarma:stok</i>	"no problem!", "never mind!"
<i>ma:stok</i>	"sorry!"

Greeting

<i>a</i>	"hey", "hello" (informal greeting)
<i>dʒule</i>	"welcome" (formal greeting)
<i>kʰamdzaŋ</i>	"everything alright?", "everything alright!"

Giving and thanking

<i>ɕabe</i>	“please”
<i>(ɕabe) dʒu</i>	“thank you!”
<i>kʰa ɕabe</i>	“you’re welcome”, “don’t mention it”
<i>no</i>	“here”, “take it!”

Asking and attracting attention

<i>a</i>	“what?”
<i>e</i>	“hey!”, “listen to me!”

A set of more complex conventionalized communicative expressions that deserve to be mentioned at this point are idiomatic phrases associated with greeting, asking about somebody’s condition, and saying goodbye. The following table gives an overview of the most common expressions of this type.

Table 67: Some common idiomatic phrases

	Idiomatic phrase	Conventionalized meaning
(1)	<i>gumaŋ elte?</i> <i>gu=maŋ el-te</i> where=ALL go-VOL.SG “Where do you want to go?”	Common idiomatic phrase for greeting other people. The phrase is only appropriate if the addressee is on her / his way to some place.
(2)	<i>kʰa liktɕek?</i> <i>kʰa lik-tɕ-ek</i> what do-TR-PRS.CJ.SG “What are you doing?”	Common idiomatic phrase for greeting other people. The phrase is only appropriate if the addressee is working on something or sitting around.
(3)	<i>kʰanak naː?</i> <i>kʰanak naː</i> how EX.1SG “How are you?”	Common idiomatic phrase for asking about someone’s condition.
(4)	<i>kangja el!</i> <i>kan-ka el-a</i> watch-PROG go-IMP.SG “Walk carefully!”	Common idiomatic phrase for saying good-bye. The phrase is only appropriate if the addressee is leaving the place where one has met.

(5)	<i>dzor!</i> <i>dzot-a</i> stay-IMP.SG “Stay (here)!”	Common idiomatic phrase for saying good-bye. The phrase is only appropriate if the addressee is staying at the place where one has met.
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Another lexical item that has to be mentioned at this point is the lexeme *bek*. This word does not qualify as a conventionalized communicative expression, as it not associated with a basic communicative act such as the expression approval, dismissal, thankfulness, etc. Rather, *bek* is best viewed as a “filler”, that is, an expression that serves the basic function of delaying the flow of discourse (Fox 2010: 1). Speakers commonly use the word as a bridging device when thinking about how to continue an utterance. At the same time, they also use it as a stylistic device to increase tension in stories. The word is thus functionally reminiscent of the English word *well*. An example sentence that illustrates the use of *bek* is given below.

(494) *nunaŋ nima tiki naŋsmettok bek k^har mejdok nitsi dzer madzertsi.*

<i>nunaŋ</i>	<i>nima=tiki</i>	<i>naŋsmettok</i>	<i>bek</i>	<i>k^ha=re</i>
and.so	day=INDEF	suddenly	well	what=EXT
<i>ma-ni-i=tok</i>		<i>nitsi</i>	<i>džert</i>	<i>ma-džert-dži</i>
NEG-EX.SG-ACT=DAT		sun	rise	NEG-rise-PST.INFER.DJ.SG

“And one day, all of a sudden, well, without there being any (reason), the sun did not rise.”

(King Kesar 194)

12 Verbs

12.1 Introduction

This chapter is dedicated to the lexical class of verbs. Following (Croft [1990] 2003: 184–185), I define verbs as lexical items that serve the “basic propositional act of predication”, viz. the denotation of events.⁷³ Verbs cannot only be defined on the basis of their predicative function, however. It is also possible to characterize them based on phonotactic, morphological, and syntactic properties. From a phonotactic perspective, verbs are characterized by a strictly monosyllabic shape, regardless of whether they are undervived (i.e. morphologically simple) or derived (i.e. morphologically complex).⁷⁴ This clearly distinguishes verbs from other word classes, which are not subject to such rigid phonotactic constraints. With regard to morphological properties, verbs set themselves apart from other lexical classes in terms of both derivation and inflection. Verbs take derivational suffixes that are not attested in other lexical classes and can be inflected for grammatical categories that do not occur in other lexical domains. At the syntactic level, verbs distinguish themselves from other syntactic constituents in terms of their consistent clause-final position.

The chapter has the following structure: § 12.2 describes the phonotactic structure of verbs. § 12.3 gives an overview of the different derivational suffixes that are attested in the verbal domain, while § 12.4 discusses the different conjugation classes. § 12.5 outlines the basic inflectional categories of a Bunan verb. § 12.6 describes the negation of verb forms, whereas § 12.7 deals with the formation of non-finite verb forms, i.e. infinitives and participles. § 12.8 describes lexicalized number distinctions in verb stems, and § 12.9 gives an account of honorific nouns. § 12.10, finally, discusses the defective verbs *gjut* “to want, to need” and *qik* “to be suitable”.

12.2 Phonotactic structure

As mentioned in the preceding section, Bunan verb stems are exclusively monosyllabic. The lexical class of verbs is the only lexical class that is subject to such rigid phonotactic constraints. Although verb stems are always monosyllabic, this does not mean that they are necessarily monomorphemic. As a matter of fact, Bunan verbs often contain additional derivational morphemes (see § 12.3 for a detailed description). The

⁷³ Note that throughout this thesis, I use the term “event” in the sense of Croft (2012: 34) as a cover term for all types of lexical aspect and not just for bounded processes.

⁷⁴ Some of my oldest consultants reported a disyllabic verb *korok-tə-um* “to dig out, to scrape off”, with which my younger consultants were not familiar. This verb most probably represents a borrowing from the neighboring language Manchad, for which Sharma (1989a: 212) describes a verb *korekči* “to dig”.

following table gives an overview of morphologically simple and morphologically complex verb stems.

Table 68: Morphological structure of verb stems

Morphological structure	Derivational morpheme	Examples	Meaning
simple	-	<i>ra-</i>	“to come”
	-	<i>dza-</i>	“to eat”
	-	<i>laŋ-</i>	“to sell”
	-	<i>lik-</i>	“to do”
complex	verbalizing - <i>t</i>	<i>kur-t-</i>	“to carry”
	functionally opaque - <i>t</i>	<i>ip-t-</i>	“to sleep”
	stative - <i>s</i>	<i>kwa-s-</i>	“to become full”
	detransitivizing - <i>s</i>	<i>ɸen-s-</i>	“to rise”

When a derivational suffix is attached to a verb root, this may give rise to syllable final consonant sequences that are at odds with phonotactic constraints. The following list gives an overview of these syllable final clusters. The morphophonological processes that lead to the simplification of these clusters are not discussed at this point, as they have already been described in chapter 3.

Table 69: Morphophonological processes affecting complex verb stems

Cluster	Example	Morphophonological process
/t/ + /s/	<i>tet-s-</i> think-STAT- “to think”	Deaffrication (see § 3.2.2.3)
C, R + /t/	<i>ip-t-</i> sleep-T- “to sleep” <i>kur-t-</i> load-VRB- “to carry”	Deletion (see § 3.2.2.4) Resyllabification (see § 3.2.2.4)

12.3 Derivation

Bunan verbs make use of a number of derivational mechanisms. First, there are a number of derivational suffixes, viz. the verbalizing suffix *-t*, the functionally opaque suffix *-t*, the stative suffix *-s*, and the detransitivizing suffix *-s*. Second, there is a derivational system that is based on voicing oppositions in verb root initials. The detransitivizing suffix is the only derivational mechanism that is still clearly productive in contemporary Bunan.

The phonological similarity between the verbalizing suffix *-t* and the functionally opaque suffix *-t* as well as the obvious resemblance of the stative suffix *-s* to the detransitivizing suffix *-s* suggests that Bunan may originally only have possessed two derivational suffixes **-t* and **-s*, which subsequently underwent functional diversification. However, since it is possible to identify two clearly distinct functional contexts for each putative proto-morpheme, I have decided to describe these contexts in separate sections.

The following subsections discuss the distribution and function of the aforementioned derivational mechanisms. § 12.3.1 and § 12.3.2 describe the stative suffix *-s* and the detransitivizing suffix *-s*, whereas § 12.3.3 and § 12.3.4 deal with the verbalizing suffix *-t* and the functionally opaque suffix *-t*. § 12.3.5 is dedicated to the system of voicing oppositions in verb root initials, and § 12.3.6, finally, contains some comparative notes on the aforementioned derivational mechanisms.

12.3.1 The stative suffix *-s*

The stative suffix *-s* occurs on verbs that denote stative and non-dynamic events. When describing the distribution of the stative suffix *-s*, we encounter a problem that we are also confronted with when analyzing the distribution of the verbalizing suffix *-t* (cf. § 12.3.3 below) and the functionally opaque suffix *-t* (cf. § 12.3.4 below). As the morpheme only consists of the single consonant segment /s/, it is often difficult to distinguish between verbs in which a stem final /s/ represents an etymological part of the root and verbs in which a stem final /s/ represents an instance of the stative suffix *-s*. In some cases, language-internal evidence may help us to determine the etymological status of a stem final fricative /s/. For example, there is a small group of verb stems that may occur with or without the stative suffix, e.g. *tak-men* “to smell, to stink” vs. *tak-s-men* “to smell, to stink”, *tet-men* “to think” vs. *tet-s-men* [*tesmen*] “to think”, *derj-men* “to believe” vs. *derj-s-men* “to believe”. In other cases, the underlying root of the verb is also attested in another lexical item. Consider the examples given below.

Stative -s detectable on the basis of language-internal evidence⁷⁵

<i>saŋ-s-men</i>	“to grow old”	<	<i>saŋ-i</i>	“old (of animals)”
<i>kju-s-men</i>	“to become long (of days)”	<	<i>kju-i</i>	“long, thin”

In other cases, comparative evidence may help us to identify the etymological status of a stem final fricative /s/. This may either be evidence from Proto-Tibeto-Burman or from other Tibeto-Burman languages. Some examples are given in the following table.⁷⁶

Stative -s detectable on the basis of comparative evidence

<i>waŋ-s-men</i>	“to come out”	PTB * <i>hwaŋ-</i>	“come, enter” (Matisoff 2003: 471)
<i>kwa-s-men</i>	“to become full”	PTB * <i>k-wa-</i>	“satiated” (Matisoff 2003: 618)
<i>na-s-men</i>	“to be sick, to become sick”	PTB * <i>na-</i>	“ill” (Matisoff 2003: 655)

However, cases in which language-internal or language-external evidence can help us to determine the status of a stem final /s/ are rare. Most often we can only guess whether a syllable final /s/ represents an instance of the stative suffix. Matters are further complicated by the fact that Bunan has borrowed a great number of verb stems from neighboring Tibetan varieties that contain potential reflexes of the PTB stative suffix, e.g. *mom(-)s-men* “to become full, to become satiated (from liquids)” < WT *ngoms* “to be satiated”, *təʰoŋ(-)s-men* “to jump” < WT *mchongs* “to jump”, *təʰak(-)s-men* “to grow, to bear fruit” < WT *chags* “to be produced, to originate, to appear”. All of these factors make it virtually impossible to provide a clear and coherent analysis of the stative suffix on monovalent verbs.

The stative suffix does not appear to be productive in contemporary Bunan. In any case, the morpheme does not partake in synchronically productive derivational mechanisms. I have thus decided not to analyze the stative suffix as a separate morphological element, unless its status as a formerly independent morpheme needs to be emphasized. In such cases, the suffix is glossed as “STAT” (for “stative”).

⁷⁵ Note that one might want to add the two intransitive verbs *so-s-men* “to become cold” and *təʰe-s-men* “to become warm”, which are clearly cognate to the adjectives *soj* “cold” and *təʰej* “warm”. However, I consider these verb forms as derivations from the transitive verbs *so-tə-um* “to cool down (tr.)” and *təʰe-tə-um* “to warm up (tr.)”, which entails that the additional morpheme -s in these verbs does not represent the stative suffix but the detransitivizing suffix (see § 12.3.2 below).

⁷⁶ Needless to say, it is problematic to determine the historical status of a morphological segment in Bunan based on roots reconstructed for Proto-Tibeto-Burman, as we cannot know whether these reconstructions are correct.

The following lists give an overview of all putative instances of the stative suffix that are attested in my lexical database. Note that some of the relevant verbs may ultimately be Tibetan loanwords. Tibetan cognates are given in the right column.⁷⁷

Putative instances of the stative suffix (intransitive conjugation)

<i>baps-men</i>	“to climb down”	WT <i>’bab</i>	“to descend”
<i>broks-men</i>	“to rise (of water level)”		
<i>buŋs-men</i>	“to inflate (of chillblains)”	WT <i>’bung</i>	“to fall upon”
<i>dzaŋs-men</i>	“to get dark”		
<i>ha: las-men</i>	“to be astonished”	WT <i>ha las</i>	“to be surprised”
<i>jaks-men</i>	“to make fun”		
<i>jos-men</i>	“to become drunk”		
<i>kʰjops-men</i>	“to go numb”		
<i>kjaŋs-men</i>	“to be sent out”		
<i>laks-men</i>	“to be lost”	WT <i>brlag</i>	“to lose”
<i>laks-men</i>	“to grow well, to thrive”	WT <i>legs pa</i>	“good, happy”
<i>lis-men</i>	“to freeze”		
<i>lops-men</i>	“to accomodate”	WT <i>lobs</i>	“to learn, to be witty”
<i>lus-men</i>	“to remain behind, to be	WT <i>lus</i>	“to remain behind, to be left over”
<i>moms-men</i>	“to become full (from	WT <i>ngoms</i>	“to be satisfied (thirst)”
<i>nam-s-men</i>	“to burn off”	WT <i>nyams</i>	“to be damaged, to decay”
<i>noŋs-men</i>	“to be spoilt, to be destroyed”	WT <i>nongs</i>	“to make a mistake”
<i>nos-men</i>	“to clear up”		
<i>ŋams-men</i>	“to yawn”	WT <i>rngam</i>	“to pant, to breathe”
<i>phaŋs-men</i>	“to be sorry, to be miser”	WT <i>phaŋs</i>	“to be sorry, to save up”
<i>reks-men</i>	“to shiver”		
<i>rus-men</i>	“to be washed away”	WT <i>rut</i>	“flood”

⁷⁷ Note that the absence of a stem final <s> in the Written Tibetan forms does not automatically entail that the corresponding Bunan verb stem cannot have been borrowed from a neighboring Tibetan variety. In western Tibetan varieties, present stems sometimes exhibit a stem final fricative /s/ that is not attested in corresponding Written Tibetan forms. For example, the Written Tibetan present stem *’bab* “to descend” contrasts with the dialectal present stem *babs* “to go down, to come down”, which is attested in several Tibetan varieties of Ladakh. However, for the sake of consistency, I always provide Written Tibetan forms rather than dialectal forms (cf. § 1.5.3). Dialectal forms can be found in the *Comparative Dictionary of Tibetan Dialects* (Bielmeier et al. forthcoming).

<i>sops-men</i>	“to heal”	WT <i>sos</i>	“to recover” (?)
<i>tɕʰaks-men</i>	“to grow, to bear fruit”	WT <i>chags</i>	“to rise, to appear”
<i>tɕʰoms-men</i>	“to be prepared, to be ornamented”	WT <i>choms</i>	“to get ready”
<i>tɕʰoŋs-men</i>	“to jump”	WT <i>chongs</i>	“to jump”
<i>tɕʰos-men</i>	“to become strong”	WT <i>ʼchos</i>	“to cure, to heal”
<i>tʰaks-men</i>	“to get ready”		
<i>tʰos-men</i>	“to be high”	WT <i>mtho</i>	“to be hig”
<i>toks-men</i>	“to be called, to be named”	WT <i>ʼdogs</i>	“to attach, to name”
<i>troks-men</i>	“to become frightened”	WT <i>ʼdrogs</i>	“to be frightened”
<i>tshims-men</i>	“to become full (from eating)”	WT <i>tshim</i>	“to be content”

Putative instances of the stative suffix (middle conjugation)

<i>qos-ɕ-um</i>	“to discuss”	WT <i>gros</i>	“discussion, advice”
<i>lus-ɕ-um</i>	“to be stuck”	WT <i>lus</i>	“to remain behind”
<i>tɕʰoŋs-ɕ-um</i>	“to jump”	WT <i>chongs</i>	“to jump”
<i>tshuks-ɕ-um</i>	“to settle down”	WT <i>tshugs</i>	“to settle”

12.3.2 The detransitivizing suffix -s

Apart from the stative suffix, there is a second derivational suffix with the phonological form /s/, which I refer to as the “detransitivizing suffix”. As the label “detransitivizing” implies, the detransitivizing suffix serves the function of lowering the transitivity of plurivalent verb stems. In the following, I will use the term “transitivity” in the sense of Hopper & Thompson (1980), who define transitivity as a gradual category that is conditioned by a number of distinct semantic parameters (see § 12.4.1.1 for a more elaborate discussion). Accordingly, the detransitivizing suffix does not necessarily reduce the number of core arguments of a given predicate. Rather, the morpheme may affect the transitivity of a verb stem in a number of different ways. All of these different transitivity-decreasing effects have in common that they involve a decrease in transitivity in terms of morphosyntactic marking. In other words, verb stems of the transitive conjugation are always assigned to a less transitive conjugation class when augmented with the detransitivizing suffix (see § 12.4 for a description of the different conjugation classes). In the majority of cases, detransitized verbs are transferred to the middle conjugation. However, there are a small number of detransitized verb stems that are assigned to the intransitive conjugation rather than the middle conjugation.

Before turning to the functional description of the detransitivizing suffix, it is worthwhile to recapitulate the morphophonological rules that affect the morpheme. The detransitivizing suffix rarely surfaces as an independent sound. In the intransitive conjugation,

the detransitivizing suffix only surfaces as a fricative /s/ before inflectional endings with an initial stop. If the following inflectional ending exhibits an initial sibilant, the detransitivizing suffix merges with that sibilant according to the morphophonological rules described in § 3.2.2.1. This is illustrated by the following examples.

<i>tə^he-tə-um</i>	>	<i>tə^he-s-men</i>	<i>[tə^hesmen]</i>
warm.up-TR-INF		warm.up-DETR-INF	
“to warm up”		“to become warm”	
	>	<i>tə^he-s-dza</i>	<i>[tə^hesæ]</i>
		warm.up-DETR-PST.DIR.DJ.SG	
		“It became warm.”	

In the middle conjugation, the suffix never surfaces as an independent sound, as it always merges with the following middle conjugation marker -ə. The morpheme can thus only be detected on the basis of morphophonological alternations that are induced by its presence. It prevents the voicing assimilation between syllable final vowels or resonants and the middle conjugation marker -ə (cf. § 3.2.2.1) and causes the deletion of a root final plosive /t/ (cf. § 3.2.2.3). Consider the following examples.

<i>al-tə-um</i>	>	<i>al-s-ə-um</i>	<i>[aləum]</i>
open-TR-INF		open-DETR-MID-INF	
“to open (tr.)”		“to open (intr.)”	
	>	<i>al-s-ə-dza</i>	<i>[alsæ]</i>
		open-DETR-MID-PST.DIR.DJ.SG	
		“(The door) opened (by itself).”	
<i>lot-tə-um</i>	>	<i>lot-s-ə-um</i>	<i>[loəum]</i>
say-TR-INF		say-DETR-MID-INF	
“to say”		“to say to one another”	
	>	<i>lot-s-ə^hak</i>	<i>[loəa^hkʰ]</i>
		open-DETR-MID-PRS.DJ.PL	
		“They tell each other.”	

This leaves us with the problem that the presence of the detransitivizing suffix cannot be empirically substantiated after verb stems that belong to the middle conjugation and exhibit a syllable final consonant /p, k, s/, as the morpheme does not cause any morphophonological alternations in these phonological environments. Consider the following example.

<i>tik-tə-um</i>	>	<i>tik-s-ə-um</i> (~ <i>tik-ə-um</i>)	[tɪçəum]
close-TR-INF		close-DETR-MID-INF	
“to close (tr.)”		“to close (intr.)”	
	>	<i>tik-s-ə-dza</i> (~ <i>tik-ə-dza</i>)	[tɪçsə]
		close-DETR-MID-PST.DIR.DJ.SG	
		“It closed (by itself).”	

From a phonological perspective, there is no reason to assume the presence of the detransitivizing suffix in the two examples given above, as the phonetic shape of the respective words can be explained without the postulation of an additional morpheme. However, by analogy with forms such as *al-s-ə-um* “to open (intr.)”, it is justified to assume that the suffix is also present in the case of verbs stems that end in the consonants /p, k, s/, even if there is no direct evidence for the presence of the morpheme.

Having recapitulated the elusive nature of the detransitivizing suffix, we may now turn to the functional description of the morpheme. As mentioned above, the suffix may affect the transitivity of plurivalent verb stems in various ways. It is possible to distinguish four major different functions: (1) anticausativization, (2) passivization, (3) reciprocalization, and (4) experiencer / recipient backgrounding. These phenomena are discussed in the following subsections.

12.3.2.1 Anticausativization

One of the most common transitivity-decreasing functions of the detransitivizing suffix is the derivation of anticausatives, i.e. the syntactic and semantic deletion of the agent of a bivalent verb and the subsequent promotion of the patient into the rank of a single core argument (cf. Haspelmath 1987: 5). An anticausativized verb thus no longer refers to an action that involves a wilfull instigator, but denotes a spontaneously occurring event. The derivational mechanism is illustrated by the examples given below, which contain transitive and detransitivized instances of the verbs *təe-tə-um* “to warm up”, *al-tə-um* “to open”, and *əen-tə-um* “to raise, to wake up (tr.)”.

(495) ... *thadzu kwatde datəa gjunəi tʂhetəa gjunəi jendzi la.*

<i>thadzu</i>	<i>kwat-de</i>	<i>da-tə-a</i>	<i>gjun-s-ə-i</i>
that	boil-SUP	give-TR-SUP	need-DETR-MID-ACT
<i>tʂhe-tə-a</i>	<i>gjun-s-ə-i</i>	<i>jendzi=la</i>	
warm.up-TR-SUP	need-DETR-MID-ACT	EQ.DJ.SG=EVOC	

“... it is necessary to bring it to boil, it is necessary to warm it up!”

(Tshechu 2.438)

(496) *soti tʂheskare.*

<i>soti</i>	<i>tʂhe-s-k-are</i>
water	warm.up-DETR-INTR-PRS.DJ.SG

“The water is becoming warm.”

(TD unrec 52)

(497) *taldzi pitaŋ aldza.*

<i>tal=dzi</i>	<i>pitaŋ</i>	<i>al-ø-dza</i>
3=ERG.SG	door	come-TR-PST.DIR.DJ.SG

“He opened the door.”

(TD 108.9 [elicited])

(498) *datle mik alsa.*

<i>datle</i>	<i>mik</i>	<i>al-s-ə-dza</i>
just.now	eye	open-DETR-MID-PST.DIR.DJ.SG

“Now my eyes have opened!” (said by a person who had drunk too much alcohol the night before when finally overcoming his hangover)

(TP unrec 4)

(499) *taldzi gi ʂentəare.*

<i>tal=dzi</i>	<i>gi</i>	<i>ʂen-tə-are</i>
3=ERG.SG	1SG	raise-TR-PRS.DJ.SG

“He is waking me up / causing me to get up.”

(TD 8.23 [elicited])

(500) *da tʰe ɕenɕare da!*

<i>da</i>	<i>tʰe</i>	<i>ɕen-s-ɕ-are</i>	<i>da</i>
now	this	raise-DETR-MID-PRS.DJ.SG	now

“Now, this (dead body) is coming back to life!”

(Conversation 87.397)

(501) *kʰjak kra ɕenɕi.*

<i>kʰjak</i>	<i>kra</i>	<i>ɕen-s-ɕ-dʒi</i>
here	hair	raise-DETR-MID-PST.INFER.DJ.SG

“My hair stood on end.”

(Conversation 87.134)

12.3.2.2 Passivization

The detransitivizing suffix does not only form anticausatives from plurivalent verbs, but can also be employed to derive passives. Passives are similar to anticausatives in the sense that the original agent is demoted, whereas the original patient becomes the new single core argument of the detransitivized verb. However, there is a crucial semantic difference between the two types of detransitivized constructions. Whereas the agent is entirely deleted in the case of an anticausative construction, it is merely syntactically suppressed in the case of a passive construction (cf. Haspelmath 1987: 6–7). In other words, the agent is still present at the semantic level, although it no longer surfaces at the syntactic level. The following example sentences illustrate the passivizing function of the detransitivizing suffix based on transitive and detransitivized forms of the verbs *al-tɕ-um* “to open”, *lik-tɕ-um* “to make”, *lot-tɕ-um* “to say”, and *da-tɕ-um* “to give”.

(502) *pitaŋ aldʒi tʰoŋmaŋ elet.*

<i>pitaŋ</i>	<i>al-ɕ-dʒi</i>	<i>tʰoŋ=maŋ</i>	<i>el-et</i>
door	open-TR-CVB.SG	room=ALL	go-PST.DIR.CJ

“Having opened the door, I went inside.”

(TD 73.44 [elicited])

(503) *haʃi alɕi ni:*

<i>haʃi_{LN}</i>	<i>al-s-ɕ-dʒi</i>	<i>ni:</i>
shop	open-DETR-MID-CVB.SG	EX.NON1SG

“The shop is open.”

or: “The shop has been opened.” (lit. “Having been opened, the shop is there.”)

(Conversation 36.62)

(504) *len likdʒi kelaŋmaŋ elet.*

<i>len</i>	<i>lik-ø-dʒi</i>	<i>kelaŋ=maŋ</i>	<i>el-et</i>
work	make-TR-CVB	Keylong=ALL	come-PST.DIR.CJ

“Having done the work, I went to Keylong.”

(TD 205.5 [elicited])

(505) *bukiŋ likɛi ni: ringare.*

<i>bukiŋ_{LN}</i>	<i>lik-s-ɛ-dʒi</i>	<i>ni:</i>
booking	make-DETR-MID-CVB.SG	EX.NON1SG

riŋ-k-are

say-INTR-PRS.DJ.SG

“He says that the booking (for his flight home) is made.” (lit. “Having been made, the booking is there.”)

(Conversation 25.86)

(506) *tʰara wantɕumtsuk kʰa lottɕum e, kjuks wantɕumtsuktok?*

<i>tʰara</i>	<i>wan-tɕ-um=tsuk</i>	<i>kʰa</i>	<i>lot-tɕ-um=jen</i>	<i>e</i>
that.other	take.out-TR-INF=REL	what	say-TR-INF=EQ.CJ	he

kjuks *wan-tɕ-um=tsuk=tok*

ashes take.out-TR-INF=REL=DAT

“How does one call that (thing) to take out (that other stuff), hey, (the thing) to take the ashes out (of the oven)?”

(TD 33.1)

(507) *kʰandomaʒi dʒotmen loɕum.*

<i>kʰandoma=ɛi</i>	<i>dʒot-men=jen</i>	<i>lot-s-ɛ-um=jen</i>
fairy=PL	stay-INF=EQ.CJ	say-DETR-MID-INF=EQ.CJ

“Fairies live (in that place), it is said.”

or: “Fairies live (in that place), people tell each other.”

(The Fairies of Kullu 2.6)

(508) *taldzi tsʰetan ʃetde dadza.*

<i>tal=dzi</i>	<i>tsʰetan</i>	<i>ʃet-de</i>	<i>da-ø-dza</i>
3=ERG.SG	Tshetan	laugh-SUP	give-TR-PST.DIR.DJ.SG

“He made Tshetan laugh.”

(TD 149.1 [elicited])

(509) *taldok dʒotde daɕi ni.*

<i>tal=tok</i>	<i>dʒot-de</i>	<i>da-s-ɕ-dʒi</i>	<i>ni:</i>
3[SG]=DAT	stay-SUP	give-INTR-MID-CVB.SG	EX.NON1SG

“He has been allowed to stay.” (lit. “Having been allowed to stay, he is here.”)

(ST unrec 4)

So far, we have only considered passive constructions in which the agent is not made overt. The following example demonstrates that passivized clauses may exhibit an oblique agent noun phrase that is marked for the ergative case.

(510) *taltʃi buʃa tsukɕi ni / **gwak.*

<i>tal=tʃi</i>	<i>buʃa</i>	<i>tsuk-s-ɕ-dʒi</i>
3=ERG.PL	tree	plant-DETR-MID-CVB.SG

*ni / **gwak*

EX.NON1SG / **EX.NON1PL

“A tree has been planted by them.”

(TD 259.8 [elicited])

The noun *buʃa* “tree” clearly acts as the subject of the construction, as its number features are indexed on the existential copula. Accordingly, the pronoun *tal=tʃi* possesses the status of an oblique noun phrase. However, Bunan also possesses constructions that are structurally similar to the one given above and accordingly have the appearance of a passivized clause, but are clearly “active” in nature. Consider the following generic past tense construction (see § 15.3.3.2 for a description of the generic past tense).

(511) *gjapodzi talɛi pʰamɛi jendzi / **jentsʰok.*

gjapo=dzi tal=ɛi
king=ERG.SG 3=PL

*pʰam-s-ɛ-i=jendzi / **pʰam-s-ɛ-i=jentsʰok*
defeat-DETR-MID-ACT=EQ.DJ.SG / **defeat-DETR-MID-ACT=EQ.DJ.PL

“The king defeated them.”

(TD 259.5 [elicited])

Given the fact that the verb *pʰam-tɛ-um* “to defeat” occurs in a detransitivized form in (511) above, one might assume that the patient argument *tal=ɛi* “3=PL” acts as the subject of the construction, while the agent argument *gjapo=dzi* “king=ERG.SG” serves as an oblique noun phrase, resulting in the passive interpretation “They were defeated by the king”. However, this interpretation is at odds with the agreement pattern, as it is the singular number value of the noun *gjapo=dzi* “king=ERG.SG” that is indexed on the verb rather than the plural value of *tal=ɛi* “3=PL”. Accordingly, there is an obvious mismatch between the morphosyntactic structure (passive) and the semantic content (active) of the construction.

This mismatch must be the result of a functional reanalysis in the course of which the “relative topicality” of the two participants was shifted (cf. Givón [1984–1990] 2001, 2: 93–94). Originally, the construction given in (511) must have been a passive with an overt, topical patient (the defeated person) and a non-overt, non-topical agent (the defeating person). We may hypothesize that this construction started out as a “basic passive” (Keenan & Dryer 2007: 328–329), which could not contain a syntactically overt agent phrase. At some stage, this original constraint was loosened, and it became possible to add an agent argument that was marked with the ergative case. Subsequently, the agent argument was reanalyzed as the more topical participant of the construction and eventually replaced the patient argument as the subject of the construction. The syntactic and pragmatic dimensions of this reanalysis are summarized in the table below.

Table 70: Reanalysis of relative topicality in passive constructions

Stage	Patient		Agent	
	syntactic status	pragmatic status	syntactic status	pragmatic status
(1)	overt	primary topic	non-overt	secondary topic
(2)	overt	primary topic	overt	secondary topic
(3)	overt	secondary topic	overt	primary topic

The exemplary case of the generic past tense demonstrates that we may encounter the detransitivizing suffix in grammatical constructions in which it no longer serves a detransitivizing function. It is important to keep this fact in mind when analyzing periphrastic verbal constructions, which are very common in Bunan (see § 15.2.2.4 for an overview).

12.3.2.3 Reciprocalization

In combination with certain bivalent verbs, the detransitivizing suffix causes a decrease in transitivity by promoting the patient to the role of an agent without demoting the original agent. In the resulting event, the original agent still acts on the patient, but the patient simultaneously reacts upon the agent, making it ultimately impossible to distinguish the two core arguments. In such cases, the detransitivized verb form acquires a reciprocal construal. This effect is also attested in combination with trivalent verbs, where the agent argument and the recipient argument merge into one conceptual entity. Consider the following examples.

(512) *apadzi girok tantan dziŋtɕipajendzi.*

apa=dzi *gi=tok* *tantan*
 grandmother=ERG.SG 1SG=DAT sure

dziŋ-tɕ-i-pa=jendzi
 scold-TR-ACT-NZR=EQ.DJ.SG

“Grandmother will surely scold me.”

(TD 103.16 [elicited])

(513) *talʒi dziŋskʰak.*

tal=ʒi dziŋ-s-kʰak
3=PL scold-DETR-INTR-PRS.DJ.PL

“They are quarreling with each other.”

not: “**They are being scolded.”

(TD 168.16 [elicited])

(514) *... e lottʰare miʈʰaj du!*

e lot-tʰare miʈʰaj_{LN} da-ku-a
hey say-TR-PRS.DJ.SG sweet give-UND-IMP.SG

“... ‘Hey’, he told her, ‘Give me some sweets!’”

(Tshechu 2.53)

(515) *katʂa ni: memezɪ nwak loʂum.*

katʂa=ni: meme=ʒi nwak lot-s-ʂ-um=jen
story=TOP monk=PL so say-DETR-MID-INF=EQ.CJ

“As for the story, the monks tell it among themselves like that.”

not: “**As for the story, the monks are told about it like that.”

(The Fairies of Kullu 2.6)

Note that agent arguments of detransitivized bivalent verbs do not take ergative marking if the respective clause receives a reciprocal construal. In (513), the use of the corresponding ergative form *tal=tsʰi* “3=ERG.PL” would yield an ungrammatical utterance. Circumstances are different in the case of trivalent verbs. The use of an ergative-marked form *meme=tsʰi* “monk=ERG.PL” in (515) would not yield an ungrammatical sentence. However, the clause would no longer receive a reciprocal interpretation if the agent argument were marked for the dative case. Rather, the clause would be construed as exhibiting a backgrounded recipient argument. The phenomenon of recipient backgrounding is described in the following section.

12.3.2.4 *Experiencer and recipient backgrounding*

The fourth function of the detransitivizing suffix is the backgrounding of certain “goal-like” arguments. The notion of “backgrounding” has been adopted from Keenan and Dryer (2007: 325–326), who argue that passives simultaneously serve a foregrounding function (with regard to the more patient-like argument) and a backgrounding function (with regard to the more agent-like argument). In what follows, I first discuss background-

ing from the perspective of clause structure and only then address the pragmatic effects that are associated with the phenomenon.

In Bunan, experiencer backgrounding is commonly attested with experiencer verbs, i.e. verbs that take an experiencer argument in the dative and a stimulus argument in the absolutive (cf. § 16.5.2). The two examples given below illustrate the phenomenon of experiencer backgrounding based on the verb *kʰuk-tə-um* “to find”.

(516) *girok bas kʰuk-tə-ipajendzi.*

<i>gi=tok</i>	<i>bas_{LN}</i>	<i>kʰuk-tə-i-pa=jendzi</i>
1SG=DAT	bus	find-TR-ACT-NZR=EQ.DJ.SG

“I will find a bus.”

(TD 314.12 [elicited])

(517) *girok bas kʰuk-s-ə-ipajendzi.*

<i>gi=tok</i>	<i>bas_{LN}</i>	<i>kʰuk-s-ə-i-pa=jendzi</i>
1SG=DAT	bus	find-DETR-MID-ACT-NZR=EQ.DJ.SG

“I will find a bus.”

(TD 314.13 [elicited])

In (516), the verb *kʰuk-tə-um* takes transitive conjugational morphology, whereas in (517), the same verb occurs in its detransitivized form and takes middle conjugational morphology. However, despite the presence of the detransitivizing suffix in (517), the sentence does not display any additional features that are commonly associated with detransitivized clauses. First, the experiencer argument is not suppressed or demoted to the status of an oblique argument. Accordingly, there is no evidence for a decrease in valency at the syntactic level. Second, there is no substantial difference in meaning between the two clauses. My consultants stated that the clause in (517) and the clause in (516) have the same meaning and consistently rejected the passive interpretation of (517) as “The bus will be found by me”. Thus, there is no evidence for a valency-decreasing effect at the semantic level either.

Experiencer clauses are not the only type of clauses that can be detransitivized without displaying syntactic or semantic traits that are commonly associated with valency-decreasing operations. The same kind of “ineffective detransitivization” is encountered in combination with trivalent verbs. In the following, I refer to this phenomenon as “recipient backgrounding” in order to distinguish it from the related phenomenon of experiencer backgrounding described above. The process of recipient backgrounding is exemplified in the two sentences given below.

(518) *anedzi girok dzamen datɕipajendzi la?*

<i>ane=dzi</i>	<i>gi=tok</i>	<i>dzamen</i>
paternal.aunt=ERG.SG	1SG=DAT	food

da-tɕ-i-pa=jendzi=la

give-TR-ACT-NZR=EQ.DJ.SG=Q

“Will auntie give me food?”

(TD 327.36 [elicited])

(519) *anedzi girok dzamen dasipajendzi la?*

<i>ane=dzi</i>	<i>gi=tok</i>	<i>dzamen</i>
paternal.aunt=ERG.SG	1SG=DAT	food

da-s-ɕ-i-pa=jendzi=la

give-DETR-MID-ACT-NZR=EQ.DJ.SG=Q

“Will auntie give me food?”

(TD 327.35 [elicited])

Again, there is no evidence for a valency-decreasing effect in (519), neither on the level of syntax, nor on the level of semantics. According to my consultants, both sentences essentially have the same meaning. This suggests that experiencer and recipient backgrounding do not alter the semantic content or syntactic valence of a predicate. Rather, the process appears to be a “pragmatic voice” phenomenon (cf. Klaiman 1991: 31–35; Givón 2001, 2: 92). In other words, the detransitivizing morphology merely displays the pragmatic effects that are commonly associated with detransitivization, but does not alter the structure of the relevant clause.⁷⁸

This conjecture leads us to the question of which are the pragmatic contexts that trigger experiencer and recipient backgrounding. In the following, I argue that backgrounding is tied to the notion of “pragmatic salience”, a term coined by Klaiman (1991: 33), who defines pragmatic salience as “the relative importance or prominence of nominal referents in the information structure* of the discourse”. More specifically, I argue that backgrounding indicates a low degree of pragmatic salience on behalf of experiencer and recipient arguments.

⁷⁸ Admittedly, Bunan possesses one periphrastic construction in which experiencer backgrounding has a direct bearing on the clause structure by triggering the commutation of the “subject role” and the “object role”. However, this construction is not discussed at this point, as the phenomenon is described in § 17.4.2 in the context of grammatical relations.

In Bunan, experiencer / recipient arguments commonly display a low degree of pragmatic salience whenever they do not play a pragmatically prominent role in the relevant discourse context. My data suggest that experiencer / recipient arguments assume a pragmatically non-prominent position when they do not serve as the primary topic or the focus of the relevant clause (see § 16.2.2.1 and § 16.2.2.2 for a discussion of the terms “topic” and “focus”, respectively) and when their identity is irrelevant, recoverable, or predictable (see Givón 2001, 2: 125–126 for a more elaborate discussion of pragmatic non-prominence). Needless to say, the low pragmatic salience of experiencer / recipient arguments is directly linked to the high pragmatic salience of other arguments in the same clause. Whenever an experiencer / recipient argument in a clause is portrayed as being less important, other arguments in the same clause are bound to figure more prominently. This is in line with Keenan and Dryer’s (2007: 325–326) observation that passives simultaneously serve a foregrounding and a backgrounding function.

The pragmatic effect of backgrounding is illustrated by the following example sentences. The relevant sentences have been taken from a recording in which the wife of my main consultant told me about what life in Lahaul was like when she was a young girl.

(520) *qawa nwa:stok eraŋzok miṯʰa:j dzare tsutsuna datɕum. tɕa:r a:na: a:ṯʰ a:na: taŋka nwak datɕum.*

<i>qawa</i>	<i>nwa:stok</i>	<i>eraŋ=ɕi=tok</i>	<i>miṯʰa:j_{LN}</i>	<i>dza-de</i>	
money	at.that.time	1PL.INCL=PL=DAT	sweet	eat-SUP	
<i>tsutsuna</i>	<i>da-tɕ-um=jen</i>	<i>tɕa:r_{LN}</i>	<i>a:na:_{LN}</i>	<i>a:ṯʰ_{LN}</i>	<i>a:na:_{LN}</i>
very.little	give-TR-INF=EQ.CJ	four	ānā	eight	ānā
<i>taŋka</i>	<i>nwak</i>	<i>da-tɕ-um=jen</i>			
money	so	give-TR-INF=EQ.CJ			

“In those days, (our parents) used to give us very little money to buy sweets. They used to give us amounts of four *ānā* or eight *ānā*.”

(Tshechu 2.32)

(521) *qawa tɕunji tɕunji daɕum.*

<i>qawa</i>	<i>tɕunji</i>	<i>tɕunji</i>	<i>da-s-ɕ-um=jen</i>
money	litte	little	give-DETR-MID-INF=EQ.CJ

“They would give us very little money.”

(Tshechu 2.36)

The two examples contain instances of the generic present tense of the verb *da-tɕ-um* “to give”. In (520), the verb occurs twice in its transitive form (*da-tɕ-um=jen*), whereas in (521), the same verb occurs once in its detransitivized form (*da-s-ɕ-um=jen*). The use of a transitive and a detransitivized form in quick succession can be explained as a consequence of a change with regard to the pragmatic salience of the first person recipient argument.

When the first person plural inclusive pronoun *eraŋ=ɕi=tok* occurred in the utterance given in (520), the pronoun was not yet a part of the common conversational ground of the speaker and the addressee. In the one and a half minutes that had passed since the beginning of the recording, the speaker had never made reference to herself. Accordingly, the speaker was not an established referent at that point. However, in the utterance given in (521), which followed ten seconds after the utterance given in (520), the speaker represented an established and clearly identifiable referent. At the same time, the speaker did not represent a topical or focal referent in the relevant discourse context. This is indicated by the fact that the speaker did no longer overtly mention the first person pronoun *eraŋ*. Accordingly, the two example sentences given above substantiate the claim that backgrounding is related to the pragmatic salience of a given referent.

Experiencer and recipient arguments are much more likely to be backgrounded if they make reference to speech-act participants, viz. the speaker or the addressee. Originally, I thus assumed that backgrounding might be tied to the notion of the “epistemic source” (cf. § 13.2.2 for a discussion of this term). Consider the following examples, which were uttered in natural discourse.

(522) *ŋaro nindza. ea astok soj tsʰorsa ka.*

<i>ŋaro</i>	<i>nindza</i>	<i>el-ka=astok</i>	<i>soj</i>
morning	EX.PST.SG	go-PROG.SG=TERM	cold
<i>tsʰor-s-ɕ-dza</i>		<i>ka</i>	
feel-DETR-MID-PST.DIR.DJ.SG		ASS	

“It was morning. While going (to the field), I felt cold.”

(Conversation 44.4)

(523) *bas kʰuksala ma sidda?*

<i>bas_{LN}</i>	<i>kʰuk-s-ɛ-dza=la</i>	<i>ma</i>	<i>sidda_{LN}</i>
bus	find-DETR-MID-PST.DIR.DJ.SG	CNS	direct

“So you found a bus, (one that went) straight (to Dharamsala), right?”
(Conversation 48.7)

(524) ... *tʰadzu maŋitsuk madzakʰak mizi ka maraj tsʰortɕʰak.*

<i>tʰadzu</i>	<i>maŋi=tsuk</i>	<i>ma-dza-k-ʰak</i>	<i>mi=ɕi</i>	<i>ka</i>
that	red=REL	NEG-eat-INTR-PRS.DJ.PL	person=PL	ASS
<i>maraj</i>	<i>tsʰor-tɕ-ʰak</i>			
bad	feel-TR-PRS.DJ.PL			

“... people do not eat that red stuff (because) they feel bad (if they do).”
(Tshechu 2.444)

In the examples above, we find the detransitivized verb forms *tsʰor-s-ɛ-dza* “feel-DETR-MID-PST.DIR.DJ.SG” and *kʰuk-s-ɛ-dza* “find-DETR-MID-PST.DIR.DJ.SG” in combination with first and second person experiencer arguments, respectively, while the fully transitive form *tsʰor-tɕ-ʰak* “feel-TR-PRS.DJ.PL” occurs with a third person experiencer argument. This bias towards speech-act participants can be explained as a consequence of the “pragmatic accessibility” of the speaker and the addressee. Speech-act participants are usually clearly identifiable in any given discourse context. Accordingly, experiencer and recipient arguments that refer to speech-act participants are likely to be backgrounded if they do not play a pragmatically prominent role in a given event. This should not be taken to mean, however, that arguments with third person reference are generally excluded from backgrounding. Third person arguments can be backgrounded, as the following sentence demonstrates.

(525) *talɕ dzamen kʰotɕitsuk diɕ maskjanaŋ epo matsʰorɕak.*

<i>tal=ɕi=tok</i>	<i>dzamen</i>	<i>kʰotɕi=tsuk</i>	<i>diɕ_{LN}</i>	<i>ma-(s)kja=naŋ</i>
3=PL=DAT	food	after=REL	dish	NEG-become=COND
<i>epo</i>	<i>ma-tsʰor-s-ɛ-ʰak</i>			
well	NEG-feel-DETR-MID-PRS.DJ.PL			

“If they (i.e. people from Europe) do not get a dessert, they do not feel well.”
(Conversation 36.13)

The use of a detransitivized verb in (525) can again be explained as a consequence of the low pragmatic salience of the relevant experiencer argument. Before utter-

ing the sentence given in (525), my main consultant had invited me to take two or three slices of the apples that we were having for dessert. As I had only taken a single slice, he subsequently accused me of *dzaŋdzaŋ*, i.e. the insincere refusal of food and drinks in order to be polite. He then uttered the sentence given in (525) and explained to his nephew that European people liked to have a sweet dish after lunch. The use of a detransitivized verb form in this utterance is a consequence of the fact that the third person pronoun referred to an established and recoverable referent. After all, the pronoun referred to the group of European people, a group that also included me, who had been addressed several seconds earlier.

Experiencer and recipient backgrounding can have a strong logophoric effect in reported speech constructions. Consider the following sentence.

(526) *qolmadzi riŋgare dordʒedzi taldok qawa daʒare.*

<i>qolma=dzi</i>	<i>riŋ-k-are</i>	<i>dordʒe=dzi</i>	<i>tal=tok</i>
Drolma=ERG.SG	say-INTR-PRS.DJ.SG	Dorje=ERG.SG	3[SG]=DAT
<i>qawa</i>	<i>da-s-ʒ-are</i>		
money	give-DETR-MID-PRS.DJ.SG		

“Drolma_i says that Dorje gives her_i / [?]her_j / [?]him_j money.”

(TD 327.36 [elicited])

When asking my consultants whom the third person pronoun *tal=tok* in the embedded clause referred to, they all told me that it could only refer to the subject of the matrix clause (i.e. Drolma), but not to any other person. Initially, I interpreted this as evidence for the fact that backgrounding is tied to the notion of the “epistemic source” (see § 13.2.2 for a discussion of the term). However, as I analyzed the phenomenon in more detail, I became convinced that the logophoricity effect in (526) is not a consequence of an epistemic constraint that limits backgrounding to contexts in which the experiencer or recipient argument is coreferent with the epistemic source. Rather, the logophoric effect seems to be an epiphenomenon of the recoverability of the matrix subject in the context of elicitation. In other words, the pronoun *tal=tok* could also refer to a person different from the matrix subject if this person happened to be an established referent. However, as the elicited sentence in (526) was devoid of pragmatic context, my consultant automatically chose the most established referent as the antecedent of the backgrounded recipient argument, and this participant was the matrix subject.

This illustrates that it is extremely difficult to describe experiencer and recipient backgrounding based on elicited data. The phenomenon can only be properly investigated on the basis of a large corpus of data from natural discourse. My personal corpus is suffi-

ciently large to provide a basic account of the phenomenon and to formulate hypotheses that describe the distribution of backgrounded arguments. However, the corpus is not comprehensive enough to analyze the distribution of backgrounded arguments in a statistically rigid manner. Accordingly, the analysis presented here should only be regarded as preliminary. Further research is needed to provide a more detailed account of the phenomenon and its possible pragmatic effects in different discourse situations.

12.3.2.5 *Factors governing the construal of detransitivized verb forms*

In the preceding sections, we have discussed the four major functions of the detransitivizing suffix and analyzed the various ways in which the morpheme may affect the transitivity of a given verb stem. Given the fact that the suffix is functionally versatile, we have to ask the question of which factors govern the semantic interpretation of a given detransitivized verb form as anticausative, passive, etc. In the following, I argue that the meaning of detransitivized verb forms essentially depends on three different factors: (1) the meaning of the underlying verb stem, (2) the grammatical construction in which the detransitivized form occurs, and (3) the pragmatic context of the utterance.

The importance of the underlying verb stem for the semantic interpretation of a given detransitivized verb form is illustrated by the following examples. Note that examples (528) and (529) have already been discussed above, but are again listed here to spare the reader the necessity of switching between different pages.

(527) *gi ɛenɛi na:*.

<i>gi</i>	<i>ɛen-s-ɛ-dʒi</i>	<i>na:</i>
1SG	raise-DETR-MID-CVB.SG	EX.1SG

“I am awake / I have woken up.”

not: “**I have been woken up.”

(TD 78.4 [elicited])

(528) *haʔi alɛi ni:*.

<i>haʔi_{LN}</i>	<i>al-s-ɛ-dʒi</i>	<i>ni:</i>
shop	open-DETR-MID-CVB.SG	EX.NON1SG

“The shop is open.”

or: “The shop has been opened.” (lit. “Having been opened, the shop is there.”)

(Conversation 36.62)

(529) *taldok dzotde daɕi ni:*

<i>tal=tok</i>	<i>dzot-de</i>	<i>da-s-ɕ-dzi</i>	<i>ni:</i>
3[SG]=DAT	stay-SUP	give-INTR-MID-CVB.SG	EX.NON1SG

“He has been allowed to stay.” (lit. “Having been allowed to stay, he is here.”)

not: “**He is allowed to stay.”

(ST unrec 4)

The example sentences given above all contain resultative forms, which are based on the construction *V-DETR-MID-CVB.SG + EX-*. The exact meaning of the resultative is not described here (see § 15.3.4.1 for a discussion of resultative constructions). The crucial point is that the detransitivizing suffix does not affect the argument structure of the three verb stems in the same way. According to my consultants, the resultative form of the verb stem *ɕen-* “to raise, to wake up (tr.)” in example (527) can only ever refer to a spontaneous awakening. A passive interpretation (“I have been woken up.”) is not possible. In the case of example (528), the meaning of the construction is more flexible, as the resultant state can either be conceptualized as the result of a dynamic process that was instigated by a non-overt agent (“The shop has been opened (by the owner).”) or a state that does not involve an agent (“The shop is open.”). In other words, both a passive and an anticausative reading are possible here. Example (529), finally, can only be construed as a passive. My consultants all agreed on the fact that this sentence entails the presence of an agent (i.e. the person who allowed the boy to stay), even though this agent is not overtly mentioned.

This demonstrates that the semantic interpretation of a detransitivized verb form as anticausative or passive essentially depends on the meaning of the detransitivized verb stem. In some cases, the resulting form can both have anticausative or passive meaning, with the exact interpretation depending on the grammatical and the pragmatic context (see below). In other cases, only one interpretation is possible. Accordingly, the anticausative domain and the passive domain should not be considered as clearly distinct categories. Rather, the two domains must be viewed as subdomains of a functional continuum.

The same is true for the relationship between the passive domain and the reciprocal domain. Consider the examples given below.

(530) *katɕa ni: meme=ɕi nwak lot-s-ɕ-um=jen*.

katɕa=ni: meme=ɕi nwak lot-s-ɕ-um=jen
 story=TOP monk=PL so say-DETR-MID-INF=EQ.CJ

“As for the story, the monks tell it among themselves like that.”

not: “**As for the story, the monks are told about it like that.”

(The Fairies of Kullu 2.6)

(531) ... *kʰandɔmazi dzotmen lot-s-ɕ-um=jen*.

kʰandɔma=ɕi dzot-men=jen lot-s-ɕ-um=jen
 fairy=PL stay-INF=EQ.CJ say-DETR-MID-INF=EQ.CJ

“... fairies live (in the high mountains), it is said.”

or: “Fairies live (in the high mountains), (people) tell each other.”

(The Fairies of Kullu 1.1)

(532) *negi lama lot-s-ɕ-i=tsuk*.

negi lama lot-s-ɕ-i=tsuk
 Negi Lama say-DETR-MID-ACT=REL

“The one who is called ‘Negi Lama’.”

not: “**The ones who say ‘Negi Lama’ to each other.”

(Tshechu 2.152)

In (530), the verb form *lot-s-ɕ-um=jen* possesses the overt agent *meme=ɕi* “monk=PL”. Accordingly, the verb receives a reciprocal interpretation and is translated as “(The monks) tell amongst themselves ...”. In example (531), the same verb form occurs without an overt agent argument. Hence, the verb form is ambiguous. According to my consultants, it can either be translated as “it is said” (with a suppressed agent argument, a suppressed recipient argument, and a promoted theme argument) or “people tell each other” (with a promoted recipient argument). In example (532), finally, the relativized verb form *lot-s-ɕ-i=tsuk* “say-DETR-MID-ACT=REL” can only refer to the person who goes under the name “Negi Lama” but not to several persons who call each other by that name. The latter semantic interpretation is ruled out by the pragmatic context, as it is highly unlikely that several people would call each other by one and the same name. These examples illustrate that the passive domain and the reciprocal domain cannot be clearly distinguished from each other. Some forms may be interpreted as passives or reciprocals, whereas others can only be construed in one way.

Based on the valency-decreasing effect that the detransitivizing suffix may have on a given verb root, it is possible to distinguish between five different verb classes. The five different classes are summarized in the table below.

Table 71: Possible effects of the detransitivizing suffix on verbs

Class	Example	Anticausative	Passive	Reciprocal
(1)	<i>ʒen-tə-um</i> “to raise”	✓	-	-
(2)	<i>al-tə-um</i> “to open”	✓	✓	-
(3)	<i>lik-tə-um</i> “to make, to do”	-	✓	-
(4)	<i>lot-tə-um</i> “to say”	-	✓	✓
(5)	<i>dziŋ-tə-um</i> “to scold”	-	-	✓

Let us now turn to factor (2), the importance of the grammatical construction for the interpretation of a detransitivized verb form. The reader may have noticed that the examples discussed above do not contain an instance of a morphologically simple (i.e. non-periphrastic) verb form⁷⁹ with a passive interpretation. This is no coincidence. In my database, there is not a single example of a morphologically simple verb form that receives a passive interpretation. Rather, these forms receive an anticausative or a reciprocal construal. This suggests that a detransitivized verb can only receive a passive interpretation if it occurs in a periphrastic construction consisting of a detransitivized non-finite form (e.g. a converb form or an infinitive form) and a copula. As a consequence, periphrastic constructions are the only constructions in which verb forms may be ambiguous with regard to the transitivity-decreasing effect of the detransitivizing suffix.

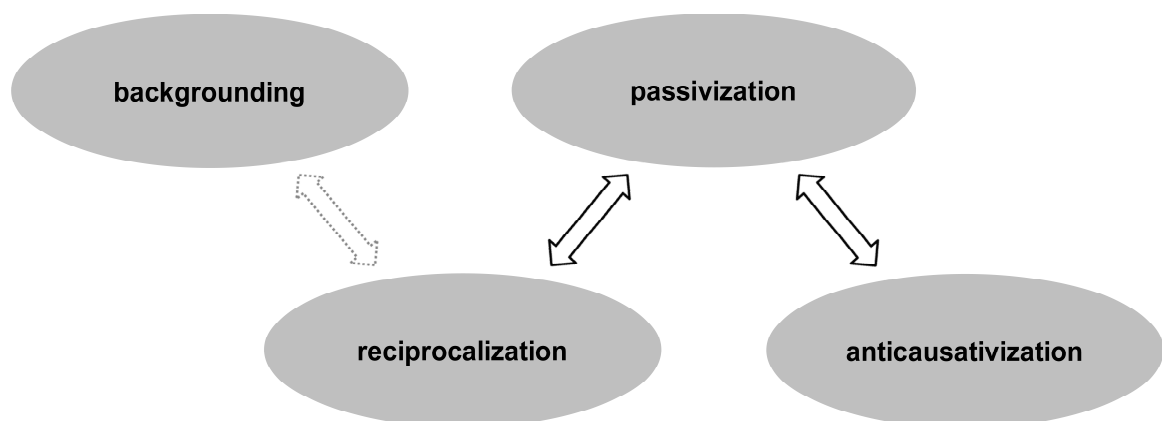
This brings us to factor (3), that is to say, the role that the pragmatic context plays in the interpretation of detransitivized verb forms. The importance of the pragmatic context is obvious in the case of examples (528) and (531) given above. The interpretation of these forms is essentially based on the pragmatic context, i.e. the common conversational ground shared by the speaker and the addressee. Needless to say, the exact interpretation may at times be irrelevant for the overall semantic content of the proposition. When

⁷⁹ See § 15.1 for a discussion of the dichotomy of “simple verb forms” and “periphrastic verb forms”.

uttering example (528), the speaker and the addressee do most probably not bother about the question whether the agent is syntactically suppressed or semantically deleted. The speaker primarily wishes to convey the information that the shop in question is open, which entails that the patient argument of the bivalent verb *al-tə-um* “to open” be topicalized. The degree of pragmatic salience that the agent argument retains is of little importance in this context.

Figure 38 below depicts the four functional domains that are associated with the detransitivizing suffix. The two-headed arrows indicate the gradual functional continuum between passives and anticausatives on the one hand and between passive and reciprocals on the other. As Figure 38 illustrates, the functional domains of anticausativization and reciprocalization are conceptually separated from each other. I have not been able to find a single detransitivized verb form that could receive both an anticausative and a reciprocal interpretation. However, the mutual exclusiveness of the two domains seems sensible, as they evoke two types of event conceptualization that are not compatible. An anticausative construal demands that the agent be entirely deleted, whereas a reciprocal construal requires that the agent remain salient, but conceptually merge with the patient. The phenomenon of experiencer / recipient backgrounding only represents a marginal member of this functional continuum, as it is merely in combination with the trivalent verb *lot-tə-um* that the detransitivizing suffix may either denote a reciprocal event (“People tell each other that ...”) or an event that includes a backgrounded recipient argument (“They have told me that ...”).

Figure 38: Functional domains associated with the detransitivizing suffix



12.3.2.6 Concluding remarks

The four transitivity-decreasing effects of the detransitivizing suffix that have been discussed in the previous sections are summarized in the table below.

Table 72: Possible effects of the detransitivizing suffix on valence and transitivity

	Detransitivizing effect	Effect on core arguments
(1)	Anticausativization	agent > deleted patient > single argument
(2)	Passivization	agent > suppressed patient > single argument
(3)	Reciprocalization	agent + patient > derived agent agent + recipient > derived agent
(4)	Experiencer / recipient backgrounding	(commutation of subject and object)

In the light of the various functions that the detransitivizing suffix may fulfill, the question arises whether it is possible to interrelate these effects. In this context, it is helpful to consider the conceptual foundation of transitivity. According to Givón ([1984–1990] 2001, 1: 109–110; *italics original*), the “prototype transitive event” involves a “deliberate, active *agent*”, a “concrete, affected *patient*”, and a “bounded, terminated, fast changing *event* in real time”. Næss (2007: 44) gives a slightly different definition and claims that prototypical transitivity is founded on the maximal distinguishability of the two participants of a transitive event based on the notions of “volitionality”, “instigation”, and “affectedness”. Based on these semantic parameters, the prototypical transitive agent is defined as the entity that willfully instigates a process, but is not affected by it. The prototypical transitive patient, on the other hand, is characterized as the entity that is affected by a process, but is not associated with its instigation.

In the framework of Givón and Næss’ definitions, the detransitivizing suffix can be interpreted as a morphosyntactic marker that indicates a deviation from the prototypical transitive event. In the case of anticausativization and passivization, the morpheme causes the deletion and suppression of the willful instigator, respectively. In the case of reciprocalization, the patient is promoted to the rank of an agent, thus portraying both participants as willful instigators and affected entities at the same time. In the case of experiencer backgrounding, the detransitivizing effect is restricted to the level of pragmatics, where the relative prominence of arguments is inverted.

While these generalizations capture the conceptual links between the various valency-decreasing effects that the detransitivizing morpheme may have on bivalent verbs, they cannot be automatically applied to trivalent verbs, as trivalent predicates invoke a more complex scenario that involves three core arguments: an agent argument, a theme argument, and a recipient / source argument. Still, the detransitivizing morpheme seems to have similar effects on trivalent verbs. In some cases, the morpheme triggers the suppression of the agent argument, whereas it causes the promotion of the recipient argument in the rank of an agent argument in others contexts. In addition, the morpheme may signal the backgrounding of the recipient argument. Note that there are no instances of detransitivized trivalent verbs with an anticausative construal in my database.

12.3.3 The verbalizing suffix *-t*

The verbalizing suffix *-t* derives verb stems from nominal roots. In Bunan, the suffix is comparatively rare, which implies that it is no longer productive. The following table gives an overview of some verbs stems that appear to have been derived from nominal roots.

Nouns exhibiting the verbalizing suffix *-t*

<i>am-t-ə-um</i>	“to walk, to wander”	<	<i>am</i>	“path, way”
<i>ken-t-men</i>	“to give birth (of animals)”	<	<i>ken</i>	“birth (of animals)”
<i>kur-t-men</i>	“to carry”	<	<i>kur</i>	“load”
<i>len-t-men</i>	“to work”	<	<i>len</i>	“work”
<i>sur-t-men</i>	“to weed”	<	<i>sur</i>	“weed”

As the examples above illustrate, the derived verb stems can both be bivalent and monovalent. The semantic relation between the underlying noun and the derived verb stem is flexible. In some cases, the nominal root refers to an entity that is in some way associated with the respective activity, e.g. *kur-t-men* “to carry” < *kur* “load”, *am-t-ə-um* “to walk, to wander” < *am* “way, path”. In other cases, the underlying noun refers to the event that is denoted by the verb, e.g. *ken-t-men* “to give birth (of animals), to drop” < *ken* “birth”, *len-t-men* “to work” < *len* “work”. Note that all verb stems that are derived by means of the verbalizing suffix belong to the intransitive or middle conjugation, although some of them are obviously bivalent. So far, I have not been able to identify a single verb stem in the transitive conjugation that is derived from a noun. It is not clear whether this reflects a general constraint or is due to coincidence.

The derived verb stems listed above may give the impression that the identification and description of the verbalizing suffix is unproblematic. However, matters are rather complicated for several reasons. First, the verbalizing suffix is homophonous with another derivational morpheme whose original function is unclear (see the following section). Both

morphemes occur in the same morphological slot and are thus often difficult to tell apart. Second, the verbalizing suffix is only clearly recognizable as a derivational morpheme if it attaches to a verb root that ends in a plosive *C* or a non-vocalic resonant *R*, as this gives rise to syllable final clusters of the types *Ct* and *Rt*, respectively, which can be identified as the result of derivational processes (see § 3.2.2.4 for the morphophonological processes that lead to the simplification of such clusters). However, if the suffix attaches to a root ending in an open syllable, it is not possible to decide whether the syllable final plosive is an etymological part of the root or a derivational morpheme. This leads us to the third problem. It is of course still possible to recognize the verbalizing suffix if it attaches to a nominal root with a final vowel. As long as we know the underlying noun, the phonological similarity and the semantic affiliation between the noun and verb will make their etymological relation obvious. However, this approach presupposes that the underlying nominal root is attested as an independent noun in contemporary Bunan, but this is not always the case.

Verbs that illustrate the problems mentioned above are *mun-t-men* “to faint”, *ti-t-men* “to irrigate” and *mur-t-men* “to snore”. These verb forms all appear to have been derived from nominal roots that do no longer occur as autonomous nouns. The status of the syllable final *-t* in these predicates can, however, still be determined by internal reconstruction. In the case of *mun-t-men* “to faint” and *ti-t-men* “to irrigate”, the underlying nominal roots can still be found in the compounds *munḍak* “darkness” (cf. WT *mun* “darkness”) and *soti* “(cold) water” (< **so-* “cold” + **ti* “water”), respectively. In the case of the verb *mur-t-men* “to snore”, on the other hand, the underlying noun is attested as a nominal constituent in the complex predicate *mur mur-s-ḡ-um* “to grumble”.

Nouns exhibiting the verbalizing suffix *-t* (reconstructed cases)

<i>mun-t-men</i>	“to faint”	< <i>*mun</i>	“darkness” cf. <i>munḍak</i> “darkness”
<i>mur-t-men</i>	“to snore”	< <i>*mur</i>	“snoring, grumbling noise” cf. <i>mur mur-s-ḡ-um</i> “to grumble”
<i>ti-t-men</i>	“to irrigate”	< <i>*ti</i>	“water” cf. <i>soti</i> “(cold) water” < <i>*so-</i> “cold” + <i>*ti</i> “water”

The verbalizing suffix is only rarely attested in my data. The eight verb stems discussed in this section represent the only putative instances of the derivational suffix. The rare occurrence of the morpheme suggests that it is no longer productive in Bunan. In any case, I have not found a single verb stem that appears to be a recent derivation. As there

is reason to believe that the verbalizing suffix is no longer productive, I do not analyze it as a separate morphological constituent in interlinear glosses, unless it is important to emphasize the status of the segment *-t* as an originally independent morpheme. In such cases, the morpheme is glossed as “VRB” (for “verbalizing”).

12.3.4 The functionally opaque suffix *-t*

Besides the verbalizing suffix, there is another derivational morpheme with the phonological shape *-t*. It most commonly occurs on monovalent verb roots that denote a change of state on behalf of their single core argument. This change of state may either be specific and involve a change in physical condition or location (e.g. *dak-t-ɛ-um* “to break”, *bran-t-ɛ-um* “to fall”) or it may be more abstract and relate to a change of an inherent property or a mental state (e.g. *min-t-men* “to ripen”, *ɛi-t-ɛ-um* “to die”). However, as we will see below, this characterization does not capture all the syntactic and semantic contexts in which the suffix is attested.

Like the verbalizing suffix, the functionally opaque suffix *-t* poses a challenge to synchronic description. The analysis of the morpheme is problematic in two ways: First, it is not always possible to recognize the suffix as an independent morphological component of a verb stem. The segment is only clearly identifiable when it attaches to a verb root that ends in a consonant, as this gives rise to a syllable final consonant cluster of the type *Ct* or *Rt*, which can only emerge as the result of derivational processes (see § 3.2.2.4 for the morphophonological simplification of such clusters). If the morpheme attaches to a verb root that ends in a vowel, it may be difficult to determine whether the syllable final */t/* represents an etymological part of the root or an additional derivational element.

In rare cases, we are able to clarify the etymological status of a syllable final */t/* based on comparisons with lexemes that are derived from the same root. The verb *kʰjo-t-men* “to become dry”, for example, is clearly etymologically related to the adjective *kʰjo-i* “dry-MOD”. As the adjective does not exhibit an alveo-dental plosive in its syllable coda, we may infer that the syllable final segment of the verb stem is a derivational suffix. Unfortunately, the lexicon of Bunan rarely provides us with this kind of etymological evidence. In case of the verbs *ʃe-t-men* “to laugh” and *ɛi-t-ɛ-um* “to die”, for example, we do not have any language-internal evidence that indicates that the syllable final */t/* in those verb forms is a derivational suffix. This is only revealed by a comparison with the Proto-Tibeto-Burman roots **r(y)ay* ~ **r(y)a* “to laugh” (Matisoff 2003: 612) and **səy* “to die” (Matisoff 2003: 647). However, in most cases, it is not possible to compare Bunan lexemes to a reconstructed proto-form. Of course, we could still try to find cognate forms in other Tibeto-Burman languages, but this is a difficult and time-consuming task that lies beyond the scope of this study.

The second problem is the opaque function of the morpheme. As noted above, the suffix mainly occurs on monovalent predicates that denote a change of state on behalf of their single core argument. However, this characterization does not account for the meaning of all verbs on in which the suffix is attested. The two lists below give an overview of all instances of the derivational suffix in the intransitive and middle conjugation. Note that the suffix does not appear to be compatible with the transitive conjugation. This is illustrated by verb pairs such as *bon-t-ε-um* “to become twisted” vs. *pʰon-tε-um* “to twist” and *kʰjo-t-men* “to dry (intr.)” vs. *kʰjo-tε-um* “to dry (tr.)”. In the case of these verb pairs, the derivational suffix is only attested on the intransitive verb stems but not on the etymologically related transitive verb stems.

The following lists give an overview of all verb stems that exhibit the functionally opaque suffix *-t*. Some of these verbs may originally have been borrowed from Tibetan. Possible etymological sources are given in the right column.

The opaque suffix *-t* on monovalent verbs (intransitive conjugation)

<i>ben-t-men</i>	“to become spilled”		
<i>dir-t-men</i>	“to thunder”	WT <i>ldir</i>	“to roar, to thunder”
<i>dol-t-men</i>	“to be pierced”	WT <i>rdol</i>	“to have a hole”
<i>dzer-t-men</i>	“to rise (of the sun)”		
<i>dzul-t-men</i>	“to bark”		
<i>gal-t-men</i>	“to lie down”		
<i>gjur-t-men</i>	“to change”	WT <i>gyur</i>	“to become”
<i>gor-t-men</i>	“to run late”	WT <i>gor</i>	“to be late”
<i>grel-t-men</i>	“to run”		
<i>jol-t-men</i>	“to fade”	WT <i>yol</i>	“to be past”
<i>kʰar-t-men</i>	“to get stuck”	WT <i>ʼkhar</i>	“to get stuck”
<i>kʰjo-t-men</i>	“to dry”		
<i>mer-t-men</i>	“to become bright”		
<i>min-t-men</i>	“to ripen”	WT <i>smin</i>	“to ripen”
<i>nor-t-men</i>	“to become confounded”	WT <i>nor</i>	“to make a mistake”
		WT <i>nor</i>	“mistake”
<i>puŋ-t-men</i>	“to grow”		
<i>rul-t-men</i>	“to rot”	WT <i>rul</i>	“to rot”
<i>se-t-men</i>	“to laugh”	PTB <i>*r(y)a</i>	“to laugh”
<i>son-t-men</i>	“to live”	WT <i>gson</i>	“to be alive”
<i>tar-t-men</i>	“to be free”		
<i>tur-t-men</i>	“to shake, to tremble”		
<i>tʰun-t-men</i>	“to agree”	WT <i>mthun</i>	“to agree”

war-t-men “to belch”

The opaque suffix *-t* on monovalent verbs (middle conjugation)

<i>bam-t-ε-um</i>	“to become insane”	WT <i>bam</i>	“to be rotten” ⁸⁰
<i>bar-t-ε-um</i>	“to come undone”		
<i>ben-t-ε-um</i>	“to become spilled”		
<i>bjar-t-ε-um</i>	“to be attached”	WT <i>byar</i>	“to stick to”
<i>bon-t-ε-um</i>	“to become twisted”		
<i>bran-t-ε-um</i>	“to fall over”		
<i>brek-t-ε-um</i>	“to slide, to slip”		
<i>εi-t-ε-um</i>	“to die”	PTB <i>*səy</i>	“to die”
<i>dak-t-ε-um</i>	“to break”		
<i>dip-t-ε-um</i>	“to collapse (of roofs)”	WT <i>rdib</i>	“to break down”
<i>dʒik-t-ε-um</i>	“to collapse (of walls)”	WT <i>ʒig</i>	“to fall to pieces”
<i>dʒwal-t-ε-um</i>	“to break off”		
<i>gʒul-t-ε-um</i>	“to come off, to fall out”		
<i>ip-t-ε-um</i>	“to sleep”		
<i>tuk-t-ε-um</i>	“to drip”		

The functionally opaque suffix *-t* on bivalent verbs

<i>kel-t-men</i>	“to carry”	WT <i>skyel</i>	“to carry”
<i>pan-t-men</i>	“to spin”		
<i>ran-t-men</i>	“to weave”	WT (s) <i>bran</i>	“to set up the warps”
<i>nil-t-ε-um</i>	“to chew the cud”		
<i>ʃun-t-ε-um</i>	“to guard”	WT <i>srung</i>	“to guard, to wait”
<i>ʃun-t-men</i> ⁸¹	“to wait”	WT <i>srung</i>	“to guard, to wait”
<i>tan-t-men</i>	“to see”		

As the lists given above illustrate, the derivational suffix does not only occur on monovalent predicates that denote a change of state. Rather, the morpheme is also attested on monovalent verbs that denote punctual events that do not change the physical condition or mental state of the core argument (e.g. *dzul-t-men* “to bark”, *war-t-men* “to belch”) and on monovalent verbs that refer to durative events (e.g. *son-t-men* “to be alive”, *grel-t-men* “to run”). Moreover, the suffix occurs on a small number of bivalent verbs (e.g. *tan-t-men* “to see”, *ʃun-t-ε-um* “to wait”).

⁸⁰ The Bunan verb *bam-* must have been borrowed from a Tibetan variety spoken in Ladakh. In these dialects, the original meaning of WT *bam* (“to be rotten”) has been shifted to “to get intoxicated, to get into trance, to be out of one’s mind”.

⁸¹ cf. Byangsi *hrinfi* “to guard, to watch” vs. *hrinci* “to wait for” (Sharma 2001b: 322).

Accordingly, the functionally opaque suffix *-t* is attested on verb stems that strongly differ in terms of syntactic valence, lexical aspect, and semantic content. The question thus arises whether we are confronted with the analysis of only one suffix or whether the verb stems listed above bear witness to more than one derivational morpheme. This question is extremely difficult to answer. It seems safe to assume that the verbs listed above do not contain the verbalizing suffix *-t* (see § 12.3.3 above). This assumption is based on two observations: First, none of the roots that underlie these predicates are attested as nouns in Bunan.⁸² Second, several of the Bunan verbs in question possess Tibetan cognates. It is difficult to assess which of these lexemes are Tibetan loanwords and which are genuine to the lexicon of Bunan, but the fact that their Tibetan equivalents function as verbs rather than nouns strongly suggests that the respective Bunan verbs have not been derived from nouns. However, these are the only conclusions that we may draw. Eventually, we cannot exclude the possibility that the verbs listed above exhibit reflexes of different derivational morphemes. However, any attempt to postulate more than one derivational suffix would be purely speculative at this point. Since there is currently no robust evidence for the assumption that these suffixes have different etymological origins, I will treat them as instances of a single derivational suffix in the following.

Based on the diffuse distribution of the derivational morpheme *-t*, it is not possible to assign a clear function to the morpheme. The suffix did most probably not serve a valency-decreasing function, as the monovalent verbs on which it occurs already distinguish themselves from their transitive counterparts based on a systematic voicing alternation of the initial consonant (see § 12.3.5 below). This, in turn, may indicate that the suffix originally denoted a specific kind of *Aktionsart*. In consideration of the fact that most verbs listed above imply a change of state on behalf of their single core argument, one may hypothesize whether the suffix originally expressed a specific kind of lexical aspect that was associated with punctuality or telicity. This scenario would imply that the morpheme once served as a functional counterpart of the stative suffix *-s* (see § 12.3.1 below), which usually occurs on verbs that refer to states and unbounded processes, cf. *k'jo-t-men* “to become dry” vs. *tak-s-men* “to smell”. However, this hypothesis hinges on a small number of selected verbs, and it is not difficult to find counterexamples (e.g. *son-t-men* “to be alive”).

The fact that it is not possible to assign a clear function to the derivational suffix in contemporary Bunan suggests that the morpheme lost its productivity a long time ago. This claim is in line with the intuition of native speakers, who do no longer perceive the morpheme as an independent morphological element. Accordingly, I only gloss the suffix

⁸² The only exception is the verb *nor-t-men* “to become confounded”, which might be derived from the Written Tibetan noun *nor* “mistake”. However, as *nor* is not attested as a noun in Bunan, this scenario seems unlikely.

as “T” in this thesis when it is necessary to emphasize its status as a formerly independent morphological element. Otherwise, I analyze the suffix as an etymological part of the respective verb root.

12.3.5 Voicing opposition

There are a number of monovalent verb stems with a voiced initial that possess cognate bivalent verb stems with a voiceless-unaspirated or a voiceless-aspirated initial. In Bunan, the mechanism of derivation is no longer productive. My database merely comprises 15 verb pairs that bear witness to this process (see below for a list).

In the following, I provide a list of the verb pairs in my lexical database that bear witness to the opposition of voiced monovalent verb stems vs. unvoiced bivalent verb stems.

Voiced initial vs. voiceless-unaspirated intitial (intransitive conjugation)

<i>biŋ-men</i>	“to become full”	<i>pin-tɕ-um</i>	“to fill”
<i>bjak-men</i>	“to hide oneself”	<i>pjak-tɕ-um</i>	“to hide someone”
<i>brekt-men</i>	“to slide, to slip”	<i>prek-tɕ-um</i>	“to shovel snow”
<i>dralt-men</i>	“to become torn”	<i>tral-tɕ-um</i>	“to tear”
<i>galt-men</i>	“to lie down”	<i>kal-tɕ-um</i>	“to load”
<i>gjar-men</i>	“to be afraid”	<i>kjar-tɕ-um</i>	“to scare”
<i>gjurt-men</i>	“to change (intr.)”	<i>kjur-tɕ-um</i>	“to change (tr.), to divert”

Voiced initial vs. voiceless-unaspirated intitial (middle conjugation)

<i>dʒikt-ɕ-um</i>	“to collapse (of walls) (intr.)”	<i>ɕik-tɕ-um</i>	“to collapse (of walls) (tr.)”
<i>gi-ɕ-um</i>	“to wash one’s hand / face”	<i>ki-tɕ-um</i>	“to wash (dishes, floors)”

Voiced initial vs. voiceless-aspirated intitial (intransitive conjugation)

<i>baps-men</i>	“to come down”	<i>pʰap-tɕ-um</i>	“to take down”
<i>bent-men</i>	“to become spilled”	<i>pʰen-tɕ-um</i>	“to pour out”

Voiced initial vs. voiceless-aspirated intitial (middle conjugation)

<i>bent-ɕ-um</i>	“to become spilled”	<i>pʰen-tɕ-um</i>	“to pour out”
<i>brekt-ɕ-um</i>	“to slide, to slip”	<i>pʰrek-tɕ-um</i>	“to shove”
<i>dakt-ɕ-um</i>	“to break (intr.)”	<i>tʰak-tɕ-um</i>	“to break (tr.)”
<i>gjult-ɕ-um</i>	“to come off, to fall out”	<i>kʰjul-tɕ-um</i>	“to peel”

12.3.6 Verbal derivation from a comparative perspective

The following subsections discuss the different derivational mechanisms from a comparative perspective and consider the question of whether the four derivational suffixes might go back to two proto-morphemes *-s and *-t.

12.3.6.1 Comparative notes on s-suffixes

The stative suffix *s-* described in § 12.3.1 is clearly cognate with functionally similar suffixes that can be found in other Tibeto-Burman languages of the Himalayan area (cf. Benedict 1972: 98–99; Matisoff 2003: 471–472). Furthermore, it is likely that the stative suffix is diachronically related to the detransitivizing suffix described in § 12.3.2. First, this is implied by the mere phonological similarity of the two morphemes. Second, this is suggested by their semantic contiguity. Stative predicates are known to be conceptually close to detransitivized constructions (Siewierska 1984: 139–140), into which they may eventually develop (Givón [1984–1990] 2001, 2: 132). Unlike the stative suffix, the detransitivizing suffix *-s* is still productive in contemporary Bunan. This suggests that the transitivity-decreasing function may have evolved from a former stativizing function.

On a more speculative note, we may ask the question of whether the derivational *s*-suffixes and the middle conjugation marker *-ɛ* (see § 12.4.1.2 and § 12.4.3.) have a common origin. Admittedly, such a diachronic link may seem problematic for two reasons. First, the middle conjugation marker exhibits a distinct phonological shape. Second, the middle conjugation marker stands in a paradigmatic relationship to the detransitivizing suffix, which means that the two verb forms may cooccur in one and the same verb form. However, from a functional-historical perspective, a putative link between the detransitivizing suffix and the middle marker appears plausible, as detransitivization and middle marking are functionally contiguous domains (Klaiman 1991: 105; Kemmer 1993: 147–149). In addition, we have to bear in mind that the West Himalayish languages Rongpo and Darma, which are closely related to Bunan, only possess one morpheme that is associated with passive / middle semantics. Zoller (1983: 49–50) mentions a “passive” suffix *-s* for Rongpo, while Willis (1983: 120–121, 364–369) describes a “middle marker” *-si* for Darma. Accordingly, it appears plausible that the detransitivizing suffix *-s* and the middle marker *-ɛ* in Bunan may have developed from one single morpheme. However, only a better understanding of the Proto-West Himalayish verbal system and the Proto-Tibeto-Burman verbal system in general will eventually enable us to clarify the diachronic relation between the different derivational suffixes attested in Bunan.

Going beyond the domain of verbal derivation, we may wonder whether the nominalizing suffix *-s* described in § 4.3.3 might be related to the aforementioned *s*-suffixes. At first, the postulation of such a link may seem counterintuitive, as nouns and verbs appear to belong to rather distinct lexical domains. However, we have to consider that stative

predicates are conceptually close to state nominalizations. This can be illustrated based on Croft's (2001: 86–92) prototype approach towards parts of speech. Crofts argues that three lexical classes of nouns, adjectives, and verbs can be characterized based on four binary parameters: (1) relationality, (2) stativity, (3) transitoriness, and (4) gradability. According to Croft's model, prototypical nouns refer to nonrelational, stative, permanent, and nongradable entities (i.e. objects), whereas prototypical verbs refer to relational, processual, transitory, and nongradable entities (i.e. actions). This is illustrated by the following table.

Table 73: Prototypical nouns and prototypical verbs according to Croft (2001)

	Nouns	Verbs
Relationality	nonrelational	relational
Stativity	stative	processual
Transitoriness	permanent	transitory
Gradability	nongradable	nongradable

Croft's approach makes obvious that stative verbs cannot be considered as prototypical verbs, as they deviate from the prototype in terms of the parameters of stativity (stative rather than processual) and transitoriness (permanent rather than transitory). Accordingly, the only parameter that distinguishes a stative verb from a prototypical noun is the parameter of relationality, that is, whether the entity is defined in relation to another entity or not. This implies that the reanalysis of a stative predicate as a state noun merely involves the construal of the relevant entity as being nonrelational rather than relational. Of course, these considerations do not allow us to reconstruct a grammatical context in which such a putative reanalysis may have occurred. However, they demonstrate that there may indeed be diachronic link between the nominalizing suffix *-s* and the derivational *s*-suffixes of the verbal domain.

12.3.6.2 Comparative notes on *t*-suffixes

While the verbalizing suffix *-t* described in § 12.3.3 has cognates in a few branches of the Tibeto-Burman language family (Benedict 1972: 101–102; Matisoff 2003: 457), the functionally opaque suffix *-t* described in § 12.3.4 cannot be related to similar morphemes in other Tibeto-Burman languages in an equally straightforward manner, as its original function remains obscure. As noted in in § 12.3.4, there is some evidence that the morpheme may originally have been associated with a punctual or telic *Aktionsart*.

Considering the phonological similarity of the verbalizing suffix *-t* and the functionally opaque suffix *-t*, we may ask the question of whether they could have been derived

from one single proto-morpheme. Such a diachronic link is essentially conceivable, the more so as the different derivational *s*-suffixes of Bunan may also have developed from one single proto-morpheme **-s* (cf. § 12.3.6.1 above). However, as long as the original semantics of the functionally opaque suffix *-t* remain obscure, this hypothesis remains vague and speculative.

The fact that the functionally opaque suffix *-t* cannot be assigned a clear function implies that the morpheme lost its productivity a long time ago and, accordingly, must belong to an archaic layer of derivational morphology. However, if this assumption is correct, it should be possible to find reflexes of the same suffix in closely related languages. A preliminary study of available materials for West Himalayish languages revealed that cognates of the suffix are indeed attested throughout West Himalayish. The suffix is difficult to identify, however, as it does not occur as an independent morphological segment. Rather, it can only be detected on the basis of consonantal mutations in the coda of certain monovalent verb stems. Some examples are listed in the table below.⁸³

Table 74: The functionally opaque suffix *-t* in other West Himalayish languages

Language	Alternating verb stems	Source
Standard Kinnauri	<i>yab-ši- ~ yab-či-</i> “to fly”	Takahashi (2012: 170)
Shumcho	<i>tʰulɛ-ma ~ tʰultʰ-ma</i> ⁸⁴ “to get pushed”	Huber (2013b)
Rongpo	<i>chya:s ~ -chya:c-</i> “to go off, to start going”	(Zoller 1983: 275)
Darma	<i>te-si- ~ te-yi-</i> “to think”	(Willis 2007a: 367)

It seems safe to assume that the mutations illustrated above represent alternations between verb stems that take the middle marker (*V-ɛ-*) and verb stems that exhibit the functionally opaque suffix *-t* and take the middle marker (*V-t-ɛ-*). However, the abovementioned authors do not analyze forms with a syllable final affricate */tɕ/* (in Standard Kinnauri, Rongpo, and Darma) or a syllable final plosive */tʰa/* (in Shumcho, see footnote 84 below) as morphologically complex. Moreover, they do not describe a clear functional difference

⁸³ The sound *[ɕ ~ ɕ]* is merely an allophone of the phoneme */s/* in Rongpo and Darma (cf. Zoller 1983: 6; Willis 2007a: 82–83). Accordingly, the middle marker is written as *-s* and *-si*, respectively, in those languages.

⁸⁴ The form *tʰultʰ-ma* goes back to an original form **tʰul-t-ɛ-ma* with a syllable final affricate. See Huber (2013a: 250–251, footnote 32) for a brief account of the relevant sound change.

between the two types of verb stems. Takahashi (2012: 171) and Willis (2007a: 121, footnote 9) state that the two types of verb stems may have slightly different meanings. However, they do not provide a more detailed account of those semantic differences. Huber (2013b) and Zoller (1983), on the other hand, do not mention a functional difference between the two types of verb stems. It is thus difficult to draw inferences about the original function of the suffix on the basis of the scarce materials that are currently available.

In general, the distribution of the morpheme in other West Himalayish languages is highly reminiscent of the distribution of the morpheme in Bunan. The suffix mostly occurs on monovalent verbs, but also appears on a small number of bivalent verbs. The respective verbs denote both durative and punctual events. Accordingly, comparative evidence from West Himalayish languages does not allow us to clarify the original function of the suffix. However, it confirms the assumption that the suffix must belong to an archaic layer of morphology, as it is attested in both the eastern and the western branch of West Himalayish. Further evidence for the ancient status of the suffix comes from several cognate verb stems that exhibit the derivational morpheme. A particularly remarkable example is the verb “to die”, whose reflexes in eastern West Himalayish languages all contain the morpheme, e.g. Bunan *ɕi-t-ɕ-um*, Sunnami *sheechpung* (Gerard 1842: 519), Rongpo *sicpəŋ* (Zoller 1983: 60), Darma *simu ~ sɿjimu* (Willis 2007a: 586), Byangsi *hicimi* (Sharma 2001b: 315), and Chaudangsi *sicimo* (Krishan 2001b: 439).

On a final note, we may bring up the question of whether the functionally opaque suffix *-t* may be related to the directive suffix **-t*, which has been described by several scholars (Wolfenden 1929; van Driem 1989; Michailovsky 1999). Given the fact that both morphemes are associated with a notion of telicity, such a diachronic link seems plausible. However, it still is difficult to argue for such a relation, as the directive suffix primarily serves a transitivity function, whereas the functionally opaque suffix *-t* is most often encountered on intransitive verbs. A better understanding of Proto-Tibeto-Burman derivational morphology will hopefully enable us to resolve this issue in the future.

12.3.6.3 Comparative notes on voicing opposition

Pairs of intransitive and transitive verb stems that are distinguished by a voicing contrast can be found throughout the Tibeto-Burman language family, which suggests that this derivational system dates back to Proto-Tibeto-Burman (cf. Benedict 1972: 124). Some scholars have interpreted the voicing contrast to the presence of prefixes that affected the quality of initial consonants (e.g. Pulleyblank 2000: 31; Baxter & Sagart 2014: 54). LaPolla (2003b: 23–24) argues that this assumption remains problematic, but acknowledges that the voicing oppositions encountered in certain branches may in part go back to former prefixes.

In the case of Bunan, it is conceivable that some of the alternations between voiced and voiceless-unaspirated initials are the result of a former causative prefix *s- (see Wolfenden 1929; Benedict 1972: 105; LaPolla 2003b: 22; Matisoff 2003: 100–102), which devoiced the voiced initial of the underlying verb root. There are no direct traces of the prefix in Bunan, as the phonotactic rules do not allow syllable initial clusters involving fricatives. However, as I argue in § 2.4.4, this constraint is the result of a comparatively recent sound change that must have occurred between the mid-19th century and the early 20th century. It is thus conceivable that the language once possessed a causative prefix *s-, the more so as it is attested in the related West Himalayish language Standard Kinnauri, cf. *biñmig'* “to be extinguished” vs. *spiñmig'* “to extinguish”, *byañmig'* “to be afraid” vs. *spyañmig'* “to frighten”, *tuñmig'* “to drink, to smoke” vs. *stuñmig'* “to give milk (mother to child)” (Bailey 1909). Based on the comparative evidence that is currently available it is not possible to say, however, whether it is the series of voiceless unaspirated or the series of voiceless aspirated transitives that may originally have exhibited a causative prefix.

12.4 Transitivity and conjugation classes

The Bunan verbal system revolves around a system of three conjugation classes. In the following, I refer to these three conjugation classes as the “intransitive conjugation”, the “middle conjugation”, and the “transitive conjugation”. As the labels “intransitive”, “middle”, and “transitive” suggest, the conjugation class membership of a verb stem is related to the notion of “transitivity”. Before describing the three conjugations in more detail, it is thus necessary to provide a brief definition of the term “transitivity” and to discuss a number of related concepts. This is done in the following subsections.

12.4.1 Preliminary remarks

12.4.1.1 Terminology

In the following, I will use the term “transitivity” in the sense of Hopper & Thompson (1980: 251–253), who define transitivity as a gradual category that is composed of several “component parts”. These component parts are listed in the following table.

Table 75: Hopper & Thompson’s (1980) component parts of transitivity

Component parts	High transitivity	Low transitivity
Participants	2 or more participants, A and O	1 participant
Kinesis	action	non-action
Aspect	telic	atelic
Punctuality	punctual	non-punctual

Volitionality	volitional	non-volitional
Affirmation	affirmative	negative
Mode	realis	irrealis
Agency	A high in potency	A low in potency
Affectedness of O	O totally affected	O not affected
Individuation of O	O highly individuated	O non-individuated

Hopper & Thompson's approach allows for a more fine-grained description of transitivity distinctions than the trichotomy of "intransitive – transitive – ditransitive", which is based on the maximal number of core arguments that a given verb stem profiles.

With the term "core argument", I refer to the participants that necessarily have to be "on the stage" in order that the event denoted by a given verb can be conceptualized as complete and self-contained. In the framework of a constructionalist approach, we may think of core arguments as the participants that are directly profiled by a predicate itself and not by the construction in which a predicate occurs (Goldberg 2006: 42–43). The Bunan verb *tup-tə-um* "to cut", for example, profiles two core arguments: an agent argument (the person who cuts) and a patient argument (the entity that is cut). By using the verb *tup-tə-um* in particular constructions, it is possible to add further arguments that are associated with the process of cutting, but are not directly profiled by the predicate itself. For example, one might specify the identity of the instrument with which the cutting is done, the person for whose sake the cutting is done, the location where the cutting takes place, etc. However, these arguments are non-essential in the sense that they do not contribute to our understanding of the most basic facts of the event.

When referring to the ability of a specific verb to profile a certain number of core arguments, I will use the term "valence". Based on the term "valence", verbs will be classified as "monovalent" (verbs that profile one core argument), "bivalent" (verbs that profile two core arguments), and "trivalent" (verbs that profile three core arguments). Whenever verbs are described as being "intransitive" or "transitive", these labels will not refer to their syntactic valence, but to their conjugation class membership. Verbs that pertain to the intransitive conjugation will be referred to as "intransitive verbs", whereas verbs belonging to the transitive conjugation will be called "transitive verbs".

Of course, such a definition presupposes that it is possible to determine the exact number of core arguments for any given verb in a straightforward manner. However, depending on the predicate, the identification of core arguments may be a rather difficult issue. In Bunan, we encounter two different types of predicates whose number of core

arguments is debatable: (1) semantically non-compositional complex predicates and (2) predicates that take non-obligatory goal arguments.

Let us begin by discussing semantically non-compositional predicates. Consider the following example sentence.

(533) *nunṭəi wa kʰorek tiki mi el-dʒi memə=tok*

<i>nunṭəi</i>	<i>wa</i>	<i>kʰorek</i>	<i>tiki</i>	<i>mi</i>	<i>el-dʒi</i>	<i>memə=tok</i>
then	FOC	later	one	person	go-CVB.SG	monk=DAT

<i>aks tak-ø-dʒi</i>	<i>rik-s-ə-i=jendʒi</i>
invite-TR-CVB	bring-DETR-MID-ACT=EQ.DJ.SG

“And after that one person went, invited the monk, and brought him (there).”

(Conversation 87.323)

As the example illustrates, Bunan possesses a complex predicate *aks tak-tə-um*, which consists of a nominal constituent *aks* and a verb stem *tak-* and can be translated as “to call, to invite”. When determining the number of core arguments of this verb, we are confronted with the problematic status of the constituent *aks*. *aks* clearly is a separate syntactic entity and has the appearance of a noun that serves as one of the arguments of the verb *tak-tə-um*. At first sight, one would intuitively assume that the verb *tak-tə-um* possesses the meaning “to deliver” and *aks* is a noun with the meaning “invitation”. Accordingly, the verb *aks tak-tə-um* would be a trivalent verb with an agent argument (the inviting person), a theme argument (the invitation), and a recipient argument (the invited person). However, although this analysis might be correct from a diachronic perspective, it does not prove helpful for the synchronic analysis of the predicate, as speakers are not able to assign any meaning to *aks* or *tak-tə-um* if the two words occur in isolation. In contemporary Bunan, *aks tak-tə-um* is a semantically non-compositional complex predicate, which cannot be segmented into smaller meaningful units, although the predicate clearly consists of two independent syntactic entities. Given the fact that *aks* does not possess any specific semantic content on its own, the question arises as to whether it is legitimate to consider the word as a core argument. Based on the definition that was given above, it is not justified to treat *aks* as a core argument, as the constituent does not refer to a concrete participant that plays an essential role in the event of inviting. Rather, *aks* forms a non-compositional semantic unit with the predicate.⁸⁵ Accordingly, nominal constituents of semantically non-compositional complex predicate are not considered as core arguments.

⁸⁵ The semantic non-compositionality of *aks tak-tə-um* is also reflected by the strong syntagmatic ties between the two constituents. For example, it is not possible to displace the nominal constituent *taks* from its preverbal position or to place another syntactic element between *taks* and the

It is important to note that the complex predicate *aks tak-tə-um* does not represent an isolated case. Bunan possesses a number of semantically non-compositional complex predicates that consist of a nominal constituent and a verb, e.g. *ha: las-men* “to be astonished”, *əubu puk-ə-um* “to have chapped skin”, *go kuk-tə-um* “to adopt (a child)”, *ha: go-tə-um* “to understand”, etc. In the following, semantically non-compositional complex predicates that consist of a nominal constituent and a verb are always treated as a single morphosyntactic unit if there is not clear evidence that Bunan speakers consider the two constituents as semantically distinct entities.

Let us now turn to the second problematic class of predicates, i.e. predicates that take non-obligatory goal arguments. Consider the following example with the verb *lik-tə-um* “to do, to make”.

(534) *awa kʰa liktəare?*

<i>awa</i>	<i>kʰa</i>	<i>lik-tə-are</i>
father	what	do-TR-PRS.DJ.SG

“What is father doing?”

(Conversation 53.3)

In the sentence given above, the verb *lik-tə-um* takes two arguments: an agent argument (*awa* “father”) and a theme argument (*kʰa* “what”). Most scholars would probably agree that these two syntactic constituents represent the core arguments of the predicate. First, this is suggested by the semantic content of the verb *lik-tə-um*. The act of doing necessarily involves an agent argument and a patient argument, as it would otherwise not be possible to conceptualize the respective event as a complete and self-contained process. In case of the agent argument, this basic status is further indicated by the fact that it serves as the subject of the clause, i.e. the privileged syntactic argument whose number features are indexed on the predicate. Based on these considerations, the verb *lik-tə-um* should be classified as a bivalent verb.

However, the verb *lik-tə-um* does not always occur with two arguments, but is also attested with an additional third argument. Consider the following example.

predicate. Moreover, the constituent *taks* always has to be overtly mentioned and cannot be left out under any circumstances. Other nominal constituents can commonly be omitted if their identity is sufficiently established in the relevant discourse context (§ 16.1).

(535) *dordzedzi dzanporok dzamen liktare.*

<i>dordze=dzi</i>	<i>dzanpo=tok</i>	<i>dzamen</i>	<i>lik-tə-are</i>
Dorje=ERG.SG	Zangpo=DAT	food	do-TR-PRS.DJ.SG

“Dorje makes food for Zangpo.”

(NN 39.4 [elicited])

In the sentence given above, the verb *lik-tə-um* does not only possess an agent argument and a patient argument, but takes an additional recipient argument in the dative case. On semantic grounds, most scholars would probably argue that the recipient is an oblique adjunct, as the verb *lik-tə-um* describes an atelic activity whose beneficiary is not essential for the conceptualization of the basic event. However, it is not possible to reinforce this analysis with morphosyntactic evidence. In the case of English, one would argue that the constituent *for Zangpo* is a prepositional phrase rather than a noun phrase and, accordingly, must represent an adjunct rather than a core argument. This argumentation cannot be applied in the case of Bunan, as the verb *lik-tə-um* in (535) possesses exactly the same argument structure as a prototypically trivalent verb such as *da-tə-um* “go give”. This is illustrated by the example given below.

(536) *dordzedzi taldok qawa datəare.*

<i>dordze=dzi</i>	<i>tal=tok</i>	<i>qawa</i>	<i>da-tə-are</i>
Dorje=ERG.SG	3[SG]=DAT	money	give-TR-PRS.DJ.SG

“Dorje gives him money.”

(TD 214.2 [elicited])

Accordingly, the morphosyntax of Bunan does not always allow us to draw a straightforward line between core recipient arguments and oblique recipient arguments, as the dative case can occur on both types of arguments. Note that the dative is not the only case that may occur on core arguments and oblique arguments. The absolutive and ergative are likewise attested on both classes of arguments (cf. § 4.4.4.1 and § 4.4.4.2). However, the latter two cases are usually less problematic, as they occur on syntactic constituents whose affiliation with the functional core or the periphery of a clause is usually less controversial.

In the absence of clear morphosyntactic criteria, core arguments and oblique adjuncts are primarily distinguished on semantic grounds in this thesis. Core arguments will thus be considered as participants that are essential for the conceptualization of an event as complete and self-contained in the sense that they are directly profiled by the respective predicate (Goldberg 2006: 42–43). Accordingly, the recipient argument in (535) is not considered as a core argument, as the predicate verb *lik-tə-um* is classified as an atelic

activity verb whose basic argument structure does not involve an endpoint / beneficiary. In the same way, dative-marked goal arguments of atelic motion verbs such as *el-men* “to go” or *grelt-men* “to run” are not treated as core arguments, as they are not essential for the conceptualization of the basic event.

Finally, note that many of the morphosyntactic phenomena that will be discussed in the following could essentially be treated as manifestations of the grammatical category “diathesis” or “voice”. This is particularly obvious in the case of the middle conjugation, which might as well be termed “middle voice” and contrasted with a category “active voice” (cf. Klaiman 1991; Kemmer 1993). I have chosen to refrain from such an analysis, as the system of Bunan is essentially tripartite (“intransitive” – “middle” – “transitive”), and not bipartite (“active” – “middle”). To be sure, it would be possible to subsume the intransitive and transitive conjugation under the label “active voice” and contrast them with the middle conjugation. However, such an approach would not do justice to the considerable morphosyntactic differences between the intransitive and the transitive conjugations and would at the same time understate the obvious morphosyntactic similarities between the intransitive and the middle conjugation. Accordingly, the terms “voice” and “diathesis” will not be applied in the following, unless when citing or paraphrasing other authors.

12.4.1.2 The conjugation markers

Having discussed the relevant terminology, we may now turn to the morphosyntactic description of the three conjugations. The conjugations are encoded by specific morphemes that occur in the morphological slot V_2 (see § 3.1), i.e. between the verb stem and the inflectional endings. The following table gives an overview of these conjugation markers.

Table 76: The conjugation markers

Conjugation	Marker	Conditioning factor
Intransitive	-k	verb inflected for present tense
	unmarked	verb not inflected for present tense
Middle	-ŋ	-
Transitive	-tŋ	following inflectional ending exhibits initial vowel
	-∅	following inflectional ending exhibits initial consonant

As the table above demonstrates, only the middle conjugation is uniformly marked with a single morpheme, whereas the intransitive and transitive conjugations are not en-

coded in a consistent manner. The intransitive conjugation is marked by the morpheme *-k* in the present tense. In all other grammatical contexts, the morphological slot V_2 remains empty. The presence or absence of the conjugation marker *-k* is thus grammatically conditioned. The transitive conjugation is encoded by the marker *-tə* if the following inflectional ending exhibits an initial vowel. If this is not the case, the transitive conjugation is marked with a null morpheme *-∅*, which does not possess a phonetic value, but still influences its phonological environment by inhibiting certain morphophonological processes (cf. § 3.2.1.3 and § 3.2.2.5). The allomorphic variation between the two markers *-tə* and *-∅* is thus phonologically conditioned.

Accordingly, the opposition between overt vs. non-overt conjugation marking is not equal in the intransitive and the transitive conjugation. In the intransitive conjugation, the opposition is privative, whereas in the transitive conjugation the opposition is equipollent (cf. Trubetzkoy 1939: 67). This is illustrated in the following table, which contains present and past tense forms of the verb stems *thok*- “to drip” (intransitive conjugation), *lok*- “to go up” (middle conjugation), and *jok*- “to buy” (transitive conjugation).

Table 77: Conjugation markers in the present and past tense

Conjugation	Present tense	Past tense
Intransitive	<i>thok-k-are</i> [<i>thoʔkare</i>] drip-INTR-PRS.DJ.SG “(Water) is dripping.”	<i>thok-dza</i> [<i>thoʔkʰtsæ</i>] drip-PST.DIR.DJ.SG “(Water) dripped.”
Middle	<i>lok-ə-are</i> [<i>loʔχsare</i>] go.up-MID-PRS.DJ.SG “(You / she / he) are / is going up.”	<i>lok-ə-dza</i> [<i>loʔχsæ</i>] go.up-MID-PST.DIR.DJ.SG “(You / she / he) went up.”
Transitive	<i>jok-tə-are</i> [<i>jəʔkʰtsare</i>] buy-TR-PRS.DJ.SG “(You / she / he) are / is buying (something).”	<i>jok-∅-dza</i> [<i>jəʔgʰzæ</i>] buy-TR-PST.DIR.DJ.SG “(You / she / he) bought (something).”

Note that the different conjugation markers are subject to a number of complex morphophonological alternations (e.g. deletion, assimilation, aspiration, etc.), which are described in § 3.2.1, § 3.2.2, and § 3.2.4.

In some cases, the different conjugation markers may trigger different morphological forms of certain endings. This kind of allomorphy is for example encountered in combination with supine and infinitive endings. The table below gives an overview of the su-

pine and infinitive forms of the verb stems *rwak*- “to graze (tr.)” (intransitive conjugation), *lok*- “to go up” (middle conjugation), and *jok*- “to buy” (transitive conjugation).

Table 78: Allomorphy of supine and infinitive forms

Conjugation	Supine	Infinitive
Intransitive	<i>rwak-de</i> [rwaʔg`de] graze-SUP “in order to graze (tr.)”	<i>rwak-men</i> [rwaʔg`men] graze-INF “to graze (tr.)”
Middle	<i>lok-ε-a</i> [lɔʔχεə] go.up-MID-SUP “in order to go up”	<i>lok-ε-um</i> [lɔʔχεum] go.up-MID-INF “to go up”
Transitive	<i>jok-tε-a</i> [jɔʔk`tεə] buy-TR-SUP “in order to buy”	<i>jok-tε-um</i> [jɔʔk`tεum] buy-TR-INF “to buy”

In what follows, I analyze such alternating forms as allomorphs that are triggered by the presence or absence of an overt conjugation marker. In other words, the supine suffix *-de* will simply be glossed as “SUP” and not as a portmanteau suffix “SUP.INTR”.

12.4.1.3 Changes of conjugation class membership and markedness

Verb stems are not bound to one conjugation class, but may change their conjugation class membership. Changes of conjugation class do not, however, occur randomly, but follow established derivational pathways that are depicted in the table below.

Table 79: Changes of conjugation class membership

Conjugation	Derivation	Type of verbs
Intransitive conjugation		<ul style="list-style-type: none"> ▪ genuine intransitive verbs ▪ derived intransitive verbs (< transitive)
Middle conjugation		<ul style="list-style-type: none"> ▪ genuine middle verbs ▪ derived middle verbs (< intransitive) ▪ derived middle verbs (< transitive)
Transitive conjugation		<ul style="list-style-type: none"> ▪ genuine transitive verbs

In what follows, I make a general distinction between “genuine verbs” and “derived verbs”. Genuine verbs are original members of their respective conjugation class and have not been derived from another conjugation. Derived verbs, on the other hand, do not represent basic members of their current conjugation class. Rather, they have acquired their current conjugation class membership after having been derived from another conjugation class by means of a synchronically productive derivational mechanism.⁸⁶ It is of crucial importance to note that the term “derived verb” is only applied to verbs that retain the full inflectional potential of their underlying, non-derived verb stem and can occur as simple, non-periphrastic forms (see § 15.1 for the definition of simple forms and periphrastic forms). For example, the detransitivized middle verb stem *ʁen-s-ʁ-* “to wake up (intr.), to get up” is classified as a derived verb stem, as it possesses the same inflectional behavior as the corresponding transitive verb stem *ʁen-* “to wake up (tr.), to cause to get up” and can be predicated as a simple finite form, e.g. as a disjunct present form *ʁen-s-ʁ-are* “wake.up-DETR-MID-PRS.DJ.SG” “(You / she / he) is getting up” or a direct evidential disjunct past form *ʁen-s-ʁ-dza* “wake.up-DETR-MID-PST.DIR.DJ.SG” “(You / she / he) got up”. The detransitivized middle verb stem *lik-s-ʁ-* “to be made”, on the other hand, is not treated as a derived verb, since the verb stem can only be predicated in periphrastic construction in combination with a copula, such as the intransitive resultative construction *lik-s-ʁ-dzi ni*: “make-DETR-MID-CVB EX.NON1SG” “(It) has been made” but not in simple finite constructions, e.g. the disjunct present form ***lik-s-ʁ-are* “**make-DETR-MID-PST.DIR.DJ.SG” “**(It) is being made” or the direct evidential disjunct past form ***lik-s-ʁ-dza* “**make-DETR-MID-PST.DIR.DJ.SG” “**(It) was made”.

If we want to be able to distinguish between genuine and derived verbs in a consistent manner, we have to define parameters that allow us to identify which verbs represent basic forms and which are derived forms. The most important parameter is morphological markedness. A considerable number of derived verbs contain the detransitivizing suffix *-s* (see § 12.3.2). For example, the intransitive verb *broŋ-s-men* ‘to prance’ and the middle verb *broŋ-s-ʁ-um* ‘to banter’ have both been derived from the transitive verb *broŋ-tʂ-um* ‘to make fun of’, which does not exhibit the detransitivizing suffix.

⁸⁶ Note that most of the derivational mechanism described in § 12.3 are no longer productive. Accordingly, verbs such as *gjułt-ʁ-um* “to come off, to fall out” (middle conjugation) and *kʲjuł-tʂ-um* “to peel” (transitive conjugation), which are obviously diachronically related, will be considered as genuine members of their respective conjugation, since the grammar of Bunan does not longer exploit voicing opposition as a productive mechanism to generate verb pairs such as the one mentioned before.

Morphologically marked derived verbs (intransitive / middle < transitive)

broŋ-s-men “to prance” < *broŋ-tɕ-um* “to make fun off”
broŋ-s-ɕ-um “to banter”

The situation is different in the case of middle verbs that have been derived from the intransitive conjugation. Such middle verbs never contain the detransitivizing suffix *-s* and can thus not be identified as derived forms based on derivational processes. However, as demonstrated in the preceding section, the middle conjugation is morphologically more marked than the intransitive conjugation in certain contexts. Compare the intransitive infinitive form *lus-men* “to remain behind” and the middle infinitive form *lus-ɕ-um* “to be stuck”. The first form only consists of a verb stem and an infinitive marker, whereas the latter is composed of a verb stem, a conjugation marker, and an infinitive marker. Based on the overall structure of the two conjugations, we can thus consider the middle verb to be more marked than the corresponding intransitive verb.

Morphologically marked derived verbs (middle < intransitive)

lus-ɕ-um “to be stuck” < *lus-men* “to remain behind”

There are cases in which morphological markedness does not prove to be a helpful parameter for distinguishing between genuine verbs and derived verbs. Consider the middle verb *su-ɕ-um* “to wash oneself” and the transitive verb *su-tɕ-um* “to wash somebody”. Both verb forms are equally morphologically complex, which means that there is no morphosyntactic evidence for the claim that the middle form is derived from the transitive form. However, on a semantic level, it still seems legitimate to consider middle verbs such as *su-ɕ-um* as derived, as they deviate from the semantic “prototype transitive event” as defined by Givón ([1984–1990] 2001, 1: 109–110) (cf. § 12.3.2). The verb *su-ɕ-um*, for example, deviates from a prototypical transitive event insofar as the agent is identical with the patient.

Semantically marked derived verbs (middle < transitive)

su-ɕ-um “to wash oneself” < *su-tɕ-um* “to wash somebody”

Accordingly, if a verb stem is attested in both the transitive and the middle conjugation, I always consider its transitive form as the more basic one and the middle form as the derived one. Note that this approach is in line with comparative evidence (see § 12.4.5). A comparison of the Bunan conjugational system with the conjugational system of other eastern West Himalayish languages suggests that the middle conjugation originally did not represent a conjugation in its own right. Rather, middle verb forms appear to have started out as intransitive verb forms that had been augmented with the middle conjugation marker *-ɕ*. This implies that a verb form like *su-ɕ-ek* “wash-MID-PRS.CJ.SG”

(“I wash myself”) originally exhibited the morphological structure **su-ɛ-k-ek* “wash-MID-INTR-PRS.CJ.SG” and was only detached from the intransitive conjugation when the original cluster **/-ɛk-/* was simplified to a simple fricative */-ɛ-/*. The reconstructed middle verb form **su-ɛ-k-ek* is evidently more marked from a morphological point of view than the corresponding transitive verb form **su-tɛ-ek* “wash-TR-PRS.CJ.SG”.

It is important to note that a derived verb form can only ever be identified as such if we can contrast it with a corresponding genuine verb form. In other words, the derived nature of a given verb can only be revealed if we know its non-derived counterpart. We have to be aware of the fact that some of the verbs that are treated as “genuine” in the following may in fact be “derived”. This may either be because the underlying non-derived stem is not attested in my material or because one of the two verb forms has undergone a semantic shift that blurs the derivational relationship between the genuine verb form and the derived verb form. The latter case may be attested in case of the verb pair *pan-ɛ-um* “to fly” – *pan-tɛ-um* “to scare away (of animals)”. It is conceivable that the middle verb originally represented a detransitivized form of the transitive verb with the meaning “to run away (of animals)”, which was subsequently narrowed to the movement of birds.

As a last point, it is interesting to note that the changes of conjugation class membership discussed in this section are essentially detransitivizing in nature, as the majority of changes lead to the assignment of a genuine transitive verb to the middle conjugation or the intransitive conjugation, which by definition involves a decrease in transitivity. In addition, the small number of genuine intransitive verbs that can be transferred to the middle conjugation cannot be considered to undergo an increase in transitivity (see § 12.4.3.2 for one single exception). Accordingly, the conjugational system of Bunan does not possess an implemented mechanism to increase the transitivity / valence of verbs. However, the grammar of the language provides speakers with a different tool to achieve this goal: a periphrastic causative construction based on the verb *da-tɛ-um* “to give” (see § 19.7).

12.4.2 The intransitive conjugation

My database comprises 164 verbs that follow the intransitive conjugation. 138 of these verbs (84.1 %) are monovalent, whereas 26 (15.9%) are bivalent. Accordingly, one out of six intransitive verbs takes two core arguments. This may seem surprising at first, as the labels “intransitive” and “bivalent” seem to be contradictory. However, according to the definition given in § 12.4.1.1 above, the attribute “intransitive” should not be understood as an absolute property (i.e. “exhibiting one core argument”) but as a gradual notion (i.e. “exhibiting a comparatively low degree of transitivity”). As I argue in the following subsection, a gradual conception of transitivity allows us to understand why the grammar of

Bunan groups some bivalent verbs together with monovalent verbs in the intransitive conjugation, instead of assigning them to the transitive conjugation.

The intransitive conjugation mainly consists of genuine intransitive verbs. According to my data, only four intransitive verbs (e.g. 2.4 % of all intransitive verbs) have been derived from other conjugations. Genuine and derived verbs are discussed separately in the following subsections.

12.4.2.1 *Genuine intransitive verbs*

The class of genuine intransitive verbs comprises 132 monovalent verbs and 28 bivalent verbs. In what follows, I first discuss the group of monovalent verbs and then address the group of bivalent verbs.

The non-derived monovalent verbs of the intransitive conjugations constitute a diverse group with regard to verbal semantics. We encounter intransitive verbs instantiating all four “time schemata” postulated by Vendler (1967: 98–107), that is to say (1) states (*ʰos-men* “to be high”, *nas-men* “to be sick”), (2) achievements (*gwaŋ-men* “to happen”, *dirt-men* “to thunder”), (3) accomplishments (*mint-men* “to ripen”, *jolt-men* “to fade”), and (4) activities (*kjor-men* “to dance”, *ra-men* “to come”). Note that state predicates can always be construed as accomplishment predicates as well. The verb *dʒot-men* for example can either receive the atelic interpretation “to sit, to stay” or the telic interpretation “to sit down” based on the pragmatic context and the grammatical construction in which the predicate occurs. This is demonstrated by the fact that the imperative form *dʒot-a* “sit-IMP.SG” can either be interpreted as “Sit down!” or “Remain seated!” / “Stay!” depending on the pragmatic context. Two further example sentences that illustrate the semantic difference between an atelic construal and a telic construal are given in the following.

(537) *daruŋ tsuna dʒot-k^{hek} das pandra minat.*

<i>daruŋ</i>	<i>tsuna</i>	<i>dʒot-k^{hek}</i>	<i>das_{LN}</i>	<i>pandra_{LN}</i>	<i>minat_{LN}</i>
still	little.bit	sit-INTR-PRS.CJ.PL	ten	fifteen	minute

“We will sit here for a little bit longer, ten or fifteen minutes.”

not: “**We will sit down for a little bit longer”

(Conversation 48.18)

(538) *tal sarok dzotsa.*

<i>tal</i>	<i>sa=tok</i>	<i>dzot-dza</i>
3[SG]	ground=DAT	sit.down-PST.DIR.DJ.SG

“He sat down on the ground.”

not: “**He was sitting on the ground.”

(NN 20.9 [elicited])

In example (537), the verb *dzot-men* clearly has the stative interpretation “to sit, to stay”, as it refers to an ongoing process. In example (538), on the other hand, the same verb expresses the accomplishment “to sit down”. Another verb stem that can receive both an atelic and a telic construal is *ipt-ɛ-um*, which can either be translated as “to sleep” (state) or as “to fall asleep” (accomplishment). This is illustrated by the examples given below.

(539) *tsuna iptɛi kelaŋmaŋ elet.*

<i>tsuna</i>	<i>ipt-ɛ-dzi</i>	<i>kelaŋ=maŋ</i>	<i>el-et</i>
little.bit	sleep-MID-CVB.SG	Keylong=ALL	go-PST.DIR.CJ

“Having slept for a little while, I went to Keylong.”

not: “**Having fallen asleep for a little while, I went to Keylong.”

(TD 205.3 [elicited])

(540) *tal iptɛi ni:*

<i>tal</i>	<i>ipt-ɛ-dzi</i>	<i>ni:</i>
3[SG]	fall.asleep-MID-CVB.SG	EX.NON1SG

“She / he is sleeping.” (lit. “Having fallen asleep, she / he is here.”)

not: “**She / he slept.” (lit. “Having slept, she / he is here.”)

(TD 193.11 [elicited])

The label “intransitive” might imply that verbs are assigned to the intransitive conjugation because they only exhibit one core argument. However, as we will see below, monovalent verbs do not exclusively occur in the intransitive conjugation, but are also attested in the middle conjugation. It is thus not possible to provide a positive definition of the group of monovalent intransitive verbs. Rather, they can be characterized with the negative definition of not being associated with middle semantics, e.g. changes in body posture, translational motion, or spontaneous events, etc. (see § 12.4.3). Note, however, that it is not possible to draw a straightforward line between semantic domains that trigger intransitive marking and semantic domains that trigger middle marking. The verb *brant-ɛ-*

um “to fall over”, for example, is classified as a middle verb, whereas the semantically similar verb *dat-men* “to fall down” is assigned to the intransitive conjugation.

As noted above, the intransitive conjugation does not only consist of monovalent verbs. The conjugation also comprises 26 verbs that take two core arguments. The relevant predicates are listed below.

Bivalent verbs in the intransitive conjugation

<i>deŋ(s)-men</i>	“to believe”
<i>det-men</i>	“to lead”
<i>don-men</i>	“to eat, to drink (h)”
<i>dot-men</i>	“to meet”
<i>dza-men</i>	“to eat”
<i>kelt-men</i>	“to carry”
<i>kent-men</i>	“to give birth (of animals)”
<i>kʰujt-men</i>	“to winnow”
<i>kʰwa-men</i>	“to pluck”
<i>kʰwaŋ-men</i>	“to abandon”
<i>kja-men</i>	“to become”
<i>kjum-men</i>	“to ply”
<i>ku-men</i>	“to steal”
<i>mjo-men</i>	“to plough”
<i>pant-men</i>	“to spin”
<i>pʰja-men</i>	“to speak”
<i>rant-men</i>	“to weave”
<i>riŋ-men</i>	“to say”
<i>ʂunt-men</i>	“to guard”
<i>surt-men</i>	“to weed”
<i>tant-men</i>	“to see”
<i>tet(s)-men</i>	“to think”
<i>tit-men</i>	“to irrigate”
<i>tot-men</i>	“to affect”
<i>tuŋ-men</i>	“to drink”
<i>twa-men</i>	“to mow”

As the list demonstrates, the bivalent verbs of the intransitive conjugation all possess a comparatively low degree of semantic transitivity that rests on a number of different “component parts” postulated by Hopper & Thompson (1980) (see Table 75 above). The verb *ʂunt-men* “to wait”, for example, can be considered as intransitive with regard to the factors “kinesis” / “agency” (action is not transferred between the A argument

and the O argument), “punctuality” (action is non-punctual), and “affectedness of O” (action does not directly affect the O argument). In the case of verbs such as *tit-men* “to irrigate” or *mjo-men* “to plough”, the intransitive status seems to rest on the factors “punctuality” (action is non-punctual) and “individuation of O” (the O argument is not individuated).

In general, all the verbs listed above denote actions that do not entail a high degree of physical affection and / or a high degree of individuation on behalf of the O argument. Note that the direct affectedness of the O argument is defined as a crucial component of prototypical transitivity by both Givón ([1984–1990] 2001, 1: 109–110) and Næss (2007: 44). Some of the verbs in question do not entail direct physical contact between the A argument and the O argument at all, e.g. *der(s)-men* “to believe”, *det-men* “to lead”, *rwak-men* “to graze (tr.)”, and *tant-men* “to see”. The verbs that presuppose some degree of physical contact between the two core arguments tend to take a mass noun as their prototypical O argument, e.g. *nalma* “yarn” for *kjum-men* “to ply”, *sur* “weed” for *surt-men* “to weed”, and *təi* “grass” for *twa-men* “to mow”. In the case of verbs such as *dza-men* “to eat”, *kent-men* “to give birth (of animals)”, and *tur-men* “to drink”, the conceptualization of the A argument as an affected entity may play a crucial role as well. Especially verbs of ingestion have a strong cross-linguistic tendency to be associated with low transitivity, as the eating person is always in some way affected by the substance that is being eaten or drunk (cf. Næss 2007: 52–54, 2009).

However, verbs that entail a low degree or complete lack of physical affectedness on behalf of the O argument and / or a low degree of individuation of the O argument do not necessarily have to be part of the intransitive conjugation. Verbs possessing a low degree of semantic transitivity can also be found in the transitive conjugation, e.g. *gom-tə-um* “to meditate in, to think of”, *mik-tə-um* “to count”, *təhil-tə-um* “to choose”. This demonstrates that conjugation class membership in Bunan is essentially idiosyncratic. The conjugation class membership of a given verb may be predictable to a certain degree on the basis of its semantic content, but eventually conjugation class membership is lexically determined. Hence, it is not possible to identify a straightforward set of factors that account for the classification of bivalent verb stems as either intransitive or transitive. The observations made above merely represent tendencies, not rules.

12.4.2.2 Intransitive verbs derived from the transitive conjugation

As noted above, the intransitive conjugation only contains a small number of derived verbs, all of which have been derived from the transitive conjugation by means of the detransitivizing suffix -s (see § 12.3.2). Consider the following list.

Derived verb stems occurring in the intransitive conjugation

<i>bron-s-men</i>	"to prance"	<	<i>bron-tə-um</i>	"to make fun off"
<i>bron-s-ə-um</i>	"to banter"			
<i>dziŋ-s-men</i>	"to quarrel"	<	<i>dziŋ-tə-um</i>	"to scold"
<i>dziŋ-s-ə-um</i>	"to quarrel"			
<i>laŋ-s-men</i>	"to rise (of dough)"	<	<i>laŋ-tə-um</i>	"to raise (of dough)"
<i>laŋ-s-ə-um</i>	"to rise (of dough)"			
<i>lwat-s-men</i>	"to be forgotten"	<	<i>lwat-tə-um</i>	"to forget"
<i>lwat-s-ə-um</i>	"to be forgotten"			
<i>tə^he-s-men</i>	"to become warm"	<	<i>tə^he-tə-um</i>	"to warm up"
(cf. <i>tə^he-ə-um</i>	"to warm oneself up")			
<i>so-s-men</i>	"to become cold"	<	<i>so-tə-um</i>	"to cool down"
(cf. <i>so-ə-um</i>	"to cool oneself down")			

As the list demonstrates, the verb stems *bron-s-* "to prance", *dziŋ-s-* "to quarrel", *laŋ-s-* "to rise (of dough)", and *lwat-s-* "to become forgotten" are also attested in the middle conjugation, whereas the verb stems *tə^he-s-* "to become warm" and *so-s-* "to become cold" exclusively occur in the intransitive conjugation. To be sure, the underlying roots *so-* "cold" and *tə^he-* "warm" also appear in the middle conjugation. However, the respective verb forms do not contain the detransitivizing suffix *-s* as part of their stem.

In addition to the six verbs listed above, there are two further intransitive verb stems that are attested in the transitive conjugation as well. The respective verb pairs are given in the following.

Verb stems occurring in the intransitive and the transitive conjugation

<i>jot-men</i>	"to be lost"	<i>jot-tə-um</i>	"to lose"
<i>sok-men</i>	"to fit"	<i>sok-tə-um</i>	"to fit in, to push in"

The existence of such verb pairs might imply that the valence of an intransitive verb stem can simply be increased by reassigning it to the transitive conjugation. However, *jot-* and *sok-* are the only verb stems that occur in both the intransitive and the transitive conjugation without being augmented by further derivational morphemes. There are no other intransitive verbs that can be transitivized in the same manner. For example, it is not possible to turn the monovalent intransitive verbs *gwat-men* "to boil (intr.)" and *tjo-men* "to cry" into the corresponding bivalent verbs ***gwat-tə-um* "to boil (tr.)" and ***tjo-tə-*

um “to make cry”, respectively, by changing their conjugation class membership. The valence of these predicates can only be increased by using the periphrastic causative construction (see § 19.7), which is exemplified in the following two example sentences.

(541) *peltsi nampo gwatde dadzala takpo neme ramen.*

<i>peltsi=nampo</i>	<i>gwat-de</i>	<i>da-ø-dza=la</i>	<i>takpo</i>
milk=COM	boil-SUP	give-ø-TR-PST.SG=ANTER	strong
<i>neme</i>	<i>ra-men=jen</i>		
tasty	come-INF=EQ.CJ		

“After having boiled it together with milk, it becomes extremely tasty.” (lit. “Having given it cooking together with milk”)
(Conversation 74.53)

(542) *dordzedzi dzanpo tjore dadza.*

<i>dordze=dzi</i>	<i>dzanpo</i>	<i>tjo-de</i>	<i>da-dza</i>
Dorje=ERG.SG	Zangpo	cry-SUP	give-PST.DIR.DJ.SG

“Dorje made Zangpo cry.”
(NN 39.2 [elicited])

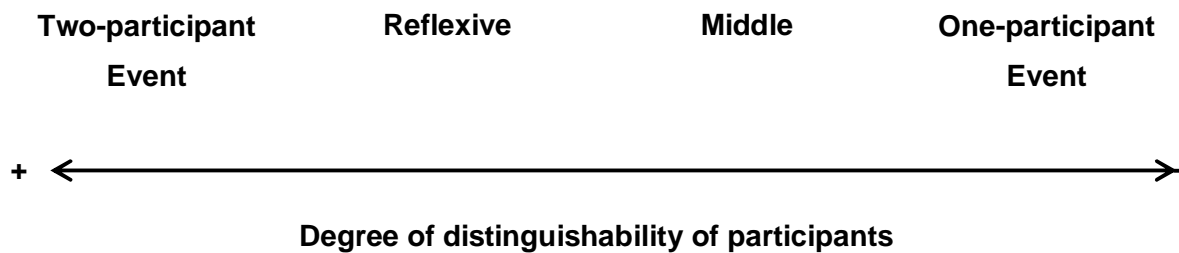
Hence, I do not consider the verb pairs *jot-men* “to be lost” – *jot-tə-um* “to lose” and *sok-men* “to fit” – *sok-tə-um* “to fit in” as instances of a derivational mechanism. Rather, I view them as distinct verb stems that happen to be homophonous.

12.4.3 The middle conjugation

Kemmer (1993: 73) characterizes the middle as a type of voice that is intermediate between transitive events (“two-participant events”) and intransitive events (“one-participant events”). Based on Hopper & Thompson’s (1980) gradual notion of transitivity (see § 12.4.1.1), Kemmer develops a model in which transitivity is seen as a gradual continuum that is related to the semantic notion of “distinguishability of participants”. Her definition of this term is given in the following.

“Two-participant events have maximal distinguishability of participants in that the participants are completely separate entities. The reflexive and middle have progressively lower distinguishability, which means that the Initiator (controller or conceived source of action) and Endpoint (affected participant) are not separate, but necessarily the same entity. Therefore the Initiator is also affected.”

Figure 39: Kemmer's (1993: 73) transitivity continuum



Kemmer (1993: 208) further argues that the parameter of “distinguishability of participants” is essentially a manifestation of the more general notion of “relative elaboration of events”, which she defines as “the degree to which the facets in a particular situation, i.e. the participants and conceivable component subevents in the situation, are distinguished”. In addition, she states that “relative elaboration of events is the key property by which reflexive and middle events are distinguished” (p. 209). This distinction can be illustrated with the following example sentences from Russian (RM = reflexive marker; MM = middle marker).

(RUS 1) *On* *utomil* *sebja*
 he exhausted RM
 “He exhausted himself.” (reflexive event)
 (Kemmer 1993: 27, citing Haimann 1983: 796)

(RUS 2) *On* *utomil+sjja*
 he exhausted+MM
 “He grew weary.” (spontaneous event)
 (Kemmer 1993: 27, citing Haimann 1983: 796)

(RUS 1) exhibits a comparatively high elaboration of events, as it implies that the subject performed an unspecified action (first subevent), and then subsequently became exhausted (second subevent). This correlates with a comparatively high degree of participant distinguishability. The agent (instigator of the unspecified action) is conceptualized as an entity different from the patient (exhausted person), although the two semantic roles refer to the same person. In (RUS 2), the relative elaboration of events is clearly lower, since the event does not necessarily presuppose a temporal sequence of two distinct subevents. It is conceivable that the subject grew weary in consequence of an event that preceded her / his change of mood, but such an interpretation is not mandatory. This low elaboration of events corresponds with a low degree of participant distinguishability, as it is no longer possible to differentiate between an actor and a patient.

Based on Kemmer's analysis, the middle can be characterized as a grammatical category that prototypically denotes situations in which (1) the subject is portrayed as the instigator of an action by which it is directly affected, and (2) there is no straightforward conceptual distinction between individual subevents or between the agent and the patient. In some languages, the middle may contrast with a reflexive category, which is then associated with a higher degree of relative elaboration of events and a higher degree of participant distinguishability. However, Kemmer (1993: 25) points out that not all languages make a formal distinction between reflexive and middle situations. The majority of languages included in her sample tend to mark prototypical reflexive situations and prototypical middle situations with the same morpheme. She refers to this marking strategy as "one-form middle systems" and contrasts them with "two-form middle systems", which make a formal distinction between prototypical reflexive situations and prototypical middle situations. As we will see below, Bunan can be considered as a language with a two-form middle system.

Kemmer identifies sixteen semantic domains that are likely to be associated with middle marking in languages that possess a corresponding marker. The respective domains are listed in the following.

Potential domains of middle marking (Kemmer 1993: 267–270)

- (1) Emphatic domain
- (2) *Reflexive (and related middle) situations
- (3) *Reciprocal domain
- (4) *(Middle) passive
- (5) *Impersonal
- (6) Facilitative
- (7) *Grooming
- (8) *Nontranslational motion
- (9) *Change in body posture
- (10) *Other body actions
- (11) *Translational motion
- (12) *Positionals
- (13) *Emotion middle
- (14) *Cognition middle
- (15) *Perception middle
- (16) *Spontaneous events

With regard to Kemmer's list, it is important to bear the following points in mind. First, not all of the semantic domains listed above are exclusively reserved for middle marking, but may also be associated with reflexive marking. If a language exhibits both a

reflexive and a middle marker, some rows of the table are more likely to trigger reflexive marking (e.g. emphatic and reflexive situations), while others are more likely to trigger middle marking (e.g. spontaneous events and the emotion / cognition / perception middle).

Second, languages do not necessarily have to mark individual semantic domains in a consistent manner. In Bunan, the spontaneous event verb *brant-ε-um* “to fall over” follows the middle conjugation, whereas the semantically contiguous verb *dat-men* “to fall down” is a member of the intransitive conjugation. Verbs of translational motion likewise occur in both the middle and the intransitive conjugation, as the verb pair *lok-ε-um* “to go up” (middle conjugation) – *baps-men* “to come down” (intransitive conjugation) illustrates. Accordingly, one should not expect to encounter uniformly marked domains. Every language that marks reflexive and / or middle categories with a specific morpheme exhibits an idiosyncratic distribution of marking strategies that are likely to cut across most semantic domains established by Kemmer.

Third, the different domains are not listed in a random order. According to Kemmer (1993: 267) the list begins with instances of middle marking that are most likely to be “grammatical” (i.e. derived from an active voice form) towards instances of middle marking that are more likely to be “lexical” (i.e. non-derived). Kemmer’s prediction largely holds true for Bunan, where semantic domains up to domain (7) “grooming” tend to be expressed by derived middle verb forms, whereas domain (8) “nontranslational motion” and following domains tend to be expressed by genuine middle verb forms. However, there are a few exceptions to this generalization. The most obvious is domain (12) “positionals”. Bunan does not possess genuine positional verbs, but commonly indicates positions with resultative constructions that are based on detransitivized verb forms that follow the middle conjugation. An example is given below.

(543) *nin tsʰaŋji kʰjak buɕi nindza.*

<i>nin</i>	<i>tsʰaŋji</i>	<i>kʰjak</i>	<i>but-s-ε-dʒi</i>	<i>nindza</i>
day	all	here	put-DETR-MID-CVB.SG	EX.PST.SG

“(The phone) was lying here (on the table) all day.”

(Conversation 68.42)

Further, domains (9) “change in body posture” and (15) “perception” are each represented by only one derived middle verb in my database: *praŋ-ε-um* “to stretch oneself” (< *praŋ-tε-um* “to stretch something”) and *εaŋ tsak-ε-um* “to watch eagerly” (lit. “to put eagerness into oneself”) (< *tsak-tε-um* “to put inside”).⁸⁷

⁸⁷ However, one might as well argue that this is an instance of a reflexive middle.

Finally, note that Kemmer acknowledges that certain semantic domains may not be formally distinguishable in some languages and that it may be difficult to assign certain verbs to a semantic domain in a straightforward manner. As example (543) above demonstrates, it is not possible to distinguish between middle passives and positionals in Bunan, as both domains are expressed by the same construction. Kemmer also points to the fact that future research may call for a revision of the list given above. However, to my knowledge there has not been an attempt to make substantial changes to her list.

In Bunan, the middle marker seems to exhibit a rather wide functional scope. It may occur in all semantic domains that have been marked with an asterisk in the list given above. Note that an asterisk does not indicate how common middle marking is in a given domain. The only domains that never trigger middle marking in Bunan are the emphatic domain and the facilitative domain. The emphatic domain is encoded with emphatic / reflexive pronouns (see § 5.2.2) rather than the middle marker. The facilitative domain, on the other hand, does not exist in Bunan. In any case, my database does not contain any constructions that can be considered as facilitative (e.g. “The book sells well.”; see Kemmer 1993: 147–149 for a more elaborate discussion of facilitative constructions).

Before we turn to the functional description of middle marking in Bunan, it is necessary to address the relationship between middle marking and valence on the one hand, and middle marking and derivational status on the other. My database contains 113 middle verb stems, 79 (69.9 %) of which are monovalent, whereas 34 (30.1 %) are bivalent. Accordingly, the percentage of bivalent verb stems is twice as high in the middle conjugation as compared to the intransitive conjugation. This is in accordance with Kemmer’s interpretation of the middle as a category intermediate between prototypical transitive events and prototypical intransitive events. Further, the middle conjugation contains a much higher percentage of derived verb stems. At least 24 (20.2 %) of all middle verb stems are derived from transitive verb stems by means of the detransitivizing suffix *-s*. The actual amount might be higher, but due to the deletion of the detransitivizing suffix *-s* after stem final plosives, it is not always possible to decide whether or not a given middle verb stem exhibits the suffix (see § 12.3.2). Accordingly, the middle conjugation again contrasts with the intransitive conjugation, which merely contains four (2.4 %) derived verb stems. The higher number of derived verb stems in the middle conjugation is a consequence of the fact that the majority of detransitized verbs are assigned to the middle conjugation (see § 12.3.2). Note that both Klaiman (1991: 105) and Kemmer (1993: 147–149) have pointed out that the middle is likely to be associated with transitivity-decreasing operations.

12.4.3.1 Genuine middle verbs

Of the 89 genuine middle verbs in my database, 65 (73.3 %) are monovalent and 23 (25.6 %) bivalent. This distribution is in line with Klaiman's (1991: 44) observation that "[t]here is a tendency for exclusively middle verbs to be intransitive [e.g. monovalent], but the correlation is not absolute." The following list contains all genuine middle verbs that are attested in my database.

Genuine middle verbs

<i>amt-ε-um</i>	"to walk"
<i>bamt-ε-um</i>	"to become insane"
<i>baps-ε-um</i>	"to start going"
<i>bart-ε-um</i>	"to come undone"
<i>bes-ε-um</i>	"to help one another (with work in the fields)"
<i>bjart-ε-um</i>	"to be attached, to become attached"
<i>bont-ε-um</i>	"to become twisted"
<i>brant-ε-um</i>	"to fall over"
<i>bras-ε-um</i>	"to disperse"
<i>brekt-ε-um</i>	"to slide, to slip"
<i>εit-ε-um</i>	"to die"
<i>εubu pukt-ε-um</i>	"to become dry (of skin)"
<i>dakt-ε-um</i>	"to break (intr.)"
<i>dipt-ε-um</i>	"to collapse (of roofs) (intr.)"
<i>dom-ε-um</i>	"to be busy, to become busy"
<i>dur-ε-um</i>	"to compete"
<i>dzikt-ε-um</i>	"to collapse (of walls) (intr.)"
<i>dzot-ε-um</i>	"to resist, to contain oneself"
<i>dzwalt-ε-um</i>	"to break of (and hang down)"
<i>qos-ε-um</i>	"to discuss"
<i>gi-ε-um</i>	"to wash oneself (of hands and face)"
<i>gjult-ε-um</i>	"to come off (of skin), to fall out (of hair)"
<i>go-ε-um</i>	"to have a party"
<i>grokt-ε-um</i>	"to crumble off, to scale off"
<i>gwak-ε-um</i>	"to embrace"
<i>ipt-ε-um</i>	"to fall asleep"
<i>lam-ε-um</i>	"to like, to enjoy"
<i>lok-ε-um</i>	"to go up"
<i>loŋ-ε-um</i>	"to vomit"
<i>mi-ε-um</i>	"to think about, to reflect"
<i>mik tshaps-ε-um</i>	"to wink (of eyes)"

<i>mur murs-ε-um</i>	“to grumble”
<i>nit-ε-um</i>	“to wither”
<i>pan-ε-um</i>	“to fly”
<i>pʰak-ε-um</i>	“to fuck”
<i>pʰik-ε-um</i>	“to fuck”
<i>pra tæek-ε-um</i>	“to be surprised”
<i>ruks nilt-ε-um</i>	“to chew the cud”
<i>rup-ε-um</i>	“to crowd, to come together”
<i>rwal-ε-um</i>	“to doze off”
<i>suk-ε-um</i>	“to move”
<i>tæur-ε-um</i>	“to be persistent”
<i>ten-ε-um</i>	“to lean backwards”
<i>tʰalt-ε-um</i>	“to pass, to ellapse”
<i>tʰi-ε-um</i>	“to melt”
<i>tra-ε-um</i>	“to sunbathe”
<i>tshuk-ε-um</i>	“to settle down”
<i>tukt-ε-um</i>	“to drip”
<i>tun-ε-um</i>	“to inhale”

The verbs can be related to the semantic domains of reciprocity (e.g. *bes-ε-um* “to help one another”), nontranslational motion (e.g. *bont-ε-um* “to become twisted”), other body actions (e.g. *loŋ-ε-um* “to vomit”), translational motion (e.g. *lok-ε-um* “to go up”), emotion (e.g. *lam-ε-um* “to like, to enjoy”), cognition (e.g. *mi-ε-um* “to think about, to reflect”), and spontaneous events (e.g. *nit-ε-um* “to wither”).

12.4.3.2 Middle verbs derived from the intransitive conjugation

As mentioned in § 12.4.1.3, there is a small number of non-genuine middle verbs that have been derived from intransitive verbs. They are listed in the following.

Middle verbs derived from the intransitive conjugation

<i>baps-ε-um</i>	“to come down”	<	<i>baps-men</i>	“to come down”
<i>bent-ε-um</i>	“to become spilled”	<	<i>bent-men</i>	“to become spilled”
<i>εaŋs-ε-um</i>	“to grow old”	<	<i>εaŋs-men</i>	“to grow old”
<i>kʰjuk-ε-um</i>	“to reverberate”	<	<i>kʰjuk-men</i>	“to reverberate”
<i>lus-ε-um</i>	“to be stuck”	<	<i>lus-men</i>	“to remain behind”
<i>rwak-ε-um</i>	“to graze (intr.)”	<	<i>rwak-men</i>	“to graze (intr. / tr.)”
<i>sops-ε-um</i>	“to heal”	<	<i>sops-men</i>	“to heal”

<i>ʃunt-ɛ-um</i>	“to wait”	<	<i>ʃunt-men</i>	“to guard”
<i>tɕʰaks-ɛ-um</i>	“to grow”	<	<i>tɕʰaks-men</i>	“to grow”
<i>tɕʰoŋs-ɛ-um</i>	“to jump”	<	<i>tɕʰoŋs-men</i>	“to jump”

These verbs can be related to the semantic domains of reciprocity (*ʃunt-ɛ-um* “to wait”), nontranslational motion (e.g. *kʰjuk-ɛ-um* “to reverberate”), other body actions (e.g. *rwak-ɛ-um* “to graze”), translational motion (e.g. *baps-ɛ-um* “to come down”), and spontaneous events (e.g. *tɕʰaks-ɛ-um* “to grow”).

As the list illustrates, most of the verb stems possess the same meaning regardless of the conjugation class in which they occur. In a few cases, a change in conjugation class correlates with a change in meaning, e.g. *lus-men* “to remain behind” vs. *lus-ɛ-um* “to be stuck”, *rwak-men* “to graze (tr.) / (intr.)” vs. *rwak-ɛ-um* “to graze (intr.)”, *ʃunt-men* “to guard” vs. *ʃunt-ɛ-um* “to wait”. The meanings of the derived middle verbs can all be explained as a natural consequence of middle marking. The verb *lus-ɛ-um* “to be stuck” entails a slight degree of self-affectedness or self-inflictedness that is not present in the genuine intransitive verb *lus-men* “to remain behind”. In other words, the event of being stuck requires a more active part on behalf of the single core argument than the event of remaining behind. The middle marker can thus be considered to raise the transitivity of the underlying verb stem *lus-* “remain behind” by assigning more agentivity to the single core argument. Note that this is the only instance of a derived middle verb that can be considered to exhibit a higher degree of transitivity than its corresponding underived verb form.

In case of the bivalent verb *ʃunt-ɛ-um* “to wait”, the middle marker has a somewhat different semantic effect. The event of waiting entails a higher degree of affectedness on behalf of the A argument than the act of guarding. That is because the event of waiting involves the presence of at least one second person who indirectly influences the A argument’s action by making him wait. The act of waiting can thus be considered as what Kemmer (1993: 123–127) refers to as a “collective situation”, a type of event that is semantically contiguous to reciprocal events. The middle marker thus has a transitivity-decreasing effect on the underlying verb stem.

The same is true in the case of the verb *rwak-ɛ-um* “to graze (intr.)”. The decrease in transitivity is much more obvious than in the case of *ʃunt-ɛ-um* “to wait”, as the middle marker does not only introduce a notion of “self-affectedness” (“to graze animals” > “to graze oneself”), but also reduces the valence of the underlying verb stem. Note that this is the only instance in which a verb stem has a higher valence when occurring in the intransitive conjugation than when appearing in the middle conjugation.

12.4.3.3 Middle verbs derived from the transitive conjugation (non-detransitivized)

As mentioned in § 12.4.1.3, the middle conjugation comprises a considerable number of verbs that have been derived from the transitive conjugation simply by changing the conjugational marker in slot V₂. They do thus not contain an additional derivational suffix indicating that they have been derived from a more transitive conjugation class (see the following section), but can only be identified as derived verbs on the basis of their standing in opposition with a corresponding genuine transitive verb.

The reassignment of a genuine transitive verb to the middle conjugation can have a number of different effects on the semantic transitivity of the relevant verb. Most commonly, the conjugation shift correlates with the conceptual merging of the agent and the patient or the conceptual merging of the agent and the recipient / goal. In other words, the agent is no longer performing an action on a patient / for a recipient that represents a distinct entity. Rather, the agent is acting on herself / himself or for herself / himself. These situation types thus correspond to what Kemmer (1993: 42–43; 74) refers to as the “direct reflexive” (agent = patient) and the “indirect reflexive” (agent = recipient), respectively. Derived verb stems in which the middle marker expresses a direct reflexive are given in the list below.

Conceptual merger of agent and patient (direct reflexive)

<i>ɕuk-ɕ-um</i>	“to comb one’s hair”	<	<i>ɕuk-tɕ-um</i>	“to comb someone’s hair”
<i>mok-ɕ-um</i>	“to cut one’s hair”	<	<i>mok-tɕ-um</i>	“to cut someone’s hair”
<i>nij-ɕ-um</i>	“to rub into one’s hair”	<	<i>nij-tɕ-um</i>	“to rub into someone’s hair”
<i>puk-ɕ-um</i>	“to soap oneself”	<	<i>puk-tɕ-um</i>	“to soap someone”
<i>so-ɕ-um</i>	“to cool oneself down”	<	<i>so-tɕ-um</i>	“to cool down something”
<i>su-ɕ-um</i>	“to wash oneself”	<	<i>su-tɕ-um</i>	“to wash someone”
<i>tɕa-ɕ-um</i>	“to rub in one’s face”	<	<i>tɕa-tɕ-um</i>	“to smear, to paint”
<i>tɕ^he-ɕ-um</i>	“to warm oneself up”	<	<i>tɕ^he-tɕ-um</i>	“to warm up something”

The following examples illustrate the difference between the bivalent transitive verb *ɕuk-tɕ-um* “to comb” and the corresponding middle verb *ɕuk-ɕ-um* “to comb oneself”. Note that both the affected body part and the possessor of the affected body part can acquire the role of the patient. With regard to case marking, there is no difference between

the transitive forms and their corresponding middle forms. In both cases, the agent can either stand in the (pragmatically unmarked) absolutive or the (pragmatically marked) ergative (cf. § 4.4.4.2).

(544) *gi / gidzi tal suk-tɛ-ek.*

<i>gi / gi=dzi</i>	<i>tal</i>	<i>suk-tɛ-ek</i>
1SG / 1SG=ERG.SG	3[SG]	comb-TR-PRS.CJ.SG

“I am combing him / It is me who is combing him.”

(NN 34.2 [elicited])

(545) *gi / gidzi taj kra suk-tɛ-ek.*

<i>gi / gi=dzi</i>	<i>taj</i>	<i>kra</i>	<i>suk-tɛ-ek</i>
1SG / 1SG=ERG.SG	3SG.GEN	hair	comb-TR-PRS.CJ.SG

“I am combing his hair / It is me who is combing his hair.”

(SZ 17.7 [elicited])

(546) *gi / gidzi kra suk-ɛ-ek.*

<i>gi / gi=dzi</i>	<i>kra</i>	<i>suk-ɛ-ek</i>
1SG / 1SG=ERG.SG	hair	comb-MID-PRS.CJ.SG

“I am combing my hair / It is me who is combing my hair.”

(NN 40.11 [elicited])

The following list gives an overview of middle verbs that express indirect reflexives, viz. events in which the agent argument is identical with the recipient argument.

Conceptual merger of agent and recipient (indirect reflexive)

<i>ɛaŋ tsak-ɛ-um</i>	“to watch eagerly” (lit. “to put eagerness into oneself”)	<	<i>tsak-tɛ-um</i>	“to put inside”
<i>ɛok-ɛ-um</i>	“to dress oneself (with underwear)”	<	<i>ɛok-tɛ-um</i>	“to dress someone (with underwear)”
<i>laŋ-ɛ-um</i>	“to sell (to earn one’s living)”	<	<i>laŋ-tɛ-um</i>	“to sell”
<i>pʰot-ɛ-um</i>	“to dress oneself (with a shirt)”	<	<i>pʰot-tɛ-um</i>	“to dress someone (with a shirt)”
<i>to-ɛ-um</i>	“to dress oneself (with a hat)”	<	<i>to-tɛ-um</i>	“to dress someone (with a hat)”
<i>tok-ɛ-um</i>	“to undress oneself”	<	<i>tok-tɛ-um</i>	“to undress someone”

<i>tsuk-ɛ-um</i>	“to dress oneself (with trousers, socks)”	<	<i>tsuk-tɛ-um</i>	“to dress someone (with trousers, socks)”
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The following example illustrates the difference between the bivalent transitive verb form *tok-tɛ-um* “to undress, to take off (trousers, socks)” and its corresponding middle form *tok-ɛ-um* “to undress, to take off (trousers, socks)”. The example was recorded during an elicitation session in which I was discussing about verbs of dressing and grooming with my main consultant. At some point, my main consultant's wife, who had noticed that I had been confounding transitive verbs forms and middle verb forms, gave me the following explanation of the functional difference between the transitive conjugation and the middle conjugation.

(547) *gidzi ini: pawla toknaŋ wa toktɛa lotɛumdzi. iŋgi: pawla tokɛinaŋ tokɛa. [...] gidzi taj pawla toktɛa.*

<i>gi=dzi</i>	<i>ini=ki</i>	<i>pawla</i>	<i>tok=naŋ</i>	<i>wa</i>
1SG=ERG.SG	2[SG].HON=GEN	socks	put.on=COND	FOC
<i>tok-tɛ-a</i>	<i>lot-tɛ-um=jendzi</i>	<i>iŋgi=ki</i>	<i>pawla</i>	
put.on-TR-SUP	say-TR-INF=EQ.DJ.SG	myself=GEN	sock	
<i>tok-ɛ=naŋ</i>	<i>tok-ɛ-a</i>	<i>gi=dzi</i>	<i>taj</i>	
put.on-MID=COND	put.on-MID-SUP	1SG=ERG.SG	3SG.GEN	
<i>pawla</i>	<i>tok-tɛ-a</i>			
socks	put.on-TR-SUP			

“When I take off your socks from you, we say *toktɛa*. When (I) take off my own socks from myself, (we say) *tokɛa*. [...] (When) I (take off) his socks (of him, we say) *toktɛa*.”

(TD 152b.1)

The following two examples illustrate the difference between the transitive verb *laŋ-tɛ-um* “to sell” and its derived middle form *laŋ-ɛ-um* “to sell (to earn one’s living)”.

(548) *tʰadzu petʂa nama lanʂa kʰonmen ringare ...*

<i>tʰadzu</i>	<i>petʂa=nama</i>	<i>lanʂ-tʂ-a</i>	<i>kʰon-ø-men</i>
that	book=all	buy-TR-SUP	finish-TR-PST.DIR.CJ

riŋ-k-are
say-INTR-PRS.DJ.SG

“He says that he has sold all those books.” (The person who sold the books is not a professional bookseller but sold them in his shop to do a favor to his friends who had written the book.)

(Conversation 32.7)

(549) *tʰadzu tal sa:ba:dzi lanʂum wa qanqɑ tʂʰwatʂum.*

<i>tʰadzu</i>	<i>tal</i>	<i>sa:ba:LN=dzi</i>	<i>lanʂ-ʂ-um=jen</i>	<i>wa</i>	<i>qanqɑ</i>
that	3[SG]	chief=ERG.SG	sell-MID-INF=EQ.CJ	FOC	equally

tʂʰwa-tʂ-um=jen
split-TR-INF=EQ.CJ

“He, the chief, sells those (apricots) and divides (the gain) equally.” (The selling of apricots is one of the main sources of income for this family.)

(Conversation 22.326)

These observations demonstrate that non-genuine middle verbs that are derived from the transitive conjugation most often refer to direct and indirect reflexive situations. However, there are few instances in which middle marking expresses a different kind of semantics. For example, middle marking may occur in what Kemmer (1993: 99–100) refers to as “collective situations”. Collective situations are actions that are carried out jointly by several participants who are not acting upon each other. In other words, the participants are not agents and patients at the same time, but are exclusively portrayed as agents. There are only two examples of this type of middle marking in my database. They are listed in the following. Note that there is no difference in meaning between the genuine transitive form and the derived middle form.

Collective situations

<i>pju-ʂ-um</i>	“to drop someone”	<	<i>pju-tʂ-um</i>	“to drop someone”
<i>tʂʰu-ʂ-um</i>	“to pick up someone”	<	<i>tʂʰu-tʂ-um</i>	“to pick up someone”

In addition, the middle may also mark situations in which the agent argument of a verb is portrayed as an affected entity. Such an instance is attested in the middle verb *kin-ʂ-um* “to give birth”, which is derived from the transitive verb *kin-tʂ-um* “to give birth”. Note

that the middle form can also receive the passive interpretation “to be born”. This passive reading of the middle form will not be addressed at this point, however, as it discussed below together with similar cases. According to my consultants, there is no overt difference in meaning between the transitive form *kin-tə-um* “to give birth” and its bivalent middle form *kin-ə-um* “to give birth”. The existence of the two alternating verb forms seems to be a consequence of the fact that the process of giving birth is not a prototypical transitive event in these sense of Givón ([1984–1990] 2001, 1: 109–110) and Næss (2007: 44), as the person who is giving birth is also affected by the process.

Affectedness of the A argument

kin-ə-um “to give birth” < *kin-tə-um* “to give birth”

Finally, there are three cases of derived middle verbs that exhibit anticausative, reciprocal, or passive meaning. The respective verb forms are listed below.

Anticausativization

tru-ə-um “to burn, to start burning
(of fire or light)” < *tru-tə-um* “to light (fire)”

Passivization

kin-ə-um “to be born” < *kin-tə-um* “to give birth”

Reciprocalization

bro-ə-um “to interact” < *bro-tə-um* “to mix”

These verb forms are remarkable, as anticausativization, passivization, and reciprocalization are usually caused by the detransitivizing suffix -s (see § 12.3.2), which is not present in any of the verb forms listed above. Accordingly, these forms have to be considered as special cases that semantically deviate from the established derivational mechanisms of the Bunan verbal system.

12.4.3.4 Middle verbs derived from the transitive conjugation (detransitivized)

In addition to the class of derived middle verbs discussed in the previous section, there is a second class of derived middle verbs that have been detransitivized by means of the derivational morpheme -s. The valency-decreasing effects that the detransitivizing morpheme may display in such contexts (i.e. anticausativization, passivization, reciprocalization, and backgrounding) have already been described in § 12.3.2. They are thus not recapitulated here. Rather, I confine myself to providing two lists of common derived middle verbs with anticausative and reciprocal meaning.

Derived middle verbs with anticausative meaning

<i>al-s-ε-um</i>	"to open (intr.)"	<	<i>al-tε-um</i>	"to open (tr.)"
<i>εen-s-ε-um</i>	"to wake up (intr.), to rise"	<	<i>εen-tε-um</i>	"to wake up (tr.), to raise"
<i>laŋ-s-ε-um</i>	"to rise (of leavened dough)"	<	<i>laŋ-tε-um</i>	"to raise (of fer- menting agent)"
<i>tεo-s-ε-um</i>	"to burn (of fire or wood) (intr.)"	<	<i>tεo-tε-um</i>	"to light (fire or wood)"
<i>tik-s-ε-um</i>	"to close (intr.)"	<	<i>tik-tε-um</i>	"to close (tr.)"
<i>tu-s-ε-um</i>	"to burn (of wood) (intr.)"	<	<i>tu-tε-um</i>	"to light (wood)"

Derived middle verbs with reciprocal meaning

<i>broŋ-s-ε-um</i>	"to banter"	<	<i>broŋ-tε-um</i>	"to make fun of"
<i>dziŋ-s-ε-um</i>	"to quarrel"	<	<i>dziŋ-tε-um</i>	"to scold"

Moreover, my database contains three derived middle verbs that contain the de-transitivizing suffix, but cannot be related to any of the four major valency-decreasing functions of the morpheme, viz. anticausativization, passivization, reciprocalization, and backgrounding. Rather, these verbs semantically behave like non-detransitivized derived middle verbs (see § 12.4.3.3 above). The respective verbs are listed below.

Derived middle verbs with exceptional semantics

<i>dzar-s-ε-um</i>	"to shave oneself"	<	<i>dzar-tε-um</i>	"to clean, to eat up"
<i>kri-s-ε-um</i>	"to dress oneself (with a belt)"	<	<i>kri-tε-um</i>	"to dress someone (with a belt)"
<i>prim-s-ε-um</i>	"to swab oneself"	<	<i>prim-tε-um</i>	"to swab so."

In case of the verbs *dzar-s-ε-um* "to shave oneself" and *prim-s-ε-um* "to swab oneself", the derived verb form expresses a meaning that involves the conceptual merging of the agent and the patient argument of the predicate. Thus, the derived verb form expresses a direct reflexive. In case of the verb *kri-s-ε-um* "to dress oneself (belt)", the derived verb form entails the conceptual merger of the agent and the recipient argument, viz. an indirect reflexive. These verbs represent the only detransitivized derived middle verbs in my database that receive a reflexive interpretation. They thus have to be regarded as exceptional instances of derived middle verbs that do not comply with the general derivational mechanisms of the Bunan verbal system.

12.4.4 The transitive conjugation

The class of transitive verbs is the largest of the three conjugation classes. My lexical database comprises 307 entries for transitive verbs. The transitive conjugation class is also the most homogeneous conjugation class with regard to valence. All verbs of the transitive conjugation that are attested in my database possess two or three core arguments. A list of these verbs is given in the following.⁸⁸

Middle verbs derived from the intransitive conjugation

<i>aks tak-tə-um</i>	“to call”
<i>al-tə-um</i>	“to open”
<i>aŋ-tə-um</i>	“to separate butter and buttermilk”
<i>ban-tə-um</i>	“to construct”
<i>bet-tə-um</i>	“to add”
<i>brak-tə-um</i>	“to arrange, to tie up”
<i>brəl-tə-um</i>	“to join together, to intertwine”
<i>bril-tə-um</i>	“to include”
<i>bris-tə-um</i>	“to write”
<i>bro-tə-um</i>	“to mix”
<i>broŋ-tə-um</i>	“to make fun of”
<i>bru-tə-um</i>	“to rub, to clean”
<i>brut-tə-um</i>	“to wipe of”
<i>but-tə-um</i>	“to put (down), to place”
<i>əak-tə-um</i>	“to immerse” (h)
<i>əat-tə-um</i>	“to narrate”
<i>əat-tə-um</i>	“to rinse (irrigation channels)”
<i>əen-tə-um</i>	“to raise, to wake up, to make stand up”
<i>əik-tə-um</i>	“to tear down (walls)”
<i>əok-tə-um</i>	“to dress (with underwear)”
<i>əor-tə-um</i>	“to miss, to drop”
<i>əu-tə-um</i>	“to skin”
<i>əuk-tə-um</i>	“to comb”
<i>əul-tə-um</i>	“to rinse”
<i>əup-tə-um</i>	“to push together, to telescope”
<i>da-tə-um</i>	“to give”
<i>dam-tə-um</i>	“to choose”
<i>dip-tə-um</i>	“to tear down (roofs)”
<i>dran-tə-um</i>	“to miss”

⁸⁸ Note that light verbs are not included in this list, as they are discussed separately in § 16.7.

<i>dras-tə-um</i>	"to chase away"
<i>dril-tə-um</i>	"to roll out"
<i>du-tə-um</i>	"to collect, to gather"
<i>duk-tə-um</i>	"to touch, to push together"
<i>dzat-tə-um</i>	"to do, to make (h)"
<i>dzer-tə-um</i>	"to stick into"
<i>dziŋ-tə-um</i>	"to scold"
<i>dzaŋ-tə-um</i>	"to build, to erect (h)"
<i>dzar-tə-um</i>	"to eat up, to clean"
<i>dzom-tə-um</i>	"to cremate (h)"
<i>dzu-tə-um</i>	"to digest"
<i>dzu-tə-um</i>	"to ask, to request, to invite (h)"
<i>dzur-tə-um</i>	"to debranch"
<i>qup-tə-um</i>	"to finish, to complete"
<i>gal-tə-um</i>	"to cross (mountain passes, rivers)"
<i>gap-tə-um</i>	"to incubate, to breed, to nurse"
<i>ges-tə-um</i>	"to accept, to take (only appropriate if the relevant entity is given in a vessel or put into one's folded hands)"
<i>gjur-tə-um</i>	"to translate"
<i>go kuk-tə-um</i>	"to adopt"
<i>go təo-tə-um</i>	"to earn a living"
<i>gom-tə-um</i>	"to mediate, to think of, to contemplate on"
<i>grik-tə-um</i>	"to put together, to connect"
<i>gwar-tə-um</i>	"to dig out fieldcrops with a pickax"
<i>ha: go-tə-um</i>	"understand"
<i>hel-tə-um</i>	"to take away, to bring away"
<i>hen-tə-um</i>	"to hear, to listen, to obey"
<i>wan-tə-um</i>	"to take out, to unload, to bring out"
<i>ja-tə-um</i>	"to serve (liquid food, e.g. drinks, soups, gravies)"
<i>jaŋ-tə-um</i>	"to draw (sword), to strike out"
<i>jaŋ-tə-um</i>	"to serve (solid food, e.g. rice, bread)"
<i>jap-tə-um</i>	"to split (by sawing)"
<i>jo-tə-um</i>	"to cook (h)"
<i>jok-tə-um</i>	"to buy"
<i>jok-tə-um</i>	"to keep"
<i>jot-tə-um</i>	"to be lost"
<i>ju-tə-um</i>	"to grind"
<i>juk-tə-um</i>	"to throw to the ground, to roll (stones)"

<i>kak-tə-um</i>	“to stop, to block”
<i>kal-tə-um</i>	“to load”
<i>kan-tə-um</i>	“to show”
<i>kan-tə-um</i>	“to watch”
<i>kaŋ-tə-um</i>	“to fill up, to pour in”
<i>kar-tə-um</i>	“to smash, to hammer, to thrash”
<i>kat-tə-um</i>	“to call together for a meeting”
<i>ki-tə-um</i>	“to wash (dishes, floor)”
<i>kil-tə-um</i>	“to dam up (water)”
<i>kin-tə-um</i>	“to give birth”
<i>kjal-tə-um</i>	“to take an oath”
<i>kjap-tə-um</i>	“to protect”
<i>kjar-tə-um</i>	“to scare”
<i>kjur-tə-um</i>	“to change, to divert (water)”
<i>kjwar-tə-um</i>	“to spread one’s legs”
<i>kok-tə-um</i>	“to devour”
<i>kol-tə-um</i>	“to distil”
<i>krak-tə-um</i>	“to fuck”
<i>kraŋ-tə-um</i>	“to pile up, to heap up”
<i>kret-tə-um</i>	“to sting, to bite”
<i>kri-tə-um</i>	“to dress with a belt”
<i>kril-tə-um</i>	“to twist”
<i>krim-tə-um</i>	“to spin a thread with one’s hands”
<i>korok-tə-um</i> ⁸⁹	“to dig out, to scrape of”
<i>kruk-tə-um</i>	“to shake, to stir, to roar (stomach)”
<i>ku ɛu-tə-um</i>	“to re-coat the floor with mud and cow dung”
<i>kwak-tə-um</i>	“to dip”
<i>kwal-tə-um</i>	“to hang up”
<i>kwat-tə-um</i>	“to wash away”
<i>kʰap-tə-um</i>	“to cover (objects)”
<i>kʰet-tə-um</i>	“to beat, to hit, to shoot”
<i>kʰir ka-tə-um</i>	“to turn”
<i>kʰjo-tə-um</i>	“to dry, to make dry”
<i>kʰju-tə-um</i>	“to wind up yarn on a stick”
<i>kʰjul-tə-um</i>	“to peel”
<i>kʰon-tə-um</i>	“to finish”

⁸⁹ This verb was only used by some of my oldest consultants. The unusual syllable structure suggests that it is a loanword from Manchad (cf. footnote 74).

<i>kʰor-tɕ-um</i>	“to repay”
<i>kʰril-tɕ-um</i>	“to embrace”
<i>kʰuk-tɕ-um</i>	“to find”
<i>lak-tɕ-um</i>	“to lick”
<i>lam-tɕ-um</i>	“to rinse”
<i>lam-tɕ-um</i>	“to fry”
<i>laŋ-tɕ-um</i>	“to make rise (dough)”
<i>laŋ-tɕ-um</i>	“to sell”
<i>lep-tɕ-um</i>	“to reach, to arrive”
<i>let-tɕ-um</i>	“to teach”
<i>lik-tɕ-um</i>	“to do, to make”
<i>lok-tɕ-um</i>	“to read, to study”
<i>loŋ-tɕ-um</i>	“to dig out”
<i>lot-tɕ-um</i>	“to say”
<i>lwat-tɕ-um</i>	“to forget”
<i>mik-tɕ-um</i>	“to count”
<i>mjaŋ-tɕ-um</i>	“to taste”
<i>mo-tɕ-um</i>	“to roast (grain)”
<i>mok-tɕ-um</i>	“to cut someone’s hair”
<i>nan-tɕ-um</i>	“to control, to bring under one’s control”
<i>nan-tɕ-um</i>	“to press”
<i>ne-tɕ-um</i>	“to rub in, to tan”
<i>niŋ-tɕ-um</i>	“to rub oil into one’s hair”
<i>num-tɕ-um</i>	“to smell”
<i>ŋa-tɕ-um</i>	“to borrow”
<i>ŋoŋ-tɕ-um</i>	“to suffer, to endure hardship”
<i>ŋuŋ-tɕ-um</i>	“to swallow”
<i>pak-tɕ-um</i>	“to measure”
<i>pak-tɕ-um</i>	“to re-coat walls with cow dung”
<i>pan-tɕ-um</i>	“to scare away (animals)”
<i>pe-tɕ-um</i>	“to pick up”
<i>pil-tɕ-um</i>	“to sieve, to sift”
<i>pin-tɕ-um</i>	“to fill, to load, to stuff”
<i>pjak-tɕ-um</i>	“to hide, to bury”
<i>pjar-tɕ-um</i>	“to attach, to fix, to glue”
<i>pjar-tɕ-um</i>	“to winnow”
<i>po-tɕ-um</i>	“to soak”
<i>pra-tɕ-um</i>	“to say goodbye”

<i>prak-tə-um</i>	“to cut, to divide”
<i>praŋ-tə-um</i>	“to stretch out”
<i>prek-tə-um</i>	“to shovel snow”
<i>prim-tə-um</i>	“to swab”
<i>pul-tə-um</i>	“to pull out, to tear out”
<i>pur-tə-um</i>	“to kill”
<i>pʰa-tə-um</i>	“to spray, to scatter”
<i>pʰam-tə-um</i>	“to defeat”
<i>pʰan-tə-um</i>	“to sew”
<i>pʰap-tə-um</i>	“to take down”
<i>pʰat-tə-um</i>	“to undo, to free”
<i>pʰel-tə-um</i>	“to increase, to multiply”
<i>pʰen-tə-um</i>	“to pour out, to empty, to spill”
<i>pʰet-tə-um</i>	“to make a path”
<i>pʰjar-tə-um</i>	“to raise, to lift up”
<i>pʰon-tə-um</i>	“to twist, to take out”
<i>pʰot-tə-um</i>	“to dress (with a shirt)”
<i>pʰrak-tə-um</i>	“to dismantle, to remove”
<i>pʰral-tə-um</i>	“to separate”
<i>pʰran-tə-um</i>	“to turn over”
<i>pʰrek-tə-um</i>	“to cause to slide down in small portions (hay, earth)”
<i>pʰri-tə-um</i>	“to take away, to diminish”
<i>pʰu-tə-um</i>	“to push”
<i>pʰul-tə-um</i>	“to present, to offer (h)”
<i>pʰur-tə-um</i>	“to shake”
<i>ral-tə-um</i>	“to dissolve (in liquids)”
<i>rik-tə-um</i>	“to fetch, to bring”
<i>ro-tə-um</i>	“to roast (meat), to cremate”
<i>ruk-tə-um</i>	“to chew”
<i>sak-tə-um</i>	“to store, to put aside”
<i>sak ʰin-tə-um</i>	“to breathe”
<i>sal-tə-um</i>	“to make space, to clear away”
<i>san-tə-um</i>	“to repair, to fix”
<i>se-tə-um</i>	“to recognize”
<i>so-tə-um</i>	“to cool down, to turn off (light), to put out (fire)”
<i>sok-tə-um</i>	“to push in”
<i>su-tə-um</i>	“to wash, to give a shower”
<i>su-tə-um</i>	“to welcome (h)”

<i>suŋ-tɕ-um</i>	“to say, to tell (h)”
<i>ɕap-tɕ-um</i>	“to ford (rivers)”
<i>ɕi-tɕ-um</i>	“to roll up (threads into a ball)”
<i>ɕok-tɕ-um</i>	“to send (letters, etc.)”
<i>ɕu-tɕ-um</i>	“to ask, to request”
<i>ɕul-tɕ-um</i>	“to drive”
<i>ɕuŋ-tɕ-um</i>	“to observe”
<i>tak-tɕ-um</i>	“to stick, to stab, to pierce”
<i>tan-tɕ-um</i>	“to wake up”
<i>tap-tɕ-um</i>	“to fold, to bend, to bring backs”
<i>tat-tɕ-um</i>	“to prepare, to put, to distribute”
<i>tɕa-tɕ-um</i>	“to paint, to rub in one’s face with a lotion”
<i>tɕak-tɕ-um</i>	“to wash (clothes)”
<i>tɕap-tɕ-um</i>	“to combine, to put together”
<i>tɕat-tɕ-um</i>	“to tear (with one’s hands)”
<i>tɕet-tɕ-um</i>	“to pull, to eat (of cows)”
<i>tɕip-tɕ-um</i>	“to suck”
<i>tɕir-tɕ-um</i>	“to sharpen”
<i>tɕo-tɕ-um</i>	“to light, to kindle (wood, fire)”
<i>tɕok-tɕ-um</i>	“to cover (persons and animals)”
<i>tɕol-tɕ-um</i>	“to propose”
<i>tɕom-tɕ-um</i>	“to rob”
<i>tɕot-tɕ-um</i>	“to beg”
<i>tɕu-tɕ-um</i>	“to squeeze, to wind out”
<i>tɕur-tɕ-um</i>	“to interrogate, to inquire, to ask repeatedly”
<i>tɕʰe-tɕ-um</i>	“to warm up”
<i>tɕʰil-tɕ-um</i>	“to choose”
<i>tɕʰo-tɕ-um</i>	“to dye”
<i>tɕʰol-tɕ-um</i>	“to pestle (crops), to beat up and down”
<i>tɕʰot-tɕ-um</i>	“to eat, to drink (h)”
<i>tɕʰu-tɕ-um</i>	“to fetch somebody, to pick up somebody”
<i>tɕʰun-tɕ-um</i>	“to bind around, to tie, to knot”
<i>tɕʰur-tɕ-um</i>	“to milk”
<i>ten-tɕ-um</i>	“to worship, to venerate”
<i>tik-tɕ-um</i>	“to close”
<i>tip-tɕ-um</i>	“to beat (persons, animals)”
<i>to-tɕ-um</i>	“to beat (drums)”
<i>to-tɕ-um</i>	“to lead”

<i>to-tɛ-um</i>	“to dress (with a cap)”
<i>tok-tɛ-um</i>	“to pluck”
<i>tok-tɛ-um</i>	“to recognize”
<i>tok-tɛ-um</i>	“to take off (clothes)”
<i>tol-tɛ-um</i>	“to pierce”
<i>ton-tɛ-um</i>	“to lift up”
<i>trak-tɛ-um</i>	“to scratch”
<i>tral-tɛ-um</i>	“to tear”
<i>tru-tɛ-um</i>	“to light, to kindle (electric light, fire)”
<i>truk-tɛ-um</i>	“to knead”
<i>trwan-tɛ-um</i>	“to hang, to hang up”
<i>tsak-tɛ-um</i>	“to put inside”
<i>tsap-tɛ-um</i>	“to cut into pieces, to work on wood”
<i>tsar-tɛ-um</i>	“to lay down, to lay out”
<i>tsir-tɛ-um</i>	“to squeeze out”
<i>tsok-tɛ-um</i>	“to pick, to carve”
<i>tsuk-tɛ-um</i>	“to begin, to plant”
<i>tsuk-tɛ-um</i>	“to dress (with trousers)”
<i>tsum-tɛ-um</i>	“to seize, to hold, to catch, to chase”
<i>tsʰak-tɛ-um</i>	“to filter”
<i>tsʰal-tɛ-um</i>	“to throw away, to drop”
<i>tsʰol-tɛ-um</i>	“to search, to look for”
<i>tsʰor-tɛ-um</i>	“to feel”
<i>tsʰwa-tɛ-um</i>	“to share, to distribute”
<i>tsʰwar-tɛ-um</i>	“to strew, to scatter”
<i>tu-tɛ-um</i>	“to light, to kindle (wood, candles)”
<i>tul-tɛ-um</i>	“to teach manners”
<i>tum-tɛ-um</i>	“to assemble”
<i>tum-tɛ-um</i>	“to sweep”
<i>tup-tɛ-um</i>	“to cut”
<i>twan-tɛ-um</i>	“to borrow, to lend”
<i>tʰak-tɛ-um</i>	“to break”
<i>tʰal-tɛ-um</i>	“to clap”
<i>tʰaŋ-tɛ-um</i>	“to see”
<i>tʰar-tɛ-um</i>	“to forge, to work on metal”
<i>tʰat-tɛ-um</i>	“to drop, to take down, to fell”
<i>tʰek-tɛ-um</i>	“to be able to carry, to be able to endure”
<i>tʰep-tɛ-um</i>	“to catch”

<i>tʰin-tɕ-um</i>	“to take away”
<i>tʰir-tɕ-um</i>	“to send (persons)”
<i>tʰok-tɕ-um</i>	“to announce”
<i>tʰon-tɕ-um</i>	“to finish, to complete”
<i>tʰor-tɕ-um</i>	“to pour (into big vessels)”
<i>tʰruŋ-tɕ-um</i>	“to nourish”
<i>tʰuk-tɕ-um</i>	“to dash against, to crash”
<i>tʰum-tɕ-um</i>	“to wrap”
<i>tʰwa-tɕ-um</i>	“to beg, to propose”
<i>tʰol-tɕ-um</i>	“to explain”
<i>tʰup-tɕ-um</i>	“to be able to, to achieve, to accomplish”
<i>war-tɕ-um</i>	“to fence in”

As mentioned above, not all verbs that follow the transitive conjugation are prototypically transitive verbs as defined by Givón ([1984–1990] 2001, 1: 109–110) and Næss (2007: 44). The transitive conjugation also comprises verbs such as *dran-tɕ-um* “to miss”, *gom-tɕ-um* “to meditate in, to think of”, or *ha: go-tɕ-um* “to understand”, which do not possess an agent and a patient / theme argument but rather an experiencer and a stimulus argument. This demonstrates that the assignment of verbs to a specific conjugation class is not based on a straightforward set of semantic parameters. To be sure, verbs with a high transitivity are mostly found in the transitive conjugation, whereas verbs with a low transitivity are commonly members of the intransitive conjugation. However, the distribution of individual verb forms across different conjugations is essentially idiosyncratic.

While the transitive conjugation is a common starting point for valency-decreasing operations (see § 12.4.1.3), there are no valency-increasing operations that assign genuine intransitive verbs and genuine middle verbs to the transitive conjugation. As a consequence, the transitive conjugation only consists of genuine transitive verbs. To be sure, Bunan possesses a morphosyntactic strategy to increase the valence of verbs. However, the relevant construction is a periphrastic causative construction that is based on the verb *da-tɕ-um*. This type of causativization is described in § 19.7.

12.4.5 The three conjugation from a comparative perspective

In Tibeto-Burman languages of the Greater Himalayan region, derivational and inflectional morphology of the verbal domain is often sensitive to distinctions in terms of valence and transitivity. This is, for example, the case in Classical Tibetan (Beyer 1992: 163), Kham (Watters 2002: 78–79), Limbu (van Driem 1987: 74), and Qiang (LaPolla 2003a: 121). I do not want to touch on the question whether the transitivity distinctions found in these languages are a genealogical feature inherited from Proto-Tibeto-Burman or whether they represent an areal feature that spread through language contact. I would

simply like to point out that morphosyntactic phenomena that are reminiscent of the conjugational classes of Bunan can be found in Tibeto-Burman languages that (according to current knowledge) are only distantly related to West Himalayish.

When we narrow down the scope of our investigation to West Himalayish, it becomes clear that Bunan is not the only language in the subgroup that classifies verbs into different conjugational classes. Zoller (1983: 68) and Willis (2007a: 328–329, 346–359) have described similar phenomena for Rongpo and Darma, respectively. Further, Sharma's (2007a: 55–63) description of the Byangsi verbal system suggests that the language differentiates between different conjugation classes as well. Sharma does not explicitly mention the existence of conjugations in Byangsi. However, the paradigms that he provides imply that the “present tense formative suffix” *-g ~ -k* and the “aspectivizer” *-ta ~ -to* might in fact represent conjugation markers of an intransitive and a transitive conjugation. At least this interpretation seems plausible from a comparative perspective, as the following table demonstrates. It compares the morphological structure of intransitive and transitive verbs in Bunan, Rongpo, Darma, and Byangsi. The morphological segmentation and glossing of the Rongpo, Darma, and Byangsi verb forms represent my personal analysis and do not necessarily reflect the analysis of the respective authors. Note that the diachronic equivalents of conjunct and disjunct forms in Bunan are first person and third person forms in the other languages, respectively. This functional correspondence is explained in § 13.5.4 in more detail.

Table 80: Intransitive conjugation markers in eastern West Himalayish

	Bunan	Rongpo	Darma	Byangsi
1SG	<i>el-k-ek</i> go-INTR-PRS.CJ.SG	<i>bwəl-kə-ŋ</i> camp-INTR-PRS.1SG	<i>ra-h-i</i> come-INTR-PRS.1SG	<i>ra-g-ε</i> come-INTR-PRS.1SG
2SG	<i>el-k-ana</i> go-INTR-PRS.2SG	<i>bwəl-kə-n</i> camp-INTR-PRS.2SG	<i>ra-h-en</i> come-INTR-PRS.2SG	<i>ra-g-ŋɔ</i> come-INTR-PRS.2SG
3SG	<i>el-k-are</i> go-INTR-PRS.DJ.SG	<i>bwəl-kə-n</i> camp-INTR-PRS.3SG	<i>ra-ni</i> come-INTR-PRS.3	<i>ra-g-an</i> come-INTR-PRS.3SG
1PL	<i>el-k-hek</i> go-INTR-PRS.CJ.PL	<i>bwəl-kə-ni</i> camp-INTR-PRS.PL	<i>ra-h-en</i> come-INTR-PRS.1PL	<i>ra-g-nye</i> come-INTR-PRS.1PL
2PL	<i>el-k-hakni</i> go-INTR-PRS.2PL	<i>bwəl-kə-ni</i> camp-INTR-PRS.PL	<i>ra-h-en(i)</i> come-INTR-PRS.2PL	<i>ra-g-ŋi</i> come-INTR-PRS.2PL
3PL	<i>el-k-hak</i> go-INTR-PRS.DJ.PL	<i>bwəl-kə-ni</i> camp-INTR-PRS.PL	<i>ra-ni</i> come-INTR-PRS.3	<i>ra-g-ŋan</i> come-INTR-PRS.3PL

Table 81: Transitive conjugation markers in eastern West Himalayish

	Bunan	Rongpo	Darma	Byangsi
1SG	<i>lik-tɛ-ek</i> do-TR-PRS.CJ.SG	<i>kaɽ-cə-ŋ</i> cut-TR-PRS.1SG	<i>ga-d-i</i> do-TR-PRS.1SG	<i>šun-tɔ</i> do-TR-PRS.1SG
2SG	<i>lik-tɛ-ana</i> do-TR-PRS.2SG	<i>kaɽ-cə-n</i> cut-TR-PRS.2SG	<i>ga-d-en</i> do-TR-PRS.2SG	<i>šun-ta-ŋo</i> do-TR-PRS.2SG
3SG	<i>lik-tɛ-are</i> do-TR-PRS.DJ.SG	<i>kaɽ-cə-n</i> cut-TR-PRS.3SG	<i>ga-d-a</i> do-TR-PRS.3	<i>šun-ta</i> do-TR-PRS.3SG
1PL	<i>lik-tɛ-hək</i> do-TR-PRS.CJ.PL	<i>kaɽ-ci-ni</i> cut-TR-PRS.PL	<i>ga-d-en</i> do-TR-PRS.1PL	<i>šun-ta-nye</i> do-TR-PRS.2SG
2PL	<i>lik-tɛ-həkni</i> do-TR-PRS.2PL	<i>kaɽ-ci-ni</i> cut-TR-PRS.PL	<i>ga-d-en(i)</i> do-TR-PRS.2PL	<i>šun-ta-ŋi</i> do-TR-PRS.2PL
3PL	<i>lik-tɛ-hək</i> do-TR-PRS.DJ.PL	<i>kaɽ-ci-ni</i> cut-TR-PRS.PL	<i>ga-d-a</i> do-TR-PRS.3	<i>šun-ta-ŋan</i> do-TR-PRS.3SG

As the tables given above demonstrate, verb forms display a similar morphological structure in all four languages. Admittedly, one might object that my morphological analysis of the verb forms in Rongpo, Darma, and Byangsi is geared towards fitting the structure of the corresponding Bunan forms. However, the alleged similarities between the different languages are not only limited to morphological structure, but also extend to phonological form. The intransitive conjugation markers *-k* in Bunan, *-kə* in Rongpo, and *-g* in Byangsi are most probably cognate, and it is not difficult to imagine that the corresponding morpheme *-h* in Darma represents a lenited reflex of a former suffix **-k*. With regard to the transitive conjugation, the data are more difficult to interpret. It seems obvious that the transitive marker *-tɛ* in Bunan and the morpheme *-cə ~ -ci* in Rongpo are etymologically related. It is also likely that the transitive marker *-d* in Darma and *-ta* in Byangsi have a common origin. However, it is not clear whether the affricate morphemes attested in Bunan and Rongpo are ultimately related to the stop morphemes found in Darma and Byangsi. Note that the formal differences between Bunan and Rongpo on the one hand and Darma and Byangsi on the other correlate with the classification of eastern West Himalayish presented in § 1.4.2, which places Bunan and Rongpo in the Central subgroup, while assigning Darma and Byangsi to the Pithauragarh subgroup.

The conjugation systems of Bunan, Rongpo, and Darma are similar in yet another respect. The intransitive conjugations in Rongpo and Darma do not only comprise monovalent verbs, but also contain verbs that exhibit two core arguments. Zoller (1983: 66) reports that the verbs *jəpən* ‘to eat’ and *tūpən* ‘to drink’ follow the intransitive conjugation. Willis’ (2007a: 330–331) description of the intransitive conjugation in Darma suggests that

it only contains monovalent verbs. However, she gives several example sentences that demonstrate that the verbs *jamu* “to eat” and *tunmu* “to drink” are in fact conjugated like intransitive rather than transitive verbs. Remember that these two verbs also follow the intransitive conjugation in Bunan.

The intransitive and transitive conjugations of Bunan thus clearly have functional equivalents in closely related languages. This gives rise to the question of whether there are also traces of the middle conjugation in Rongpo, Darma, and Byangsi. Indeed, middle marking has been described for all three languages (Zoller 1983: 49–50; Willis 2007a: 364–369; Sharma 2007a: 61–62).⁹⁰ The following table contrasts middle forms with intransitive and transitive verbs in Bunan, Rongpo, Darma, and Byangsi.

Table 82: Middle marking in eastern West Himalayish

	Bunan	Rongpo	Darma	Byangsi
INTR	<i>el-k-ek</i> go-INTR-PRS.CJ.SG	<i>bwəl-kə-ñ</i> camp-INTR-PRS.1SG	<i>ra-h-i</i> camp-INTR-PRS.1SG	<i>ra-g-ε</i> camp-INTR-PRS.1SG
MID	<i>su-ε-ek</i> wash-MID-PRS.CJ.SG	<i>kya:-s-kə-ñ</i> hide-MID-INTR-PRS.1SG	<i>ur-si-h-i</i> wash-MID-INTR-PRS.1SG	<i>ruŋ-ši-g-ε</i> listen-MID-INTR-PRS.1SG
TR	<i>lik-tε-ek</i> do-TR-PRS.CJ.SG	<i>kaɬ-cə-ñ</i> cut-TR-PRS.1SG	<i>ga-d-i</i> do-TR-PRS.1SG	<i>šun-tɔ</i> do-TR-PRS.1SG

As the table demonstrates, Rongpo, Darma, and Byangsi do not possess a distinct middle conjugation class like Bunan. Rather, middle verbs are members of the intransitive conjugation, but exhibit an additional middle morpheme, which is inserted between the verb stem and the conjugation class suffix. This observation provides interesting insights into the historical status of the middle conjugation in Bunan. The comparative evidence from Rongpo, Darma, and Byangsi suggests that the middle conjugation of Bunan originally only represented a subclass of the intransitive conjugation. Accordingly, the modern verb form *su-ε-ek* “wash-MID-PRS.CJ.SG” most probably goes back to a form **su-ε-k-ek* “*wash-MID-INTR-PRS.CJ.SG”. The middle verbs only acquired the status of a separate conjugation when a sound change caused the loss of the intransitive conjugation marker *-k* after the middle marker *-ε*. Note that this scenario also accounts for some idiosyncratic differences in inflectional endings between the different conjugations, e.g. in the conjunct future tense (cf. § 15.2.1.3). For intransitive and middle verbs, the conjunct future tense is expressed with the same endings as the conjunct present tense. However, the transitive

⁹⁰ Note that only Willis (2007a) refers to the respective category as “middle”, whereas Zoller (1983) and Sharma (2007a) use the terms “passive” and “mediopassive”, respectively.

conjugation possess a special set of endings to express the same temporal value. Consider the following table.

Table 83: Formal differences between future tense endings across conjugations

	Conjunct future tense	
INTR	<i>el-k-ek</i> go-INTR-PRS.CJ.SG	"I will go."
MID	<i>ɕen-s-ɕ-ek</i> rise-DETR-MID-PRS.CJ.SG	"I will stand up."
TR	<i>ɕen-ø-kata</i> do-TR-FUT.CJ.SG	"I will make (somebody) stand up."

This difference in tense marking becomes understandable once we acknowledge the fact that the derived form *ɕen-s-ɕ-ek* originally was reassigned to the intransitive conjugation (**ɕen-s-ɕ-k-ek*) and, accordingly, was conjugated like an intransitive verb.

The considerations presented in this section only represent a small-scale study that is restricted to eastern West Himalayish. In the absence of further comprehensive descriptions of West Himalayish languages, it is not possible to provide a more detailed comparison of conjugational systems across the subgroup. However, grammatical descriptions of the western West Himalayish languages Manchad (Francke 1909: 78–86) and Tinan (Francke 1909: 86–97) suggest that verb stems are probably also organized in different conjugation classes in some languages belonging to western West Himalayish.

12.5 Inflectional morphology of the verb

Verbs are inflected for five different grammatical categories in Bunan. These are tense, mood, conjunct-disjunct, evidentiality, person, and number. These categories differ from each other in terms of their pervasiveness in the verbal system. Tense, which is marked on almost all finite inflected forms, represents the most pervasive category. Conjunct-disjunct and number are likewise robustly attested, but there are certain forms that are not marked for these categories. Evidentiality marking is more restricted, as it only occurs in the past tense and – to a lesser extent – in the future tense but not in the present tense. Mood likewise represents a category that is only marked in a comparatively small number of constructions. Person marking, finally, has the most limited distribution. To be sure, person agreement forms can be found in the past, present, and future tense. However, person agreement is subject to pronounced age-dependent variation and virtually absent from the generatiolect of young speakers.

The verbal categories of Bunan are not further discussed at this point, but are described in more detail in § 13 and § 15. The following tables gives an overview of verbal categories and indicates in which sections particular phenomena are discussed.

Table 84: Verbal categories of Bunan

slot	grammatical category	subcategories	§
V₃	conjunct-disjunct	conjunct undergoer	§ 13.3
V₄	tense	present past future	§ 15.2.1
	mood	volitional consultative assumptive repudiative imperative	§ 15.2.2 and § 18.3
	conjunct-disjunct	conjunct disjunct	§ 13.3
	evidentiality	direct evidence inferential evidence	§ 13.4
	person	first person second person non-first person	§ 13.5
	number	singular plural	§ 13.6

12.6 Negation

Verb forms are negated with the morpheme *ma-*, which is prefixed to the verb stem. Note that this morpheme represents one of only two prefixes in the verbal domain of Bunan, the second prefix being the prohibitive prefix *ʈa-* (cf. § 18.3.2). All other derivational and inflectional morphemes are suffixes rather than prefixes. A few examples that illustrate the use of the negation prefix are given below.

(550) *qonpo=ɕi ja: eltsʰa madzɔttʰa.*

<i>qonpo=ɕi</i>	<i>ja:</i>	<i>el-tsʰa</i>	<i>ma-dzɔt-tsʰa</i>
guest=PL	yesterday	go-PST.DIR.DJ.PL	NEG-stay-PST.DIR.DJ.PL

“Our guests left yesterday, they did not stay.”

(Conversation 63.4)

(551) *tal makjanan wa kulik tsʰakdʒi el tʰirtɕum nindza apa.*

<i>tal</i>	<i>ma-kja=nan</i>	<i>wa</i>	<i>kulik</i>	<i>tsʰak-ø-dʒi</i>
3[SG]	NEG-become=COND	FOC	key	put.inside-TR-CVB
<i>el=tʰir-tɕ-um</i>	<i>nindza</i>	<i>apa</i>		
go=send-TR-INF	EX.PST.SG	AUTH		

“If he would not have been here, we would have locked the house and left.”

(Conversation 22.216)

(552) *hāj nun melokpaɕi magwak la tʰadzun?*

<i>hāj</i>	<i>nun</i>	<i>melok-pa=ɕi</i>	<i>ma-gwak=la</i>
2SG.GEN	there	Pattan.Valley-NZR=PL	NEG-EX.NON1PL=Q

tʰadzun

there

“Aren’t there some people from the Pattan Valley in your neighborhood?”

(Conversation 39.38)

The verb stem of a negated verb form may occur before the negated verb form according to the scheme *V ma-V-*. This construction puts additional emphasis on the negated proposition and, accordingly, represents an emphatic negation.

(553) *tʰadzu gjar=tok=tɕi gi nira el maegek.*

<i>tʰadzu</i>	<i>gjar=tok=tɕi</i>	<i>gi</i>	<i>nira</i>	<i>el</i>	<i>ma-el-k-ek</i>
that	fear =DAT=ABL	1SG	daytime	go	NEG-go-INTR-PRS.CJ.SG

“Because of that fear I do not go out during daytime.”

(The Lama and the Owl 30)

(554) *ʰansunɕek memɛzi nwak lik maliktɕhak.*

<i>ʰansunɕek</i>	<i>memɛ=zi</i>	<i>nwak</i>	<i>lik</i>	<i>ma-lik-tɕhak</i>
this.year=about	monk=PL	so	do	NEG-do-TR-PRS.DJ.PL

“The monks do not do it that way nowadays.”

(Tshechu 2.419)

In periphrastic verb forms, the negation commonly occurs on the auxiliary and not on the non-finite verb form. This is illustrated by the following example.

(555) *taldzi ʰamimaŋtɕi rikɕi men wa.*

<i>tal=dzi</i>	<i>ʰami=maŋ=tɕi</i>	<i>rik-s-ɕ-i</i>	<i>men</i>
3=ERG.SG	down.there=ALL=ABL	bring-DETR-MID-ACT	NEG.EQ.CJ
<i>wa</i>			
FOC			

“He does not bring (the stoves that he sells) from down there.”

(Conversation 55.191)

However, in my corpus of natural discourse, there are a few instances in which the negation prefix occurs on the non-finite verb form. This seems to indicate that these forms are on their way to becoming reanalyzed as morphologically simple forms (cf. § 15.2).

(556) *tete malepɕi jendzi.*

<i>tete</i>	<i>ma-lep-s-ɕ-i=jendzi</i>
grandfather	NEG-reach-DETR-MID-ACT=EQ.DJ.SG

“Grandfather has not arrived yet.”

(Conversation 14.48)

Bunan does not possess lexicalized negative pronouns (cf. English *nobody*, *nothing*, *never*, etc.), which could functionally replace the negation prefix. Indefinite pronouns acquire the meaning of negative pronouns when they are combined with a negated verb form. This is illustrated by the following examples.

(557) *erĩ kat lettəipa sur magwaj jen tʰan astok.*

<i>erĩ</i>	<i>kat</i>	<i>let-tə-i-pa</i>	<i>su=re</i>
1PL.INCL.GEN	language	teach-TR-ACT-NZR	whoever
<i>ma-gwa-i=jen</i>		<i>tʰan=astok</i>	
NEG-EX.PL-ACT=EQ.CJ		today=TERM	

“There has never been anybody who taught our language (to foreigners) to the present day.”

(Conversation 25.58)

(558) *girok ta inidzi ika re kakatsiti re madawdza.*

<i>gi=tok=ta</i>	<i>ini=dzi</i>	<i>ika=re</i>	<i>kakatsi=tiki=re</i>
1SG=DAT=AVS	2.HON=ERG.SG	when=EXT	lamb=INDEF=EXT
<i>ma-da-ø-ku-dza</i>			
NEG-give-TR-UND-PST.DIR.DJ.SG			

“But to me, you have never given a single lamb!”

(The Prodigal Son 53)

There are a small number of verb forms that occur in a special short form when being negated. First, this is true for the direct evidential past tense of verbs that follow the transitive conjugation. These verbs exhibit an inflectional ending *-men*, which is commonly dropped if the verb form is negated. Consider the following example.

(559) *gompa dzoʔj tʰaŋ matʰaŋ hiŋtʃi.*

<i>gompa</i>	<i>dzot-i</i>	<i>tʰaŋ</i>	<i>ma-tʰaŋ-men</i>	<i>hiŋ=tsʰi</i>
monastery	stay-ACT	see	NEG-see-PST.DIR.CJ	1PL.EXCL=ERG.PL

“We did not see anybody who lived at the monastery.”

(Tshechu 2.398)

Second, this is true for the inferential form of the existential copula *ni-* (see § 14.3). In declarative statements, the inferential form surfaces as *dzot-ka=ni*: “must be, will be”. When negated, the form loses its inflectional endings, as the following example illustrates.

(560) *bidzil tsore madzot nwa:stok.*

<i>bidzil_{LN}</i> =tsore	<i>ma-dzot-ka=ni:</i>	<i>nwa:stok</i>
electricity=ENR	NEG-stay-PROG.SG=EX.NON1SG	at.that.time

“There may not have been electricity in those days.”

(Conversation 87.175)

In addition, negated short forms are also attested in combination with certain copulas. The non-first person form of the existential copula *ni:*, for example, is often realized as [mej ~ mēj] rather than [mani:]. The equative copula *jen-*, on the other hand, possesses a special negative stem *men-*, which represents a phonological truncation of a once morphologically transparent form **ma-jen-*. Consider the following examples.

(561) *dwanj asti gomner re mej.*

<i>dwanj</i> =asti	<i>gomner</i> =re	<i>ma-ni</i>
two.years.ago=SML	peon=EXT	NEG-EX.NON1SG

“For the last two years or so, there has not been a peon (at the monastery) either.”

(Tshechu 2.504)

(562) *keska men!*

<i>keska</i>	<i>men</i>
lie	NEG.EQ.CJ

“This is not a lie!”

(Conversation 25.24)

(563) *šəšur gompa mendzi!*

<i>šəšur gompa</i>	<i>mendzi</i>
Shashur Monastery	NEG.EQ.CJ

“(This monastery in the photograph) is not Shashur Monastery!”

(Conversation 72.8)

12.7 Non-finite verb forms

In Bunan, there are five different non-finite verb forms. The respective verb forms are (1) the infinitive, (2) the supine, (3) the progressive participle, (4) the active participle, and (5) the converb. These infinite verb forms are discussed in the following subsections.

12.7.1 The infinitive

The infinitive is formed with the ending *-men* in the intransitive conjugation, and with the ending *-um* in the middle and transitive conjugations, as illustrated in the table below.

Table 85: The infinitive endings

INTR	MID	TR
<i>V-men</i>	<i>V-ε-um</i>	<i>V-tε-um</i>

At first, it may seem strange that the middle and transitive conjugation use a different infinitive marker. However, it is highly probable that the two allomorphs *-men* and *-um* derive from a common source, and that the allomorph *-um* is the result of (1) the insertion of an epenthetic vowel /u/ between the conjugation markers and the infinitive endings, and (2) the subsequent loss of the last syllable of the resulting trisyllabic verb form. The proposed scenario is illustrated below.

The development of allomorphy in infinitive endings

<i>ra-men</i>	“come-INF”	< * <i>ra-men</i>	“come-INF”
<i>loŋ-ε-um</i>	“vomit-MID-INF”	< * <i>loŋ-ε-men</i>	“vomit-MID-INF”
<i>lik-tε-um</i>	“make-TR-INF”	< * <i>lik-tε-men</i>	“make-TR-INF”

The infinitive marker derives nouns that refer to the action denoted by the respective verb and plays an important role in the formation of periphrastic verb forms (see § 15.3.1) and relative clauses with future tense reference (see § 19.2.3). Accordingly, the infinitive hardly ever occurs as the last element of a subordinate clause, but is most often followed by a copula or the relativizer *=tsuk*. The only grammatical context in which non-augmented infinitive forms are robustly attested are constructions of the type *V-INF kʰams ra-men* “to feel like doing V” (lit. “the coming of the desire to do V”), which is illustrated by the following examples.

(564) *da ini ramen kʰams ranaŋ ini ɲampo ra tʰir na.*

<i>da</i>	<i>ini</i>	<i>ra-men</i>	<i>kʰams</i>	<i>ra=naŋ</i>	<i>ini</i>
now	2[SG].HON	come-INF	desire	come=COND	2[SG].HON
<i>ɲampo</i>	<i>ra=tʰir-a=na</i>				
together	come=send-IMP.SG=HS				

“‘If you want to come, come with (us)’, he said.”

(Tulshug Lingpa 166)

(565) *niŋmaj tɕʰos inok liktɕum kʰams ranəŋ ɲampo wa gidzi tɕʰos da.ta.*

niŋma=ki *tɕʰos* *ini=tok* *lik-tɕ-um* *kʰams*
Nyingma=GEN religion 2[SG].HON=DAT make-TR-INF desire

ra=nanɲ=ɲampo *wa* *gi=dzi* *tɕʰos*
come=COND=COM FOC 1SG=ERG.SG religion

da-ø-kata

give-TR-FUT.CJ.SG

“If you want Nyingma teachings, then I shall teach you.”

(Tulshug Lingpa 19)

The noun-like nature of infinitives is indicated by two factors. First, some infinitive forms have developed into nouns, e.g. the infinitive form *dza-men* “to eat”, which has become a noun *dzamen* with the meaning “food” (see section 4.3.7). Second, infinitives may form compounds together with other nouns. This is illustrated by the following example, in which the compound *el-men-gjak* “go-INF-calendar.day” occurs.

(566) *ɕimlamən elmengjak wa nam radza wa.*

ɕimla=maŋ *el-men-gjak* *wa* *nam*
Shimla=ALL go-INF-calendar.day FOC sky

ra-dza *wa*
come-PST.DIR.DJ.SG FOC

“On the day that you went to Shimla it rained, right?”

(Conversation 14.112)

12.7.2 The supine

The supine is formed with the ending *-de* in the intransitive conjugation and with the ending *-a* in the middle and transitive conjugation, as illustrated below.

Table 86: The supine endings

INTR	MID	TR
<i>V-de</i>	<i>V-ɕ-a</i>	<i>V-tɕ-a</i>

The formal difference between the allomorphs *-de* and *-a* is striking, and it is difficult to imagine that they have developed from a common source. The intransitive supine ending *-de* is most probably derived from an old verb for “to come”, which is no longer attested as a lexical verb in Bunan, but has developed into the attributive copula *de-* (see § 14.4). This assumption is corroborated by the presence of cognate verbs in other West

Himalayish languages, i.e. Sunnami *de-waŋ* “to go” (Christian Huber, p.c.), Rongpo *di-pəŋ* (Zoller 1983), Darma *dɛ-mu* (Willis 2007a), Byangsi *dye-mo* (Sharma 2007a), and Chaudangsi *de-mo* (Krishan 2001b). Furthermore, this scenario is also in line with comparative grammaticalization research. According to Heine & Kuteva (2002: 163–165), verbs with the meaning “to go” are a well-known source of purposive markers. The origin of the allomorph *-a*, which is attested in the middle and transitive conjugation, is not clear at the moment. It most probably belongs to an older morphological layer than the intransitive supine suffix *-de*.

The supine is functionally contiguous to the infinitive (see above), but distinguishes itself from the latter form in two ways. First, the supine often expresses a purposive meaning and, accordingly, is not simply an “infinitive” but rather an “infinitive of purpose”. Second, the supine does not share the nominal character of the infinitive. This is reflected by the fact that the supine does not occur in complex constructions that are based on clausal nominalizations, i.e. periphrastic verb forms and relative clauses.

A number of examples that illustrate the use of the supine are given below.

(567) *tal katɕaŋ dotde taj kjuma elijendzi wa.*

<i>tal=katɕaŋ</i>	<i>dot-de</i>	<i>taj</i>	<i>kjuma</i>	<i>el-i=jendzi</i>
3[SG]=ADESS	meet-SUP	3SG.GEN	home	go-ACT=EQ.DJ.SG
<i>wa</i>				
FOC				

“He went to his friend’s home in order to meet him.”

(Conversation 87.318)

(568) *otɕi nam nosnaŋ amtɕa el-a ne!*

<i>otɕi</i>	<i>nam</i>	<i>nos=naŋ</i>	<i>amt-ɕ-a</i>	<i>el-a</i>
tomorrow	sky	clear.up=COND	walk-MID-SUP	go-IMP.SG
<i>ne</i>				
SUG				

“If the sky will have cleared up by tomorrow, then do go for a walk!”

(Conversation 59.14)

(569) *kjum joktəa hoəmej kaj jendzi.*

<i>kjum</i>	<i>jok-tə-a</i>	<i>hoəmej</i>	<i>kaj</i>	<i>jendzi</i>
house	buy-TR-SUP	very.much	difficult	EQ.DJ.SG

“It is very difficult to buy a house.”

(Conversation 14.52)

The supine form is often additionally augmented with the dative clitic =*tok* to express an additional degree of emphasis. This is illustrated by the following example.

(570) *gi kullumaŋ elte tʰara sabdzi joktəarok*

<i>gi</i>	<i>kullu=maŋ</i>	<i>el-te</i>	<i>tʰara</i>	<i>sabdzi</i> _{LN}
1SG	Kullu=ALL	go-VOL.SG	that.other	vegetables

jok-tə-a=tok

buy-TR-SUP=DAT

“I want to go to Kullu in order to buy that other stuff, vegetables.”

(TD unrec 17)

12.7.3 The progressive participle

The progressive participle is formed with the morpheme *-ka* (singular) / *-kʰa* (plural) throughout all conjugations, as the table below illustrates. Note that there is no distinction between singular and plural forms in the transitive conjugation.

Table 87: The progressive participle endings

	INTR	MID	TR
SG	<i>V-ka</i>	<i>V-ə-ka</i>	<i>V-ka</i>
PL	<i>V-kʰa</i>	<i>V-ə-kʰa</i>	

The progressive participle suffixes *-ka* / *-kʰa* appear to belong to an ancient layer of derivational morphology. This is suggested by the fact that formally and functionally similar participle forms have been described for the closely related West Himalayish language Rongpo (Zoller 1983: 56).

As the label “progressive participle” implies, the suffixes *-ka* (singular) / *-kʰa* (plural) derive modifying expressions that refer to the event denoted by the verb stem to which they have been suffixed. From a functional perspective, the resulting verb forms are reminiscent of English progressive participles in *-ing*. In terms of syntactic behavior, Bunan progressive participles behave like adverbs, as they can only modify clauses but not noun

phrases. They are commonly used to form adverbial clauses that specify the manner in which a certain action is performed. A few examples that illustrate the use of progressive participles are given in the following.

(571) *kangja el!*

<i>kan-ka</i>	<i>el-a</i>
watch-PROG	go-IMP.SG

“Go carefully!” (lit. “Go while watching”)

(TD unrec 53)

(572) *nunanj wa tjoa taldzi satta ...*

<i>nunanj</i>	<i>wa</i>	<i>tjo-ka</i>	<i>tal=dzi</i>	<i>sat-ø-ta</i>
then	FOC	cry-PROG.SG	3=ERG.SG	tell-TR-PST.INFER.DJ

“And then, (while she was) crying, she told (him) ...”

(King Kesar 127)

(573) *nunanj tsari likka likka likka wa tal rolans senga tsukais.*

<i>nunanj</i>	<i>tsari_{LN}</i>	<i>lik-ka</i>	<i>lik-ka</i>	<i>lik-ka</i>
therefore	provocation	make-PROG	make-PROG	make-PROG

<i>wa</i>	<i>tal</i>	<i>rolans</i>	<i>s-en-s-a</i>
FOC	3[SG]	rolangs	raise-DETR-MID-SUP

tsuk-s-i=jendzi

begin-DETR-MID-ACT=EQ.DJ.SG

“Therefore, while the people kept teasing (the dead body), it started to rise as a rolangs.”

(Conversation 87.395)

In addition, progressive participles are used to form adverbial clauses with anterior temporal reference. In this case, the respective participial form is negated and followed by the temporal adverb *durek* “before”. The following example sentences illustrate this use of the progressive participle form. The respective adverbial clauses can be combined with main clauses that refer to past, present or future events.

- (574) *bottok durek nanpasangepaj tɕʰos madarga durek bonpo tɕʰos dardzi gwaj jentɕʰok.*

<i>bot=tok</i>	<i>durek</i>	<i>nanpasangepa-tɕʰos</i>	<i>ma-dar-ka</i>
Tibet=DAT	before	Buddhism-religion	NEG-develop-PROG.SG
<i>durek</i>	<i>bonpo-tɕʰos</i>	<i>dar-ø-dzi</i>	<i>gwa-i=jentɕʰok</i>
before	Bonpo-religion	develop-TR-CVB	EX.PL-ACT=EQ.DJ.PL

“Before the religion of Buddhism had been established in Tibet, they had established the religion of the Bonpos (there).”

(Zhangzhung 26)

- (575) *mu mara: durek manwel lepdza.*

<i>mu</i>	<i>ma-ra-ka</i>	<i>durek</i>	<i>manwel</i>
snow	NEG-come-PROG.SG	before	Manuel
<i>lep-ø-dza</i>			
reach-TR-PST.DIR.DJ.SG			

“Manuel reached here before it snowed.”

(SA unrec 2)

- (576) *gi mara: durek taldzi dzamen likkata.*

<i>gi</i>	<i>ma-ra-ka</i>	<i>durek</i>	<i>tal=dzi</i>	<i>dzamen</i>
1SG	NEG-come-PROG.SG	before	3=ERG.SG	food
<i>lik-ø-kata</i>				
make-TR-FUT.1SG				

“Before I will come home, he will prepare food.”

(NN 22.7 [elicited])

The progressive participle can be combined with the existential copula *ni-* to form a periphrastic progressive present tense. This construction is discussed in § 15.3.2.1.

12.7.4 The active participle

The active participle is formed with the suffix *-i* in all conjugations, as the following table illustrates.

Table 88: The active participle endings

INTR	MID	TR
<i>V-i</i>	<i>V-ε-i</i>	<i>V-tε-i</i>

Like the progressive participle (see preceding section), the active participle is essentially a modifying expressions that refers to the action denoted by the verb stem. However, unlike the progressive participle, which behaves like an adverb, the active participle is functionally similar to an adjective. This is not surprising, as the active participle marker *-i* is most probably cognate to the modifier marker *-i*, which is the most common derivational morpheme on adjectives in the Bunan lexicon (see § 6.3.1). However, the active participle hardly ever occurs as a simple noun modifier. Rather, the non-finite verb form serves as a basis for a range of different complex constructions, such as several periphrastic verb forms (see § 15.3.3) and relative clauses with past and present tense reference (see § 19.2).

As noted above, the active participle does usually not occur in prenominal position. In the following examples, it occurs with the agentive nominalizer *-pa* (see § 4.3.2). The resulting nominalized participle forms are agentive nouns.

(577) ... *boskat pʰajpa noj gwak* ...

<i>boskat</i>	<i>pʰja-i-pa</i>	<i>noj</i>	<i>gwak</i>
Tibetan.language	speak-ACT-NZR	many	EX.NON1PL

“... there are many people who speak Tibetan ...”

(Conversation 84.68)

(578) *nuj tʰukεipazok hoεmej kaj jendzi apa.*

<i>nuj</i>	<i>tʰuk-ε-i-pa=εi=tok</i>	<i>hoεmej</i>	<i>kaj</i>
new	settle.down-MID-ACT-NZR=PL=DAT	extremely	difficult

<i>jendzi</i>	<i>apa</i>
EQ.DJ.SG	AUTH

“For those who have settled recently (in the Kullu Valley) it is very difficult.”

(Conversation 1.14)

(579) *erĩ kat lettəipa sur magwaj jen tʰan astok.*

<i>erĩ</i>	<i>kat</i>	<i>let-tə-i-pa</i>	<i>su=re</i>
1PL.INCL.GEN	language	teach-TR-ACT-NZR	who=EXT
<i>ma-gwa-i=jen</i>		<i>tʰan=astok</i>	
NEG-EX.PL-ACT=EQ.CJ		today=TERM	

“There has not been anybody teaching our language (i.e. Bunan) until today.”
(Conversation 25.58)

12.7.5 The converb participle

The converb participle is formed by adding the endings *-dzi* (singular) / *-təʰi* (plural) to a verb stem. The endings are uniform across all conjugations. Note that there is no distinction between a singular and a plural form in the transitive conjugation.

Table 89: The converb participle endings

	INTR	MID	TR
SG	<i>V-dzi</i>	<i>V-ə-dzi</i>	<i>V-ə-dzi</i>
PL	<i>V-təʰi</i>	<i>V-ə-təʰi</i>	

The converb participle is a semi-finite verb form⁹¹ that indicates a sequential temporal relationship between a converb form and a finite verb form. More precisely, the converb form refers to an event that occurred before the event denoted by the finite verb form. Accordingly, converb forms are commonly used to form adverbial clauses that express temporal sequentiality. The resulting constructions can be translated into English as temporal clauses introduced with *After having ...* or as main clauses that are connected to another main clause with the conjunction *... and (then) ...*. Note that converb participles are devoid of any temporal, aspectual, modal, or epistemic value. They are interpreted based on the next finite verb form occurring in the same sentence. A few examples are given in the following.

⁹¹ See § 15.1 for a more elaborate discussion of the term “semi-finite”.

(580) *dordzeliŋtɕi naŋre eltɕhi nuŋtɕi nepal re lepta.*

dʒordzeliŋ=tɕi naŋrek el-tɕhi nuŋtɕi nepal=re
 Darjeeling=ABL inside go-CVB.PL then Nepal=EXT
lep-ø-ta
 reach-TR-PST.INFER.DJ

“From Darjeeling they went into (the mountains) and then also came to Nepal.”
 (Tulshug Lingpa 179)

(581) *dottɕi el!*

dot-dʒi el-a
 meet-CVB.SG go-IMP.SG

“Meet me (first) and (only then) leave!”
 (TL unrec 1)

(582) *tɕujlek kurtɕi ra tɕujlek!*

tɕuj=lek kurt-dʒi ra-a tɕuj=lek
 ten=APP carry-CVB.SG come-IMP.SG ten=APP

“Bring about ten, about ten (copies of your book)!” (lit. “Carry and come ...”)
 (Conversation 32.9)

The converb participle is used to form periphrastic resultative constructions. These constructions are discussed in § 15.3.4.1.

12.8 Number distinctions

A small number of verb stems distinguishes between a singular stem and a plural stem. The respective verb pairs are listed below.

Verbs exhibiting a lexicalized number distinction

<i>waŋs-men</i>	“to come out (sg.)”	<i>kʰwaŋs-men</i>	“to come out (pl.)”
<i>ni-men</i>	“to be (there) (sg.)”	<i>gwa-men</i>	“to be (there) (pl.)”
<i>ra-men</i>	“to come (sg.)”	<i>gwaŋ-men</i>	“to come (pl.)”
<i>tart-men</i>	“to be free (sg.)”	<i>tʰart-men</i>	“to be free (pl.)”
<i>tjo-men</i>	“to cry (sg.)”	<i>tʰjot-men</i>	“to cry (pl.)”
<i>tuŋ-men</i>	“to drink (sg.)”	<i>tʰuŋ-men</i>	“to drink (pl.)”

The following example sentences illustrate the stem opposition based on the verbs *tuŋ-men* “to drink” and *ra-men* “to come”.

(583) *mjas tete dza tun-gare la?*

<i>mjas</i>	<i>tete</i>	<i>dza</i>	<i>tun-k-are=la</i>
Myas	grandfather	tea	drink-INTR-PRS.DJ.SG=Q

“Does the grandfather of the Myas family drink tea?”

(DP unrec 1)

(584) *itəik tʰun-kʰak!*

<i>itəik</i>	<i>tʰun-kʰak</i>
how.much	drink.PL-INTR-PRS.DJ.PL

“How much (coffee) you guys drink!”

(DP unrec 13)

(585) *pasan nimati radza.*

<i>pasan</i>	<i>nima=tiki</i>	<i>ra-dza</i>
Pasang	day=INDEF	come-PST.DIR.DJ.SG

“Pasang came (to visit me) one day.”

(Conversation 31.2)

(586) *tsʰantʰanji gwan-tsʰa.*

<i>tsʰantʰanji</i>	<i>gwan-tsʰa</i>
all	come.PL-PST.DIR.DJ.PL

“All of them came.”

(Conversation 39.19)

As the list given above demonstrates, the plural stem is most often derived from the singular stem by replacing a voiceless-unaspirated initial with a homorganic aspirated initial, e.g. *tun-men* “to drink (sg.)” vs. *tʰun-men* “to drink (pl.)”, *tart-men* “to be free (sg.)” vs. *tʰart-men* “to be free (pl.)”. The singular verb stem *tjo-men* “to cry (sg.)” contrasts with a plural verb stem *tʰjot-men* “to cry (pl.)”, which is augmented with an additional syllable final plosive *-t*. This sound might represent an instance of the functionally opaque derivational suffix described in § 12.3.4. In the case of the verb stem pair *wans-men* “to come out (sg.)” vs. *kʰwans-men* “to come out (pl.)”, the number opposition is based on an opposition of a vocalic onset vs. a consonantic onset in */kʰ/*.

The existential copula *ni-* and the verb *ra-men* “to come (sg.)” exhibit the suppletive plural stems *gwa-* and *gwan-men* “to come (pl.)”, respectively. The phonological similarity between the two plural stems suggests that they may have a common origin. Indeed,

it is conceivable that the plural copula stem might have been derived from the plural stem *gwaŋ-*, which is commonly used to indicate generic existence, as the following example illustrates (cf. § 14.6.2). The origin of the suppletive plural stem *gwaŋ-* “to come (pl.)” is not clear at present.

(587) *wa kudzumaŋ herti ramen get mi atə^henomo dʒogni: gwaŋmen.*

<i>wa</i>	<i>kudzu=maŋ</i>	<i>her=tiki</i>	<i>ra-men=jen</i>	<i>get</i>
FOC	Kullu=ALL	again=INDEF	come-INF=EQ.CJ	eight
<i>mi</i>	<i>atə^he-nomo</i>	<i>dʒogni:LN</i>	<i>gwaŋ-men=jen</i>	
person	older.sister-younger.sister	fairy	come.PL-INF=EQ.CJ	

“And in Kullu, there is another (story). (According to this story) there are eight persons, older sisters and younger sisters, fairies.”

(The Fairies of Kullu 1.78)

There is evidence that the lexicalized number opposition described above only developed recently. First, there are merely six instances of lexicalized number distinctions in my corpus. Second, the phenomenon has not been reported for any other West Himalayish language so far. Moreover, remember that an opposition of plain initial vs. aspirated initial is often exploited to express number distinctions in nominal and verbal morphology, e.g. =*dzi* “ERG.SG” vs. =*ts^hi* “ERG.PL”, -*dza* “PST.DIR.DJ.SG” vs. -*ts^ha* “PST.DIR.DJ.PL”, -*dʒi* “CVB.SG” vs. -*tə^hi* “CVB.PL”. It is thus highly probable that the aspiration opposition was analogically extended from the endings to a small number of verbal stems with a high token frequency.

12.9 Honorific verbs

Bunan possesses a considerable number of honorific verbs. All the honorific verbs that are attested in my database are given below.

Honorific verbs

<i>am-men</i>	“to come (h)”		
<i>əak-tə-um</i>	“to immerse (h)”		
<i>don-men</i>	“to eat (h)”	< WT <i>’don</i>	“to eat (h)”
<i>dʒat-tə-um</i>	“to make, to do (h)”	< WT <i>mdʒad</i>	“to make, to do (h)”
<i>dʒal-men</i>	“to visit (h)”	< WT <i>mjal</i>	“to visit (h)”
<i>dʒaŋ-men</i>	“to build, to erect (h)”	< WT <i>bzhengs</i>	“to raise, to erect (h)”
<i>dʒu-tə-um</i>	“to ask, to request (h)”	< WT <i>zhu</i>	“to ask (h)”
<i>dʒuks-men</i>	“to sit (h)”	< WT <i>bzhugs</i>	“to sit, to reside (h)”
<i>jo-tə-um</i>	“to cook (h)”	< WT <i>g.yo</i>	“to prepare (food)”
<i>kjot-men</i>	“to come (h)”	< WT <i>skyod</i>	“to come (h)”

<i>si tʰir-tə-um</i>	“to paint (h)”	< WT <i>si</i>	“color”
<i>suŋ-tə-um</i>	“to say (h)”	< WT <i>gsung</i>	“to speak, to talk (h)”
<i>tams-men</i>	“to be born (h)”	< WT <i>bltams</i>	“to be born (h)”
<i>təʰam-men</i>	“to perform a mask dance (h)”	< WT <i>ʼchams</i>	“to dance”
<i>təʰot-təa</i>	“to eat, to drink (h)”	< WT <i>mchod</i>	“to eat, to drink (h)”
<i>tɔŋs-men</i>	“to die (h)”	< WT <i>ʼgrongs</i>	“to die (h)”
<i>tʰuŋs-men</i>	“to be reborn (h)”	< WT <i>ʼkhrungs</i>	“to be born (h)”

As the list illustrates, most of these honorific verbs have been borrowed from neighboring Tibetan varieties. Tibetic languages are generally renowned for their elaborate systems of honorific expressions (cf. Beyer 1992: 154–155). Note that Bunan, unlike some varieties of Tibetan, does not possess “elegant” forms, e.g. lexemes that indicate the socially inferior status of the speaker.

As I already pointed out in § 4.6 on honorific nouns, it is important to keep in mind that the honorific expressions of Bunan cannot be equated with sophisticated stylistic variants of English, e.g. “to arrive” (instead of “to come”), “to dine” (instead of “to eat”), “to converse” (instead of “to talk”), etc. Honorific expressions are not simply stylistic variants that a Bunan speaker may optionally use in formal contexts. Rather, they are mandatory when speaking about persons of high social rank (i.e. monks, nuns, and members of the family of a local chief) or religious issues. The following sentences illustrate the use of some honorific verbs.

(588) *təʰorten tiki dʒaŋgathek tʰadzun inɪzi: gompə likɛitsukkuŋ.*

<i>təʰorten=tiki</i>	<i>dʒaŋ-ø-kathek</i>	<i>tʰadzun</i>	<i>inɪ=ɛi=ki</i>
stupa=INDEF	build.HON-TR-FUT.CJ.PL	there	2.HON=PL=GEN
<i>gompə</i>	<i>lik-s-ɛ-i=tsuk=kuŋ</i>		
monastery	make-DETR-MID-ACT=REL=LOC		

“We will build a stupa there, in the place where you built your monastery.”

(Tulshug Lingpa 113)

(589) *wa hiŋ ɲama tsʰaŋitsʰi rinpotæe nuŋ dʒudʒi helmen na.*

<i>wa</i>	<i>hiŋ=ɲama</i>	<i>tsʰaŋi=tsʰi</i>	<i>rinpotæe</i>	<i>nuŋ</i>
FOC	1PL.EXCL=all	all=ERG.PL	Rinpoche	there

<i>dʒu-ø-dʒi</i>	<i>hel-ø-men=na</i>
request.HON-TR-CVB	bring-TR-PST.DIR.CJ=HS

“All of us asked the Rinpoche there (for teachings) and brought him with us.”
(Tulshug Lingpa 54)

(590) *paŋgra gompā dʒalet madʒalet?*

<i>paŋgra gompā</i>	<i>dʒal-et</i>	<i>ma-dʒal-et</i>
Pangra Monastery	visit.HON-PST.DIR.CJ	NEG-visit.HON-PST.DIR.CJ

“Have you visited Pangra Monastery or not?”
(Tshechu 2.160)

12.10 Defective verbs

In Bunan, there are two lexemes that serve the propositional act of predication and, accordingly, fulfill the function of verbs, but do not possess the full inflectional potential of verbs. These two defective verbs are *gjut* “to want, to need” and *qik* “to be suitable”. They are discussed in the following subsections.

12.10.1 *gjut* “to want, to need”

The defective verb *gjut* occurs as a finite inflected verb in certain contexts. It possesses a present tense stem *gjus-* and a participle stem *gjun-*, both of which are illustrated by the examples given below.

(591) *girok soti gjuskare.*

<i>gi=tok</i>	<i>soti</i>	<i>gjus-k-are</i>
1SG=DAT	water	need-INTR-PRS.DJ.SG

“I need water.”
(TD 274.11 [elicited])

(592) *saŋʈe kjanan wa gjunɕi jendzi.*

<i>saŋʈe</i>	<i>kja=nan</i>	<i>wa</i>	<i>gjun-s-ɕ-i</i>
old.man	become=COND	FOC	need-DETR-MID-ACT

jendzi
EQ.DJ.SG

“When you become an old man, it is necessary (to sit on cushions instead of the bare ground).”

(DP unrec 18)

The present stem *gjus-* has most probably been derived from the basic root *gjut-* by suffixation of the stative suffix *-s* (see § 12.3.1). The phonological form of the participle stem *gjun-* cannot be explained as the result of a derivational process. Zoller (1983: 266) reports a verb stem *gyũ-* ~ *gyũc-* for Rongpo, a West Himalayish language closely related to Bunan. The presence of a nasalized vowel /ũ/ in Rongpo suggests that the stem final nasal may be an old feature rather than a recent innovation.

The detransitivized active participial form *gjun-s-ɕ-i* “being wanted, being needed” is well attested in my data. The participle is frequently used with different copulas to express that something is needed or was needed.

(593) *girok soti gjunɕi ni:*

<i>gi=tok</i>	<i>soti</i>	<i>gjun-s-ɕ-dzi</i>	<i>ni:</i>
1SG=DAT	water	need-DETR-MID-CVB.SG	EX.NON1SG

“I want / need water.”

(TD 274.8 [elicited])

(594) *girok soti gjunɕi nindza.*

<i>gi=tok</i>	<i>soti</i>	<i>gjun-s-ɕ-dzi</i>	<i>nindza</i>
1SG=DAT	water	need-DETR-MID-CVB.SG	EX.PST.SG

“I wanted / needed water.”

(TD 274.9 [elicited])

The present stem *gjus-*, on the other hand, is exceedingly rare. It is only attested once in my corpus of natural speech and a few more times in elicited sentences. The rarity of the present tense stem is a consequence of the fact that speakers prefer to use the bare stem *gjut* in present tense contexts. The use of the defective verb *gjut* is illustrated by the sentences below.

(595) *manu bras gjut la?*

<i>manu</i>	<i>bras</i>	<i>gjut=la</i>
Manuel	rice	need=Q

“Manuel, do you want more rice?”

(Conversation 79.14)

(596) *kam se kam t̤a:li:s pat̤a:s mi hent̤ipa ta gjut kana!*

<i>kam se kam_{LN}</i>	<i>t̤a:li:s_{LN}</i>	<i>pat̤a:s_{LN}</i>	<i>mi</i>
at.least	forty	fifty	person
<i>hen-t̤-i-pa=ta</i>		<i>gjut</i>	<i>kan-a</i>
hear-TR-ACT-NZR=AVS		need	watch-IMP.SG

“But see, we need at least forty or fifty people as audience members (for the talk)!”

(Conversation 16.101)

In addition, speakers frequently predicate the nominalized form *gjut-s* “wanting, need” with the attributive copula *de-*. The resulting copula clause thus translates as “There is the wanting to ... / There is the need to ...”. The following example illustrates this construction.

(597) *k̤orek ama n̤ampo ph̤jare gjus de.*

<i>k̤orek</i>	<i>ama=n̤ampo</i>	<i>ph̤jare</i>	<i>gjus</i>	<i>de</i>
later	mother=COM	speak-SUP	need-NZR	ATT.SG

“Later, I want to talk to mother.”

(Conversation 97.13)

12.10.2 *q̤ik* “to be suitable”

The second defective verb in Bunan is *q̤ik* “to be suitable”. Like the defective verb *gjut* “to want, to need”, *q̤ik* can be inflected as an intransitive verb. This is illustrated by the following examples.

(598) *san̤tara tsore q̤ikkare ka.*

<i>san̤tara_{LN}=tsore</i>	<i>q̤ik-k-are</i>	<i>ka</i>
orange=ENR	be.suitable-INTR-PRS.DJ.SG	ASS

“Oranges and other fruits make good desserts.”

(Conversation 79.1)

(599) *da eraŋ temrel maɖiktsa.*

<i>da</i>	<i>eraŋ</i>	<i>temrel</i>	<i>ma-ɖik-dza</i>
now	1PL.INCL	blessing	NEG-be.suitable-PST.DIR.DJ.SG

“Now, our blessings were not effective.”

(Tulshug Lingpa 199)

However, finite inflected verb forms such as the ones given above only rarely occur in my corpus of natural speech. Most often, speakers only use the simple stem *ɖik* as a defective verb, as the following examples illustrate.

(600) *dza maliknaŋ ɖik ɖik.*

<i>dza</i>	<i>ma-lik=naŋ</i>	<i>ɖik</i>	<i>ɖik</i>
tea	NEG-make=COND	be.suitable	be.suitable

“It is okay if you do not make tea.”

(Conversation 23.18)

(601) *kwaks ɖik ma?*

<i>kwak-s</i>	<i>ɖik</i>	<i>ma</i>
dip-NZR	be.suitable	CNS

“That is enough gravy (for you), right?”

(TD unrec 4)

(602) *manu pitaŋ tik thirnaŋ ɖik la?*

<i>manu</i>	<i>pitaŋ</i>	<i>tik=thir=naŋ</i>	<i>ɖik=la</i>
Manuel	door	close=send=COND	be.suitable=Q

“Manuel, is it okay if I close the door completely?”

(DP 10)

The defective verb *ɖik* is clearly a borrowing from a neighboring Tibetan variety (cf. WT *’grig* “to fit, to be right”). It is not clear whether the use of *ɖik* as a defective verb has been encouraged by contact with Tibetan or whether the phenomenon only developed in Bunan after the lexeme had been borrowed.

13 Epistemic marking and syntactic agreement

13.1 Introduction

The Bunan verbal system is remarkable from a cross-linguistic perspective, as it simultaneously exploits the functional domains of syntactic agreement and epistemic marking. With the term “syntactic agreement”, I refer to agreement in terms of the categories “person” and “number”, i.e. the indexation of person and number features on the predicate. With the term “epistemic marking”, I refer to the marking of the grammatical categories “evidentiality” and “conjunct-disjunct”, which reflect the epistemic perspective of the speaker, or, more generally, the “epistemic source” (see § 13.2.2 below for a definition of this term). The following example sentence illustrates the encoding of both types of grammatical categories.

(603) *tal=tsʰi ja: girok kʰetkʰjutsʰa.*

<i>tal=tsʰi</i>	<i>ja:</i>	<i>gi=tok</i>	<i>kʰet-ø-ku-tsʰa</i>
3=PL	yesterday	1SG=DAT	beat-TR-UND-PST.DIR.DJ.PL

“They beat me yesterday.”

(TD 63.2 [elicited])

The verb form in example (603) contains syntactic and epistemic information. Let us first consider the level of syntactic agreement. The finite verb form contains the inflectional ending *-tsʰa*, which indexes the plural number of the pronoun *tal=tsʰi* “3=PL”. Accordingly, the morpheme specifies the syntactic relationship between the predicate and its arguments by indicating the presence of a plural subject. At the same time, the predicate also incorporates epistemic information. Unlike syntactic agreement, epistemic information does not relate individual arguments to the clause, but specifies the relationship that holds between the speaker and the knowledge contained in the proposition. The verb form in (603) includes two morphemes that contain epistemic information. First, there is the inflectional ending *-tsʰa*, which expresses two different epistemic categories. For one thing, the morpheme has a direct evidential value and accordingly indicates that the speaker gained the knowledge through direct perception. For another thing, the morpheme expresses that the information represents “disjunct knowledge”, i.e. that the speaker does not have privileged access to the information in the proposition by virtue of being the wilful instigator of the action. Second, there is the secondary conjunct marker *-ku*. This morpheme indicates that the speaker possesses privileged access to the information contained in the proposition because she / he is coreferent with the patient argument of the predicate.

The presence of both syntactic agreement and epistemic marking in Bunan is clearly the consequence of intense contact with different language communities. For sev-

eral centuries, Bunan has been spoken in a region that borders on the continuum of Tibetan varieties in the North, and the continuum of Indo-Aryan idioms in the South. It is thus not surprising that the grammar of Bunan comprises both syntactic agreement, which is prominent in Indo-Aryan languages, and epistemic marking, which is a common phenomenon in Tibetic languages.

There is ample evidence that the Bunan verbal system was originally exclusively based on syntactic agreement, but subsequently acquired epistemic categories due to longstanding and intensive contact with Tibetic languages. A major functional shift from syntactic agreement to epistemic marking took place in the recent past, when Bunan converted an old person agreement system into a conjunct-disjunct system. The details of this transformation are too complex to be discussed at this point. Suffice it to say that the process involved two main mechanisms: (1) the reanalysis of first person and third person forms as conjunct and disjunct markers, respectively, and (2) the partial collapse of old agreement paradigms and the subsequent functional rearrangement of verb forms. A preliminary study of the first mechanism can be found in Widmer (2015).

In the following sections, I describe the epistemic and syntactic grammatical categories that are encountered in the verbal domain from both a synchronic and a diachronic perspective. After some preliminary remarks on epistemic marking in § 13.2, I discuss the epistemic categories “conjunct-disjunct” and “evidentiality” in § 13.3 and § 13.4, respectively. In §13.5, I describe the syntactic category “person”, and in 13.6, I provide an account of the syntactic category “number”.

13.2 Preliminary remarks on epistemic categories

13.2.1 An overview of epistemic marking in Bunan

From a comparative Tibeto-Burman perspective, the verbal system of Bunan is interesting, as it represents an intermediate stage between “simple” conjunct-disjunct systems that have been described for languages such as Kathmandu Newar (Hale 1980; Hargreaves 2005), Kaike (Watters 2006) and Galo (Post 2013), and the more complex epistemic systems found in Tibetic languages (Häsler 1999; Haller 2000a, 2004; Hein 2001; Tournadre 2003; Huber 2005).

In the present tense, the verbal system of Bunan encodes a basic distinction that is very similar to the conjunct-disjunct system of Kathmandu Newar. Conjunct singular endings (-*ek*) occur in contexts in which the speaker acts as the wilfull instigator of an event, whereas disjunct singular endings (-*are*) occur in contexts in which the speaker does not assume this role. Consider the following examples.

(604) **gi len liktæk.**

<i>gi</i>	<i>len</i>	<i>lik-tæ-ek</i>
1SG	work	do-TR-PRS.CJ.SG

“I am working.”

(TD unrec 50)

(605) **gi dzuktoktæi gjalgare.**

<i>gi</i>	<i>dzuk=tok=tæi</i>	<i>gjal-k-are</i>
1SG	pain=DAT=ABL	recover-INTR-PRS.DJ.SG

“I am recovering from the sickness.”

(TD 322.4 [elicited])

(606) **ini dzaŋdzaŋ liktæare!**

<i>ini</i>	<i>dzaŋdzaŋ</i> ⁹²	<i>lik-tæ-are</i>
2[SG].HON	insincere.refusal	do-TR-PRS.DJ.SG

“You are refusing the tea insincerely!”

(Conversation 36.12)

(607) **dordzædzi dzaŋporok dzamen liktæare.**

<i>dordzæ=dzi</i>	<i>dzaŋpo=tok</i>	<i>dzamen</i>	<i>lik-tæ-are</i>
Dorje=ERG.SG	Zangpo=DAT	food	do-TR-PRS.DJ.SG

“Dorje is cooking food for Zangpo.”

(NN 39.4 [elicited])

In interrogative speech acts, the distribution of conjunct and disjunct markers is different. Here, conjunct markers occur whenever the addressee is portrayed as the wilfull instigator of an event, whereas disjunct markers occur in all other contexts.

⁹² The concept of *dzaŋdzaŋ*, the “insincere refusal” of drinks and food, is a central element in the culture of hospitality practiced by the Bunan speaking community. Whenever guests are offered drinks or food, they will not immediately accept these refreshments, but will emphatically refuse them several times, while the host will resolutely insist that the guests eat and / or drink. This ostensible refusal of hospitality is considered to be polite. Similar customs have been documented for Tibetan-speaking communities of Northern India (cf. Norman 2001: 4–5).

(608) **gi** *noj dza:re* **la?**

gi *noj* *dza-k-are=la*
1SG much eat-INTR-PRS.DJ.SG=Q

“Do I eat a lot?”

(TC unrec 1)

(609) **handzi** *kʰa liktsek?*

han=dzi *kʰa* *lik-tsek*
2=ERG.SG what do-TR-PRS.CJ.SG

“What are you doing?”

(Conversation 87.352)

(610) **awa** *kʰa liktare?*

awa *kʰa* *lik-tare*
father what do-TR-PRS.DJ.SG

“What is father doing?”

(Conversation 53.3)

In contexts of reported speech, the situation is again different. Here, conjunct morphology occurs whenever the quoted speaker is portrayed as the wilfull instigator of an event, whereas disjunct markers occur in all other contexts.⁹³

(611) **taldzi rinjare tal** *gjokspa kjuma ragek.*

tal=dzi *rinj-k-are* *tal* *gjokspa* *kjuma*
3=ERG.SG say-INTR-PRS.DJ.SG 3[SG] quick home

ra-k-ek

come-INTR-PRS.CJ.SG

“He_i says that he_i will come home soon.”

(TD 62.2 [elicited])

⁹³ Note that these sentences exhibit a somewhat unusual syntactic structure. In Bunan, speech complements are rarely preceded by their matrix clause. Rather, the matrix clause commonly follows the speech complement, and most often only consists of the verb *rinj-k-are* “say-INTR-PRS.DJ.SG” without an overt subject. The peculiar structure of the example sentences given above results from the fact that they were elicited rather than recorded from natural speech.

(612) *taldzi ringare tal gjokspa kjuma ra:re.*

<i>tal=dzi</i>	<i>riŋ-k-are</i>	<i>tal</i>	<i>gjokspa</i>	<i>kjuma</i>
3=ERG.SG	say-INTR-PRS.DJ.SG	3[SG]	quick	home

ra-k-are

come-INTR-PRS.DJ.SG

“He_i says that he_j will come home soon.”

(TD 62.3 [elicited])

(613) *taldzi ringare gi gjokspa kjuma ra:re.*

<i>tal=dzi</i>	<i>riŋ-k-are</i>	<i>gi</i>	<i>gjokspa</i>	<i>kjuma</i>
3=ERG.SG	say-INTR-PRS.DJ.SG	1SG	quick	home

ra-k-are

come-INTR-PRS.DJ.SG

“He_i says that I will come home soon.”

(TD 62.1 [elicited])

As these examples demonstrate, Bunan encodes a binary epistemic distinction in the present tense. The distinction is based on whether certain speech act roles (i.e. the speaker in declarative contexts, the addressee in interrogative contexts, and the quoted speaker in quoted declarative contexts) are coreferent with the agent argument of the predicate. Accordingly, Bunan seems to encode a straightforward conjunct-disjunct opposition in the present tense that is similar to the conjunct-disjunct system that has been described for Kathmandu Newar (Hale 1980; Hargreaves 2005).⁹⁴

In the past tense, the situation is more complex, however. Here, epistemic marking does not only indicate whether the speaker / the addressee / the quoted speaker are co-referent with the agent argument of a verb. In addition, the verbal morphology also reflects how the speaker, the addressee, or the quoted speaker came to know about a given event. Accordingly, the past tense system of Bunan is more complex than the simple conjunct-disjunct system of Kathmandu Newar. Rather, it is reminiscent of systems that have been described for many varieties of Tibetan (see references above). The following example sentences illustrate these epistemic distinctions from the epistemic perspective of the speaker.

⁹⁴ As a matter of fact, this statement represents a slight simplification, as conjunct markers exhibit a wider scope in Bunan than they do in Kathmandu Newar. However, for the sake of simplicity, I will not address these differences at this point. A more detailed discussion of conjunct marking in the present tense is provided in § 13.3.1.

(614) *gidzi dzamen likmen.*

<i>gi=dzi</i>	<i>dzamen</i>	<i>lik-ø-men</i>
1SG=ERG.SG	food	make-TR-PST.DIR.CJ

“I cooked food.”

(NN 22.3 [elicited])

(615) *girok pujdak ts^horsa.*

<i>gi=tok</i>	<i>pujdak</i>	<i>ts^hor-s-ø-dza</i>
1SG=DAT	well	feel-DETR-MID-PST.DIR.DJ.SG

“I felt well.”

(TD 83.14 [elicited])

(616) *dordzedzi dzamen likdza.*

<i>dordze=dzi</i>	<i>dzamen</i>	<i>lik-ø-dza</i>
Dorje=ERG.SG	food	make-TR-PST.DIR.DJ.SG

“Dorje cooked food.” (The speaker knows this because she / he saw Dorje cook food)

(NN 24.7 [elicited])

(617) *dordzedzi dzamen likta.*

<i>dordze=dzi</i>	<i>dzamen</i>	<i>lik-ø-ta</i>
Dorje=ERG.SG	food	make-TR-PST.INFER.DJ

“Dorje cooked food.” (The speaker can infer this because she / he can see the meal that Dorje cooked)

(NN 24.8 [elicited])

As the examples given above demonstrate, Bunan combines conjunct-disjunct marking with evidential marking in the past tense. In other words, past tense endings do not only indicate whether the speaker / the addressee / the quoted speaker are the wilfull instigators of a given event, but also reflect the knowledge source of the relevant discourse participant. This gives rise to a ternary distinction between “conjunct + direct evidence” (-*men*), “disjunct + direct evidence” (-*dza*), and “disjunct + inferential evidence” (-*ta*). The combination “conjunct + inferential evidence” is not attested in Bunan. The absence of a morpheme that would combine these two subcategories seems sensible, as conjunct knowledge and inferred knowledge are mutually exclusive concepts. A person cannot act intentionally without directly perceiving the result of her / his action. The rela-

tionship between conjunct-disjunct and evidentiality is thus reminiscent of the relationship between the grammatical categories “aspect” and “tense”, which interact in equally complex ways.⁹⁵

These considerations demonstrate that the epistemic system of Bunan cannot be described in terms of a single epistemic category. To provide a comprehensive account of the verbal system, we have to assume the existence of two epistemic categories: conjunct-disjunct and evidentiality. Given the fact that these categories play a crucial role in the Bunan verbal system, it is necessary to define them in a proper manner.

In the following, I use the term “conjunct-disjunct” to refer to a binary grammatical category that specifies the “quality” of a speaker’s knowledge. More specifically, conjunct-disjunct marking encodes whether or not the speaker (or more precisely the epistemic source) possesses privileged access to the knowledge that is contained in a given proposition (see the following section for the definition of the term “epistemic source” and § 13.3 for the definition of the term “privileged access”). A conjunct form implies that the speaker possesses personal, intimate knowledge about an event that no other current discourse participant can access. A disjunct form, on the other hand, signals that the speaker does not have any exclusive knowledge about a given event. For the time being, we may assume that privileged epistemic access can be equated with the wilfull instigation of an event. In other words, conjunct marking indicates that the speaker (or more generally the epistemic source) volitionally instigated an event.

The term “evidentiality” will be used in the sense of Aikhenvald (2004: 3) to refer to a grammatical category “whose primary meaning is epistemic source.” Accordingly, evidentiality and conjunct-disjunct will be considered as distinct grammatical categories. Evidentiality indicates in which way one has acquired knowledge about a given fact, whereas conjunct-disjunct specifies the exclusiveness of this knowledge.

The term “mirativity” will be used in the sense of DeLancey (1997, 2012) to refer to a grammatical category that indicates that knowledge is new and surprising to the speaker. DeLancey has convincingly argued that mirativity represents a grammatical category in its own right and is distinct from both evidentiality and conjunct-disjunct. In Bunan, however, mirativity merely occurs as an epiphenomenon of disjunct marking. Accordingly, I will not treat mirativity as a separate grammatical category in this thesis, but will describe the phenomenon as a functional extension of disjunct marking in certain pragmatic contexts.

⁹⁵ For example, many languages distinguish between a perfective aspect and an imperfective aspect in the past tense but not in the present tense (cf. Dahl 1985: 81–84). This constraint is logical, as an action cannot possess a perfective aspect value (i.e. be completed) and a present tense value (i.e. be ongoing) at the same time.

13.2.2 The epistemic source

As argued in the previous section, the epistemic verbal categories of Bunan only reflect the epistemic perspective of the speaker in simple declarative statements. In interrogative contexts, they are adjusted to the perspective of the addressee, while in contexts of reported speech, they reflect the perspective of the quoted speaker. The insight that epistemic categories are sensitive to the parameter of illocutionary force is not new. Hale (1980) already described this phenomenon in his seminal study of conjunct-disjunct marking in Kathmandu Newar. However, he was not able to provide a coherent explanation of the phenomenon, as he tried to describe the grammatical category in syntactic terms. To be sure, his postulation of underlying “quote frames” allowed him to explain conjunct marking in simple declarative speech acts and conjunct marking in quoted declarative speech acts as manifestations of one basic construction. However, this approach could not explain why conjunct marking could also occur with second person pronouns in interrogative speech acts.

DeLancey (1990) was the first to come up with a convincing functional explanation for the peculiar distribution of conjunct-disjunct morphology across declarative and interrogative speech acts. DeLancey analyzed the distribution of conjunct and disjunct forms in the framework of a “cognitive model of event structure”⁹⁶, which relates the verbal category to the cognitive access of the discourse participants to different stages of an event. According to this model, conjunct marking indicates intimate personal knowledge of the cause of an event, whereas disjunct marking indicates the lack of intimate knowledge. In his study, DeLancey demonstrated that conjunct-disjunct systems encode the quality of discourse participants’ knowledge rather than their syntactic identity. In declarative statements, the speaker draws on her / his personal knowledge when describing events. Accordingly, epistemic morphology reflects the quality of the speaker’s knowledge in simple declarative contexts. The situation is different in interrogative contexts. When asking a question to another person, the speaker does no longer provide information that is based on her / his personal knowledge. Rather, she / he requests information that reflects the epistemic perspective of the addressee. In interrogative contexts, epistemic morphology thus refers to the quality of the addressee’s knowledge.

Subsequent to DeLancey’s study, Hargreaves (1991) developed a descriptive model to account for the fact that propositions reflect the epistemic perspective of different speech act-participants in different pragmatic contexts. A notion central to Hargreaves’ approach is the term “epistemic source”, which is defined as the speech-act participant

⁹⁶ Note that this model had already been postulated in DeLancey (1986). However, DeLancey had not yet adopted Hale’s terminology for this study, but used the term “volitionality” instead of “conjunct-disjunct”.

that possesses “the epistemic authority for the proposition in a clause” (pp. 25–26). In other words, the epistemic source is the speech-act participant whose epistemic perspective is reflected in an utterance. The following quote provides a more elaborate definition of the term.

The discourse notion of Epistemic Source has three contexts for realization. First, the speaker in a declarative clauses assume [sic!] the role of Epistemic Source [...]. Second, the addressee in an interrogative clause is attributed the role of Epistemic Source by virtue of being asked a question by the speaker. Third, the original speaker in a reported speech utterance is attributed the role of Epistemic Source for the proposition in the reported speech clause.

(Hargreaves 1991: 35)

As the quote given above demonstrates, Hargreaves’ approach not only incorporates declarative and interrogative contexts, but also takes into account reported speech contexts. At first, it may seem counterintuitive to consider the quoted speaker as a separate instantiation of the epistemic source. However, the model makes complete sense once we take a closer look at the “epistemic architecture” of reported speech constructions. As a matter of fact, reported speech constructions encode two different epistemic perspectives at the same time. First, there is the epistemic perspective of the current speaker, who reports the words of the original speaker. Second, there is the epistemic perspective of the original speaker, who represents the ultimate source of the reported utterance. The value of Hargreaves’ model will be illustrated below, where I demonstrate that the perspective of the original speaker may have a direct bearing on the structure of reported speech complements in languages that possess epistemic verbal categories.

Interestingly, Hargreaves does not subsume the addressee of a reported interrogative speech act (e.g. *Marie asked James whether he would come to the party*) under the speech act-participants that may assume the role of the epistemic source. However, there is no obvious reason why the original addressee should be excluded from the model. Accordingly, I also consider the original addressee as a speech-act participant whose epistemic perspective may be encoded in an utterance and postulate four different speech-act participants that may serve as the epistemic source:

- (1) The current speaker in declarative contexts.
- (2) The current addressee in interrogative contexts.
- (3) The original speaker in reported declarative contexts.
- (4) The original addressee in reported interrogative contexts

It is important to note that Hargreaves' notion of the "epistemic source" is not the only descriptive approach towards epistemic verbal systems that can be found in the literature. A number of scholars have come up with related concepts such as "locutor" (Curnow 1997; Aikhenvald 2004), "informant" (Bickel & Nichols 2007: 223; Bickel 2008), "assertor" (Creissels 2008), and "source of information" (Tournadre 2008). However, these approaches are merely variants of Hargreaves' original model and do not offer any advanced insight into the phenomenon of epistemic marking. Accordingly, I have decided to adopt Hargreaves' approach for this thesis.

In the following, I argue that the concept of the epistemic source accounts for a number of idiosyncrasies that we encounter in the grammar of Bunan. The grammatical domains that are affected by the epistemic source are listed in the table below.

Table 90: Grammatical domains affected by the epistemic source

	Affected grammatical domain	Section
(1)	conjunct-disjunct marking	§ 13.3
(2)	evidentiality marking	§ 13.4
(3)	person marking in the existential and possessive copulas	§ 14.3, § 14.5
(4)	personal deixis of dative experiencers in light verb constructions	§ 16.7.1

For a start, I illustrate the descriptive value of the epistemic source by applying the concept in the analysis of a number of sentences that have been discussed in the preceding section. To spare the reader the necessity of switching between different pages, I again list the relevant sentences in the following. For the sake of simplicity, I confine myself to the analysis of conjunct-disjunct marking in the present tense.

(618) ***gi len liktæk.***

<i>gi</i>	<i>len</i>	<i>lik-tæ-ek</i>
1SG	work	do-TR-PRS.CJ.SG

"I am working."

(TD unrec 50)

(619) *ini dzaṇdzaṇ likṭare!*

<i>ini</i>	<i>dzaṇdzaṇ</i>	<i>lik-ṭare</i>
2[SG].HON	insincere.refusal	do-TR-PRS.DJ.SG

“You are refusing the tea insincerely!”

(Conversation 36.12)

(620) *dordḑedzi dzaṇporok dzamen likṭare.*

<i>dordḑe=dzi</i>	<i>dzaṇpo=tok</i>	<i>dzamen</i>	<i>lik-ṭare</i>
Dorje=ERG.SG	Zangpo=DAT	food	do-TR-PRS.DJ.SG

“Dorje is cooking food for Zangpo.”

(NN 39.4 [elicited])

In the examples given above, we encounter a distribution of epistemic markers that is typical for conjunct-disjunct systems. The first person pronoun in (618) triggers the conjunct ending *-ek* on the verb, whereas the second and third person pronouns in (619) and (620) trigger the disjunct ending *-are*. The reason for this marking pattern should be clear by now. In (618), the current speaker talks about an action that she / he performed herself / himself. Accordingly, the proposition is based on her / his personal exclusive knowledge to which only she / he has direct or privileged access (remember that privileged epistemic access was preliminary defined as direct access to the wilfull instigation of an event in § 13.2.1; see § 13.3 for a more elaborate definition of the term). This privileged access is encoded with the conjunct ending *-ek*. The situation is different in (619) and (620). Here, the current speaker merely reports actions performed by the addressee / a non-participant. There is no exclusive relationship between the knowledge that is contained in these propositions and the current speaker. Any person can potentially evaluate these facts in the same way as the current speaker, which is why the verb receives disjunct marking in these utterances.

The following sentences illustrate the distribution of conjunct and disjunct forms in interrogative speech acts. Based on the notion of the “epistemic source”, we expect an inversion of the marking pattern in such contexts. Indeed, the data bears out our prediction. Consider the following sentences.

(621) *gi noj dza:re la?*

<i>gi</i>	<i>noj</i>	<i>dza-k-are=la</i>
1SG	much	eat-INTR-PRS.DJ.SG=Q

“Do I eat a lot?”

(TC unrec 1)

(622) **handzi k^ha liktsek?**

han=dzi k^ha lik-t₆-ek
2=ERG.SG what do-TR-PRS.CJ.SG

“What are you doing?”

(Conversation 87.352)

(623) **awa k^ha liktare?**

awa k^ha lik-t₆-are
father what do-TR-PRS.DJ.SG

“What is father doing?”

(Conversation 53.3)

In the sentences given above, conjunct marking occurs in (622), while disjunct marking occurs in (621) and (623). The reason for this is again obvious. In interrogative contexts, the addressee assumes the status of the epistemic source, as she / he possesses privileged access to her / his own wilfull acting. However, the addressee does not possess privileged access to the wilfull acting of the speaker or of any other speech act non-participant. Accordingly, only the verb form in (622) receives conjunct marking.

Now, let us examine the influence of the epistemic source in reported declarative speech. Remember that in such contexts the reported speaker assumes the status of the epistemic source with regard to the reported speech act, while the current speaker merely assumes the status of the epistemic source with regard to the matrix clause (e.g. *She said (that) ...*). This is illustrated by the sentences given below.

(624) **taldzi riŋgare tal gjokspa kjuma ragek.**

tal=dzi riŋ-k-are tal gjokspa kjuma
3=ERG.SG say-INTR-PRS.DJ.SG 3[SG] quick home

ra-k-ek
come-INTR-PRS.CJ.SG

“He_i says that he_i will come home soon.”

(TD 62.2 [elicited])

(625) *taldzi ringare **tal** gjokspa kjuma **ra:re**.*

<i>tal=dzi</i>	<i>riŋ-k-are</i>	<i>tal</i>	<i>gjokspa</i>	<i>kjuma</i>
3=ERG.SG	say-INTR-PRS.DJ.SG	3[SG]	quick	home

ra-k-are

come-INTR-PRS.DJ.SG

“He_i says that he_j will come home soon.”

(TD 62.3 [elicited])

(626) *taldzi ringare **gi** gjokspa kjuma **ra:re**.*

<i>tal=dzi</i>	<i>riŋ-k-are</i>	<i>gi</i>	<i>gjokspa</i>	<i>kjuma</i>
3=ERG.SG	say-INTR-PRS.DJ.SG	1SG	quick	home

ra-k-are

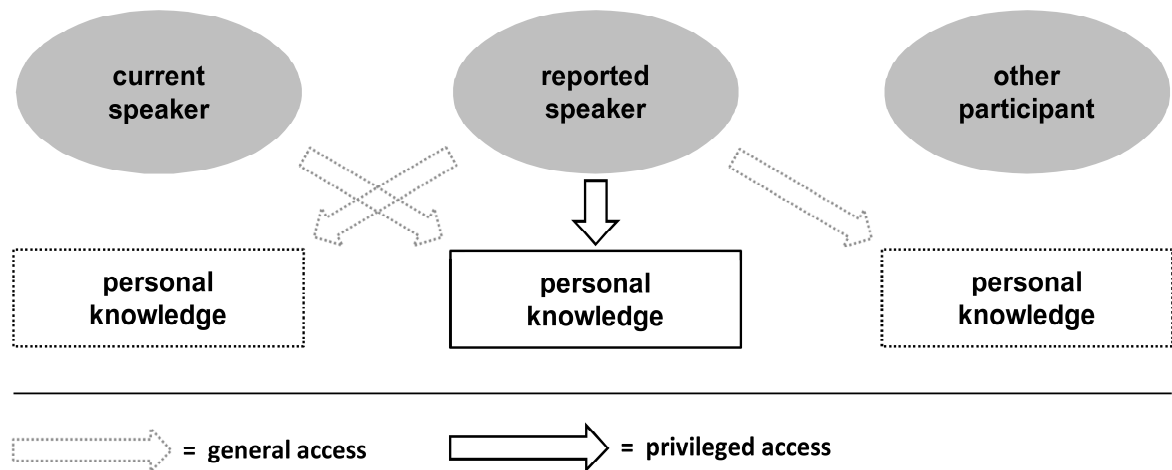
come-INTR-PRS.DJ.SG

“He_i says that I will come home soon.”

(TD 62.1 [elicited])

As the three examples illustrate, conjunct marking is only possible if the epistemic source (i.e. the reported speaker) is coreferent with the subject of the speech complement clause. If the subject of the subordinate clause refers to another person, the verb in the subordinate clause can only receive disjunct marking, even if the subject of the subordinate clause refers to the current speaker. The reason for this peculiar distribution of conjunct and disjunct markers is the following: The current speaker does not report his own personal knowledge, but merely refers to the knowledge of the reported speaker, to which the current speaker does not have privileged access. The reported speaker, in turn, does not have privileged access to the knowledge of the current speaker or any other participant. However, the reported speaker has privileged access to her / his personal knowledge, even if this access only exists in the virtual reality of reported discourse. Accordingly, the knowledge contained in the embedded clause in (624) is conceptualized as conjunct knowledge. The concept of privileged access in contexts of reported speech is illustrated below.

Figure 40: Privileged access in contexts of reported speech



It is important to note that this pattern not only occurs in complement clauses of speech verbs but also in complement clauses of verbs of thinking, as the two following examples demonstrate.

(627) *atɕʰe mizare tal epo kjorgek.*

<i>atɕʰe</i>	<i>mi-ɕ-are</i>	<i>tal</i>	<i>epo</i>
older.sister	think-MID-PRS.DJ.SG	3[SG]	well

kjor-k-ek
come-INTR-PRS.CJ.SG

“Sister_i thinks that she_i dances well.”

(TD 198.4 [elicited])

(628) *atɕʰe mizare tal epo kjorgare.*

<i>atɕʰe</i>	<i>mi-ɕ-are</i>	<i>tal</i>	<i>epo</i>
older.sister	think-MID-PRS.DJ.SG	3[SG]	well

kjor-k-are
come-INTR-PRS.DJ.SG

“Sister_i thinks that she_j / he_j dances well.”

(TD 198.5 [elicited])

Finally, let us consider the influence of the epistemic source in contexts of reported interrogative speech acts. Two examples of such constructions are given below.

(629) *sonamdzi rint̥endok ʃut̥are tal ika ragek.*

<i>sonam=dzi</i>	<i>rint̥en=tok</i>	<i>ʃu-t̥are</i>	<i>tal</i>	<i>ika</i>
Sonam=ERG.SG	Rinchen=DAT	ask-TR-PRS.DJ.SG	3[SG]	when
<i>ra-k-ek</i>				
come-INTR-PRS.CJ.SG				

“Sonam asked Rinchen_i when he_i would come.”

(TD 327.2 [elicited])

(630) *sonamdzi rint̥endok ʃut̥are tal ika ra:re.*

<i>sonam=dzi</i>	<i>rint̥en=tok</i>	<i>ʃu-t̥are</i>	<i>tal</i>	<i>ika</i>
Sonam=ERG.SG	Rinchen=DAT	ask-TR-PRS.DJ.SG	3[SG]	when
<i>ra-k-are</i>				
come-INTR-PRS.DJ.SG				

“Sonam asked Rinchen_i when she_j / he_j would come.”

(TD 327.4 [elicited])

As the two examples illustrate, conjunct marking occurs in contexts in which the addressee of the matrix clause is coreferent with the subject of the dependent clause. Once more, conjunct marking reflects the privileged access of the addressee to the information contained in the dependent clause. If the addressee of the matrix clause is not identical with the subject of the dependent clause, the verb can only receive disjunct marking. This is because the addressee can only have privileged access to his own actions but not to the action of another person.

13.2.3 A note on terminology

While the term “evidentiality” has gained wide acceptance among descriptive linguists working on Tibeto-Burman languages, the same cannot be said for the term “conjunct-disjunct”. Only few scholars have adopted Hale’s terminology (DeLancey 1990; Hargreaves 2005; Waters 2006), while a considerable number of researchers have come up with their own terminology to describe the grammatical category (Tournadre 1991; van Driem 1998; Sun 1993; Haller 2000a; Hein 2001; Huber 2005; *inter alia*). Over the past few years, the term “egophoricity”, which was introduced by Tournadre (1991), has become more and more widely used, especially within the field of Tibetan linguistics but also among typologists. Despite the popularity of the egophoricity approach, I have decided not to use it for this thesis and to comply with Hale’s original terminology instead. The reason for this is threefold. First, the term “conjunct-disjunct” is, after all, established among linguists who work on languages of the Greater Himalayan area (especially Tibeto-Burman

and Altaic) and South America (especially Barbacoan). Second, the term “conjunct-disjunct” clearly refers to a binary grammatical category that comprises the subcategories “conjunct” and “disjunct”. The egophoricity approach obscures the fundamental binary nature of the grammatical category, as it only offers a term for the conjunct category “egophoric” but no corresponding term for the disjunct category.⁹⁷ This approach surely has its advantages when dealing with the complex epistemic verbal systems of Tibetic languages, which are based on both the grammatical categories “evidentiality” and “conjunct-disjunct”. However, it is difficult to apply to the description of languages that only encode a conjunct-disjunct opposition such as Kathmandu Newar or Bunan (in the present tense). Third, Hale’s terminology may not be as misguided as many believe it to be. To be sure, his attempt to describe the grammatical category in terms of syntactic principles may seem inappropriate from the perspective of contemporary descriptive theory. However, we should not forget that his approach correctly predicts the distribution of conjunct and disjunct forms in Kathmandu Newar. The basic difference between his model and contemporary accounts mainly is that Hale’s approach maps the pragmatic context onto syntax. In other words, Hale’s underlying “quote frames” translate the epistemic source into syntactic structures. The terms “conjunct” and “disjunct” specify whether the relationship between the matrix subject of the quote frame (i.e. the epistemic source) and the subject of the dependent clause is based on identity (privileged access) or not (general access). The two terms thus capture what the grammatical category is all about, to wit, the specification of the relationship that holds between a given discourse participant and the knowledge in a given proposition.

13.3 Conjunct-disjunct

In § 13.2.1, I define “conjunct-disjunct” as grammatical category that indicates whether the epistemic source possesses privileged access to the knowledge that is contained in a given proposition. The concept of the “epistemic source” was defined in § 13.2.2. The notion of “privileged access”, however, has not been properly discussed so far, but has only been preliminarily equated with direct access to the wilfull instigation of an event. It is thus necessary to provide a more detailed definition in the following.

As Hargreaves (2005: 31) points out, the postulation of the superordinate discourse role of the epistemic source does not yet enable us to provide a coherent account of conjunct-disjunct marking. The epistemic source allows us to identify discourse contexts in which conjunct marking can potentially occur, but does not explain why conjunct marking is restricted by semantico-pragmatic factors such as controllability. Accordingly,

⁹⁷ This was also noted by Post (2013: 111), who introduced the term “alterphoric” to refer to the disjunct subcategory.

there must be another factor that influences the distribution of conjunct and disjunct markers. Hargreaves referred to this additional factor as “privileged access”.

The notion of “privileged access” essentially refers to the fact that individuals have an unique and exclusive epistemic perspective on their own mental states. Our thoughts, feelings and experiences are only accessible to ourselves, but cannot be perceived by any other person in a similarly direct manner. As Hargreaves points out, conjunct-disjunct systems project this “ontological constraint” onto grammatical structure by indicating whether a given discourse participant possesses privileged access to a given mental state or not. In other words, conjunct-disjunct systems mark whether the epistemic source possesses a direct and exclusive access to the knowledge that is contained in a given proposition (conjunct marking), or whether this knowledge is equally accessible for any other discourse participant (disjunct marking).

The considerable cross-linguistic variation between conjunct-disjunct systems is a consequence of the fact that languages operate on different definitions of exclusive access. Tournadre (2008) and Bickel (2008) use the term “scope” to refer to the typological variable that captures these cross-linguistic differences. I adopt this term for the following discussion, in which I will provide a brief overview of conjunct-disjunct marking in selected Tibeto-Burman languages.

As noted earlier, the grammar of Kathmandu Newar equates privileged access with intentional action. In other words, the epistemic source can only have exclusive access to knowledge if this knowledge was acquired through the wilfull instigation of an event. Consider the following examples.⁹⁸

(NEW 1) *Ji ana wan-ā.*
 1SG there go-PST.CJ
 “I went there (conjunct).” (Hale 1980: 95)

(NEW 2) *Jij wa khə sil-a.*
 1SG.ERG that fact know-PST.CJ
 “I came to know that fact (disjunct).” (Hale 1980: 96)

The conjunct-disjunct systems of Central Tibetan dialects usually operate on a wider definition of exclusive access. Here, conjunct markers do not only take scope over volitional instigators but also over experiencers, patients and recipients. Many Central Tibetan varieties have grammaticalized two different conjunct morphemes to encode

⁹⁸ Hale (1980) did not gloss his examples. Accordingly, the interlinear glosses have been created by myself and represent my interpretation of the data.

these two types of exclusive access. This is illustrated by the following examples from Kyirong Tibetan, which have been adopted from Huber (2005).⁹⁹

(KYI 1) *dã:* *ŋɛ* *p^hūpā* *tj^h(p)-pa* .
 yesterday I.ERG peg hit.in-AOR.VOL
 “Yesterday I knocked in a peg.” (Huber 2005: 120)

(KYI 2) *dã:* *ŋa* *na-bo.*
 yesterday I feel.ill-AOR.RECEPT
 “Yesterday I was ill.” (Huber 2005: 122)

(KYI 3) *mā:mī* *ŋa-la* *tj^h-bo.*
 soldier I-DAT feel.ill-AOR.RECEPT
 “The soldiers beat me.” (Huber 2005: 121)

(KYI 4) *k^hō* *ɛŋnà:* *nã:-la* *ɛ̃:* *tūp* *pɣ(d)-so.*
 he forest inside-LOC wood cut went-AOR.SENS
 “He went into the forest to cut wood.” (Huber 2005: 121)

As these examples demonstrate, Kyirong Tibetan possesses a conjunct aorist marker *-pa*, which has scope over volitional agents, a conjunct aorist marker *-bo*, which has scope over experiencers and patients, as well as a disjunct marker *-so*, which indicates that the speaker directly experienced an event, but does not claim to possess privileged access to the knowledge contained in the relevant proposition.¹⁰⁰

In Kyirong Tibetan, conjunct markers can still have a wider scope in the imperfective aspect. Here, basically any sentence can be marked with the conjunct marker *-jɔ:* if the respective proposition refers to recurring events with which the primary epistemic source is well acquainted.

(KYI 5) *thū:tē:* *cɣ^hdu* *nɛ:-jɔ:*.
 Thupten(pn) always be.sick-IPFV.EXPER
 “Thupten is always sick.” (Huber 2005: 112)

Finally, note that conjunct-disjunct systems are not universally sensitive to semantic-pragmatic factors such as “controllability”. Evidence for this comes from the Tibeto-

⁹⁹ Huber uses the abbreviations AOR (aorist), VOL (volitional), RECEPT (ego-receptive), and SENS (direct sensory evidence).

¹⁰⁰ According to Huber (2005: 121–122), the markers *-so* and *-bo* can often be used interchangeably. However, she does not specify the pragmatic contexts that govern the choice of one epistemic marker over the other. It is probable that the distinction depends on whether the information source wants to portray a certain experience as “exclusive” or “generally accessible”.

Burman language Galo, which belongs to the Tani subgroup of North Eastern India. According to Post (2013), conjunct markers (-tó “EGO”) in Galo take scope over every event in which the epistemic source acts as the S / A argument of a verb. Disjunct markers (-gée “ALTER”) occur in all other contexts.

(GAL 1) *ηό* *ʔacín* *dó-tó-bá*
 1SG cooked.rice eat-**EGO**-PFV:DIR
 “I’ve just had my meal (I know, because I experienced it).” (Post 2013: 114)

(GAL 2) *ηό* *koodàa* *tokkè* *ò-lòo-tó-bá*
 1SG balcony ABL.UP fall.from.height-DOWNWARD-**EGO**-PFV.DIR
 “I fell from the balcony (I know, I experienced it).” (Post 2013: 123)

(GAL 3) *ηό* *kanòo-tó-bá*
 1SG hungry-**EGO**-PFV.DIR
 “I got hungry (I know, I experienced it).” (Post 2013: 123)

(GAL 4) *νό* *ʔacín* *dó-gée-bá*
 2SG cooked.rice eat-**ALTER**-PFV:DIR
 “You had your meal (I have seen you doing it)” (Post 2013: 115)

(GAL 5) *βìi* *ʔacín* *dó-gée-bá*
 3SG cooked.rice eat-**ALTER**-PFV:DIR
 “He had his meal (I have seen you doing it)” (Post 2013: 115)

The conjunct-disjunct system of Galo thus has the appearance of a subject agreement system. However, the system is clearly based on epistemic marking rather than syntactic agreement, as the following interrogative sentences demonstrate. Here, the conjunct marker -tó can only occur in combination with second person pronouns.

(GAL 6) *ηό* *ʔacín* *dó-tó-bá*
 1SG cooked.rice eat-**EGO**-PFV:DIR
 “I’ve just had my meal (I know, because I experienced it).” (Post 2013: 114)

(GAL 7) *ηό* *ʔacín* *dó-gée-bá=rèe*
 1SG cooked.rice eat-**ALTER**-PFV:DIR=PQ
 “Have I had my meal (I can’t remember, but believe that you know)?” (Post 2013: 114)

Accordingly, Galo operates on a wider definition of exclusive access than Kathmandu Newar or Kyirong Tibetan. In Galo, exclusive access comprises all actions and events in which the epistemic source acts as the most agentive core argument of a verb, which gives rise to a system that encodes “epistemic subjects”.

This brief (and necessarily simplifying) discussion of a few selected conjunct-disjunct systems illustrates the usability of the concept of “privileged access” / “scope” for the description of individual systems and their cross-linguistic comparison. In the following, I will use this terminology to describe the conjunct-disjunct system of Bunan. As I will argue below, the notion of “scope” is particularly helpful in describing conjunct-disjunct marking in the past tense domain. In the past tense, Bunan possesses two sets of conjunct morphemes, which take scope over different participants: primary conjunct endings, which occur in slot V_4 and have scope over volitional agents and experiencers of internal stimuli, and secondary conjunct endings, which occur in slot V_3 and have scope over patients, themes, and recipients. Accordingly, primary and secondary conjunct markers are described in distinct subsections. Besides the parameter of scope, we have to consider two additional factors when describing the conjunct-disjunct system of Bunan: (1) the morphological structure of the verb form and (2) the tense of the verb form. The morphological structure of a verb is crucial, as simple inflected forms generally have a narrower scope than periphrastic verb forms based on the equative copula *jen-*. Accordingly, finite inflected forms are treated separately from periphrastic verb forms in the following discussion. The temporal reference of a verb form is important, as the basic distribution of conjunct and disjunct markers is rigid in the present tense, but may be modified in the past and future tense to express particular pragmatic nuances. Hence, conjunct-disjunct marking is discussed separately for each tense domain.

13.3.1 Conjunct-disjunct marking in the present tense

In the present tense, conjunct endings have scope over volitional agents and experiencers of internal stimuli. In other words, a verb receives conjunct marking if the epistemic source willfully instigates an event or if the epistemic source experiences a sensation or a bodily process whose stimulus is located inside of her / his body. This is illustrated by the following sentences.

(631) *gi ni: iŋgi: jato epo tsukɛi nampo kjaŋka dʒotkek.*

<i>gi=ni:</i>	<i>iŋgi=ki</i>	<i>jato</i>	<i>epo</i>
1SG=TOP	myself=GEN	friend	good
<i>tsuk-s-ɛ-i=nampo</i>		<i>kjaŋka</i>	<i>dʒot-k-ek</i>
educate-DETR-MID-ACT=COM		always	sit-INTR-PRS.CJ.SG

“As for me, I always keep company with my well-educated friends.”

(The Prodigal Son 54)

(632) *gi loŋʒek.*

<i>gi</i>	<i>loŋ-ɛ-ek</i>
1SG	vomit-MID-PRS.CJ.SG

“I am vomiting.”

(TG 13.38 [elicited])

As opposed to this, a verb receives disjunct markers if the epistemic source cannot control the event that is denoted by the verb, or if she / he perceives an external stimulus that is potentially accessible for other discourse participants.

(633) *gi datkjure!*

<i>gi</i>	<i>dat-k-are</i>
1SG	fall-INTR-PRS.DJ.SG

“I am falling!”

(TD 322.3 [elicited])

(634) *girok na pura: tankjure na da!*

<i>gi=tok=na</i>	<i>pura:LN</i>	<i>tant-k-are=na</i>	<i>da</i>
1SG=DAT=HS	fully	see-INTR-PRS.DJ.SG=HS	now

“‘I can fully see it now’, he said.”

(Tulshug Lingpa 163)

(635) *girok soj tsʰorɛare.*

<i>gi=tok</i>	<i>soj</i>	<i>tsʰor-s-ɛ-are</i>
1SG=DAT	cold	feel-DETR-MID-PRS.DJ.SG

“I feel cold.”

(TD 315.5 [elicited])

In Bunan, verbs that denote the perception of an internal stimulus (i.e. *nas-men* “to be sick”, *sal-men* “to have diarrhea”, *tjo-men* “to cry”, *lon-ɛ-um* “to vomit”, *rwal-ɛ-um* “to doze off”, etc.) commonly receive conjunct marking if the experiencer of the stimulus is coreferent with the epistemic source. Accordingly, the pragmatic factor of “internal experience” seems to be ranked higher than the pragmatic factor of “volitional instigation”. The only verb that does not comply with this general rule is *gjal-men* “to recover”.

(636) *gi dzuktoktɛi gjalgare.*

<i>gi</i>	<i>dzuk=tok=tɛi</i>	<i>gjal-k-are</i>
1SG	pain=DAT=ABL	recover-INTR-PRS.DJ.SG

“I am recovering from the sickness.”

(TD 322.4 [elicited])

The reason why the verb *gjal-men* takes default disjunct marking is not entirely clear. Intuitively, one would think of the process of recovering as an event that is only ultimately accessible for the recovering person. However, it is conceivable that Bunan speakers do not conceptualize the improvement of one’s physical condition as being related to an internal stimulus. After all, the fact that one is recovering from a sickness may become apparent to other persons in many different ways, e.g. through one’s appearance and behavior, the fact that one is no longer lying in bed all day, the fact that one can eat solid food again, etc. These are all indicators that do not belong to the sphere of exclusive knowledge, as they are potentially accessible for any other person.

It is important to note that it is not possible to modify the distribution of conjunct and disjunct markers in the present tense. For example, it is not possible to suffix a conjunct ending to a prototypically uncontrollable verb to indicate that the epistemic source is performing the respective action intentionally. At the same time, it is not possible to attach a present tense disjunct ending to a prototypically controllable verb to express a lack of intention or control on behalf of the epistemic source. Such a modification of the basic pattern is only possible if the epistemic source describes an action that she / he is performing in a photograph or a video. Consider the following example.

(637) *gi ek bar ra:re.*

<i>gi</i>	<i>ek_{LN}</i>	<i>bar_{LN}</i>	<i>ra-k-are</i>
1SG	one	time	come-INTR-PRS.DJ.SG

“I appear once (in this video).” (said by a speaker who showed me the video of the wedding ceremony of his older brother)

(SC unrec 1)

The motivation for this marking strategy is obvious. The proposition in (637) does not represent exclusive knowledge, as the epistemic source cannot control the action that he is performing in the video. He can merely describe the fact that he appears in this video, but he can no longer influence this fact. Accordingly, he assumes an outside perspective with regard to his own acting and, accordingly, uses a disjunct ending on the predicate.

Based on these considerations, Bunan verbs can be classified into two groups according to whether their present tense form receives default conjunct marking or default disjunct marking if their agent or experiencer of an internal stimulus is coreferent with the epistemic source. Authors working on Tibeto-Burman with conjunct-disjunct systems have referred to these two groups of verbs as “personal verbs” vs. “impersonal verbs” (Hale 1980: 96), “control verbs” vs. “noncontrol verbs” (Hargreaves 2005: 4), or “controllable verbs” vs. “non-controllable verbs” (Häsler 1999: 134; Haller 2000b: 175; Huber 2005: 84–85). None of these terms are particularly suitable for the characterization of the lexical opposition that we observe in Bunan. The terms “personal” vs. “impersonal” are too general, whereas the terms “control” / “controllable” vs. “noncontrol” / “non-controllable” imply that “controllability” is the sole pragmatic factors that triggers the occurrence of a conjunct form, which is not true.

In the following, I refer to the two groups of verbs as “privileged access verbs” and “general access verbs”. Privileged access verbs refer to events to which the epistemic source has privileged access based on the wilfull instigation of an event, or the perception of an internal stimulus. General access verbs, on the other hand, refer to events to which the epistemic source does not have privileged access based on wilfull instigation or internal experience.

13.3.2 Conjunct-disjunct marking in the past tense

13.3.2.1 Primary conjunct marking

In the past tense, the distribution of conjunct and disjunct forms is essentially determined by the same factors that have been established for the present tense in the preceding section. Conjunct forms occur whenever the epistemic source is portrayed as a wilfull and conscious agent or the experiencer of an internal stimulus.

(638) *gidzi lotmen inok lotkjata.*

<i>gi=dzi</i>	<i>lot-ø-men</i>	<i>ini=tok</i>
1SG=ERG.SG	say-TR-PST.DIR.CJ	2[SG].HON=DAT

lot-ø-kata

say-TR-FUT.CJ.SG

“I told him, ‘I will tell you.’”

(Conversation 32.6)

(639) *gi dun^hak tiki ɕalet.*

<i>gi</i>	<i>dun^hak=tiki</i>	<i>ɕal-et</i>
1SG	week=INDEF	have.diarrhea-PST.DIR.CJ

“I had diarrhea for one week.”

(TD 103.10 [elicited])

Disjunct marking, on the other hand, occurs with the class of verbs that I refer to as general access verbs (see § 13.3.1 above), i.e. verbs that do not involve the personal instigation of an event or the perception of an internal stimulus.

(640) *gi pitan^hgi tan^hkardok bupts^ha.*

<i>gi</i>	<i>pit^han=ki</i>	<i>tan^hkar=tok</i>	<i>bup-dza</i>
1SG	door=GEN	threshold=DAT	stumble-PST.DIR.DJ.SG

“I stumbled over the threshold of the door.”

(TD 82.5 [elicited])

(641) *gi dzuktoktɕi gjaldza.*

<i>gi</i>	<i>dzuk=tok=tɕi</i>	<i>gjal-dza</i>
1SG	pain=DAT=ABL	recover-PST.DIR.DJ.SG

“I recovered from the sickness.”

(TD 95.2 [elicited])

However, there are a small number of exceptions to this general rule. One exceptional case is the verb *th^han-tɕ-um* “to see”, which represents the suppletive past tense verb for the verb *tant-men* “to see”, which only occurs in the present tense. As demonstrated in the previous section, the verb *tant-men* takes default disjunct marking in the present tense and accordingly has to be classified as a general access verb. The verb *th^han-tɕ-um* “to see”, on the other hand, can only take conjunct marking in the past tense. Consider the following example.

(642) *gi gun dzottɛi wa nwa:stok tʰaŋmen.*

<i>gi</i>	<i>gun</i>	<i>dzot-dzi</i>	<i>wa</i>	<i>nwa:stok</i>
1SG	winter	stay-CVB.SG	FOC	at.that.time

tʰaŋ-ø-men

see-TR-PST.DIR.CJ

“I stayed (in Manali) in winter and at that time I saw (him).”

(Conversation 22.349)

Accordingly, the verb *tʰaŋ-tɛ-um* “to see” is a privileged access verb. The reason for the unequal treatment of the verbs *tant-men* “to see” (present tense) and *tʰaŋ-tɛ-um* “to see” (past tense) seems to be the following: If a person refers to an object that she / he can see at the moment of speaking, this object is most probably also visible for other discourse participants. Consider the following sentence.

(643) *girok karma tankjare.*

<i>gi=tok</i>	<i>karma</i>	<i>tant-k-are</i>
1SG=DAT	star	see-INTR-PRS.DJ.SG

“I see stars (in the sky).”

(TD 230.9 [elicited])

If a person utters the proposition in (643), the knowledge contained in this proposition cannot be considered as exclusive, as everybody who will look up to the sky will see the stars as well. In other words, the stars in the night sky are an external stimulus that is equally accessible to any other person. However, the situation is rather different if the same proposition is turned into a statement that refers to a past event, as in (644) below.

(644) *gidzi karma tʰaŋmen.*

<i>gi=dzi</i>	<i>karma</i>	<i>tʰaŋ-ø-men</i>
1SG=ERG.SG	star	see-TR-PST.DIR.CJ

“I saw stars (in the sky).”

(TD 230.10 [elicited])

The proposition in (644) refers to a past situation that is no longer accessible at the moment of speaking. Accordingly, the knowledge that is contained in this proposition is much more personal and exclusive, as the epistemic source describes this situation based on his personal memory of a past situation. Moreover, the addressee did most probably not share this experience with the speaker, as there would be no need to tell her / him

about it otherwise. This explains why the suppletive past tense form *thaŋ-tə-um* “to see” takes default conjunct marking.

Further exceptional cases are the verbs *kwas-men* “to become full, to become satiated (from eating or drinking)”, *tshims-men* “to become full, to become satiated (from eating)”, and *moms-men* “to become full, to be satiated (from drinking)”. These verbs do never occur in the present tense, as they could only be construed as accomplishments, which would give rise to the peculiar progressive interpretation “I am becoming full”.¹⁰¹ However, the respective verbs are attested in the past tense, where they receive the stative interpretation “I have become full / I am full”. In such contexts, the verbs in questions consistently take disjunct marking. Consider the following example sentence.

(645) *ini kwasa la? təunji dzadza!*

<i>ini</i>	<i>kwas-dza=la</i>	<i>təunji</i>	<i>dza-dza</i>
2[SG].HON	become.full-PST.DIR.DJ.SG=Q	little	eat-PST.DIR.DJ.SG

“Have you had enough? You only ate a little bit!”

(Conversation 42.41)

Intuitively, one would guess that the verb *kwas-men* should receive conjunct marking in the example sentence given above, as one’s feeling of satiety ultimately represents an internal stimulus that cannot be accessed by any other person. The reason why the verbs *kwas-men* “to become full, to become satiated (from eating or drinking)”, *tshims-men* “to become full, to become satiated (from eating)”, and *moms-men* “to become full, to become satiated (from drinking)” can only receive disjunct marking in the past tense is not entirely clear. The deviation might be explicable in terms of the fact that one’s satiety arises a consequence of one’s eating and drinking. The food that one eats and the drinks that one drinks are essentially external stimuli, which are by definition perceptible for other persons. Accordingly, the knowledge about one’s own feeling of satiety may not be construed as entirely exclusive, as other persons may know how much one has already eaten / drunk, which allows them to estimate whether one has had enough or not.

Apart from the few exceptions discussed above, conjunct-disjunct marking thus essentially follows the same basic principles in the past tense that are also relevant in the present tense. Privileged access verbs take default conjunct marking if their agent argument or experiencer argument is coreferent with the epistemic source, whereas general

¹⁰¹ A native speaker of English may not find the sentence “I am becoming full” as particularly awkward. However, my consultants consistently rejected sentences like *gi kwas-k-ek* “1SG become.full-INTR-PRS.CJ.SG” or *gi kwas-k-are* “1SG become.full-INTR-PRS.DJ.SG” as ungrammatical, which suggests that the progressive construal of accomplishments is not conventionalized in Bunan.

access verbs receive default disjunct marking. However, whereas the basic marking pattern can hardly ever be modified in the present tense (see § 13.3.1 above), it is possible to modify the distribution of conjunct and disjunct forms in the past tense.

For one thing, it is possible to use inferential disjunct forms with privileged access verbs whose agent argument is coreferent with the epistemic source if the epistemic source performed the respective action unintentionally.

(646) *gi ja: arak tunɖzi. hit mara:re.*

<i>gi</i>	<i>ja:</i>	<i>arak</i>	<i>tunɖzi</i>	<i>hit</i>
1SG	yesterday	liquor	drink-PST.INFER.DJ.SG	memory

ma-ra-k-are
NEG-come-INTR-PRS.DJ.SG

“I must have drunk alcohol yesterday evening, but I cannot remember.” (said by a person who is waking up with a hangover and cannot remember what had happened the night before)
(TG 21.8 [elicited])

At the same time, it is possible to mark general access verbs with conjunct endings if their “most agent-like” argument is coreferent with the epistemic source. This is illustrated by example (647) below. This sentence contains the verb *lep-tə-um*, which is a general access verb, but nonetheless takes a conjunct rather than a disjunct ending in this context.

(647) *ini lepmen ʂaʂur gompak lepmen malepmen?*

<i>ini</i>	<i>lep-ø-men</i>	<i>ʂaʂur gompak</i>
2[SG].HON	reach-TR-PST.DIR.CJ	Shashur Gompak=DAT

<i>lep-ø-men</i>	<i>ma-lep-ø-men</i>
reach-TR-PST.DIR.CJ	NEG-reach-TR-PST.DIR.CJ

“Have you ever been to Shashur Gompak?”
(Tshechu 1.1)

The motivation for the use of a conjunct ending in the sentence above is the following: In example (647), the epistemic source is asked whether she / he has ever visited Shashur Monastery. Thus, the question refers to a personal experience that the epistemic source has made in the past. It is evident that only the epistemic source can have direct access to this kind of knowledge. Accordingly, the privileged access verb *lep-tə-um* “to reach, to arrive” receives conjunct marking. In example (648) below, on the other hand, the epistemic source is asked to inform the speaker about his current whereabouts. Thus,

this question does not refer to old knowledge that is based on the personal experience of a past event but to a momentary state that is potentially accessible to any other person who happens to be in the same place like the addressee.

(648) *sunil guj lepdza?*

<i>sunil</i>	<i>guj</i>	<i>lep-ø-dza</i>
Sunil	where	reach-TR-PST.DIR.DJ.SG

“Sunil, how far have you come?” (said by a speaker who was talking to his nephew on the phone and asked him where he currently was)

(Conversation 65.1)

In example (649) below, the use of a conjunct ending in combination with the general access verb *dat-men* “to fall” can be explained in a similar fashion.

(649) *iṭeik bar dat!*

<i>iṭeik</i>	<i>bar_{LN}</i>	<i>dat-et</i>
how.many	time	fall-PST.DIR.CJ

“How many times I have fallen from trees!” (said by a man who grew up working in the orchard of his parents)

(TP unrec 3)

The conjunct past form *dat-et* expresses that the proposition is based on the speaker’s old and personal knowledge. The verb form does not refer to a single event but to a series of individual events. The memories of these events in their entirety are only accessible to the speaker alone and form a part of his personal and exclusive knowledge, which is why the verb receives conjunct marking.

The use of the conjunct past morphemes *-et* ~ *-men* is not only attested in contexts in which the epistemic source acts as the “most agent-like” argument of a verb. In (650) below, the epistemic source is coreferent with the recipient argument of the clause, whereas in (651) and (652), the epistemic source does not correspond to an argument of the verb at all.

(650) ... *wa ṭhe rinpoṭedzi girok ʕatmen.*

<i>wa</i>	<i>ṭhe</i>	<i>rinpoṭe=dzi</i>	<i>gi=tok</i>	<i>ʕat-ø-men</i>
FOC	this	Rinpoche=ERG.SG	1SG=DAT	tell-TR-PST.DIR.CJ

“... and this is what the Rinpoche told me.”

(Tulshug Lingpa 225)

(651) *durek tal hoəmej dzuk likmen.*

<i>durek</i>	<i>tal</i>	<i>hoəmej</i>	<i>dzuk</i>	<i>lik-ø-men</i>
earlier	3[SG]	very.much	pain	made-TR-PST.DIR.CJ

“Back then he was severely sick.”

(TD 102.1 [elicited])

(652) *kʰorek amet ka apa.*

<i>kʰorek</i>	<i>am-et</i>	<i>ka</i>	<i>apa</i>
later	come.HON-PST.DIR.CJ	ASS	AUTH

“(This monk) came (to Shashur monastery) much later.”

(Tshechu 2.153)

In the examples above, conjunct marking has the same effect that has already been described based on examples (647) and (649) above. The speaker indicates that he has privileged access to the knowledge contained in this proposition. In other words, she / he portrays the respective facts as exclusive knowledge about which she / he knows better than the other discourse participants because she / he personally experienced the relevant event.

Interestingly, only my three oldest consultants, who were in their late seventies, used the conjunct past endings *-et* ~ *-men* with such a wide scope. When I read the sentences given in (651) and (652) to my Bunan consultants who were in their sixties and younger, none of them deemed the sentence as grammatical. However, when I played them recordings of the relevant sentences, they all acknowledged that members of the oldest speaker generation used the conjunct past endings *-et* ~ *-men* in that manner.

This strongly suggests that the use of the conjunct past endings with a wide scope must be an archaic feature. Initially, I assumed that this difference between speaker generations was due to contact with Tibetan speaking communities. In Tibetic languages, conjunct markers tend to have a wide scope (see § 13.3 above for a brief discussion of conjunct-disjunct marking in the Central Tibetan dialect of Kyirong), and Bunan speakers who are older than seventy are usually fluent speakers of the Tibetan varieties spoken in Himachal Pradesh. Based on these observations, it seemed sensible to assume that the scope of conjunct marking in the past tense had been extended due to Tibetan influence. However, it later became clear that there is a language-internal explanation for the divergent use of the conjunct past endings in different generatiolects. In order to make this explanation understandable to the reader, a brief excursus into the history of the conjunct past tense endings is necessary.

There is ample evidence that the conjunct past endings *-et* ~ *-men* developed from a formerly periphrastic construction that was composed of a verbal infinitive form and the equative copula *jen-*. There are three pieces of evidence that support that claim. First, the intransitive infinitive ending *-men* is homophonous with the transitive conjunct past ending *-men*. The mere phonological similarity of the two suffixes suggests that they may have a common origin. Second, old speakers pronounce the intransitive / middle conjunct past ending *-et* as *-etn* [*-eʔt̪ṇ* ~ *-eʔn*], i.e. with a final nasal. The presence of this nasal consonant suggests that the ending may originally have had the form **-en*, which in turn represented a truncated form of the original suffix **-men*. Note that the alveo-dental plosive /*t*/ can be explained as the result of a morphological reanalysis that occurred in combination with verb stems ending in /*t*/: Francke (1909: 74) reported a form “jo^dn”¹⁰², which he described as a third person perfect form of the verb *dzot-men* “to sit”. This verb form suggests that the original ending **-en* had been reduced to **-n* after verb stems with a final /*t*. It is not difficult to imagine that the unreleased stem final plosive was reanalyzed as a part of the ending (e.g. **jot-n* > **jo-tn*) in this context. Third, Francke (1909: 74) also mentions a form “jo^dngya”, a first person perfect form of the verb *jot-men* “to sit”. This verb form evidently exhibits an additional first person marker *-gja*, which no longer occurs on past tense forms in contemporary Bunan.¹⁰³ However, the suffix is still attested in the copula form *jen-gja* “EQ-1SG”, an archaic agreement form of the equative copula *jen-* (cf. § 14.2.2). Accordingly, it seems plausible that the person marker *-gja* on Francke’s first person form “jo^dngya” is a reflex of the cliticized copula form *jengja*.

The evidence considered above strongly implies that the conjunct past tense developed from a formerly periphrastic construction that was based on an infinitive form and the equative copula.¹⁰⁴ The early stages of the proposed grammaticalization process are illustrated in the scheme given below.

¹⁰² Note that Francke used superscript <^d> to transcribe syllable final unreleased plosives.

¹⁰³ Apparently, the ending *-gja* was on the verge of becoming obsolete in the early 20th century. At least, this is implied by Konow’s note in the *Linguistic Survey of India* (Grierson 1909: 473), where we read: “The personal suffixes are often dropped altogether; thus *elen* [instead of *elengya*], I went”. To be sure, I was able to elicit archaic person agreement forms like *lik-ø-mengja* “I did” from my oldest consultants, who are in their late seventies (cf. § 13.5.1), but in my corpus of natural speech there is not a single conjunct past form that exhibits this suffix.

¹⁰⁴ It is noteworthy that various Tibetic languages have grammaticalized their conjunct past tenses from formerly periphrastic constructions with an identical morphological structure, i.e. *V-INF + EQ*. Such constructions are for example attested in the Tibetan varieties spoken in Lhasa (DeLancey 1990: 293), Kyirong (Huber 2005: 120–121, 123), and Tabo (Hein 2007: 198).

Proposed grammaticalization path of the conjunct past tense

INTR:	<i>*ra-en</i> *come-PST	<	<i>*ra-men</i> *come-INF	+	<i>*jen-</i> *EQ-
MID:	<i>*tra-ɛ-en</i> *sunbathe-MID-PST	<	<i>*tra-ɛ-men</i> *sunbathe-MID-INF	+	<i>*jen-</i> *EQ-
TR:	<i>*da-ø-men</i> *give-TR-PST	<	<i>*da-tɛ-men</i> *give-TR-INF	+	<i>*jen-</i> *EQ-

This scenario offers a possible explanation for the wide scope of conjunct past endings in the generatiolet of old speakers. As argued in § 15.2.1.2, the direct evidential conjunct past tense most probably developed from a remote past tense that depicted an event as complete and definite. This remote past tense did not yet possess an epistemic value, but only acquired this function when it became a part of the functional trichotomy that characterizes the past tense system of contemporary Bunan. Accordingly, the wide scope of conjunct past endings in the speech of my oldest consultants may be seen as an archaic trait that reflects the formerly wider applicability of these endings. In the speech of my younger consultants, the scope of these endings has been narrowed to events in which the information source was directly involved as a participant, e.g. as an agent, as an experiencer, as a patient, as a recipient, etc.

To be sure, the scenario outlined above remains fragmentary and leaves open a number of crucial questions. For example, I have not addressed the question of how exactly the remote past tense was integrated into the complex system of epistemic oppositions that we encounter in contemporary Bunan. However, a detailed diachronic account of the verb form would go beyond the scope of this section. I thus confine myself to offering a historical explanation for the synchronically attested variation in the use of conjunct past endings.

13.3.2.2 Secondary conjunct marking

As noted above, the past tense is the only domain in which we find a secondary conjunct marker that can have scope over patient and recipient arguments. The respective morpheme has the phonological form *-ku* and can only occur in combination with verbs that follow the transitive conjugation and are inflected for the direct evidential disjunct past tense or the imperative mood.

The use of the secondary conjunct marker *-ku* is subject to pronounced age-dependent variation. Old speakers clearly use secondary conjunct markers more frequently and in a wider array of contexts than young speakers, who do not use secondary conjunct markers in a productive manner. My material suggests that members of the young

speaker generation only retain secondary conjunct marking in combination with the verb *da-tə-um* “to give”. The epistemic marker has most probably been retained in this context, as the verb *da-tə-um* has a high token frequency. Accordingly, the respective secondary conjunct forms must be highly entrenched.

A number of example sentences that illustrate the use of secondary conjunct marking in combination with the verb *da-tə-um* “to give” are given below. In this context, the secondary conjunct marker *-ku* indicates that the recipient argument of the predicate is coreferent with the epistemic source.

(653) *taltsh'i girok dzamen re dawts'ha nuŋ.*

<i>tal=tsh'i</i>	<i>gi=tok</i>	<i>dzamen=re</i>	<i>da-ø-ku-tsh'a</i>
3=ERG.PL	1SG=DAT	food=EXT	give-TR-UND-PST.DIR.DJ.PL

nuŋ
there

“They also gave me food there.”
(Zhangzhung 38)

(654) *wa otəi pata: dawni*

<i>wa</i>	<i>otəi</i>	<i>pata:LN</i>	<i>da-ku-ni</i>
FOC	tomorrow	clue	give-UND-IMP.PL

“Let me know by tomorrow (whether) ... !”
(Conversation 76.9)

(655) *džanaŋ biskit dawts'ha la?*

<i>dža=naŋ</i>	<i>biskitLN</i>	<i>da-ø-ku-tsh'a=la</i>
tea=CON	cookie	give-TR-UND-PST.DIR.DJ.PL=Q

“Did they offer you tea and cookies?”
(DP unrec 4)

(656) *taldok dawa dawdza ringare.*

<i>tal=tok</i>	<i>dawa</i>	<i>da-ø-ku-dza</i>
3[SG]=DAT	tomorrow	give-TR-UND-PST.DIR.DJ.SG
<i>ring-k-are</i>		
say-INTR-PRS.DJ.SG		

“She_i / he_i told me that she_j / he_j had given her_i / him_i money!”

(TD 325.10 [elicited])

Note that the use of the secondary conjunct marker *-ku* is obligatory in combination with the verb *da-tə-um*. An imperative form like *da-ni* “give-IMP.PL” can only be construed as “Give it to her / him / them!” but never as “Give it to me!”. If the speaker wants to express that something should be given to her / him, she / he has to use the secondary conjunct form *da-ø-ku-ni* “give-TR-UND-IMP.PL”.

As noted above, older speakers also use secondary conjunct marking in combination with other verbs than *da-tə-um* “to give”. In combination with bivalent verbs, the secondary conjunct marker indicates that the speaker was physically affected by an event. This may either involve direct physical contact between the agent and the speaker, as in (657), or relate to a more indirect kind of affectedness, as in (658) through (661).

(657) *talzi ja: hiŋzok kʰetkjuʂa.*

<i>tal=əi</i>	<i>ja:</i>	<i>hiŋ=əi=tok</i>	<i>kʰet-ku-tʂa</i>
3=PL	yesterday	1PL.EXCL=PL=DAT	beat-UND-PST.DIR.DJ.PL

“They beat us yesterday.”

(TD 63.4 [elicited])

(658) *təʰolga rikkudza henak.*

<i>təʰol-ka</i>	<i>rik-ø-ku-dza</i>	<i>henak</i>
shake-PROG	bring-TR-UND-PST.DIR.DJ.SG	like.this

“Shaking (us) like this, (the bus) brought us here.”

(Conversation 22.205)

(659) *tal helgudza na.*

<i>tal</i>	<i>hel-ø-ku-dza=na</i>
3[SG]	take.away-TR-UND-PST.DIR.DJ.SG=HS

“He_i said that (the fairy) abducted him_i.”

(The Fairies of Kullu 1.70)

(660) *taldzi girok dzingudza.*

<i>tal=dzi</i>	<i>gi=tok</i>	<i>dziŋ-ku-dza</i>
3=ERG.SG	1SG=DAT	scold-UND-PST.DIR.DJ.SG

“He scolded me.”

(TD 63.15 [elicited])

(661) *handzi girok punankat letkju!*

<i>han=dzi</i>	<i>gi=tok</i>	<i>punan-kat</i>	<i>let-ku-a</i>
2=ERG.SG	1SG=DAT	Bunan.Valley-language	teach-UND-IMP.SG

“Teach me the Bunan language!”

(TD 327.19 [elicited])

Furthermore, secondary conjunct marking can also occur in combination with trivalent predicates if the epistemic source is not coreferent with the recipient argument but the theme argument. This is illustrated by the following sentence.

(662) *taldzi girok taldok laŋgutsʰa.*

<i>tal=tsʰi</i>	<i>gi=tok</i>	<i>tal=tok</i>	<i>laŋ-ku-tsʰa</i>
3=ERG.PL	1SG=DAT	3[SG]=DAT	sell-UND-PST.DIR.DJ.PL

“They sold me to him.” (said by a person who is a slave)

(TD 325.19 [elicited])

In my database, there is also one example that suggests that the secondary conjunct marker may also indicate that the speaker is the person who benefits from a situation. Consider the example below.

(663) *taldzi girok len likkudza.*

<i>tal=dzi</i>	<i>gi=tok</i>	<i>len</i>	<i>lik-ku-dza</i>
3=ERG.SG	1SG=DAT	work	make-UND-PST.DIR.DJ.SG

“He did the work for me.”

(TD 63.11 [elicited])

It is of crucial importance to note that the secondary conjunct markers in (657) through (663) are not obligatory. According to my oldest consultants, the secondary conjunct marker could be removed in all of these verb forms without affecting the meaning or the grammaticality of these sentences. Thus, the verb *da-tə-um* is the only predicate with which secondary conjunct marking is obligatory. In all other contexts, secondary conjunct

marking is merely a stylistic alternative that is sociolinguistically marked, as it is strongly associated with the generatiolect of old speakers.

Based on the examples considered so far, the morpheme *-ku* could be interpreted as a syntactic agreement marker that primarily registers the presence of a first person “object argument”, but has additionally acquired an “epistemic dimension” and now also registers the presence of an object argument that is coreferent with the epistemic source. Given the fact that the Bunan verbal system combines both syntactic agreement and epistemic marking, this conjecture is justified, the more so as there are indeed grammatical domains in which syntactic agreement and epistemic agreement interact directly with each other (cf. § 14.3.2). However, the morpheme *-ku* does not encode syntactic agreement, as the following example sentence illustrates.

(664) *taldzi girok kʰetdza la / **kʰetkjudza la.*

<i>tal=dzi</i>	<i>gi=tok</i>	<i>kʰet-ø-dza=la /</i>
3=ERG.SG	1SG=DAT	beat-TR-PST.DIR.DJ.SG=Q /

***kʰet-ø-ku-dza=la*

***beat-TR-UND-PST.DIR.DJ.SG=Q*

“Did she / he beat me?” (asked by a person who cannot remember the details of the event in question)
(TD 325.24 [elicited])

If the morpheme *-ku* encoded syntactic agreement, we would expect that the verb form in (664) above would receive secondary conjunct marking. However, the marker cannot occur in this context. This demonstrates that the morpheme *-ku* exclusively encodes privileged access to knowledge that is based on the primary epistemic source’s status as a patient argument, a theme argument, or a recipient argument.

13.3.3 Conjunct-disjunct marking in the future tense

In the future tense, conjunct-disjunct markers essentially have the same distribution as in the present tense. Conjunct marking occurs with privileged access verbs if the epistemic source is coreferent with the agent argument or the experiencer argument of the respective verb. Disjunct marking represents the default choice with general access verbs. However, it is possible to modify this basic pattern in clauses with future tense reference. For one thing, it is possible to use general access verbs in combination with conjunct endings. This is illustrated by the following example sentences.

(665) *nima tiki gi ɛitɛipajendzi.*

<i>nima=tiki</i>	<i>gi</i>	<i>ɛit-ɛ-i-pa=jendzi</i>
day=INDEF	1SG	die-MID-ACT-NZR=EQ.DJ.SG

“One day, I will die (because everybody has to die some day).”

(TD 84.6 [elicited])

(666) *nima tiki gi ɛitɛek.*

<i>nima=tiki</i>	<i>gi</i>	<i>ɛit-ɛ-ek</i>
day=INDEF	1SG	die-MID-PRS.CJ.SG

“One day, I will die (and I know the reason why).”

(TD 84.5 [elicited])

The proposition in (665) is a neutral statement in which the speaker reflects on the fact that she / he will have to die someday, simply because it is a part of the human condition. The proposition in (666), on the other hand, has a rather different meaning. Here, the speaker suggests that she / he has already personally experienced a state that may cause her / his death in the long run. This sentence could thus only be uttered by somebody who has been suffering from a severe sickness or, in a metaphorical sense, by somebody who has been experiencing hard times and wants to emphasize the fact that she / he can no longer bear these conditions.

Note that the form *ɛit-ɛ-ek* in (666) does not entail any degree of intention or desire on behalf of the speaker. If a speaker wishes to express that she / he wishes to die, she / he would use a verb form that contains the volitional ending *-te* (cf. § 15.2.2.1), as the following example illustrates.

(667) *gi ɛitɛite!*

<i>gi</i>	<i>ɛit-ɛ-te</i>
1SG	die-MID-VOL.SG

“I want to die.”

(TD 84.6 [elicited])

For another thing, it is possible to use disjunct morphology on privileged access verbs. This is illustrated by the examples given below.

(668) *gidzi the len likkata.*

<i>gi=dzi</i>	<i>the</i>	<i>len</i>	<i>lik-ø-kata</i>
1SG=ERG.SG	this	work	make-TR-FUT.CJ.SG

"I will do this work." (neutral statement)

(TD 242.2 [elicited])

(669) *gidzi the len liktəipajendzi.*

<i>gi=dzi</i>	<i>the</i>	<i>len</i>	<i>lik-tə-i-pa=jendzi</i>
1SG=ERG.SG	this	work	make-TR-ACT-NZR=EQ.DJ.SG

"I will do this work." (tentative statement)

(TD 242.7 [elicited])

The proposition in (668) is a neutral statement in which the speaker declares her / his intention to accomplish a given task. The proposition in (669) essentially has the same meaning, but is less binding as opposed to the statement in (668). The speaker indicates that she / he is essentially willing to do the work, but that she / he does not yet have a specific idea of when, where, and under which circumstances she / he will be able to perform the task. In several elicitation sessions with younger speakers, I received the impression that members of the young speaker generation do not combine privileged access verbs with disjunct markers as in (669) above. However, I have not had the possibility to look into this matter in more detail. Further research is needed to corroborate this claim.

13.3.4 Conjunct-disjunct marking in periphrastic verb forms

Bunan possesses a range of periphrastic constructions that consist of a non-finite verbal form followed by the equative copula *jen-*, which is inflected for the conjunct-disjunct opposition. The copula possesses a conjunct form *jen*, a disjunct singular form *jendzi*, and a disjunct plural form *jentə^hok*. The conjunct form *jen* can have scope over whole propositions, regardless of whether the epistemic source is coreferent with a participant contained in this proposition or not (see § 14.2.2), and also retains this wide scope when occurring in periphrastic constructions. Accordingly, conjunct marking in periphrastic constructions is not restricted to contexts in which the epistemic source acts as the wilfull instigator of an event or the experiencer of an internal stimulus. Rather, the conjunct copula form *jen* can be used whenever the epistemic source wants to express that she / he is well acquainted with the knowledge on which a given proposition is based. Consider the following sentences, which have been taken from a recording of an autobiographical report of my main consultant. In this story, my main consultant told me how he visited the Bonpo main monastery in Dolanji (Himachal Pradesh) in the 1960s and realized that

Zhangzhung, the sacred language of the Bonpos, exhibited similarities to his own native language and other West Himalayish languages of Lahaul.

(670) *nospok jen loŋi jen gidzi.*

<i>nospok</i>	<i>jen</i>	<i>lot-s-ŋ-i=jen</i>	<i>gi=dzi</i>
true	EQ.CJ	say-DETR-MID-ACT=EQ.CJ	1SG=ERG.SG

“‘It is true!’ I said.”

(Zhangzhung 71)

(671) *gi nima tiki ragek ne loŋi jendzi.*

<i>gi</i>	<i>nima=tiki</i>	<i>ra-k-ek</i>	<i>ne</i>
1SG	day=INDEF	come-INTR-PRS.CJ.SG	SUG

lot-s-ŋ-i=jendzi
say-DETR-MID-ACT=EQ.DJ.SG

“‘I will come (visit you) someday’, I said.”

(Zhangzhung 16)

The examples given above are based on a periphrastic past tense form that expresses generic evidence (see § 13.4.3). Both past tense forms are based on the detransitivized active participle form of the verb *lot-tə-um* “to say”. In the first example, the participial form is followed by the conjunct form *jen*, whereas in the second example, it is followed by the disjunct form *jendzi*. The semantic differences between the two forms are so elusive that my main consultant had great difficulties in explaining them to me. The disjunct form in (671) portrays the proposition as a generally known fact. Speakers often use these forms in narratives about personal experiences. In such contexts, disjunct marking serves as a stylistic device to evoke the atmosphere of a story. The conjunct form in (670), on the other hand, presents the proposition as a fact that is part of the speaker’s intimate knowledge and, accordingly, gives a much more personal touch to the utterance.

Similar uses of conjunct and disjunct copula forms are also encountered in other periphrastic verb forms. The following sentences contain generic present tense forms, which are formed from the infinitive and the equative copula (see § 15.3.1.1).

(672) *gun eraŋmaŋ mu noj ramen.*

<i>gun</i>	<i>eraŋ=maŋ</i>	<i>mu</i>	<i>noj</i>	<i>ra-men=jen</i>
winter	1PL.INCL=ALL	snow	much	come-INF=EQ.CJ

“‘In winter, there is a lot of snow in Lahaul.’ (focus on personal experience)

(TD 311.1 [elicited])

(673) *gun eraŋmaŋ mu noj ramendzi.*

<i>gun</i>	<i>eraŋ=maŋ</i>	<i>mu</i>	<i>noj</i>	<i>ra-men=jendzi</i>
winter	1PL.INCL=ALL	snow	much	come-INF=EQ.DJ.SG

“In winter, there is a lot of snow in Lahaul.” (focus on common knowledge)
(TD 311.2 [elicited])

The two example sentences are basically identical and only differ with regard to the form of the final copula. In (672), the final copula *jen* implies that the speaker is basing this statement on her / his own personal experience, which entails that she / he has been to Lahaul in winter in the past. The final copula *jendzi* in (673), on the other hand, indicates that the speaker is portraying the proposition as a generic fact that everybody knows about. She / he does not claim to have personal or intimate knowledge of this fact. Note that this does not necessarily exclude the possibility that the speaker has personally experienced the winter climate of Lahaul. The choice of the copula *jendzi* merely indicates that the speaker does not see any reason to portray the proposition as exclusive and personal knowledge.

13.3.5 The historical status of conjunct-disjunct marking

There is ample evidence that the conjunct-disjunct system of Bunan is a recent innovation and emerged from an original person agreement system. Remnants of a former person agreement system can still be found throughout the verbal system of Bunan. The evidence for the historical relationship between conjunct-disjunct marking and person agreement marking is not, however, discussed at this point, but is taken up at the end of the section on person agreement (§ 13.5.4).

13.4 Evidentiality

As noted in § 13.2.1, I define evidentiality as a grammatical category that specifies the way in which the epistemic source acquired knowledge about a given event or situation (cf. Aikhenvald 2004: 3). Evidentiality plays a crucial role in the verbal system of Bunan. The language distinguishes between four different types of evidentiality: direct evidentiality, inferential evidentiality, generic evidentiality, and reported evidentiality. In Aikhenvald’s (2004: 23–66) typology of evidentiality systems, Bunan accordingly ranks as “C₂ system”.¹⁰⁵

In Bunan, the grammatical category “evidentiality” differs from other verbal categories in several respects. First, evidentiality is a versatile category with regard to morpho-syntactic encoding. Direct evidentiality and inferential evidentiality are marked by means

¹⁰⁵ Note that Aikhenvald (2004: 2–3) uses the term “assumed” evidence instead of “generic” evidence.

of finite inflectional endings, while generic evidentiality is expressed by periphrastic constructions that consist of a non-finite verb form followed by the equative copula stem *jen-*. Reported evidentiality may either be encoded by a phrasal clitic or a finite inflected verb form of a speech verb. Second, evidentiality distinguishes itself from other verbal categories in terms of its unequal distribution across the verbal system. While there is a threefold distinction between direct, inferential, and generic evidentiality in the past tense, there is a mere opposition of generic evidential forms and non-evidential forms in the present and future tense.

In the following subsections, the semantic function of the individual evidential sub-categories are described in more detail.

13.4.1 Direct evidentiality

As noted above, direct evidentiality is only encoded in the past tense, where it is marked by the direct evidential past tense endings *-dza* / *-tsʰa*. The use of these endings indicates that the epistemic source has direct first-hand evidence of a given event, but that this knowledge does not pertain to the sphere of exclusive and personal “conjunct knowledge” (cf. § 13.3). It is irrelevant whether the respective knowledge was acquired based on visual, auditory, or sensory evidence, as the following examples demonstrate.

(674) *kʰjak mu radza*.

<i>kʰjak</i>	<i>mu</i>	<i>ra-dza</i>
here	snow	come-PST.DIR.DJ.SG

“Here it snowed.” (The speaker saw the snowfall.)

(Conversation 28.50)

(675) *bruk dirtsa*.

<i>bruk</i>	<i>dirt-dza</i>
thunder	thunder-PST.DIR.DJ.SG

“There has been thunder.” (The speaker could hear the thunder.)

(TD unrec 54)

(676) *ɲaro nindza ea astok soj tʰorsa.*

<i>ɲaro</i>	<i>nindza</i>	<i>el-ka=astok</i>	<i>soj</i>
morning	EX.PST.SG	come-PROG.SG=TERM	cold

tʰor-s-ɛ-dza

feel-DETR-MID-PST.DIR.DJ.SG

“It was morning. When we went off, I felt cold.” (The speaker felt the cold.)

(Conversation 44.7)

The direct evidential past endings are both used for events that happened in the recent past and events that happened a long time ago. This is demonstrated by the following example sentences. The sentence in (677) refers to an event that had only occurred several days earlier, whereas the sentence in (678) refers to a situation that my oldest consultant had experienced five decades earlier.

(677) *kʰjak mu radza.*

<i>kʰjak</i>	<i>mu</i>	<i>ra-dza</i>
here	snow	come-PST.DIR.DJ.SG

“Here it snowed.”

(Conversation 28.50)

(678) *nunɽɛi ranɽopaj mi ɲama tʰanɽi tʰattʰa.*

<i>nunɽɛi</i>	<i>ranɽo-pa=ki</i>	<i>mi=ɲama</i>	<i>tʰanɽi</i>
then	Ranglo-NZR=GEN	person=all	all

tʰat-tʰa

be.happy-PST.DIR.DJ.PL

“And then all of the people from the Ranglo Valley were happy”.

(Tulshug Lingpa 110)

It is important to keep in mind that the direct evidential past ending does not always refer to the knowledge source of the current speaker. In a quoted declarative sentence such as example (679) below, the evidential marker refers to the knowledge source of the quoted speakers. In interrogative sentences, on the other hand, the evidential marker always reflects the (presumed) knowledge source of the addressee. This is the case in (680) and (681), where the use of *-dza* expresses direct evidence on behalf of the current addressee and the quoted addressee, respectively.

(679) *wa mana:li noj mu radza loʔak.*

<i>wa</i>	<i>mana:li</i>	<i>noj</i>	<i>mu</i>	<i>ra-dza</i>
FOC	Manali	much	snow	come-PST.DIR.DJ.SG

lot-s-ʔak
say-DETR-MID-PRS.DJ.PL

“People say that there was a lot of snow in Manali.” (evidential marker reflects knowledge of the quoted speakers)
(Conversation 28.50)

(680) *rinpotʂe lepdza la tʰan?*

<i>rinpotʂe</i>	<i>lep-ʔ-dza=la</i>	<i>tʰan</i>
Rinpoche	arrive-TR-PST.DIR.DJ.SG	today

“Has the Rinpoche arrived today?” (evidential marker reflects presumed knowledge of the current addressee)
(Conversation 71.4)

(681) *tʰotʂa la loʔi.*

<i>tʰot-dza=la</i>	<i>lot-s-ʔ-dʒi</i>
be.delivered-PST.DIR.DJ.SG=Q	say-DETR-MID-CVB.SG

“She asked, ‘Was (my gift) delivered (to you)?’” (evidential marker reflects presumed knowledge of the quoted addressee)
(Conversation 55.20)

Finally, there are some pragmatic contexts in which the verbal endings *-dza* and *-tsʰa* do not appear to possess an evidential value. Consider the following example.

(682) *tʰe dʒenwarirok wa itʂik ʂittʂʰa!*

<i>tʰe</i>	<i>dʒenwari_{LN}=tok</i>	<i>wa</i>	<i>itʂik</i>	<i>ʂit-ʂ-tsʰa</i>
this	January=DAT	FOC	how.many	die-MID-PST.DJ.PL

“So many people died in January!”
(Conversation 14.224)

If we assumed that the verb form *ʂit-ʂ-tsʰa* in the sentence above expresses a direct evidential value, this would entail that the speaker of the sentence witnessed the death of all the people who passed away in the month of January. However, the sentence clearly does not convey this meaning. Accordingly, the question arises how we can account for the fact that direct evidential endings can occur in situations in which the speak-

er did not personally witness the event referred to in the proposition. In my opinion, there are two possible ways to explain this unexpected use of direct evidential markers. For one thing, it is conceivable that the use of the direct evidential ending in the example above reflects an idiosyncratic stylistic convention of Bunan (cf. Aikhenvald 2004: 315–324). In this case, the direct evidential would express a high degree of personal involvement or concernment. The direct evidential verb form in the example sentence given above could be interpreted in such a manner. However, this explanatory approach cannot account for the fact that the verb *ɕit-ɕ-um* “to die” commonly occurs with the direct evidential ending, regardless of the relationship between the speaker and the deceased person. Consider the following example sentence, in which the speaker talks about an accident about which he had heard in the news.

(683) *ŋaj mi ɕittsʰa ake ɕimla.*

<i>ŋaj</i>	<i>mi</i>	<i>ɕit-ɕ-tsʰa</i>	<i>ake</i>	<i>ɕimla</i>
five	person	die-MID-PST.DJ.PL	QUE	Shimla

“Five people died in Shimla, right?” (The speaker had heard about it in the news)
(Conversation 14.176)

The example sentences given above suggest that there are pragmatic contexts in which the inflectional endings *-dza* and *-tsʰa* do not express direct evidence, but rather mark a statement as factual and neutral with regard to evidential construal. (682) and (683) appear to represent such contexts. In both sentences, it was unnecessary for the speaker to specify his information source, as the other two discourse participants had already heard about the respective events as well. Most probably, they had even talked about these events beforehand. At the time that the conversation in question took place, these events had accordingly become part of the “collective memory” of my host family.

This “neutral-factual” interpretation of examples (682) and (683) makes sense from a historical point of view. As I argue in § 13.4.5 below, the direct evidential past tense markers *-dza* and *-tsʰa* are the most ancient inflectional markers in the past tense domain and probably date back to the stage of a common western West Himalayish proto-language. These endings originally did not have an evidential value, but only acquired an epistemic function when they came to stand in functional opposition to the inferential past tense markers, which in turn are most likely the result of a relatively recent grammaticalization process.

Evidence for this claim also comes from the fact that the ending *-dza* does not express any epistemic values when being combined with non-finite clause chaining clitics such as *=la* (anterior) or *=naŋ* (conditional). Consider the following examples.

(684) *tɛakdzala tapɛi ragek ringare na.*

<i>tɛak-ø-dza=la</i>	<i>tap-s-ɛ-dʒi</i>
wash-TR-PST.SG=ANTER	bring.back-DETR-MID-CVB.SG
<i>ra-k-ek</i>	<i>riŋ-k-are=na</i>
come-INTR-PRS.CJ.SG	say-INTR-PRS.DJ.SG=HS

“‘Having washed (my clothes), I will come back’, he told them, it is said.”

(Conversation 22.75)

(685) *gi daltok amtsanaŋ tɛʰas ramen manindza.*

<i>gi</i>	<i>daltok</i>	<i>amt-ɛ-dza=naŋ</i>	<i>tɛʰat-s</i>
1SG	slowly	walk-MID-PST.SG=COND	be.tired-NZR
<i>ra-men</i>	<i>ma-nindza</i>		
come-INF	NEG-EX.PST.SG		

“If I would have walked slowly, I would not have become exhausted.”

(TD 70.11 [elicited])

In contemporary Bunan, utterances like ***gi=dzi tɛak-ø-dza* “1SG=ERG.SG wash-TR-PST.DIR.DJ.SG” “I washed (clothes)” or ***gi amt-ɛ-dza* “1SG walk-MID-PST.DIR.DJ.SG” “I walked” are ungrammatical. The first person pronoun *gi* can only occur with verb forms in the conjunct past tense, i.e. *tɛak-ø-men* “wash-TR-PST.DIR.CJ” and *amt-ɛ-et* “walk-MID-PST.DIR.CJ”. However, it is not possible to suffix clause chaining clitics to these conjunct verb forms. In constructions such as the ones exemplified above, only the ending *-dza* can occur. This indicates that the direct evidential disjunct past endings belong to an old layer of inflectional morphology and retain an archaic non-epistemic function in subordinate clauses. Accordingly, it seems plausible that these endings may also have retained a non-epistemic function under certain pragmatic contexts in main clauses.

13.4.2 Inferential evidentiality

Like direct evidentiality, inferential evidentiality is only encoded in the past tense. The evidential subcategory is encoded by the markers *-dzi* (singular) and *-tɛʰok* (plural) in the intransitive and middle conjugation and by the marker *-ta* in the transitive conjugation.

The use of inferential evidential markers indicates that the epistemic source has not directly witnessed the event denoted by the verb, but has learned about the respective event in some other way. For example, speakers use the inferential evidential marker when they can infer that a given event must have taken place based on a resultant state. This is illustrated by the example sentences given below.

(686) *tetedzi eraŋmaŋ tʰopa likta dzamen ma?*

<i>tete=dzi</i>	<i>eraŋ=maŋ</i>	<i>tʰopa</i>	<i>lik-ø-ta</i>
grandfather=ERG.SG	1PL.INCL=ALL	similar	make-TR-
PST.INFER.DJ			

<i>dzamen</i>	<i>ma</i>
food	CNS

“Grandfather has prepared traditional Lahauli food, right?” (The speaker did not see grandfather cooking, but he can see the prepared food.)
(Conversation 70a.1)

(687) *tʰadzu ŋamatsʰi bakæetsi tʰadzu tsore rikta.*

<i>tʰadzu=ŋama=tsʰi</i>	<i>bakæetsi</i>	<i>tʰadzu=tsore</i>
that=all=ERG.PL	deep-fried.bread	similar=ENR

rik-ø-ta
bring-TR-PST.INFER.DJ

“All of them had brought deep-fried bread and such things.” (The speaker did not see the people bring the food, but he saw the buffet were they had put the food.)
(Conversation 39.33)

(688) *tʰan ajna soj kjadzi eldzi.*

<i>tʰan</i>	<i>ajna</i>	<i>soj</i>	<i>kja-dzi</i>
today	very.much	cold	become-CVB.SG

el-dzi
bring-PST.INFER.DJ.SG

“Today it has become very cold.” (The drop in temperature happened over night and was not directly witnessed by the speaker.)
(Conversation 44.1)

It is irrelevant whether the speaker makes this inference at the moment of speaking or whether the speaker has made this inference earlier. (686) was uttered in a situation in which the speaker had just realized that his grandfather had cooked traditional Lahauli food. (687) and (688), on the other hand, occurred in contexts in which the respective speakers were referring to inferred knowledge that they had gained earlier. In addition, it is also irrelevant whether the inference was made based on visual or sensory information.

Prototypically, the inferential occurs in situations in which the speaker perceives the result of someone else's action. However, in pragmatically marked contexts the form may also refer to actions that the speaker performed herself / himself, but that she / he can no longer remember. Consider the sentence below, which might be uttered by a person who wakes up with a hangover and no memory of the night before. In this case, a person will need to use the inferential past form to refer to her / his (presumed) actions on the night before, as she / he does not possess first-hand knowledge of these events.

(689) *gi ja: arak tunɖzi. hit mara:re.*

<i>gi</i>	<i>ja:</i>	<i>arak</i>	<i>tunɖzi</i>	<i>hit</i>
1SG	yesterday	liquor	drink-PST.INFER.DJ.SG	memory

ma-ra-k-are
NEG-come-INTR-PRS.DJ.SG

"I must have drunk alcohol yesterday evening, but I cannot remember." (said by a person who is waking up with a hangover and cannot remember what had happened the night before.)

(TG 21.8 [elicited])

In addition, inferential markers refer to events that the speaker performed unintentionally. Example (690) below was uttered by a speaker in the moment that she realized that she had left her mobile phone in the orchard where she had been working before. Example (691), on the other hand, would be the appropriate way of stating that one inadvertently ate from someone else's dish.

(690) *pʰon tʰaj lwat-s-ɕ-dzi.*

<i>pʰon_{LN}</i>	<i>tʰaj</i>	<i>lwat-s-ɕ-dzi</i>
phone	up.there	forget-DETR-MID-PST.INFER.DJ.SG

"Oh, I must have left my phone up there."

(DP unrec 28)

(691) *o gidzi hāj tʰukpa tunɖzi.*

<i>o</i>	<i>gi=dzi</i>	<i>hāj</i>	<i>tʰukpa</i>	<i>tunɖzi</i>
oops	1SG=ERG.SG	2SG.GEN	soup	drink-PST.INFER.DJ.SG

"Oops, I inadvertently ate from your soup."

(TD 98.5 [elicited])

In the two examples given above, the inferential has a strong mirative connotation (DeLancey 1997, 2012) and expresses that the knowledge contained in the relevant prop-

osition is new and surprising to the speaker. However, it is important to keep in mind that the expression of mirativity is not the primary function of the inferential marker, but merely represents an epiphenomenon that occurs in specific pragmatic contexts, i.e. when an inference is made for the first time. For example, the sentence in (690) only had a mirative connotation when the speaker uttered it for the first time on realizing that she had left her mobile phone in the orchard. If she would have told somebody else about this event later, she would still have used the inferential verb form. However, the evidential ending would then no longer have had a mirative connotation, as the speaker would already have been familiar with the semantic content of the proposition at that time.

This subordinate status of mirativity is a consequence of the metonymic semantic relationship that holds between inferred knowledge and surprising knowledge. Whenever one makes an inference about a past event for the first time, the knowledge conveyed by the respective proposition is new and probably also surprising to the speaker. In other words, “unexpectedness” is a frequent contextual semantic feature of propositions that are marked with the inferential marker. In the course of time, speakers may reanalyze this originally contextual feature as an inherent semantic feature of the evidential marker. The form thus undergoes a hypoanalysis (Croft 2000: 126–127). In Bunan, there is no evidence for such a functional reanalysis, however. Mirativity is merely a contextual feature of the morpheme, whereas inferential evidence and disjunct are inherent verbal categories of the ending.

Speakers may also use inferential markers to refer to events that they experienced in dreams, albeit this is not obligatory. According to my main consultant, a proposition like the one given in example (692) below could either be marked as “conjunct knowledge” or “disjunct inferred knowledge”.

(692) *maŋskun gi dilli eldzi / elet.*

<i>maŋs=kun</i>	<i>gi</i>	<i>dilli</i>	<i>el-dzi / el-et</i>
dream=LOC	1SG	Delhi	go-PST.INFER.DJ.SG / go-PST.DIR.CJ

“In my dream I travelled to Delhi.”

(TD 93.7 [elicited])

Finally, inferential evidentiality is also commonly used to refer to events that one has learnt about by hearsay. Thus, the inferential marker is frequently encountered in stories that refer to mythological events. Consider the following example, which has been taken from the traditional story about the legendary hero King Kesar.

(693) ... *talzi leks nama tshants'hanji tumta. nwak tumdzi thadzun leks nama tshanidok lotta*

<i>tal=ɕi</i>	<i>leks=nama</i>	<i>tshants'hanji</i>	<i>tum-ø-ta</i>	<i>nwak</i>
3=PL	village=all	all	summon-TR-PST.INFER.DJ	so

<i>tum-ø-dzi</i>	<i>thadzun</i>	<i>leks=nama</i>	<i>tshanji=tok</i>
summon-TR-CVB	there	village=all	all=DAT

lot-ø-ta

say-TR-PST.INFER.DJ

“... he summoned them, the whole village. After he had summoned the whole village there, (Agu Khargan Gani) said to them:”

(King Kesar 16)

Further, inferential marking is also used to refer to historical events that the speaker knows to have taken place. The following example is from the story about Thulshug Lingpa, a renowned lama of the Nyingma school, who lived in the mid-20th century and was a teacher and close friend of my main consultant.

(694) ... *wa gen asti larok loksa dzukte'hok. dordzeliŋtɕi nanre eltɕhi nunɕtɕi nepal re lepta.*

<i>wa</i>	<i>gen=asti</i>	<i>la=tok</i>	<i>lok-ɕ-a</i>
FOC	spring=SML	mountain=DAT	climb-MID-SUP

<i>dzuk-tɕ'hok</i>	<i>dʒordzeliŋ=tɕi</i>	<i>nanrek</i>	<i>el-tɕhi</i>
begin-PST.INFER.DJ.PL	Darjeeling=ABL	inside	go-CVB.PL

<i>nunɕtɕi</i>	<i>nepal=re</i>	<i>lep-ø-ta</i>
then	Nepal=EXT	reach-TR-PST.INFER.DJ

“... and sometime in spring they started to climb the mountains. From Darjeeling they went into (the mountains) and then came to Nepal.”

(Tulshug Lingpa 179)

Due to its status as an epistemic subcategory, inferential evidentiality is tied to the discourse role of the epistemic source. Accordingly, an inferential marker refers to the evidential stance of the addressee in interrogative speech acts. In a sentence such as the one given below, the speaker assumes that the addressee did not see the event denoted by the verb but only the result of the respective action.

(695) *pitaŋ tikta la?*

pitaŋ *tik-ø-ta=la*
door close-TR-PST.INFER.DJ=Q

“Have they closed the door?” (The speaker assumes that the hearer has not seen the guests closing the garden door.)

(TD unrec 18)

In a quoted declarative speech act, the inferential marker refers to the stance of the quoted speaker. The use of the hearsay clitic *=na* in the example below indicates that the persons whom the current speaker is quoting did not have first-hand knowledge of the house purchase themselves.

(696) *ja: riŋgare nekæek jokta na kjum.*

<i>ja:</i>	<i>riŋ-k-are</i>	<i>nek=æek</i>
yesterday	say-INTR-PRS.DJ.SG	last.year=about
<i>jok-ø-ta=na</i>	<i>kjum</i>	
buy-TR-PST.INFER.DJ=HS	house	

“They said that yesterday. They said that he bought a house sometime last year.”
(The current speaker suggests that the quoted speaker did not have first-hand knowledge of the house purchase.)

(Conversation 14.46)

13.4.3 Generic evidentiality

Unlike direct and inferential evidentiality, generic evidentiality is not expressed by an inflectional ending. Rather, generic evidentiality is expressed by a number of periphrastic constructions that consist of a non-finite verb form followed by the equative copula *jen-*. These forms will not be systematically discussed at this point, as they are described in more detail in § 15.3. Rather, I will focus on the semantics of generic evidentiality.

As the label “generic” implies, generic evidentiality refers to events and situations that represent a part of one’s general knowledge of the world. Accordingly, generic evidential constructions do not specify the way in which the speaker acquired the knowledge on which a proposition is based. Rather, they indicate that the relevant facts are simply known to the speaker. Consider the following two examples.

(697) *nitsi ranaŋ wa soj ramen men apa.*

<i>nitsi</i>	<i>ra=naŋ</i>	<i>wa</i>	<i>soj</i>	<i>ra-men</i>	<i>men</i>
sun	come=COND	FOC	cold	come-INF	NEG.EQ.CJ

apa
AUTH

“When the sun comes out, it will not be cold anymore.”

(Conversation 22.201)

(698) *kʰa lik-tə-um da.*

<i>kʰa</i>	<i>lik-tə-um=jen</i>	<i>da</i>
what	do-TR-INF=EQ.CJ	now

“What can one do (in such a situation)?”

(Conversation 63.45)

The proposition in (697) denotes a generic fact. Everybody knows that temperatures increase when the sun comes out. Example (698) is a rhetorical question that is often used when talking about difficult situations and problems. In a more literal sense, the question could be translated as “Based on your general knowledge of the world: What would you say that people usually do in such situations?”

In addition, speakers frequently use generic evidential constructions when telling stories. Note that it is irrelevant whether the respective events actually happened or whether they belong to the sphere of myths and legends. Example (699) below is taken from a ghost story, whereas example (700) is taken from a recording in which a consultant was telling an autobiographical story about events that had happened several decades earlier.

(699) *əit-ə-dʒi pʰiro tok=asti kan tal rolaŋs ɛenəidʒi.*

<i>əit-ə-dʒi</i>	<i>pʰiro tok=asti</i>	<i>kan-a</i>	<i>tal</i>
die-MID-CVB.SG	night=DAT=SML	watch-IMP.SG	3[SG]

<i>rolaŋs</i>	<i>ɛen-s-ə-i=jendʒi</i>
rolangs	raise-DETR-MID-ACT=EQ.DJ.SG

“And having died, sometime at night he rose as a rolangs.”

(Conversation 87.361)

(700) *gi nima tiki ragek ne loŋi jendzi.*

<i>gi</i>	<i>nima=tiki</i>	<i>ra-k-ek</i>	<i>ne</i>
1SG	day=INDEF	come-INTR-PRS.CJ.SG	SUG

lot-s-ɛ-i=jendzi

say-DETR-MID-ACT=EQ.DJ.SG

“‘I will come (visit you) someday’, I said.”

(Zhangzhung 16)

As example (700) above demonstrates, speakers sometimes use generic evidential constructions to refer to events that they performed themselves. When I first noticed this usage of generic evidentiality, I assumed that it evoked connotations of great temporal distance and could only refer to actions that one performed a long time ago. However, this hypothesis turned out to be wrong. Example (701) below was recorded from a speaker who told about a ceremony that she had attended on the same day. Accordingly, generic evidential constructions do not necessarily need to refer to events that belong to the distant past, but may also be used to describe recent events if a speaker wishes to tell them in a story-like manner, rather than portraying them as a report of one’s personal experience.

(701) *nunŋtɕi datle wa tʰadzun eli jentɕʰok.*

<i>nunŋtɕi</i>	<i>datle</i>	<i>wa</i>	<i>tʰadzun</i>	<i>el-i=jentɕʰok</i>
then	just.now	FOC	there	go-ACT=EQ.DJ.PL

“Then we went there.” (The relevant event had happened on the same day.)

(Conversation 22.5)

(702) *nospok jen loŋi jen gidzi.*

<i>nospok</i>	<i>jen</i>	<i>lot-s-ɛ-i=jen</i>	<i>gi=dzi</i>
true	EQ.CJ	say-DETR-MID-ACT=EQ.CJ	1SG=ERG.SG

“‘It is true!’, I said.”

(Zhangzhung 71)

13.4.4 Reported evidentiality

As mentioned earlier, reported evidentiality possesses a special status within the evidentiality system of Bunan because it is not marked by means of particular inflectional endings (like direct and inferential evidentiality) or encoded by periphrastic constructions (like generic evidentiality). Another peculiar trait of reported evidentiality is its compatibility with other evidential categories. In other words, a proposition that is marked for direct evi-

dentiality, inferential evidentiality, or generic evidentiality may be additionally marked for reported evidentiality. The resulting utterance then encodes the epistemic perspective of the reported speaker and epistemic perspective of the current speaker at the same time.

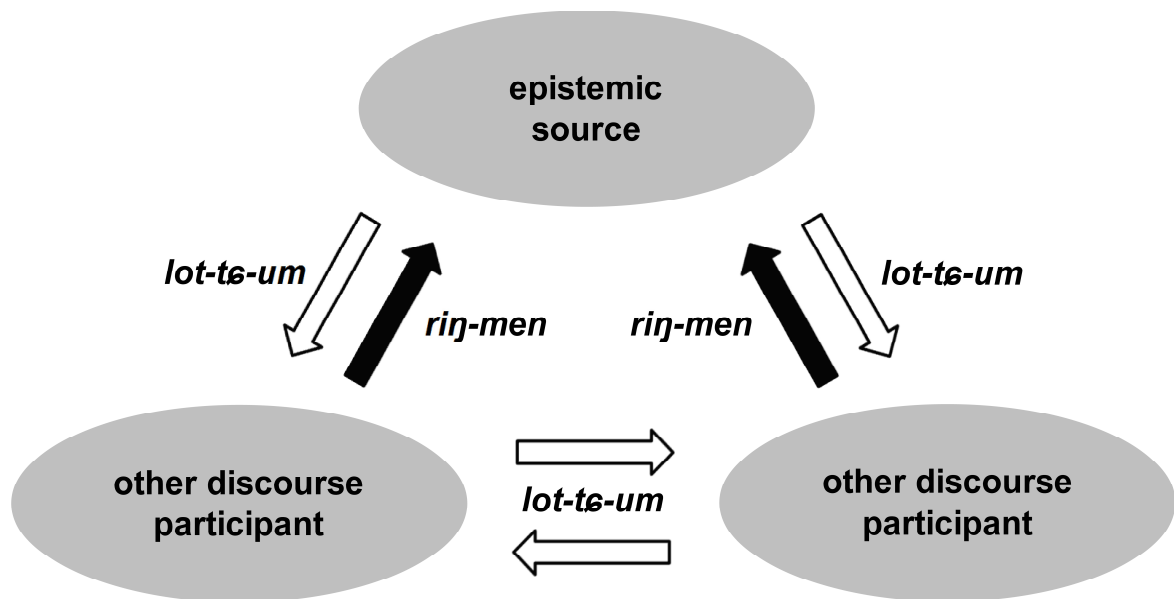
Bunan possesses two different strategies that indicate that an utterance is based on reported evidentiality. First, a reported proposition can be marked with the hearsay clitic *=na*. Second, a reported proposition can be embedded into a reported speech construction that is based on a speech verb. The first strategy is not described at this point, as the hearsay clitic is discussed in § 10.2.4. Accordingly, the following discussion focuses on complement constructions that express reported evidentiality (see § 19.6 for a more general discussion of reported speech constructions).¹⁰⁶

Bunan possesses two speech verbs that are commonly used to express reported evidentiality: the intransitive verb *riŋ-men* “to say” and the transitive verb *lo-tə-um* “to say”. Although the two verbs have the same translation in English, they are not functionally equivalent. The intransitive verb *riŋ-men* occurs in contexts in which the epistemic source represents the goal of the speech act. The transitive verb *lo-tə-um*, on the other hand, is used whenever the epistemic source does not serve as the goal of the speech act. The deictic value of these verbs is described by the following scheme.¹⁰⁷

¹⁰⁶ Note that Aikhenvald (2004: 105, 120–123) does not consider complementation as truly evidential in nature. Rather, she treats the phenomenon as an “evidentiality strategy”, i.e. a grammatical structure that does not serve the primary function of indicating the source of information, but may express evidential overtones in certain contexts. Nonetheless, I have decided to subsume complement construction under the category of reported evidentiality, as there is no functional difference between reported statements that are marked by a speech verb clause and reported statements that are marked with the hearsay clitic *=na*.

¹⁰⁷ Huber (2013a: 244) describes a similar system for the West Himalayish language Shumcho.

Figure 41: Deictic value of speech verbs *riŋ-men* “to say” and *lo-tɛ-um* “to say”



The following example sentences illustrate the different deictic scenarios that are evoked by the verbs *riŋ-men* and *lo-tɛ-um*.

(703) *ʔelipʰon maradzə riŋgare taj.*

<i>ʔelipʰon_{LN}</i>	<i>ma-ra-dza</i>	<i>riŋ-k-are</i>
telephone	NEG-come-PST.DIR.DJ.SG	say-INTR-PRS.DJ.SG
<i>taj</i>		
3SG.GEN		

“He_i said (to me) that he_j had not called him_i.” (lit. “He_i said to me that his_j phone had not come.”)

(Conversation 22.388)

(704) *kʰa riŋgare da tete?*

<i>kʰa</i>	<i>riŋ-k-are</i>	<i>da</i>	<i>tete</i>
what	say-INTR-PRS.DJ.SG	now	grandfather

“Now, what did he say (to you), grandfather?”

(Conversation 47d.1)

(705) *sonam moruptsi ringare na tete radzi ni: ringare na.*

<i>sonam morup=dzi</i>	<i>riŋ-k-are=na</i>	<i>tete</i>
Sonam Morup=ERG.SG	say-INTR-PRS.DJ.SG=HS	grandfather
<i>ra-dzi</i>	<i>ni:</i>	<i>riŋ-k-are=na</i>
come-PST.INFER.DJ.SG	EX.NON1SG	say-INTR-PRS.DJ.SG=HS

“Sonam Morup told her, she said. He told her that grandfather had arrived, she said.”

(Conversation 14.34)

(706) *but thir lotmen wa.*

<i>but=thir-a</i>	<i>lot-ø-men</i>	<i>wa</i>
put-send-IMP.SG	say-TR-PST.DIR.CJ	FOC

“I told him to leave it.”

(Conversation 16.238)

(707) *ama sitai jendzi loak.*

<i>ama</i>	<i>sit-ə-i=jendzi</i>	<i>lot-s-ə-hak</i>
mother	die-MID-ACT=EQ.DJ.SG	say-DETR-MID-PRS.DJ.PL

“They say that (her) mother died.”

(Conversation 22.388)

(708) *khjak dzuk ra:re lozi jendzi.*

<i>khjak</i>	<i>dzuk</i>	<i>ra-k-are</i>
here	pain	come-INTR-PRS.DJ.SG

lot-s-ə-i=jendzi
say-DETR-MID-ACT=EQ.DJ.SG

“‘It hurts here’, she said (to them).”

(Conversation 22.359)

However, note that the verb form *lot-s-ə-hak* “say-DETR-MID-PRS.DJ.PL” sometimes also occurs in contexts in which the epistemic source is coreferent with the addressee of the reported speech act. This is illustrated by the following example.

(709) *girok djwak tɕwanɣ gjak dzɔra dzɔra loɕak.*

<i>gi=tok</i>	<i>djak</i>	<i>tɕwanɣ</i>	<i>gak</i>	<i>dzot-a</i>
1SG=DAT	two.days.ago	fifteen	calendar.day	stay-IMP.SG
<i>dzot-a</i>	<i>lot-s-ɕ-hak</i>			
stay-IMP.SG	say-DETR-MID-PRS.DJ.PL			

“Some time ago they told me, ‘Stay for two weeks, stay!’”

(Conversation 49.53)

In this case, the use of the verb *lot-tɕ-um* with an addressee that is identical with the epistemic source seems to be licensed by recipient backgrounding, that is, the use of detransitivized verb forms with recipient arguments that display a low degree of pragmatic salience (§ 12.3.2.4). In addition, it is important to note that the intransitive verb *riŋ-men* “to say” only occurs with singular subjects. In my corpus of natural discourse, there is not a single instance of the verb form *riŋ-k-hak* “say-INTR-PRS.DJ.PL” “They say (to me)”. This suggests that the verb *riŋ-men* only occurs in contexts in which the epistemic source is addressed by a single person, whereas the detransitivized verb form *lot-s-ɕ-hak* “say-DETR-MID-PRS.DJ.PL” is used in contexts in which the epistemic source is addressed by a group of persons.

As (705) above illustrates, it is possible to combine speech verbs with the hearsay clitic *=na*. If the clitic attaches to the verb *riŋ-men*, this implies that the goal of the quoted speech act was the quoted speaker rather than the current speaker. If the *=na* cliticizes to the verb *lo-tɕ-um*, this increases the “evidential distance” between the source of information and the speaker by adding another “epistemic layer”. In other words, the verb form *lot-s-ɕ-hak* “say-DETR-MID-PRS.DJ.PL” simply means “People say that”, whereas the augmented verb form *lot-s-ɕ-hak=na* “say-DETR-MID-PRS.DJ.PL=HS” translates as “I have been told that people say that”. Consider the following example.

(710) *the tulɕuk liŋpa tulku wantɕa kʰoj manindza loɕi loɕak na.*

<i>the</i>	<i>tulɕuk liŋpa</i>	<i>tulku</i>	<i>wan-tɕ-a</i>	<i>kʰoj</i>
this	Tulshug Lingpa	reincarnation	take.out-TR-SUP	suitable

<i>ma-nindza</i>	<i>lot-s-ɕ-tɕʰi</i>
NEG-EX.PST.SG	say-DETR-MID-CVB.PL

lot-s-ɕ-ʰak=na
say-DETR-MID-PRS.DJ.PL=HS

“‘Identifying this reincarnation of Tulshug Lingpa was not suitable’, they told them, people say, I have been told.”

(Tulshug Lingpa 242)

In addition, speakers often mark reported statements with the participial form *lot-s-ɕ-dʒi* “say-DETR-MID-CVB.SG”, which is a detransitivized converb form of the verb *lot-tɕ-um* “to say”. The participial form *lot-s-ɕ-dʒi* can both be used in contexts in which the identity of the epistemic source is known (“My brother says ...”) and in context in which the identity of the epistemic source is unclear or unspecified (“People say ...”).

(711) *wa taks ɕokkata loɕi.*

<i>wa</i>	<i>taks</i>	<i>ɕok-ɕ-kata</i>	<i>lot-s-ɕ-dʒi</i>
FOC	gift	send-TR-FUT.CJ.SG	say-DETR-MID-CVB.SG

“She_i said that she would_i send a gift.”

(Conversation 87.244)

(712) *narsin loɕi.*

<i>narsin</i>	<i>lot-s-ɕ-tɕʰi</i>
narsimha	say-DETR-MID-CVB.PL

“People say *narsimha*¹⁰⁸ (to that kind of mythical creature).”

(Conversation 87.244)

13.4.5 The historical status of evidentiality

13.4.5.1 Evidentiality as an innovative grammatical category

There is ample evidence that the grammatical category “evidentiality” is comparatively young and was only grammaticalized in the recent past as a consequence of intense language contact with western Tibetan varieties, which are renowned for their complex

¹⁰⁸ The term *narsimha* (Skr. *nara* „man“ + *simha* „lion“) refers to a person who is human during daytime, but turns into a lion at night.

evidentiality systems (cf. Koshal 1979; Hein 2001, 2007; Preiswerk 2011). This claim is based on several observations. First, evidentiality is not reconstructable for Proto-West Himalayish or smaller genetic units within this subgroup. To be sure, epistemic verbal categories have been described for several West Himalayish languages, such as Standard Kinnauri (Saxena 2000), Shumcho (Huber 2013a), and Darma (Willis 2007b). However, in all of these languages, epistemic categories are expressed by periphrastic constructions consisting of a non-finite verb followed by a copula rather than finite inflected verb forms. Moreover, it is not possible to trace back these constructions to a common Proto-West Himalayish source. It is thus highly unlikely that epistemic categories represent an ancient grammatical feature within this subgroup. Rather, it is much more probable that West Himalayish languages acquired epistemic categories through intense language contact with neighboring varieties of Tibetan, which might represent the ultimate areal origin of epistemic marking in the Himalayas (cf. DeLancey 1992).

Second, there is language-internal evidence for this claim. As I have made clear in the preceding sections, the grammatical category “evidentiality” is marked in various different ways in Bunan. It may be encoded by finite inflectional morphemes (direct evidentiality, inferential evidentiality), periphrastic constructions (generic evidentiality), as well as phrasal clitics or reported speech constructions (reported evidentiality). This inconsistent morphosyntactic encoding indicates that the system may not be very old, the more so as there is strong evidence that inferential evidential markers were grammaticalized in the recent past from a periphrastic construction (see below).

Based on functional and formal observations, it seems safe to assume that evidential distinctions were first grammaticalized in the past tense. First, the past tense is the only domain in which we find a threefold opposition of evidential categories (see above). Second, the past tense is the only domain in which evidentiality is encoded by means of inflectional endings rather than periphrastic constructions. In the following two paragraphs, we will try to reconstruct the diachronic development of evidentiality in Bunan in more detail.

13.4.5.2 The grammaticalization of inferential evidentiality

As implied in the previous paragraph, the original functional core of the evidential subsystem in the past tense must be the opposition of direct evidentiality vs. inferential evidentiality, as both subcategories are expressed by means of portmanteau suffixes rather than periphrastic constructions. The respective inflectional endings are given in the table below.

Table 91: Direct and inferential past tense endings

	Direct evidentiality		Inferential evidentiality	
	Singular	Plural	Singular	Plural
INTR	<i>-dza</i>	<i>-tsʰa</i>	<i>-dʒi</i>	<i>-tɕʰok ~ -tɕʰwak</i> ¹⁰⁹
MID	<i>-dza</i>	<i>-tsʰa</i>	<i>-dʒi</i>	<i>-tɕʰok ~ -tɕʰwak</i>
TR	<i>-dza</i>	<i>-tsʰa</i>	<i>-ta</i> ¹¹⁰	

The historical status of the two sets of endings seems to be rather different. The direct evidential past endings *-dza* / *-tsʰa* most probably belong to an ancient layer of inflectional morphology. This is suggested by the presence of similar past tense endings in the eastern West Himalayish languages Sunnami (Christian Huber, personal communication), Darma (Willis 2007a: 355–359), Byangsi (Sharma 2007a: 56–57), and Chaudangsi (Krishan 2001b: 418).¹¹¹

Cognates of *-dza* / *-tsʰa* in eastern West Himalayish

Sunnami	<i>de-zu</i>	„he went“
Darma	<i>de-su</i>	„he went“
Byangsi	<i>dza-sò</i>	„he ate“
Chaudangsi	<i>ja-s</i>	„he ate“

The ancient status of these endings in Bunan is also underlined by the fact that they are the only past tense morphemes that can occur in combination with certain subordinating clitics, e.g. the conditional clitic *=nan* or the anteriority clitic *=la* (cf. § 13.4.1).

The inferential past endings, on the other hand, appear to be the result of a more recent grammaticalization process. This claim is based on the striking phonological similarities between the inferential past endings and certain non-finite endings / copula forms found in contemporary Bunan. For one thing, the intransitive / middle inferential past endings *-dʒi* and *-tɕʰok* closely resemble the converb endings *-dʒi* and *-tɕʰi* (see § 12.7.5). In

¹⁰⁹ The form *-tɕʰwak* is archaic and only occurs in a traditional story that was recorded in 2010 from one of my oldest consultants (*1939).

¹¹⁰ Note that Francke (1909: 69) reported an opposition of a singular ending *-ta* and a plural ending *-thad*. The latter form does no longer exist in contemporary Bunan.

¹¹¹ The cognate forms of Bunan *-dza* / *-tsʰa* are often preceded by an additional element *-n(V)-* in Darma, Byangsi, and Chaudangsi. It is conceivable that this is a reflex of the existential copula **ni-*. This would suggest that the respective past tense forms in Darma, Byangsi, and Chaudangsi derive from a former periphrastic construction with the past tense form of the existential copula as a second element.

addition, the transitive inferential past ending *-ta* is reminiscent of the possessive copula *ta-* (see § 14.5).

Based on these observations, we may speculate that the inferential endings of the intransitive and middle conjugations derive from a periphrastic construction that originally contained the converb endings *-dzi* / *-tɕʰi* followed by an unknown auxiliary, most probably a copula. The rhyme /ok ~ wak/ of the plural ending *-tɕʰok* ~ *-tɕʰwak* still reflects this second element. The more archaic form *-tɕʰwak* suggests that this second constituent may have been *gwak*, the suppletive plural form of the existential copula *ni-* (see § 14.3). Accordingly, the original construction may have had the form **V-tɕʰi gwak* “V-CVB.PL EX.3PL” in the plural. By analogy, we may postulate the corresponding singular form **V-dzi ni*: “V-CVB.SG EX.3SG”. Interestingly, these reconstructed forms correspond to a construction that exists in contemporary Bunan: the intransitive resultative construction (see § 15.3.4.1).

In case of the transitive inferential past ending, it is highly likely that the original source construction contained the possessive copula *ta-* as an auxiliary. Unfortunately, the ending itself does not provide any evidence for what the non-finite ending may have been. However, we may speculate that the original transitive source construction paralleled its intransitive counterpart in terms of morphological structure. In other words, the transitive construction was most likely based on a converb form as well. In this case, we have to postulate a detransitivized converb form in order to arrive at a meaningful source construction, as only a detransitivized converb clause can directly function as the complement of the possessive copula.¹¹² Based on these considerations, we may reconstruct a singular form **V-s-ɕ-dzi ta* “V-DETR-MID-CVB.SG POSS.3SG” and a plural form **V-s-ɕ-tɕʰi tat* “V-DETR-MID-CVB.SG POSS.3PL”. Again, this construction is attested in contemporary Bunan, where it expresses a transitive resultative construction (see § 15.3.4.1).

This tentative reconstruction suggest that the inferential endings of Bunan were grammaticalized from resultative constructions. From a cross-linguistic perspective, this assumption is highly credible, as the development of resultatives or perfects into non-first hand evidentials is widely attested (Aikhenvald 2004: 279–281).

Accordingly, we may reconstruct the following scenario: At some point in the past, Bunan only possessed resultative constructions. They were functionally equivalent to the resultative constructions of contemporary Bunan, and denoted present states that had

¹¹² The transitive resultative construction is thus reminiscent of the Standard Average European “have”-perfect, which is formed from the lexical verb “to have” and a passive participle (Haspelmath 2001: 1495).

emerged as the result of a past action. In specific pragmatic contexts, these resultative constructions could acquire inferential overtones. Such inferential overtones arose whenever a speaker referred to a resultant state without having witnessed the anterior action that had given rise to the respective situation. Consider the following example from contemporary Bunan.

(713) *pera kraŋɕi ni:*.

<i>pera</i>	<i>kraŋ-s-ɕ-dʒi</i>	<i>ni:</i>
basket	pile.up-DETR-MID-CVB.SG	EX.NON1SG

“The baskets are piled up.” ⇒ (“They have been piled up by someone.”)

(SSP-Questionnaire Sonam 43)

These connotations eventually gave rise to a hypoanalysis (Croft 2000: 126–127). In the course of this process, the feature “inferential”, which originally was a mere contextual feature of a specific pragmatic situation, was gradually projected onto the verb form. This hypoanalysis had far-reaching consequences at both the level of semantics and the level of morphological form. With regard to semantics, the process triggered the shift of the semantic focus from the resultant state (i.e. the state of “being piled up”) towards the inferred action (i.e. the action of “piling up”). At the level of constituents, this corresponds to the shift of the semantic focus from the copula *ni:* to the converb form *kraŋ-s-ɕ-dʒi*. Croft ([2001] 2009: 258) characterizes this process as a relocation of the “primary information bearing unit”, i.e. the lexical constituent with “major informational content”. As Croft further points out, the shift of semantic focus entails a shift in phrasal stress. As the copula loses its functional salience, it is likely to lose its stress and become cliticized to the non-finite verb form, with which it will eventually merge into an inflected finite verb (pp. 266–267).

Note that Croft’s notion of a “primary information bearing unit” also provides a convincing explanation for the functional and formal divergence of the original source construction. The hypoanalysis described above must have triggered an early split up of the source construction into the resultative constructions and the precursor of the inferential past tense. As argued above, the latter construction subsequently underwent a relocation of the primary information bearing unit, while the first construction was not affected by this shift. In other words, the semantic focus of the resultative construction in Bunan still lies on the resultant state and not the preceding action. Accordingly, the copula still represents the primary information bearing unit in these periphrastic constructions, which prevents it from being reanalyzed as a simple inflectional ending.

13.4.5.3 *The emergence of direct evidentiality*

The scenario outlined in the previous paragraphs explains the grammaticalization of inferential evidential markers in the past tense. However, we have not yet addressed the question of the origin of direct evidential disjunct markers. As stated above, the inflectional endings *-dza* / *-tsʰa* appear to belong to an ancient layer of inflectional morphology. It is thus highly unlikely that these endings were recently grammaticalized from originally periphrastic constructions. At the same time, the evidential function of these endings cannot be reconstructed for Proto-West Himalayish. Accordingly, we have to come up with a scenario that explains how ancient inflectional morphology came to express an innovative grammatical category. As I argue in the following, the solution of the problem lies in the concept of “Horn-scales”, a notion that was already used in § 5.2.1 to explain the seemingly inconsistent functional behavior of some personal pronouns.

In course of the grammaticalization process described above, old periphrastic resultatives did not only acquire an innovative epistemic function. At the same time, they also changed their temporal / aspectual semantics. Whereas the original periphrastic construction expressed a “perfect of result”, i.e. a category indicating that a past action had relevance for a present situation (cf. Dahl 1985: 133–135), the grammaticalized inflectional form developed into a past tense that merely indicates that the relevant action happened in the past. Accordingly, the newly grammaticalized inferential past form came to stand in functional opposition to the old past tense in *-dza* / *-tsʰa*. This development entailed a new functional partitioning of the past tense domain. The inferential past forms became obligatory in contexts in which speakers referred to past actions that they had not witnessed personally, whereas the old past forms were used in all other contexts. This new functional opposition gave rise to a Horn-scale <non-evidential past, inferential past>.

In order to comprehend the mechanism that underlies this Horn-scale, it is crucial to understand how Grice’s Maxim of Quality relates to the grammatical category “evidentiality”. The Maxim of Quality demands that speakers only make statements that they believe to be true and for which they possess adequate evidence (Grice 1975: 46–47). With regard to evidentiality, this entails that speakers base a statement on the most certain degree of evidentiality that is available to them. In other words, speakers are only expected to use an inferential past form if they have not directly witnessed a given event. In all other contexts, they are obliged to use a non-inferential form if they want to comply with the Maxim of Quantity. This pragmatic mechanism eventually triggered the transformation of the old non-evidential past tense into a direct evidential past tense. Whenever a speaker used the non-evidential past tense, other discourse participants inferred that the respective person must have had directly witnessed the respective event, as she / he would have been expected to use the weaker inferential form otherwise. The direct evidential

value of the old past tense in contemporary Bunan is thus ultimately the effect of a generalized scalar implicature. The original non-evidential function of the direct evidential endings has only been retained in a few specific grammatical and pragmatic contexts (cf. § 13.4.1).

13.5 Person

Person is a grammatical category that indexes the speech act role of certain arguments on the predicate. Traditional approaches differentiate between three subcategories: first person (speaker), second person (addressee), and third person (non-participant) (Siewierska 2004: 1). In Bunan, vestiges of subject agreement in terms of the grammatical category “person” can be found throughout the grammar of the language. The privileged syntactic argument that I call the subject commonly corresponds to the most agentive participant in a given event. In the case of monovalent verbs, subject status is always assigned to the single core argument. In the case of plurivalent verbs, subject status is assigned to the core argument that assumes the semantic role of an agent or an experiencer.

The category “person” distinguishes itself from other verbal categories in two respects. First, person agreement is not as pervasive as the verbal categories “evidentiality”, “conjunct-disjunct”, and “number”, but is only attested in certain subdomains of the verbal system. Person agreement stands in complementary distribution to conjunct-disjunct marking, which suggests that there is a diachronic relationship between the two verbal categories (see below). Second, the use of person agreement morphology is subject to strong age-dependent variation. Subject agreement only occurs in the generatiolet of the oldest speaker generation, but is virtually absent from the generatiolet of younger speakers. Both observations suggest that person agreement marking is an archaic grammatical feature that stands in functional competition with conjunct-disjunct marking in the generatiolet of the oldest speaker generation and has become largely obsolete in the generatiolet of the younger speaker generations. The person agreement morphemes that are discussed below thus must represent the last remnants of a once full-fledged agreement system that may even have been biactantial at some point in time.¹¹³

In the following subsections, I provide an overview of the different agreement forms that can still be found in contemporary Bunan and address the question of the historical status of person marking in more detail. The reader will note that some of the per-

¹¹³ Biactantial agreement systems index both the identity of the subject and the object on the verb. Such systems have been reported for several Tibeto-Burman languages of Nepal, e.g. the Kiranti languages (cf. Ebert 2003: 509–514) and the Kham-Magar languages (cf. Watters 2002: 83–87). Evidence for the former existence of a biactantial agreement system in Bunan is discussed in § 13.5.4.

son agreement markers are encoded by one morphological segment throughout different tenses. The second person singular, for example, is consistently indexed by endings containing the segment /*na*/, i.e. *-ana* (present tense), *-dzana* (direct evidential past tense) - *katana* (future tense), while the second person plural is marked with endings containing the segment /*ni*/, i.e. *-akni* (present tense), *-ts'ani* (direct evidential past tense) - *kat'atni* (future tense). Accordingly, one might wonder whether one should analyze *-na* and *-ni* as separate person agreement morphemes.

I have chosen not to adopt such an approach, as the consequent detachment of agreement morphemes would tremendously complicate the morphological analysis of all paradigms by forcing us to postulate additional morphophonological rules and minimal morphological segments. It is more economical to treat the respective morphological entities as portmanteau morphemes, rather than to segment them into smaller units. Note that it is not only the principle of parsimony that urges us to adopt such an analysis. The approach also seems appropriate in light of the fact that agreement markers assume a peripheral status in the Bunan verbal system. Agreement markers are only attested in the speech of the oldest speaker generation, whereas speakers below the age of sixty do not use agreement forms. This extreme age-dependent variation suggests that agreement morphology is no longer productive in contemporary Bunan. Accordingly, it seems inappropriate to remodel the morphological structure of verbal paradigms because of a small number of morphemes that are only used by members of a particular age group and hardly ever occur in natural discourse.

13.5.1 First person subject agreement forms

First person subject agreement forms are only attested in the past tense. They are found in the two direct evidential past tenses (ending in *-et* ~ *-men* and *-dza* / *-ts'a*) as well as in the inferential past tense (ending in *-ta*). These agreement forms are a characteristic trait of the generatiolect of old speakers. Members of the younger speaker generations are most often familiar with these forms, but do no longer use them themselves. In any case, I have never encountered a past tense form displaying person agreement in a sentence recorded from natural discourse that had been uttered by a speaker who was below the age of sixty.

The most robustly attested first person agreement markers are the direct evidential past endings *-kidza* (singular) and *-kits'a* (plural). These endings are obviously related to the direct evidential disjunct past endings *-dza* (singular) and *-ts'a* (plural) and contain an additional element /*ki*/, which might be cognate to the first person singular pronoun *gi*. The following example exemplifies the use of these agreement morphemes as well as their status as sociolinguistically marked variables.

(714) A: *tete assi: lepdza ini?*

B: *assi: lepkidza wa.*

<i>tete</i>	<i>assi:LN</i>	<i>lep-ø-dza</i>	<i>ini</i>
grandfather	eighty	reach-TR-PST.DIR.DJ.SG	2[SG].HON
<i>assi:LN</i>	<i>lep-ø-kidza</i>	<i>wa</i>	
eighty	reach-TR-PST.DIR.1SG	FOC	

A: "Grandfather, you have reached eighty years old, right?"

B: "I have reached eighty years old, indeed."

(Conversation 36.108)

The example sentence given above was recorded from a conversation between my oldest consultant, who is in his late seventies, and his nephew, who is in his early thirties. When the nephew asked his grandfather whether he was already eighty years old, he used the direct evidential disjunct form *lep-ø-dza* to formulate this question. His grandfather, in turn, used the archaic agreement form *lep-ø-kidza* to answer the question. Further examples of first person agreement forms are given below.

(715) *gi re tsunati lotkidza.*

<i>gi=re</i>	<i>tsuna=tiki</i>	<i>lot-ø-kidza</i>
1SG=EXT	little.bit=INDEF	say-TR-PST.DIR.1SG

"I also said a few words."

(Conversation 39.5)

(716) ... *khjak erantshi the purgits'ha.*

<i>khjak</i>	<i>eran=ts'hi</i>	<i>the</i>	<i>pur-ø-ki-ts'ha</i>
here	1PL.INCL=ERG.PL	this	kill-TR-PST.DIR.1PL

"... (see) here, we have killed this (demon)."

(King Kesar 271)

That the morphemes *-kidza* and *-kits'ha* express syntactic agreement rather than an epistemic distinction is demonstrated by the fact that a sentence like *guj lep-ø-ki-dza* "where reach-TR-PST.DIR.1SG" can be understood as a question of the speaker to herself / himself, i.e. "Where have I reached?". However, according to my main consultant, the same sentence can also be interpreted as a question to a second person addressee, i.e. "Where have you reached?".

(717) *guj lepkidza?*

guj *lep-ø-kidza*
where say-TR-PST.DIR.1SG

“Where have you reached?”

or: “Where have I reached?”

(TD 267.3 [elicited])

This suggests that the *-kidza* is no longer a pure agreement morpheme, but has developed into a “hybrid marker” that can express the identity of a participant (syntactic agreement) as well as a participant’s access to knowledge (epistemic marking). In other words, the suffix *-kidza* can both relate to the syntactic notion of the “subject” and the epistemic notion of the “epistemic source”. Whether the morpheme is interpreted as an agreement marker or an epistemic marker depends entirely on the pragmatic context.¹¹⁴

The polyfunctionality of the morphemes *-kidza* and *-kitsʰa* is reflected by yet another fact. When eliciting interrogative sentences with a second person subject, my consultant would sometimes use verb forms that were simultaneously marked for first and second person (see the following section for a description of second person agreement morphemes), as the following example illustrates.

(718) *guj lepdzana / lepkidzana?*

guj *lep-ø-dzana / lep-ø-kidzana*
where say-TR-PST.DIR.2SG / say-TR-PST.DIR.1/2SG

“Where have you reached?”

(TD 267.4 [elicited])

This simultaneous marking of the first and the second person on the predicate provides further evidence for the low functional load and the low degree of entrenchment of first person agreement forms.

In addition, there are instances of a first person subject agreement marker in the inferential past tense. The morpheme has the phonological form *-kita* and is cognate with the inferential past marker *-ta*. The suffix contains the additional segment */ki/*, which is also present in the direct evidential endings *-kidza* and *-kitsʰa* (see above). The ending *-kita* is only attested twice in my corpus of natural speech. One example is provided below.

¹¹⁴ The first person forms of the existential copula *ni-* (§ 14.3) and the possessive copula *ta-* (§ 14.5) exhibit a similar degree of functional hybridity.

(719) *pata: malikkita.*

<i>pata:</i> _{LN}	<i>ma-lik-ø-kita</i>
clue	NEG-make-TR-PST.INFER.1SG

“I have not paid attention.” (said by a speaker who had been asked what was being shown on television)

(DP unrec 34)

Finally, first subject agreement marking is also attested in the direct evidential past tense ending in *-et* ~ *-men*. The respective verb form has the phonological form *-mengja* and is etymologically related to the conjunct past marker *-men*. The archaic agreement form

-mengja is the only first person subject agreement form that is not attested in my corpus of natural data. Due to the Bunan data provided in Grierson (1909) and Francke (1909), I became aware of its potential existence and was eventually able to elicit the form from several of my oldest consultants. The fact that my consultants never actively used the form in spontaneous speech strongly suggests that the morpheme has become an obsolete form even in the generatidiolect of the oldest speaker generation. The following sentence exemplifies the use of the suffix.

(720) *gidzi len likmengja.*

<i>gi=dzi</i>	<i>len</i>	<i>lik-mengja</i>
1SG=ERG.SG	work	do-PST.DIR.1SG

“I did the work.”

(TD 216.7 [elicited])

The reader may have noticed that the endings *-mengja* and *-kidza* are both glossed as “-PST.DIR.1SG”, which suggests that they are functionally equivalent. However, there is in fact a functional difference between the two endings. According to my consultants, the ending *-mengja* expresses a remote past, whereas the ending *-kidza* expresses a recent past. This difference in temporal reference does not represent the primary meaning of the two endings in contemporary Bunan, however, which is why I have decided not to incorporate this information in the interlinear glosses. A more detailed account of the original functional opposition between the two suffixes is given in § 15.2.1.2.

13.5.2 Second person subject agreement forms

Second person subject agreement forms are exceedingly rare in contemporary Bunan. Like first person subject agreement markers, they are only attested in the generatidiolect of my oldest consultants. I only became aware of the existence of second person agreement markers during my third fieldtrip in 2012. The reason that I discovered these

endings relatively late is twofold. First, these endings exhibit an extremely limited distribution and are mainly restricted to the domain of interrogative speech acts. Second, second person agreement forms are only encountered in the generatiolect of old speakers.

The most common second person agreement markers are the present tense endings *-ana* (singular) and *-hakni* (plural). The following example sentences illustrate the use of these agreement morphemes.

(721) *man gujtsuk dza:na?*

<i>man</i>	<i>gujtsuk</i>	<i>dza-k-ana</i>
medicine	what.kind.of	eat-INTR-PRS.2SG

“What kind of medication do you take?”

(Conversation 32.12)

(722) *hantshi nira kha liktshakni? hanzi guj dzotkshakni?*

<i>han=tshi</i>	<i>nira</i>	<i>kha</i>	<i>lik-tshakni</i>	<i>han=xi</i>	<i>guj</i>
2=ERG.PL	daytime	what	make-TR-PRS.2PL	2=PL	where

dzot-kshakni
sit-INTR-PRS.2PL

“What are you guys doing all day? Where are you staying?”

(Conversation 69.6)

These second person agreement endings cannot occur in declarative speech acts but only interrogative speech acts, as the following example sentence demonstrates.

(723) *ini dzandzan liktare / **likšana!*

<i>ini</i>	<i>dzandzan</i>	<i>lik-tare / **likšana</i>
2[SG].HON	insincere.refusal	do-TR-PRS.DJ.SG / **do-TR-PRS.2SG

“You are refusing the tea insincerely!”

(TD 325.7 [elicited])

In addition, the second person agreement forms do not possess any inherent epistemic value. Accordingly, they are not sensitive to distinctions in epistemic accessibility, which means that both privileged access verbs and general access verbs can take second person agreement morphemes. The following sentence illustrates second person agreement marking on the general access verb *tshor-tshum* “to feel”.

(724) *han soj tʰorɔ̃ana / tʰorɔ̃are la?*

han soj tʰor-s-ɔ̃-ana / tʰor-s-ɔ̃-are=la
2[SG] cold feel-DETR-MID-PRS.2SG / feel-DETR-MID-PRS.DJ.SG=Q

“Are you feeling cold?”

(TD 324.2 [elicited])

Note that second person agreement forms are in functional competition with conjunct-disjunct marking. In other words, a question with a second person subject such as “What are you doing?” can be formulated in two different ways in Bunan. Consider the following contrastive examples.

(725) *han kʰa lik-tɔ̃-ana?*

han kʰa lik-tɔ̃-ana
2[SG] what do-TR-PRS.2SG

“What are you doing?”

(TD 216.6 [elicited])

(726) *han kʰa lik-tɔ̃-ek?*

han kʰa lik-tɔ̃-ek
2[SG] what do-TR-PRS.CJ.SG

“What are you doing?”

(TD 216.7 [elicited])

The example sentences given above were elicited from my oldest consultant. According to him, the two sentences do not differ with respect to the meaning that they convey. Rather, they differ with regard to the grammatical categories that are exploited to project the intended meaning onto syntactic structure. The question in (725) is based on a second person agreement form, whereas the question in (726) is based on a conjunct form. For an old Bunan speaker, both sentences represent possible options to formulate a question with a second person subject. This demonstrates that the crucial difference between the verb forms *lik-tɔ̃-ana* and *lik-tɔ̃-ek* is not a matter of grammatical function but a matter of sociolinguistic markedness. The use of second person agreement forms as in (725) is a characteristic trait of the speaking style of old speakers. All instances of second person agreement forms that are attested in my corpus of natural discourse data occur in sentences that were uttered by speakers above the age of seventy. Members of the younger speaker generations do not actively use these forms. As a matter of fact, several young speakers denied that a sentence like (725) is grammatical, which suggests that second person agreement forms have become entirely obsolete in the idiolects of certain

members of the youngest speaker generation. The use of epistemic verb forms as in (726), on the other hand, is attested across all speaker generations. Accordingly, conjunct-disjunct verb forms represent the sociolinguistically unmarked variable, whereas second person agreement forms are a grammatical feature that is strongly associated with the speaking style of old people.

Second person agreement forms are not only attested in the present tense, but also occur in the future tense and the past tense. The following two sentences illustrate the use of future tense second person agreement morphemes *-katana* (singular) and *-kat^hatni* (plural). Note that the future tense is the only domain in which second person agreement markers are not restricted to interrogative contexts, but can also occur in declarative statements.

(727) *kulik t^hahela handzi jotk^hatana!*

<i>kulik</i>	<i>t^ha-hel-a</i>	<i>han=dzi</i>	<i>jot-ø-katana</i>
key	PROHIB-take.away-IMP.SG	2=ERG.SG	lose-TR-FUT.2SG

“Don’t take the key with you! You will lose it!”

(TD 327.16 [elicited])

(728) *k^ha likkat^hatni?*

<i>k^ha</i>	<i>lik-ø-kat^hatni</i>
what	do-TR-FUT.2PL

“What will you guys do?”

(TD 267.11 [elicited])

In the past tense, second agreement forms are again restricted to interrogative contexts. The following sentences illustrate the use of the second person agreement endings

-dzana (singular) and *-ts^hani* (plural) in the direct evidential past tense.

(729) *guj lepdzana?*

<i>guj</i>	<i>lep-ø-dzana</i>
where	reach-TR-PST.DIR.2SG

“Where have you reached?”

(TD 327.11 [elicited]),

(730) *guj leptsʰani?*

guj *lep-ø-tsʰani*
where reach-TR-PST.DIR.2PL

“Where have you guys reached?”

(TD 276.6 [elicited])

Second person agreement forms are also attested in the direct evidential past tense in *-et* ~ *-men* and in the inferential past tense. However, according to my main consultant, there are only singular forms but no corresponding plural forms in these tenses. The respective singular forms are illustrated below.

(731) *kʰa liktana?*

ini=dzi *len* *lik-ø-tana*
2.HON=ERG.SG work do-TR-PST.INFER.2SG

“What have you done (without noticing)?”

(TD 267.23 [elicited])

(732) *inidzi len likmenna?*

ini=dzi *len* *lik-ø-menna*
2.HON=ERG.SG work do-TR-PST.DIR.2SG

“Did you do the work?”

(TD 216.8 [elicited])

13.5.3 Non-first person subject agreement forms

Bunan possesses an assertive future tense, whose endings express agreement between a non-first person subject and the predicate. These endings have the forms *-kani:* (singular) and *-kʰak* (plural) in the intransitive and the middle conjugation and the forms *-kata* (singular) and *-katʰat* (plural) in the transitive conjugation.

(733) *epo ra:ni:. mi tsʰanjidok re kitpo tiki ra:ni:.*

epo *ra-kani:* *mi* *tsʰanji=tok=re*
good come-ASSER.NON1SG person all=DAT=EXT

kitpo=tiki *ra-kani:*
prosperity=INDEF come-ASSER.NON1SG

“It will be good! There will be prosperity for all people!” (The speaker is convinced that these things will become true)

(Tulshig Lingpa 155)

(734) *han otəi kelaŋmaŋ ea:ni.*

<i>han</i>	<i>otəi</i>	<i>kelaŋ=maŋ</i>	<i>el-kani:</i>
2[SG]	tomorrow	Keylong=ALL	go-ASSER.NON1SG

“You are supposed to go to Keylong tomorrow.”

(TD 327.22 [elicited])

(735) *taldok ʃu! taldzi inok letkjata.*

<i>tal=tok</i>	<i>ʃu-a</i>	<i>tal=dzi</i>	<i>ini=tok</i>
3[SG]=DAT	ask-IMP.SG	3=ERG.SG	2[SG].HON=DAT

let-ø-kata

teach-TR-ASSER.NON1SG

“Ask him, he will teach you!” (The speaker is convinced that the respective person will teach the addressee)

(Conversation 13a.123)

(736) *hantʃi hiŋzok eraŋkat letkjatʰat.*

<i>han=tʃi</i>	<i>hiŋ=ɛi=tok</i>	<i>eraŋ-kat</i>
2=ERG.PL	1PL.EXCL=PL=DAT	1PL.INCL-language

let-ø-katʰat

teach-TR-ASSER.NON1PL

“You will teach us the Bunan language.” (the speaker is convinced that the addressees will teach them the Bunan language)

(TD 261.1 [elicited])

13.5.4 The historical status of person

As mentioned in the introduction to this chapter, there is ample evidence that Bunan once possessed a full-fledged person agreement system. First, this is suggested by Francke’s (1909: 65–77) grammatical sketch of Bunan, in which he provided a comprehensive list of agreement paradigms. In all of these paradigms, the verb agrees with its subject in terms of person and number. Francke’s present tense paradigm for the transitive conjugation is given below.¹¹⁵

¹¹⁵ Francke used superscript <^g> to refer to unreleased syllable final velar plosives.

Table 92: Present tense paradigm of the verb *ligcum* “to make” (Francke 1909)

	Singular	Plural
1	<i>ligce^g</i>	<i>ligche^g</i>
2	<i>ligcana</i>	<i>ligchagni</i>
3	<i>ligcare</i>	<i>ligcha^g</i>

Second, this is implied by the verbal system of contemporary Bunan, in which traces of Francke’s agreement paradigms can still be found. The number distinctions that Francke reported have been retained in the majority of cases (cf. § 13.6), while person agreement has only persisted in a few specific grammatical contexts.

Third, the claim is in line with comparative evidence. Verb agreement systems have been described for virtually all West Himalayish languages, i.e. Manchad (Francke 1909: 78–86), Tinan (Francke 1909: 78–97), Rongpo (Zoller 1983: 66–71), Standard Kinnauri (Takahashi 2001: 109–112), Byangsi (Sharma 2001b: 306–309), Chaudangsi (Krishan 2001b: 417–419), Darma (Willis 2007a: 346–359), and Shumcho (Huber 2013a). Furthermore, comparative studies by Saxena (1997) and Takahashi (2009) suggest that some of the agreement markers found in those languages are cognate. In the light of these facts, it seems highly probable that Bunan also possessed a full-fledged agreement system in the past.

This then leads us to the question of what happened to the Bunan person agreement system if it was still robustly established one hundred years ago. A comparison of Francke’s material with my data strongly suggests that person agreement was transformed into conjunct-disjunct marking for the most part. Consider the following table, which contrasts Francke’s (1909) present tense agreement paradigm (“Old Bunan”) with my personal data (“Contemporary Bunan”). Note that the morphological segmentation and interlinear glossing of Francke’s forms represent my interpretation.

Table 93: Present tense agreement in Old Bunan and contemporary Bunan

Old Bunan		Contemporary Bunan	
Forms	Gloss	Forms	Gloss
<i>lig-c-e^g</i>	make-TR-PRS.1SG	<i>lik-tə-ek</i>	make-TR-PRS. CJ .SG
<i>lig-c-ana</i>	make-TR-PRS.2SG	<i>lik-tə-ana</i>	make-TR-PRS.2SG
<i>lig-c-are</i>	make-TR-PRS.3SG	<i>lik-tə-are</i>	make-TR-PRS. DJ .SG
<i>lig-c-he^g</i>	make-TR-PRS.1PL	<i>lik-tə-^hek</i>	make-TR-PRS. CJ .PL
<i>lig-c-hagni</i>	make-TR-PRS.2PL	<i>lik-tə-^hakni</i>	make-TR-PRS.2PL
<i>lig-c-ha^g</i>	make-TR-PRS.3PL	<i>lik-tə-^hak</i>	make-TR-PRS. DJ .PL

A comparison of Francke's material with my own data implies that first person forms were reanalyzed as conjunct forms, whereas third person forms were reanalyzed as disjunct forms. Contemporary Bunan still retains part of the agreement paradigm given above. First, there are the second person agreement forms *-ana* and *-^hakni*, which are mostly restricted to interrogative contexts, however, and only persist in the generatiolect of the oldest speaker generation (see above). Second, there is the number distinction between singular forms and plural forms. The functional transformation of person agreement into epistemic marking is summarized in the table below.¹¹⁶

Table 94: The transformation of person agreement into epistemic marking

Old Bunan		Contemporary Bunan
first person	⇒	conjunct
second person	⇒	second person
third person	⇒	disjunct

Note that the functional transformation of an entire paradigm is only attested in the present tense. In the past and future tenses, the transition from syntactic marking to epis-

¹¹⁶ As I argue in Widmer (2015), an early stage of the same functional transformation is also attested in Dolakha Newar, a Tibeto-Burman language spoken in eastern Nepal (cf. Genetti 2007: 172–174). Widmer (2013) explained the functional transformation as a consequence of the borrowing of a special construction of reported speech that is highly common in Tibetic languages. The historical scenario is, however, too complex to be sketched out here and will be discussed in detail in another article.

temic marking was more complex. Here, the process involved the gradual breakdown of former agreement paradigms and the subsequent rearrangement of particular forms in new functional oppositions, while other forms retained their old syntactic function, but gradually became obsolete. In contemporary Bunan, the past tense domain builds upon a ternary opposition, which is given below.

Table 95: Functional core of the past tense domain in contemporary Bunan

	direct / conjunct	direct / disjunct	inferential / disjunct
SG	<i>-men</i>	<i>-dza</i>	<i>-ta</i>
PL		<i>-ts^ha</i>	

In Francke’s material, the endings listed above were still part of separate agreement paradigms that were inflected for person and number. For example, Francke (1909: 69) provided a full-fledged agreement paradigm for the direct evidential paradigm (called “imperfective” by Francke). The respective paradigm is given below.

Table 96: Paradigm of the “imperfective” (Francke 1909: 69)

	Singular	Plural
1	<i>ligkiza</i>	<i>l^githsa</i>
2	<i>ligzana</i>	<i>ligthsani</i>
3	<i>ligza</i>	<i>ligthsa</i>

All these forms can still be found in the generatiolect of old speakers, although they do no longer form a functionally coherent paradigm. The forms *lik-ø-kidza* / *lik-ø-kits^ha* and *lik-ø-dzana* / *lik-ø-ts^hani* still retain their first and second person agreement values, respectively. The forms *lik-ø-dza* / *lik-ø-ts^ha*, however, have been transformed into disjunct endings. Accordingly, only Francke’s third person endings “-za” and “-thsa” were fully integrated into the emerging epistemic system of contemporary Bunan, as these morphemes were reanalyzed as the direct evidential disjunct counterparts of the inferential disjunct ending *-ta*. This innovative epistemic system had no use for the first and second person agreement forms, however. Thus, these endings retained their old functional value and gradually became obsolete, as they could not be integrated into the developing epistemic system.

Finally, it is important to note that the functional transformation of agreement morphology did not only affect subject agreement markers. It is highly probable that the sec-

ondary conjunct marker *-ku* (cf. § 13.3.2.2), which takes scope over patient, theme and recipient arguments, was originally a first person object agreement marker, which was reanalyzed as a conjunct marker that takes scope over “object-like” arguments. The fact that this morpheme is rare even in the speech of my oldest consultants implies that the object agreement system of Bunan had become largely obsolete when the functional transformation from syntactic agreement to epistemic marking began. This interpretation is in line with Francke’s (1909: 70) description. Francke described *-ku* as a “pronominal infix”, which was only attested in the direct evidential past tense and the imperative. This means that the form essentially had the same distribution that it still has in the speech of my oldest consultants.

Note that object agreement in general seems to be rare in West Himalayish. According to current knowledge, Bunan is the only language in the eastern branch that exhibits remnants of a former object agreement system. In the western branch, rudimentary object agreement systems have been described for Standard Kinnauri (Takahashi 2001: 111) and Shumcho (Huber 2013a: 239–254). The peripheral status of object agreement within the subgroup suggests that object agreement may have already been in decline in Proto-West Himalayish. However, further descriptive and comparative research on West Himalayish is necessary to enhance our understanding of the historical status of object agreement in the languages belonging to this subgroup.

13.6 Number

Number is a grammatical category that encodes whether the subject role is assumed by a single individual (singular) or by a group of individuals (plural). As the notion of “subject” has already been briefly discussed in § 13.5, I do not further elaborate on this syntactic role at this point. As noted in § 4.4.3.1, number agreement is restricted by the semantic parameter of animacy in Bunan. In other words, only animate subjects are able to trigger plural agreement on a predicate. The category of animates comprises humans and animals. Other living beings such as trees, plants, etc. are peripheral members of the category as well. The following examples illustrate number distinctions in verbal forms.

(737) *pasan nimati radza*

<i>pasan</i>	<i>nima=tiki</i>	<i>ra-dza</i>
Pasang	day=INDEF	come-PST.DIR.DJ.SG

“Pasang came (to visit me) one day.”

(Conversation 31.2)

(738) *tsʰaŋtsʰaŋi gwaŋtsʰa.*

tsʰaŋtsʰaŋi *gwaŋ-tsʰa*
everybody come.PL-PST.DIR.DJ.PL

“Everybody came.”

(Conversation 39.19)

(739) *taldzi len epo likdza kʰjak radzi.*

tal=dzi *len* *lik-ø-dza* *kʰjak* *ra-dzi*
3=ERG.SG epo do-TR-PST.DIR.DJ.SG here come-CVB.SG

“He did good work after he had come here.”

(Conversation 25.53)

(740) *ʰadzu mi noj dzuk liktsʰa.*

ʰadzu *mi* *noj* *dzuk* *lik-ø-tsʰa*
that person much pain do-TR-PST.DIR.DJ.PL

“Those people were very sick.”

(Tulshug Lingpa 45)

There is evidence that number agreement has been losing ground in Bunan in the recent past. This is suggested by currently collapsing number distinctions in copulas. The equative copula *jen-* possesses two disjunct forms: a singular form *jendzi* and a plural form *jentsʰok*. The plural form is still commonly used by both older and younger speakers. However, examples such as the one given below indicate that *jentsʰok* is on its way to becoming obsolete.

(741) *talzi munɛi jendzi / jentsʰok.*

tal=ɛi *munɛi_{LN}* *jendzi / jentsʰok*
3=PL teacher EQ.DJ.SG / EQ.DJ.PL

“They are teachers.”

(TG 30.8 [elicited])

In case of the attributive copula *de-*, the process has already reached a more advanced stage. Old speakers still differentiate between a singular form *de* and a plural form *det*. Young speakers are usually not familiar with the latter form and use *de* in clauses with singular subjects and plural subjects.

Further evidence for the claim that number distinctions are gradually disappearing can be drawn from a comparison of my data with the material of Francke (1909), who col-

lected his data in the early 20th century. Francke reported several number distinctions that do no longer exist in contemporary Bunan. For example, he described two endings for the inferential past: a singular morpheme “-ta” and a plural morpheme “-tha^{dh}”. Contemporary Bunan does no longer distinguish between a singular and a plural inferential past morpheme, but only possesses a single form -ta.

The loss of number distinctions is not the only process of language change that the Bunan verbal system is currently undergoing. Francke’s (1909) material suggests that Bunan once also possessed a robust person agreement system, which has largely been transformed into a system of epistemic marking (see preceding section). Both processes can be viewed as components of a more comprehensive functional shift in the course of which a syntactic verbal system based on person and number agreement is turned into an epistemic verbal system based on the grammatical categories “conjunct-disjunct” and “evidentiality”. Thus, the collapse of number distinctions and the transformation of person agreement can be considered to represent two sides of the same coin.

14 The copulas

14.1 Introduction

Bunan possesses an elaborate system of copulas. These copulas are similar to verbs in terms of their morphosyntactic properties. First, verbs and copulas can only occur in clause-final position. Second, both classes of lexemes are inflected for similar grammatical categories, i.e. tense, person, number, and conjunct-disjunct. However, the two lexical classes are also clearly distinct in some respects. For one thing, copulas do not possess transparent inflectional morphology like verbs. In most cases, it is not possible to segment a copula into a stem and an inflectional ending. The existential copula *ni-*, for example, has the first person singular form *na*: “EX.1SG”. This form cannot be analyzed into smaller meaningful morphological components. Diachronic considerations suggest that *na*: “EX.1SG” may go back to an original form **ni-gja* “EX-1SG”. However, it makes little sense to take this reconstructed form as a basis for a synchronic description, as the ending *-gja* is no longer productive in Bunan. Furthermore, such an analysis would be at odds with the intuition of native speakers, who do not consider these copula forms as morphologically complex. For another thing, copulas are not inflected for the grammatical category “evidentiality”. Either they possess an inherent evidential value that cannot be modified, or they are neutral with regard to evidentiality.

The main function of the Bunan copulas is to predicate lexical classes other than verbs, i.e. nouns, pronouns and adjectives. There are four different types of copulas: the equative copula *jen-*, the existential copula *ni-*, the attributive copula *de-*, and the possessive copula *ta-*. The following table relates the copulas of Bunan to the functional typology of Payne (1997: 111–113). Payne distinguishes six basic types of non-verbal predicates, which are identity (*She is my sister*), inclusion (*He is a farmer*), attribution (*The grass is green*), location (*The dog is in the garden*), existence (*There are elephants in India*), and possession (*I have two cars*).

Table 97: Non-verbal predication in Bunan

	equative <i>jen-</i>	existential <i>ni-</i>	attributive <i>de-</i>	possessive <i>ta-</i>
identity	x			
inclusion	x			
attribution	x	x	x	
location	(x)	x		
existence		x		
possession				x

In the following subsections, the function of the individual copulas is discussed in more detail. I begin with the description of the equative copula *jen-* (§ 14.2), and subsequently proceed to the existential copula *ni-* (§ 14.3), the attributive copula *de-* (§ 14.4), and the possessive copula *ta-* (§ 14.5). In addition, I also discuss two verbs that may serve a copula-like functions: the verb *kja-men* “to become” and the verb *ra-men* “to come” (§ 14.6).

14.2 Equative *jen-*

14.2.1 General remarks

The equative copula possesses the stem *jen-*, from which three different finite forms are *derived*: a conjunct form *jen* “EQ.CJ”, a disjunct singular form *jendzi* “EQ.DJ.SG”, and a disjunct plural form *jent^hok* “EQ.DJ.PL”. These forms are listed in the table below.

Table 98: The forms of the equative copula stem *jen-*

	SG	PL
CJ	<i>jen</i>	
DJ	<i>jendzi</i>	<i>jent^hok</i>

The Bunan equative copula *jen-* bears resemblance to the Written Tibetan copula *yin*, whose reflexes can still be found in contemporary varieties of Tibetan (cf. Bielmeier et al. forthcoming). Accordingly, the question arises whether this copula might have been borrowed from a neighboring Tibetan variety. This question is extremely difficult to an-

swer, as similar copula forms can also be found in closely related West Himalayish languages. For example, Zoller (1983: 68) describes a copula *hwən-* “to be” for Rongpo, whereas Sharma (2007a: 147) reports an auxiliary *yin* “to be” for Byangsi. On the one hand, one might interpret this as evidence for the existence of a copula **jin ~ *jen* in Proto-West Himalayish. On the other hand, it is possible that the respective copulas also represent Tibetan borrowings in Rongpo and Byangsi, as both languages are spoken in close proximity to the Tibetan linguistic area. Based on the data currently available, it is not possible to decide which of the two scenarios is more likely. Only future research on West Himalayish languages will enable us to resolve this question.

14.2.2 Generic evidence

The equative copula possesses an inherent generic evidential value and indicates that the knowledge contained in a proposition is based on the speaker’s overall knowledge of the world. Accordingly, the copula does not tell the hearer how the speaker learned about the facts contained in a proposition. However, by choosing a conjunct form or a disjunct form, the speaker can indicate whether she / he considers these facts as conjunct knowledge, to which she / he has privileged access, or whether she / he views them as disjunct knowledge, which is equally accessible for any other person. Note that conjunct marking on the equative copula operates on a wide scope (see § 13.3 for a detailed discussion of the concept of privileged access and scope). In other words, conjunct marking is not restricted to contexts in which the epistemic source assumes a particular semantic role in the clause. Rather, conjunct forms can have scope over any proposition, regardless of whether the primary epistemic source is coreferent with an argument in this proposition or not.

The equative copula cannot be inflected for tense and does not have a specific inherent temporal value. This is reflected by the fact that the equative copula can be used in periphrastic verb constructions that may either have past, present, or future tense reference (see § 15.3 for a number of such periphrastic constructions).

As noted in the introduction to this chapter, the equative copula *jen-* fulfills three basic predicative functions in Bunan: (1) the expression of identity, (2) the expression of proper inclusion, and (3) the expression of attribution. The following two sentences illustrate function (1), the expression of identity.

(742) *tʰadzu butsa su jen?*

<i>tʰadzu</i>	<i>butsa</i>	<i>su</i>	<i>jen</i>
that	boy	who	EQ.CJ

“Who is that boy?”

(Conversation 13a.19)

(743) *gi adʒaŋ jendʒi taj.*

<i>gi</i>	<i>adʒaŋ</i>	<i>jendʒi</i>	<i>taj</i>
1SG	maternal.uncle	EQ.DJ.SG	3SG.GEN

“I am his maternal uncle.”

(TD unrec 47)

As the examples above illustrate, it is possible to use the conjunct form *jen* with the third person noun phrase *tʰadzu butsa* “that boy” and the first person pronoun *gi* with a disjunct form. With the conjunct form *jen* in (742), the speaker implies that the addressee possesses exclusive personal knowledge about the identity of the person in question. With the disjunct form in (743), on the other hand, the speaker portrays the information contained in the proposition as common knowledge. A somewhat wordy but more appropriate translation of the sentence thus might be “I am his maternal uncle, as everybody knows.” While the combination of a conjunct form with a first person pronoun is possible, it is clearly pragmatically marked. Speakers generally possess an exclusive epistemic access to their identity and, accordingly, this relationship is most often encoded by a conjunct form. Accordingly, a speaker will usually use the conjunct form *jen* when asking an addressee about his identity, as in the sentence given below.¹¹⁷

(744) *han suj jen?*

<i>han</i>	<i>su=ki</i>	<i>jen</i>
2[SG]	who=GEN	EQ.CJ

“What family do you belong to?” (lit. “Of whom are you?”)

(Tshechu 2.46)

While it is possible to use a disjunct form in the sentence above, this would result in an awkward meaning. A disjunct form would imply that the speaker is not asked to specify her / his identity based on his personal knowledge but based on the common

¹¹⁷ Note that it is not common to use the sentence *han su jen?* “2[SG] who EQ.CJ” “Who are you?” to ask about an addressee’s identity, as this is considered to be a rather direct and rude type of question. It is much more common to ask about the family of a person, i.e. *han su=ki jen?* “Of whom are you?”.

knowledge of the community. In other words, the sentence would have the literal meaning “What family do you belong to according to people’s belief?”.

The following sentences illustrate the second major function of the equative copula, the expression of proper inclusion. The following examples illustrate instances of *jen* in which the copula takes scope over a pronoun / noun that is coreferent with the epistemic source.

(745) *gi munəi jen.*

<i>gi</i>	<i>munəi_{LN}</i>	<i>jen</i>
1SG	teacher	EQ.CJ

“I am a teacher.”
(TG 30.1 [elicited])

(746) *parosi jen riŋgare.*

<i>parosi_{LN}</i>	<i>jen</i>	<i>riŋ-k-are</i>
neighbor	EQ.CJ	say-INTR-PRS.DJ.SG

“He_i said that he_i was (your) neighbor.”
or: “He_i said that he_j was (your) neighbor.” (The reported speaker is well acquainted with the fact that the person in question is the neighbor of the addressee.)
(SA unrec 14)

Note that (746) is ambiguous. When uttered, the sentence originally had the meaning “He_i said that he_i was (your) neighbor”, with the reported speaker and the noun *parosi* “neighbor” referring to the same participant. However, in an appropriate grammatical context, the sentence could also have the meaning “He_i said that he_j was (your) neighbor”. In this case, the use of the conjunct form would imply that the reported speaker was well acquainted with the identity of the respective person.

Again, it is possible to use disjunct forms in combination with copula themes that are coreferent with the epistemic source, as the following example illustrates.

(747) *gi munəi jendzi nunaŋ gi mudarsamaŋ elte.*

<i>gi</i>	<i>munəi_{LN}</i>	<i>jendzi</i>	<i>nunaŋ</i>	<i>gi</i>	<i>mudarsa_{LN}=maŋ</i>
1SG	teacher	EQ.DJ.SG	thus	1SG	school=ALL

el-te
go-VOL.SG

“I am a teacher (as everybody knows), so I will go to school.”

(NN 29.1 [elicited])

However, as already pointed out above, this is pragmatically marked, as statements relating to one’s identity or profession are usually portrayed as exclusive and personal knowledge, rather than common knowledge. The use of a disjunct form with a third person copula theme, on the other hand, is common.

(748) *tal munəi jendzi.*

<i>tal</i>	<i>munəi_{LN}</i>	<i>jendzi</i>
3[SG]	teacher	EQ.DJ.SG

“She is a teacher.”

(TG 30.3 [elicited])

Finally, let us discuss the third major function of the equative copula: the attribution of properties. If the equative copula is used to attribute a property to a copula theme, this implies that the respective property is an inherent and permanent property of the respective referent. Consider the following example.

(749) *han kʰanak jen?*

<i>han</i>	<i>kʰanak</i>	<i>jen</i>
2[SG]	how	EQ.CJ

“What kind of person are you?”

(King Kesar 65)

In the sentence above, the use of the equative copula implies that the interrogative pronoun *kʰanak* refers to a permanent property of the addressee, that is to say, about her general condition. If the same pronoun is predicated with the existential copula *ni-* (see § 14.3), the question changes its meaning and then refers to the addressee’s momentary condition, i.e. *han kʰanak ja*: “How have you been (recently)?”.

Similarly, the use of the equative copula in the sentence below indicates that the predicated fact is permanent, i.e. that it has always been a challenge and that will always be a challenge for people from Lahaul to settle down in the Kullu Valley.

(750) *nɯj tʰukɛipazok hoɛmej kaj jendzi apa.*

<i>nɯj</i>	<i>tʰuk-ɛ-i-pa=ɛi=tok</i>	<i>hoɛmej</i>	<i>kaj</i>
new	settle.down-MID-ACT-NZR=PL=DAT	extremely	difficult
<i>jendzi</i>	<i>apa</i>		
EQ.DJ.SG	AUTH		

“For those who have settled recently (in the Kullu Valley) it is very difficult.”

(Conversation 1.14)

Finally, the equative copula is also attested in another type of non-verbal predicate construction, to wit, predicate locatives. The equative copula is only rarely attested in predicate locatives, as such constructions are usually based on the existential copula *ni-* (see § 14.3). The following example illustrates this use of the equative copula in predicate locative constructions.

(751) *the guj jendzi?*

<i>the</i>	<i>guj</i>	<i>jendzi</i>
this	where	EQ.DJ.SG

“Where is this (village)?” (said by a speaker who was looking at old pictures of villages in Lahaul)

(Conversation 79.7)

In the example above, the use of the equative copula is licensed by the fact that the speaker is asking a question about a permanent location. If the same question would be asked with the existential copula *ni-*, this would result in an awkward meaning, as the existential copula refers to non-permanent locations. In other words, the sentence *the guj ni:* would have the meaning “Where is this village currently?”, presupposing that the village changes its location from time to time.

While *jen* primarily expresses epistemic categories in contemporary Bunan, there is evidence that the copula was originally fully inflected for person and number. First, this is implied by the presence of a number distinction between singular *jendzi* and plural *jentɛʰok*. Second, this is suggested by the presence of the archaic agreement form *jen-gja* “EQ-1SG” in the traditional narrative of King Kesar. The passage in which this archaic form occurs is given in the following.

(752) *kʰorek wa tʰadzu lasmi=dzi tantan lotta gi ni: kʰar kʰar mataj lasmiti jengja.*

<i>kʰorek</i>	<i>wa</i>	<i>tʰadzu</i>	<i>lasmi=dzi</i>	<i>tantan</i>
later	FOC	that	woman=ERG.SG	sure
<i>lot-ø-ta</i>		<i>gi=ni:</i>	<i>kʰa=re</i>	<i>kʰa=re</i>
say-TR-PST.INFER.DJ		1SG=TOP	what=EXT	what=EXT
<i>ma-ta-i</i>		<i>lasmi=tiki</i>	<i>jen-gja</i>	
NEG-POSS-ACT		woman=INDEF	EQ-1SG	

“Then this woman assured him, ‘As for me, I am a woman possessing nothing at all.’”

(King Kesar 73)

According to my oldest consultants, the form *jen-gja* “EQ-1SG” is an obsolete form that can only be used in combination with first person subjects. This claim is corroborated by Francke’s (1909) grammatical sketch of Bunan. Francke provided an agreement paradigm for the equative copula, which is given below.

Table 99: The agreement paradigm of the copula *yen* (Francke 1909)

	singular	plural
1	<i>yengja</i>	<i>yenni</i>
2	<i>yenna</i>	<i>yenni</i>
3	<i>yen</i>	<i>yen</i>

The obsolete copula form *jen-gja* corresponds to Francke’s first person form *yengja* in terms of both form and function. Remarkably, Francke did not report the contemporary disjunct forms *jendzi* and *jentəʰok* in this paradigm. However, a form *yenji* is attested in several texts that Francke ([1907b] 2008, 1926: 221–224) collected. This seems to suggest that about one hundred years ago, both the archaic agreement forms and the innovative epistemic forms were in use among Bunan speakers, and that the agreement forms only became obsolete in the course of the 20th century.

14.2.3 Inferential evidence

The equative copula *jen-* possesses an inferential form, which is formed from the infinitive *jen-men*, to which the existential copula *ni-* or the attributive copula *de-* are attached. Structurally similar inferential forms can also be formed from verbs (see § 15.3.1.2 and § 15.3.1.3).

The inferential form of the equative copula differs from the basic generic form in terms of its evidential value. Whereas the generic form expresses that the knowledge contained in a given proposition is based on the speaker's overall knowledge of the world, the inferential form expresses that a given statement is based on inferred knowledge. The inferential form thus expresses a meaning similar to the modal forms of the English verb *to be*, i.e. *must be* and *will be*.

With the final copula, the speaker specifies how exactly she / he inferred the knowledge contained in a given proposition. The form *jen-men ni:* indicates that the speaker is making an inference in an epistemically neutral manner, i.e. that she / he is making a claim without further specifying the source of her / his knowledge. The form *jen-men de*, on the other hand, indicates that the speaker possesses direct evidence for her / his inference. This is illustrated by the following two sentences.

(753) *the man epo jenmen ni:*

<i>the</i>	<i>man</i>	<i>epo</i>	<i>jen-men</i>	<i>ni:</i>
this	medicine	good	EQ-INF	EX.NON1SG

"This medicine must be good." (general statement)

(TD 16.11 [elicited])

(754) *the man epo jenmen de.*

<i>the</i>	<i>man</i>	<i>epo</i>	<i>jen-men</i>	<i>de</i>
this	medicine	good	EQ-INF	ATT.SG

"This medicine must be good." (statement based on direct evidence)

(TD 16.12 [elicited])

The statement in (753) would be appropriate in a situation in which the speaker is not familiar with the medicine in question, but nonetheless is convinced that it must be effective. The statement in (754), on the other hand, presupposes that the speaker does have direct evidence for his claim. It may be that she / he has heard about people who were cured by the medicine, or it may be that she / he has read the package insert.

In natural discourse, the form *jen-men de* occurs much more frequently than the form *jen-men ni:*. There seems to be a logical explanation for this difference in relative frequency. If one makes a statement that is based on an inference, one usually possesses some kind of direct evidence for one's claim. If one does not have any direct evidence for a specific claim, but still uses an inferential form, one might say more than one has adequate evidence for and, accordingly, will be at risk of violating Grice's Maxim of Quality

(Grice 1975: 46–47). In such contexts, it is thus more appropriate to use a form that expresses a mere assumption rather than a general inference.

The form *jen-men ni* is attested once in my corpus of natural language data. The conversation in which it occurs was recorded in a noisy environment. It was thus not possible to determine what exactly the speaker was talking about when he used the form. Accordingly, I can only provide natural examples for the direct inferential form *jen-men de*. These examples are given in the following.

(755) ... *hĩ: mi jama dʒaŋdʒuŋgi mi durektsuk jenmen de loʂi*.

<i>hĩ:</i>	<i>mi=ɲama</i>	<i>dʒaŋdʒuŋ=ki</i>	<i>mi</i>
1PL.EXCL.GEN	person=all	Zhangzhung=GEN	person
<i>durek=tsuk</i>	<i>jen-men</i>	<i>de</i>	<i>lot-s-ɕ-dʒi</i>
earlier=REL	EQ-INF	ATT.SG	say-DETR-MID-CVB.SG

“... all of our people must be the former people of Zhangzhung’, I said.” (The speaker infers this from the scriptures of the Bonpos)
(Zhangzhung 80)

(756) *gjaɸo jenmen de*.

<i>gjaɸo</i>	<i>jen-men</i>	<i>de</i>
king	EQ-INF	ATT.SG

“He must be the king.” (The speaker infers this based on a prophecy that had foretold that a king would be born)
(King Kesar 163)

14.3 Existential *ni*-

14.3.1 General remarks

The forms of the existential copula are derived from the stem *ni*- in the singular. The corresponding plural forms are derived from a suppletive stem *gwa*-, which might be cognate to the suppletive plural stem *gwaŋ*- of the verb *ra-men* “to come” (see § 12.8). The individual forms of the existential copula are given below.

Table 100: The forms of the existential copula *ni*- (declarative contexts)

	SG	PL
1	<i>ɲa:</i>	<i>gwajk</i>
2	<i>ni:</i>	<i>gwak</i>
3	<i>ni:</i>	<i>gwak</i>

Table 101: The forms of the existential copula *ni*- (interrogative contexts)

	SG	PL
1	<i>ɲa:</i>	<i>gwajk</i>
2	<i>ɲa:</i> (<i>ɲa:na</i>)	<i>gwajk</i> (<i>gwakni</i>)
3	<i>ni:</i>	<i>gwak</i>

The existential copula *ni*- is most probably the oldest of the four copulas attested in contemporary Bunan. Cognate copula forms are found in other West Himalayish languages, for example Darma (Willis 2007a: 337–338), Sunnami (Christian Huber, p.c.), and Standard Kinnauri (Saxena 2000: 472). In § 2.3.2, I argue that the topic marker *ni* in Written Tibetan may be cognate to the Bunan existential copula as well. Accordingly, these forms might all derive from a copula **ni*.

14.3.2 Present tense

As the two tables above illustrate, the individual forms of the existential copula exhibit a remarkable distribution. First and third person subjects always occur in combination with the forms *ɲa:* / *gwajk* and *ni:* / *gwak*, respectively. This suggests that the distribution of the individual copula forms can be explained in terms of straightforward syntactic agreement. However, this analysis is at odds with the evidence from second person subjects. In declarative contexts, second person subjects occur with the copula forms *ni:* / *gwak*, which are otherwise attested with third person subjects. In interrogative contexts, on the other hand, second person subjects occur with the copula forms *ɲa:* / *gwajk*, which otherwise occur with first person subjects. This distribution is highly reminiscent of a conjunct-disjunct system. In addition, there are two further second person forms *ɲa:na* / *gwakni*, which are only used by old Bunan speakers and whose occurrence is restricted to interrogative contexts.

The two tables given above suggest that we can only account for the distribution of the individual copula forms if we assume that their distribution is governed by syntactic

agreement and epistemic marking at the same time. At first, one may be reluctant to accept this analysis, as syntactic agreement and epistemic marking seem to be rather distinct functional domains that are not expected to interact with each other in such a peculiar way. However, as I argue in the following, this is the only approach that allows us to explain the distribution of the individual forms in a coherent manner.

In the following, I discuss the single pieces of evidence in the sequence in which I myself have put them together while conducting fieldwork on Bunan, as I hope that this will render my analysis more comprehensible and, eventually, more credible. For the sake of clarity, I confine myself to the discussion of singular forms. A second interlinear gloss line in bold face is used in the following. This line represents my original analysis of the respective copula forms.

When I first elicited forms of the existential copula, I was convinced that I was confronted with an opposition of a conjunct form *ɲaː* and a disjunct form *niː*. This assumption seemed to be sensible, as the Bunan verbal system in general is concerned with the encoding of the epistemic categories “conjunct-disjunct” and “evidentiality” (see § 13.1).

(757) *gi kɟuma ɲaː*.

<i>gi</i>	<i>kɟuma</i>	<i>ɲaː</i>
1SG	home	EX.CJ.SG
1SG	home	EX.1SG

“I am at home.”

(Conversation 29.13)

(758) *han guj ɲaː?*

<i>han</i>	<i>guj</i>	<i>ɲaː</i>
2[SG]	where	EX.CJ.SG
2[SG]	where	EX.1SG

“Where are you?”

(TD 267.12 [elicited])

(759) *han khjak ni: kana!*

<i>han</i>	<i>khjak</i>	<i>ni:</i>	<i>kan-a</i>
2[SG]	where	EX.DJ.SG	watch-IMP.SG
2[SG]	where	EX.NON1SG	watch-IMP.SG

“Aha, here you are!” (said by a speaker who has been looking for a given person and eventually finds her / him)
(TD 322.16 [elicited])

(760) *angkur khjak ni:*

<i>angkur</i>	<i>khjak</i>	<i>ni:</i>
Angkur	here	EX.DJ.SG
Angkur	here	EX.NON1SG

“Angkur is here.”
(Conversation 71.27)

(761) *tashi guj ni:?*

<i>tashi</i>	<i>guj</i>	<i>ni</i>
Tashi	where	EX.DJ.SG
Tashi	where	EX.NON1SG

“Where is Tashi?”
(Conversation 98.16)

As the examples above illustrate, the distribution of the forms *pa:* and *ni:* largely bore out my initial predication. However, there were two problems with this analysis. First, it was not possible to use the copula form *ni:* with a first person pronoun. A question like (762) below could only be formed with *pa:* but never with *ni:*.

(762) *gi guj pa: / **ni:?*

<i>gi</i>	<i>guj</i>	<i>pa: / **ni:</i>
1SG	where	EX.CJ.SG / **EX.DJ.SG
1SG	where	EX.1SG / **EX.NON1SG

“Where am I?”
(TD 310.3 [elicited])

Moreover, the existential copula did not reflect a conjunct-disjunct pattern when occurring as an auxiliary in periphrastic verb constructions. In order to understand this point, it is helpful to consider the following sentences first.

(763) *bek gi daksam tʰelek astok tʰoliŋ gompə dzot.*

<i>bek</i>	<i>gi</i>	<i>daksam</i>	<i>tʰe=lek=astok</i>	<i>tʰoliŋ gompə</i>
well	1SG	now	this=APP=TERM	Tholing Monastery

dzot-et

stay-PST.DIR.CJ

“Well, I stayed in Tholing Monastery for about this amount of time.”

(Tulshug Lingpa 21)

(764) *gi pitangi tanʃkardok buptsə.*

<i>gi</i>	<i>pitaŋ=ki</i>	<i>tanʃkar=tok</i>	<i>bup-dza</i>
1SG	door=GEN	threshold=DAT	stumble-PST.DIR.DJ.SG

“I stumbled over the threshold of the door.”

(TD 82.5 [elicited])

As the two examples above illustrate, the distribution of conjunct and disjunct markers is sensitive to the pragmatic parameter of “controllability” in Bunan. Conjunct markers occur whenever the speaker can control an action, whereas disjunct markers occur if the speaker did not volitionally instigate an event.

As I was convinced that the existential copula encoded a straightforward conjunct-disjunct opposition, I expected that *na:* would occur with periphrastic verb forms denoting events that the speaker can control, whereas *ni:* would occur with periphrastic verb forms referring to events that the speaker cannot control. However, as the following examples illustrate, the actual distribution of *na:* in such constructions was not consistent with my analysis.

(765) *gi dzottəi na: / **ni:*

<i>gi</i>	<i>dzot-dzi</i>	<i>na: / **ni:</i>
1SG	sit.down-CVB.SG	EX.CJ.SG / **EX.DJ.SG
1SG	sit.down-CVB.SG	EX.1SG / **EX.NON1SG

“I am sitting.” (lit. “Having sat down, I am here.”)

(TD 48.4 [elicited])

(766) *gi bup-tɛi na: / **ni.*

<i>gi</i>	<i>bup-dzi</i>	<i>na: / **ni:</i>
1SG	stumble-CVB.SG	EX.CJ.SG / **EX.DJ.SG
1SG	stumble-CVB.SG	EX.1SG / **EX.NON1SG

“I have stumbled (and am still lying on the ground).” (lit. “Having stumbled, I am here.”)

(TD 48.4 [elicited])

Based on these considerations, I eventually came to the conclusion that the opposition between *na:* and *ni:* cannot be primarily epistemic in nature. Rather, the two forms encode an opposition of first person vs. non-first person in declarative contexts. In interrogative contexts, this syntactic pattern is obscured by the conjunct-like function that *na:* assumes in combination with second person “subjects”. The inconsistent behavior of the copula form *na:* must be due to an extension of epistemic marking from verbal paradigms to the existential copula. Indeed, there is reason to believe that the use of *na:* in questions to a second person addressee is a relatively recent innovation. Evidence for this assumption comes from the archaic form *na:na*, whose use is exemplified in the sentence below.

(767) *han guj na:na?*

<i>han</i>	<i>guj</i>	<i>na:na</i>
2[SG]	where	EX.2SG

“Where are you?”

(TD 267.14 [elicited])

The copula form *na:na* is remarkable in two ways. First, the form is restricted to interrogative speech acts with a second person subject. It is not possible to use the form in declarative speech acts, nor is it possible to use it with first or third person subjects. Second, the form is only used by my oldest consultants but not by members of the youngest and the middle speaker generation. In other words, the question form in (767) is a characteristic trait of the generatiolect of old speakers. The utterance in (758), on the other hand, represents the sociolinguistically unmarked way of asking the same question.

These considerations suggest that *na:na* is an archaic second person agreement form that has only been retained in interrogative contexts. This analysis is in line with the material of Francke (1909), who published a grammatical sketch of Bunan in the early 20th century. In this grammatical sketch, Francke also described the existential copula *ni-*. The forms that he reported are given in the table below (corresponding forms in contemporary Bunan are given in brackets).

Table 102: The agreement paradigm of the copula *ni-* (Francke 1909)

	singular	plural
1	<i>nia</i> (ɲa:)	<i>goá^g</i> (gwajk)
2	<i>nina</i> (ɲa:na)	<i>goágni</i> (gwakni)
3	<i>ni</i> (ni:)	<i>goá^g</i> (gwak)

Francke's paradigm suggests that the existential copula still displayed straightforward syntactic agreement one hundred years ago. In the course of the 20th century, the paradigm seems to have been restructured under the influence of an emerging conjunct-disjunct system that developed in the verbal domain (see § 13.5.4). In declarative contexts, this led to the reduction of a former threefold opposition (first person vs. second person vs. third person) to a twofold opposition (first person vs. non-first person). In interrogative contexts, this caused the gradual replacement of the old second person form *ɲa:na* with the first person *ɲa:*. The gradual progression of this paradigmatic change is still visible as age-dependent variation in contemporary Bunan.

The existential copula fulfills three major functions in Bunan, which are (1) the expression of location, (2) the expression of existence, and (3) the attribution of non-permanent states. The first function is illustrated by the examples below.

(768) *wa hiŋ nispi ketdzi gwajk.*

<i>wa</i>	<i>hiŋ</i>	<i>nispi</i>	<i>ketdzi</i>	<i>gwajk</i>
FOC	1PL.EXCL	two.HUM	alone	EX.1PL

“The two of us are here alone.”

(Conversation 46.13)

(769) *dzelsa asti mi gwak apa!*

<i>dzelsa=asti</i>	<i>mi</i>	<i>gwak</i>	<i>apa</i>
Kullu=SML	person	EX.NON1PL	AUTH

“There were as many people (at the festival) as there are in Kullu!”

(Conversation 22.19)

The second function, i.e. the expression of existence, is illustrated by the following two examples.

(770) *nokri tɕunji kudzuŋ kjum mej.*

<i>nokri</i> _{LN}	<i>tɕunji</i>	<i>kudzu=maŋ</i>	<i>kjum</i>	<i>ma-ni:</i>
officials	few	Kullu=ALL	house	NEG-EX.NON1SG

“(Back then) there were few officials (among our people), and we did not own houses in Kullu.” (lit. “... and there were no houses in Kullu.”)

(Tshechu 2.3)

(771) *kudzizi loɕum dzogni: atɕʰenomo geʝ gwak.*

<i>kudzu=ki=ɕi</i>	<i>lot-s-ɕ-um=jen</i>	<i>dzogni</i> _{LN}
Kullu=GEN=PL	say-DETR-MID-INF=EQ.CJ	fairy

<i>atɕʰe-nomo</i>	<i>geʝ</i>	<i>gwak</i>
older.sister-younger.sister	eight	EX.NON1PL

“The people from Kullu tell amongst themselves that there are fairies, eight sisters.”

(The Fairies of Kullu 1.10)

As noted above, the existential copula can also attribute properties to a subject. Most often, the use of the existential copula entails that the predicated attribute is non-permanent. In addition, *ni-* predicates attributes in an epistemically neutral manner. In other words, the copula does not reveal how the speaker relates to the knowledge that is contained in a given proposition. This is illustrated by the following contrastive examples.

(772) *hãj awa kʰanak ni:?*

<i>hãj</i>	<i>awa</i>	<i>kʰanak</i>	<i>ni:</i>
2SG.GEN	father	how	EX.NON1SG

“How is your father?”

(TD 277.6 [elicited])

(773) *han kʰanak jen?*

<i>han</i>	<i>kʰanak</i>	<i>jen</i>
2[SG]	how	EQ.CJ

“What kind of person are you?”

(King Kesar 65)

(774) *kʰanak de la?*

kʰanak *de=la*
how ATT.SG=Q

“How does it (i.e. your body) feel?” (question asked to a pregnant woman)
(King Kesar 96)

In (772), the interrogative pronoun *kʰanak* refers to the momentary condition of the addressee’s father, as the copula *ni-* indicates the non-permanent nature of the predicated property. As noted above, the copula does not presuppose a particular way in which the addressee may have acquired the relevant knowledge. In (773), in turn, interrogative pronoun *kʰanak* refers to the permanent condition of the addressee, that is to say, to the general conditions under which she lives. This generic interpretation of *kʰanak* is a consequence of the generic evidential value of the equative copula. In addition, the choice of the conjunct form *jen* entails that the speaker presupposes that the addressee has exclusive, personal knowledge about her living conditions. In (774), finally, *kʰanak* refers to the addressee’s immediate physical condition at the moment of speaking. Accordingly, the speaker asks for knowledge that is based on the addressee’s immediate sensory perception of her own physical condition.

As *ni-* does not have an inherent epistemic value, the copula occurs in contexts in which it is not important to indicate why exactly the speaker knows about a particular fact. Consider the following sentence.

(775) *tal tedzi ni: tʰipɕa tʰupɕum men!*

<i>tal</i>	<i>tedzi</i>	<i>ni:</i>	<i>tʰip-s-ɕ-a</i>
3[SG]	big	EX.NON1SG	beat-DETR-MID-SUP
<i>tʰup-s-ɕ-um</i>		<i>men</i>	
be.able-DETR-MID-INF		NEG.EQ.CJ	

“He is big, it is not possible to beat him (in a fight).”
(NN 47.14 [elicited])

In this example, the copular clause *tal tedzi ni:* “He is big” sets the stage for the speaker’s main statement, i.e. his advice not to challenge a particularly tall person for a fight. In such a context, it is not relevant how exactly the speaker learnt that the person in question is big. Both the speaker and the addressee obviously know whom they are talking about. Accordingly, it is not necessary for the speaker to specify his source of knowledge. The impressive body size of the person in question is simply portrayed as a given fact based on which the speaker makes his main statement.

There is, however, some evidence that the existential copula is currently acquiring an epistemic function. When eliciting minimal pairs in which the existential copula *ni-* stood in contrast with the attributive copula *de-*, my consultants would often construe *ni-* as the functional counterpart of *de-*. Consider the following examples.

(776) *tal lo^kj ni:*

<i>tal</i>	<i>loki</i>	<i>ni:</i>
3[SG]	sick	EX.NON1SG

“He is sick.” (epistemically neutral fact)

or: “He is sick.” (The speaker learnt about that fact in the past through direct perception.)

(TD 322.14 [elicited])

(777) *tal lo^kj de.*

<i>tal</i>	<i>loki</i>	<i>de</i>
3[SG]	sick	ATT.SG

“He is sick.” (The speaker has just learnt about that fact through direct perception.)

(TD 322.13 [elicited])

It is thus conceivable, that the existential copula will eventually be incorporated into the epistemic system, as it stands in minimal functional contrast with copulas that express epistemic categories. Note that the disjunct past tense endings *-dza* / *-ts^ha* may have acquired their direct evidential value in a very similar manner, that is to say, by virtue of standing in a functional opposition to a newly grammaticalized set of endings that expressed inferential evidence (see § 13.4.5).

14.3.3 Past tense

So far, we have only considered the present tense forms of the existential copula. However, the copula also occurs in two different past tense forms. The first past tense form is a non-evidential synthetic past tense, which is based on the endings *-dza* / *-ts^ha*.¹¹⁸ Consider the following table.

¹¹⁸ These endings are also found in the direct evidential past tense (see § 15.2.1.2).

Table 103: The synthetic past tense forms of the existential copula stem *ni-*

	SG	PL
1	<i>nindza</i>	<i>gwakitsʰa</i> [gwɛʔjtsʰæ]
NON1		<i>gwantsʰa</i>

Note that the person distinction between first person plural *gwakitsʰa* and non-first person plural *gwantsʰa* is only attested in the speech of my oldest consultants. Members of the middle and young speaker generations do not make this person distinction anymore, but use the plural form *gwantsʰa* in combination with all persons.

The second past tense is a periphrastic construction. The respective forms are derived from the active participle form, to which the disjunct forms of the equative copula are cliticized. This past tense form expresses a generic evidential value.

Table 104: The periphrastic past tense forms of the existential copula stem *ni-*

	SG	PL
DJ	<i>ni-i=jendzi</i> [nindzi]	<i>ni-i=jentɕʰok</i> [nintɕʰok]

The non-evidential past tense form most often refers to events that happened in the recent past. The generic past tense form, on the other hand, commonly refers to events that happened in the distant past and were not personally witnessed by the speaker.

The past tense forms of the copula *ni-* exhibit a wider range of functions than the present tense forms. First, they fulfill the three major functions that have already been described for the present tense forms, that is, (1) the expression of location, (2) the expression of existence, and (3) the attribution of non-permanent states. Examples that illustrate these functions are given in the following.

(778) *djwak durek tʰaraŋ elet hamirpur nindza.*

<i>djwak</i>	<i>durek</i>	<i>tʰaraŋ</i>	<i>el-et</i>	<i>hamirpur</i>
two.days.ago	before	that.other.place	go-PST.DIR.CJ	Hamirpur

nindza
EX.PST.SG

“Some time ago I went to that other place, I was in Hamirpur.”

(Conversation 49.41)

(779) *nun dukpaŋ goma ni:ndzi nun ...*

<i>nun</i>	<i>dukpa=ki</i>	<i>gompa</i>	<i>ni-i=jendzi</i>	<i>nun</i>
there	Drugpa=GEN	monastery	EX.SG-ACT=EQ.DJ.SG	there

“There was a monastery of the Drugpa lineage ...”

(Tshechu 2.126)

(780) *dwaŋɕek sew nindza ...*

<i>dwaŋɕek</i>	<i>sew</i>	<i>nindza</i>
two.years.ago=about	apple	EX.PST.SG

“A few years back, there were a lot of apples ...”

(Conversation 16.13)

(781) *durek guru rinpotɕej bakta bejul ni:ndzi.*

<i>durek</i>	<i>guru rinpotɕe=ki</i>	<i>bakta_{LN}</i>	<i>bejul</i>
earlier	Guru Rinpoche=GEN	time	Beyul

ni-i=jendzi
EX.SG-ACT=EQ.DJ.SG

“In old days, in the time of Guru Rinpoche, there was (a country called) Beyul.”

(Tulshug Lingpa 94)

(782) *nitsi hoɕmej tɕʰej nindza.*

<i>nitsi</i>	<i>hoɕmej</i>	<i>tɕʰej</i>	<i>nindza</i>
sun	very.much	warm	EX.PST.SG

“The sun was extremely hot.”

(Conversation 68.23)

(783) *təʰostok ɲamæen ni:ndʒi ...*

<i>təʰos=tok</i>	<i>ɲamæen</i>	<i>ni-i=jendʒi</i>
religion=DAT	outstanding	EX.SG-ACT=EQ.DJ.SG

“He was outstanding in (practicing) the Dharma ...”

(Tshechu 2.145)

In addition, the past tense forms of the existential copula can also express proper inclusion and identity. This is illustrated by the following examples.

(784) *asistant pablik rilean ophisar nindza.*

<i>asistant pablik rilean ophisar_{LN}</i>	<i>nindza</i>
assistant public relations officer	EX.SG.PST

“I was an assistant public relations officer.”

(Zhangzhung 2)

(785) *dzaŋskar gjapoj butsa ni:ndʒi ...*

<i>dzaŋskar</i>	<i>gja-po=ki</i>	<i>butsa=tiki</i>	<i>ni-i=jendʒi</i>
Zangskar	king=GEN	boy=INDEF	EX.SG-ACT=EQ.DJ.SG

“He was a son of the King of Zangskar ...”

(Tshechu 2.106)

14.3.4 Inferential evidence

The existential copula possesses two periphrastic forms that express inferential evidentiality. First, there is the general inferential form *dʒot-ka=ni:* (plural *dʒotkʰjak*). Second, there is a direct inferential form *ni-men de*, which is structurally similar to the direct inferential form of the equative copula (*jen-men de*). Both the general inferential form and the direct inferential form essentially serve the same functions as the simple present tense forms, i.e. (1) the expression of location, (2) the expression of existence, and (3) the attribution of non-permanent states.

The general inferential form consists of the progressive participle of the verb *dʒot-men* “to sit, to stay”, to which the non-first person singular form of the existential copula is cliticized. Many people pronounce this periphrastic form as [ʒøʔtʰcen] rather than [ʒøʔtʰcæni:], which indicates that this copula form is currently being reanalyzed as a morphologically simple form. This process has already been completed in case of the plural

form *dzotkʰjak*, which is a contraction of the progressive participle form *dzot-kʰa* “sit-PROG.PL” and *gwak* “EX.NON1PL”.¹¹⁹

The general inferential form occurs in contexts in which speakers make an assumption in an epistemically neutral manner rather than based on some kind of direct evidence. The use of the general inferential form is exemplified by the following example sentence.

(786) *swiserlend soj dzotkja ni:*.

<i>swiserlend_{LN}</i>	<i>soj</i>	<i>dzot-ka=ni:</i>
Switzerland	cold	sit-PROG.SG=EX.NON1SG

“In Switzerland, it must be cold.”

(Conversation 1.32)

The sentence was recorded during a conversation about the harsh winter climate in Himachal Pradesh. At some point, one of the discourse participants turned to me and uttered the sentence given above. This speaker had never been to Europe and, accordingly, did not have first-hand evidence for the statement that winters in Switzerland are cold. However, based on his overall knowledge of the world, he assumed that the temperatures had to be low in Europe as well in wintertime. Some further examples are given below.

(787) *tedzi dzotkja ni:*.

<i>tedzi</i>	<i>dzot-ka=ni:</i>
big	sit-PROG.SG=EX.NON1SG

“He must be older (than me).”

(Conversation 36.11)

(788) *sunil da dzagatsuk dzotken.*

<i>sunil</i>	<i>da</i>	<i>dzagatsuk</i>	<i>dzot-ka=ni:</i>
Sunil	now	Jagatsukh	sit-PROG.SG=EX.NON1SG

“Sunil must be in Jagatsukh.”

(Conversation 55.140)

Like the general inferential form *dzot-ka=ni:*, the direct inferential form *ni-men de* indicates that a speaker lacks first-hand evidence for her / his claim and can only infer that

¹¹⁹ This form happens to be homophonous with the third person plural present tense form *dzot-k-hak* “sit-INTR-PRS.DJ.PL” “They sit / are sitting.”

the respective situation must be true. In addition, the direct inferential form expresses that the speaker's inference is based on some kind of direct evidence. This is exemplified by the following sentence.

(789) *the tsha^{kj} nimen de.*

<i>the</i>	<i>tsha^{kj}</i>	<i>ni-men</i>	<i>de</i>
this	useless	EX.SG-INF	ATT.SG

“This (milk) must be of inferior quality (once it has been skimmed).”

(Conversation 59.76)

This sentence was recorded from a conversation about a person who sold skimmed milk. One of the discourse participants then said that this milk had to be of inferior quality. This person used the inferential form of the existential copula to predicate the adjective *tsha^{kj}* “useless, of inferior quality”. In this context, the use of an inferential copula made complete sense. The woman who had uttered the sentence had skimmed milk many times in her life. Accordingly, she had direct first-hand evidence for the fact that skimmed milk is less nutritious than unskimmed milk. However, she had never bought or tried the skimmed milk of the person in question. Accordingly, she did not have direct first-hand evidence for the inferior quality of this particular type of milk. Based on her personal experience with skimmed milk, she could only infer that this milk had to be “useless”, which is why she used the inferential form *ni-men de*.

In the following, I provide two more examples of the inferential form *ni-men de*, both of which have been taken from my corpus of natural language data.

(790) *totmar̩ re maraj nimen de dzaga.*

<i>tot=mar̩=re</i>	<i>maraj</i>	<i>ni-men</i>	<i>de</i>
Tod.Valley=ALL=EXT	bad	EX.SG-INF	ATT.SG

dzaga_{LN}

place

“In the Tod Valley, there must be haunted places as well.” (The speaker bases his statement on the fact that there are several haunted places in the Gahr Valley)

(Conversation 87.147)

(791) *ajna nimen de bidzi.*

<i>ajna</i>	<i>ni-men</i>	<i>de</i>	<i>bidzi</i> _{LN}
very.much	EX.SG-INF	ATT.SG	busy

“He must be very busy.” (The speaker bases his statement on the fact that the person whom he has been trying to reach repeatedly does not pick up the phone)
(TD unrec 39)

14.4 Attributive *de*-

14.4.1 General remarks

The attributive copula has the singular form *de* and the plural form *det*. The number distinction is only found in the generatiolect of old speakers. Members of the younger speaker generations do no longer distinguish between a singular and a plural form, but use *de* in all contexts. Consider the following table.

Table 105: The forms of the attributive copula stem *de*-

SG	PL
<i>de</i>	<i>det</i>

The copula *de* is not attested as a copula in any other West Himalayish language, which indicates that its status as an attributive copula in Bunan is the result of a relatively recent grammaticalization process. Comparative evidence suggests that the copula represents the grammaticalized form of an old verb with the meaning “to go”. In various other West Himalayish languages, cognate verbs are still attested, i.e. Sunnami *de-warŋ* “to go” (Christian Huber, p.c.), Rongpo *di-pəŋ* “to go” (Zoller 1983), Darma *dε-mu* “to go” (Willis 2007a), Byangsi *dye-mo* “to go” (Sharma 2007a), and Chaudangsi *de-mo* “to go” (Krishan 2001b). We can only speculate on the exact grammaticalization path in the course of which a verb with the meaning “to go” developed into a copula that attributes non-permanent states based on immediate perception. According to Heine & Kuteva (2002: 156), verbs with the meaning “to go” are a well-known source for grammatical morphemes that indicate a change of state. Thus, the grammaticalization may have proceeded along a hypothetical pathway “to go” > “to become” > “to be”. It is conceivable that language contact with western Tibetan varieties, which possess a functionally similar copula *duk* (cf. Bielmeier 2000), may have further encouraged this process. However, in the absence of more detailed historical material for Bunan, all attempts to reconstruct the grammaticalization of the copula *de* must remain speculative. Note that the supine marker *-de* (see § 12.7.2) is most probably also derived from the same source as the attributive copula.

14.4.2 Direct evidence

Speakers use the attributive copula to assign properties to a given referent. The use of the copula implies two things. First, *de* entails that the predicated property is a non-permanent and non-inherent trait of the referent in question. Second, the copula indicates that the knowledge contained in the proposition is based on immediate and direct sensory perception. As noted in the previous section, the attributive copula stands in minimal functional contrast to the existential copula *ni-*, which predicates non-permanent properties in an epistemically neutral way. Due to this functional opposition, the existential copula currently seems to develop into an “epistemic counterpart” of *de-* (see above).

The copula *de-* prototypically occurs in contexts in which discourse participants are talking about properties that are directly accessible at the moment of speaking. When a speaker makes a declarative sentence with the attributive copula, she / he indicates that she has direct sensory evidence for the facts contained in the proposition. When the speaker asks a question that contains the attributive copula, she / he presupposes that the addressee can provide information based on her / his own perception of the relevant facts. Some examples that illustrate the use of *de-* are given below.

(792) *tsʰatpa noj de tʰan ake?*

<i>tsʰatpa</i>	<i>noj</i>	<i>de</i>	<i>tʰan</i>	<i>ake</i>
hot	too.much	ATT.SG	today	QUE

“It is too hot today, isn’t it?”

(SA unrec 15)

(793) *dʒa kʰej de la?*

<i>dʒa</i>	<i>kʰej</i>	<i>de=la</i>
tea	sweet	ATT.SG=Q

“Is the tea sweet?”

(Conversation 55.78)

(794) *tsʰa bjaj asti de la?*

<i>tsʰa</i>	<i>bjaj=asti</i>	<i>de=la</i>
salt	thin=SML	ATT.SG=Q

“Is there somewhat too little salt in it?”

(Conversation 55.130)

(795) *neme de tete.*

<i>neme</i>	<i>de</i>	<i>tete</i>
tasty	ATT.SG	grandfather

“(The food) is tasty, grandfather.”

(Conversation 16.148)

(796) *kantəistok pujdak de.*

<i>kan-tə-i-s=tok</i>	<i>pujdak</i>	<i>de</i>
watch-TR-ACT-NZR=DAT	nice	ATT.SG

“(Jagatsukh) is a nice place to visit.” (lit. “It is nice for watching.”) (said while walking through the village of Jagatsukh)

(ST unrec 3)

(797) *dej de tetkja.*

<i>dej</i>	<i>de</i>	<i>tet-ka</i>
beautiful	ATT.SG	think-PROG.SG

“(This hiking stick) is beautiful’, he thought.”

(Conversation 87.248)

In (792) through (797), the attributive copula occurs in contexts in which either the speaker or the addressee are able to assess the property of a given referent based on their momentary perception of this property. In such contexts, the copula often has a strong mirative connotation (see § 13.2.1 for a definition of the terms “mirative” and “mirativity”). However, the copula is not restricted to contexts in which the speaker is talking about a property which she / he perceives at the moment of speaking. Rather, the copula can be used whenever the speaker wants to emphasize that the knowledge contained in the proposition is based on her / his direct perception. This is demonstrated by the following example.

(798) *tə^hej de ɕel.*

<i>tə^hej</i>	<i>de</i>	<i>ɕel</i>
warm	ATT.SG	summer

“(In Delhi) it is warm in summer.”

(Conversation 28.27)

The sentence given above was recorded during a conversation about the hot weather that Delhi experiences in summer. The sentence was recorded in the Kullu Valley

in winter 2013. Accordingly, the speaker did not possess immediate direct evidence for the knowledge contained in the proposition when he uttered the sentence. Still, it was possible for him to predicate the adjective *təʰej* “warm” with the attributive copula *de*. This demonstrates that the use of *de* is not restricted to contexts in which a speaker is basing a statement on his momentary direct perception of an event. Rather, a speaker can use the attributive copula whenever she / he wishes to emphasize that the knowledge in a given proposition is based on her / his direct perception of the respective event. Some examples that illustrate this use of the attributive copula are given below.

(799) *kudzumaŋ mi ɛit-ɛ=naŋ kaj de ake?*

<i>kudzu=maŋ</i>	<i>mi</i>	<i>ɛit-ɛ=naŋ</i>	<i>kaj</i>	<i>de</i>
Kullu.Valley=ALL	person	die-MID=COND	difficult	ATT.SG
<i>ake</i>				
QUE				

“It is difficult if people (belonging to our community) die in Kullu, isn’t it?”
(Conversation 1.1)

(800) *soj de kʰjak tʰanɛk.*

<i>soj</i>	<i>de</i>	<i>kʰjak</i>	<i>tʰan=ɛk</i>
cold	ATT.SG	here	today=about

“It is cold here these days.”
(Conversation 1.31)

(801) *ŋaro ajna soj de.*

<i>ŋaro</i>	<i>ajna</i>	<i>soj</i>	<i>de</i>
morning	very.much	cold	ATT.SG

“In the morning it is extremely cold.”
(Conversation 22.173)

(802) *henak təʰa: ʈaj de.*

<i>henak</i>	<i>təʰa:=ʈa-i</i>	<i>de</i>
like.this	knowledge=POSS-ACT	ATT.SG

“He is very clever.” (The speaker knows about this because she has been living with the respective person for a long time)
(Conversation 25.21)

Interestingly, it is not possible to use the attributive copula *de* in combination with a first person subject. According to my main consultant, a sentence such as the one given below is ungrammatical.

(803) ***gi phjorpo de.*

<i>gi</i>	<i>phjorpo</i>	<i>de</i>
1SG	handsome	ATT.SG

intended: “I am handsome.” (said when seeing oneself in a mirror)

(TD 16.17 [elicited])

The intended meaning “I am handsome” cannot be expressed with a copula clause. Rather, one would have to use a form of the verb *tsʰor-tə-um* “to feel, to experience”. This is illustrated by the following example.

(804) *gi phjorpo tsʰorəare.*

<i>gi</i>	<i>phjorpo</i>	<i>tsʰor-s-ə-are</i>
1SG	handsome	feel-DETR-MID-PRS.DJ.SG

“I look handsome.” (said when seeing oneself in a mirror)

(TD 16.18 [elicited])

However, the proposition in (803) becomes grammatical if it is formulated as an interrogative speech act. Consider the following example sentence.

(805) *gi phjorpo de la.*

<i>gi</i>	<i>phjorpo</i>	<i>de=la</i>
1SG	handsome	ATT.SG=Q

“Do I look handsome?”

(TD 16.19 [elicited])

The exact reason for this restriction is not entirely clear. The fact that (803) is ungrammatical seems to suggest that the use of the attributive copula presupposes an outside perspective on the predicated property. In other words, the copula subject and the epistemic source have to be conceptually different to render the use of *de* grammatical.

It is important to note that *de* can only be used to assign non-permanent properties to a referent. Expressions that relate to the identity rather than a momentary quality of the referent can only be predicated with the equative copula *jen-*. This is demonstrated by the example sentence given below.

(806) *the tʰadza mendzi / **made kʰedza jendzi / **de!*

<i>the</i>	<i>tʰa-dza</i>	<i>mendzi / **ma-de</i>	<i>kʰedza</i>
this	salt-tea	NEG.EQ.DJ.SG / **NEG-ATT.SG	sweet.tea

*jendzi / **de*
EQ.DJ.SG / **ATT.SG

“This is not butter tea, this is milk tea!”

(TD 92.7 [elicited])

According to my consultant, this sentence is appropriate in a situation in which the speaker is taking a first sip from a cup of tea that was supposed to contain butter tea. In the moment that the speaker realizes that the cup does in fact not contain butter tea, she / he might utter the sentence given above. The nouns *tʰadza* and *kʰedza* relate to the permanent identity and quality rather than the non-permanent quality of the tea. Accordingly, *tʰadza* and *kʰedza* cannot be predicated with the attributive copula *de-* but only with the equative copula *jen-*.

To be sure, there are constructions in which the attributive copula takes a noun as its complement. Two examples are given below.

(807) *hoamej tʰer de girok!*

<i>hoamej</i>	<i>tʰer</i>	<i>de</i>	<i>gi=tok</i>
very.much	sorrow	ATT.SG	1SG=DAT

“I was very worried!”

(Conversation 14.43)

(808) *kʰorek ama nampo phjare gjus de.*

<i>kʰorek</i>	<i>ama=nampo</i>	<i>phja-de</i>	<i>gjut-s</i>	<i>de</i>
later	mother=COM	speak-SUP	need-NZR	ATT.SG

“Later, I will need to talk to mother.”

(Conversation 97.13)

Based on these sentences, one might assume that the attributive copula is after all able to form predicate nominal constructions.¹²⁰ However, when we consider the meaning of the two sentences, it become obvious that the relevant constructions are not predicate nominals in the strict sense of the word, as the relationship between the copula themes

¹²⁰ Following Payne (1997: 111–113), I use the term “predicate nominal” to refer to non-verbal predicate constructions that express identity and proper inclusion.

and the copula complements is not based on identity or proper inclusion. Rather, the copula *de* expresses that the speaker experiences a momentary state that is associated with the nouns *tsʰer* “sorrow” and *gjut-s* “need-NZR”. Accordingly, these constructions represent predicate adjectives rather than predicate nominals.

Finally, it is important to keep in mind that *de-* cannot fulfill the function of an existential copula. This is demonstrated by the following example.

(809) *erĩ thon khju ni: / **de!*

<i>erĩ</i>	<i>thon</i>	<i>khju</i>	<i>ni: / **de</i>
1PL.INCL.GEN	room	dog	EX.NON1SG / **ATT.SG

“There is a dog in our house!” (The speaker did not expect to find a dog in her / his house and does not know how the animal got into the house)

(TD 96.19 [elicited])

According to my consultant, the sentence given above would correspond to what he might say if he came home from Kullu and found an unknown dog in his house. Even though this sentence is based on the immediate perception of a situation, it is not possible to use *de* in this context, as the attributive copula cannot form predicate locatives.

14.5 Possessive *ta-*

14.5.1 General remarks

The possessive copula is based on a stem *ta-*. The individual forms of the copula are given in the two tables below.

Table 106: The forms of the possessive copula *ta-* (declarative contexts)

	SG	PL
1	<i>ta:</i>	<i>tajk</i>
2	<i>ta</i>	<i>tat</i>
3	<i>ta</i>	<i>tat</i>

Table 107: The forms of the possessive copula *ta-* (interrogative contexts)

	SG	PL
1	<i>ta:</i>	<i>tajk</i>
2	<i>ta:</i> <i>ta:na</i>	<i>tajk</i>
3	<i>ta</i>	<i>tat</i>

The historical status of the possessive copula *ta-* is not entirely clear. Copulas with a similar phonological shape have been described for several West Himalayish languages. For example, Francke (1909: 80, 89–90) describes a copula stem *ta-* for Manchad and Tinan, Bailey (1920: 81) mentions a copula *tā* for Chitkhuli, and Huber (2013a: 234–235) reports a copula *tə-* for Shumcho. Furthermore, Christian Huber has informed me that copula forms that appear to be cognate to Shumcho *tə-* can also be found in the neighboring languages Jangrami and Sunnami (personal communication). The areal distribution of these copula forms is difficult to interpret, as we do not know their function(s) in most cases. Accordingly, it is not possible to determine whether and how the Bunan possessive copula *ta-* is related to the abovementioned copulas.

We may speculate whether the Bunan possessive copula *ta-* is derived from a lexical verb **ta-* with the meaning “to keep, to hold”. Reflexes of this verb are found in Standard Kinnauri *tāmig* “to keep” (Bailey 1910: 681), Rongpo *ta:-* “to put, to lay, to set, to keep” (Zoller 1983: 284), Darma *ta’-* “to keep” (Willis 2007a: 584), Byangsi *ta:mo* “to keep, to put” (Sharma 2007a: 137), and Chaudangsi *tamo* “to keep” (Krishan 2001b: 442). It seems conceivable that a lexical verb with such a meaning could develop into a copula expressing a possessive relationship (cf. Heine & Kuteva 2002: 185–186).¹²¹ However, it is not clear whether the phonologically similar copulas attested in other West Himalayish languages can also be traced back to this lexical root.

14.5.2 Present tense

As the tables given above illustrate, the distribution of the individual forms of the possessive copula is almost identical with the distribution of the individual forms of the existential copula (cf. § 14.3). The distribution of first person and third person forms can be explained in terms of straightforward syntactic agreement (first person = *ta:* / third person = *ta*), whereas the distribution of second person forms can only be accounted for if we assume that these forms are governed by both the grammatical relation of the subject and

¹²¹ An example for this grammaticalization process is the English verb *to have*, which goes back to the Proto-Indo-European root **keh₂p-* with the reconstructed meaning “to catch, to seize” (Rix et al. [1998] 2001: 344–345).

the discourse role of the epistemic source. Again, the peculiar distribution of forms becomes understandable when we consider them in a historical context. The table below lists the different forms that Francke (1909: 68) reported for the possessive copula (the corresponding forms in contemporary Bunan are given in brackets).

Table 108: The agreement paradigm of the copula *ta-* (Francke 1909)

	singular	plural
1	<i>ta</i> (<i>ta:</i>)	<i>ta^g</i> (<i>tajk</i>)
2	<i>tana</i> (<i>ta:na</i>)	<i>tadni</i> (-)
3	<i>ta</i> (<i>ta</i>)	<i>ta^d</i> (<i>tat</i>)

Francke's data suggest that the contemporary paradigm of the possessive copula has been shaped by the same process that has also affected the paradigm of the existential copula. In other words, the old subject agreement pattern has been retained with first and third person forms, whereas the second person forms have been remodeled in analogy to the innovative conjunct-disjunct system. The archaic second person singular agreement form *ta:na*, which is only found in the generatiolect of old Bunan speakers, is the last remnant of the original second person agreement forms. Francke's second person plural agreement form *tadni*, which would correspond to **tatni* in contemporary Bunan, is no longer attested. In any case, I was not able to elicit it from my oldest consultants. Accordingly, the implementation of epistemic agreement in the second person paradigms has proceeded further in the paradigms of the possessive copula than in the paradigms of the existential copula.

The main function of the possessive copula is to express a possessive relationship between the subject (the owner) and the copula complement (the owned object). Whenever I elicited sentences that contained the possessive copula, my consultants would insist on assigning the genitive case to the owner and the absolutive case to the owned entity. However, the actual distribution of case morphemes turned out to be more flexible in natural discourse. Copula subjects often occur in the absolutive case in present tense contexts, but may likewise stand in the ergative case in past tense contexts. The semantic and pragmatic factors that govern the distribution of cases cannot be assessed based on the comparatively small number of tokens in my database. The following example sentences illustrate the use of the possessive copula.

(810) *gi: ta:.*

gi=ki *ta:*
1SG=GEN POSS.1SG

“I (still) have (food).” (said by a speaker how had been offered a second serving)
(Conversation 16.60)

(811) *eraŋ ʰukpa tajk bulʰuk tajk ken tajk*

eraŋ *ʰukpa* *tajk* *bulʰuk* *tajk*
1PL.INCL soup POSS.1PL noodle.soup POSS.1PL

ken *tajk*
porridge POSS.1PL

“We have soup, we have noodle soup, we have porridge”
(Conversation 36.19)

(812) *pustok dzuk mata:na la?*

pus=tok *dzuk* *ma-ta:na=la*
knee=DAT pain NEG-POSS.2SG=Q

“Don’t you have a pain in your knee?”
(Tshechu 2.358)

(813) *guj ta:?*

guj *ta:*
where POSS.1SG

“Where do you have it?”
(Conversation 55.128)

(814) *pʰetsej nwak bete ta ma?*

pʰetse=ki *nwak* *bete* *ta* *ma*
uncle=GEN thus child POSS.NON1SG CNS

“So uncle has children, right?”
(Conversation 14.22)

(815) *kʰatəik pi: ŋaj bi:ga: matat.*

kʰatəik *pi:* *ŋaj* *bi:ga:LN* *ma-tat*
 some four five bīghā NEG-POSS.NON1PL

“Some people do not (even) own four or five *bīghā* of land.”

(Conversation 16.24)

I have come across some young Bunan speakers who insisted on using the adessive clitic =*katəaŋ* in contexts of alienable possession. An elicited example is given below.

(816) *gi katəaŋ ŋaj hambu ta:.*

gi=katəaŋ *ŋaj* *hambu* *ta:*
 1SG=ADESS five cow POSS.1SG

“I have five cows.”

(PS 37.5 [elicited])

The use of the adessive seems to be due to the influence of the dominant contact language Hindi, where alienable possession is generally expressed with the possession *ke pās* “in the vicinity of, near” (Sandahl 2000: 34).

14.5.3 Past tense

Like the existential copula, the possessive copula exhibits two past tense forms: a non-evidential synthetic past tense in *-dza* / *-tsʰa*, and a generic evidential periphrastic past tense form, which consists of the active participle of the possessive copula, to which disjunct forms of the equative copula *jen-* are attached. The individual past tense forms are listed in the two tables below.

Table 109: The synthetic past tense forms of the possessive copula stem *ta-*

	SG	PL
1	<i>tandza</i>	<i>takitsʰa</i> [tɛʔjtsʰə]
NON1		<i>tantsʰa</i>

Table 110: The periphrastic past tense forms of the possessive copula stem *ta-*

	SG	PL
DJ	<i>ta-i=jendzi</i>	<i>ta-i=jentəʰok</i>

The synthetic past tense forms are commonly used to refer to events that the speaker witnessed and that happened in the recent past. The generic past, on the other hand, refers to events that the speaker did not witness and that happened in the distant past. The following example sentences illustrate the use of the two past tense forms.

(817) *nek kjumatəi takitsʰa tʰandzun ta: mata: nek tsunati takitsʰa.*

<i>nek</i>	<i>kjuma=təi</i>	<i>takitsʰa</i>	<i>tʰandzun</i>	<i>ta:</i>
last.year	home=ABL	POSS.PST.1PL	this.year	POSS.1SG

<i>ma-ta:</i>	<i>nek</i>	<i>tsuna=tiki</i>	<i>takitsʰa</i>
NEG-POSS.1SG	last.year	little.bit=INDEF	POSS.PST.1PL

“Last year we had apples from our own orchard (lit. “from home”), this year I do not have any, but last year we had a small amount.”

(Conversation 36.10)

(818) *kulik anetsʰi tan matantsʰa ka gidzi tandza kulik.*

<i>kulik</i>	<i>ane=tʰi</i>	<i>tan</i>	<i>ma-tantsʰa</i>	<i>ka</i>
key	paternal.aunt=ERG.PL	POSS	NEG-POSS.PST.PL	ASS

<i>gi=dzi</i>	<i>tandza</i>	<i>kulik</i>
1SG=ERG.SG	POSS.PST.SG	key

“My aunts did not have the key (to the house), I had the key.”

(Conversation 87.272)

(819) *durek durek tʰadzu liŋdok taj gjapo ta matatəʰwak.*

<i>durek</i>	<i>durek</i>	<i>tʰadzu</i>	<i>liŋ=tok</i>	<i>ta-i</i>	<i>gjapo</i>
earlier	earlier	that	Ling=DAT	POSS-ACT	king

<i>ta</i>	<i>ma-ta-i=jentəʰwak</i>
POSS	NEG-POSS-ACT=EQ.DJ.PL

“In old days, that country of Ling did not have a King who owned the country.”

(820) *awa tiki: nispi butsa taj jendzi.*

<i>awa=tiki=ki</i>	<i>nispi</i>	<i>butsa</i>	<i>ta-i=jendzi</i>
father=INDEF=GEN	two.HUM	boy	POSS-ACT=EQ.DJ.SG

“A father had two sons.”

(The Prodigal Son 2)

14.5.4 Inferential evidence

The possessive copula possesses two inferential forms: a general inferential form *ta-men ni:* and a direct inferential form *ta-men de*. The two forms are structurally similar to the inferential forms of the equative copula, *jen-men ni:* and *jen-men de*, respectively (see § 14.2.3), and also express a similar evidential value. The inferential forms of the possessive copula do not occur in my corpus of natural data, but are only attested in my corpus of elicited data. The function of the two forms is illustrated by the two sentences given below.

(821) *taj kudzuŋ braŋsa tamen ni:*.

<i>taj</i>	<i>kudzu=maŋ</i>	<i>braŋsa</i>	<i>ta-men</i>	<i>ni:</i>
3SG.GEN	Kullu.Valley=ALL	apartment	POSS-INF	EX.NON1SG

“He must have an apartment in the Kullu Valley.” (general statement)

(TD 327.9 [elicited])

(822) *taj kudzuŋ braŋsa tamen de*.

<i>taj</i>	<i>kudzu=maŋ</i>	<i>braŋsa</i>	<i>ta-men</i>	<i>de</i>
3SG.GEN	Kullu.Valley=ALL	apartment	POSS-INF	ATT.SG

“He must have an apartment in the Kullu Valley.” (statement based on direct evidence)

(TD 327.8 [elicited])

The proposition in (821) contains an inference that is portrayed as an epistemically neutral fact. Many members of the Bunan community have rented apartments in the Kullu Valley and, accordingly, it is highly probable that the person in question also possesses a residence there, although the speaker does not possess any direct evidence for this statement. The proposition in (822), on the other hand, is an inference that is based on some kind of direct evidence. The speaker may have heard the rumor that the person owns a house in Kullu, or she / he may have repeatedly seen the person in the market area of Kullu over a longer period of time.

14.5.5 The construction *tə^ha:=fa-* “to know”

The possessive copula often occurs in combination with the noun *tə^ha:* “knowledge”, which is a Tibetan borrowing (cf. WT *cha* “knowledge”), to form a construction *tə^ha:=fa-* “to know” (lit. “to have knowledge”). This construction is remarkable, as the possessive copula has entered a strong syntagmatic relationship with the preceding noun. This is indicated by two facts. First, the initial alveo-dental /t/ of the possessive copula has become a retroflex /ʈ/ in this construction. Second, when this construction is negated, the

negative prefix *ma-* does not occur before the possessive copula, but is prefixed to the noun-verb complex. Consider the following examples.

(823) *rakar rakar tɕʰa:ʔa: ho gi!*

<i>rakar</i>	<i>rakar</i>	<i>tɕʰa:ʔa:</i>	<i>ho</i>	<i>gi</i>
Rakar	Rakar	knowledge=POSS.1SG	yes	1SG

“The village Rakar, the village Rakar, yes, I know it!”

(Conversation 71.11)

(824) A: *matɕʰa:ʔa la?*

B: *atɕʰoj tɕʰa:ʔaj gwak na tal matɕʰa:ʔa.*

<i>ma-tɕʰa:ʔa=la</i>	<i>atɕʰo=ki</i>
NEG-knowledge=POSS.NON1SG=Q	older.brother=GEN

<i>tɕʰa:ʔa-i</i>	<i>gwak=na</i>	<i>tal</i>
knowledge=POSS-ACT	EX.NON1PL=HS	3[SG]

ma-tɕʰa:ʔa
NEG-knowledge=POSS.NON1SG

A: “Does she not know (how to speak our language)?”

B: “They say that (her) older brothers know (how to speak our language), but she does not know.”

(Conversation 42.4)

Note that phrasal stress is always assigned to the noun *tɕʰa:*, whereas the cliticized copula remains unstressed. As a consequence, the vowel of the possessive copula is often reduced to [ə] or entirely deleted. Accordingly, the noun-copula sequence *tɕʰa:ʔa* “knowledge=POSS.NON1SG” “she / he knows” is commonly pronounced as [tɕʰa:ʔ] in fast speech.

14.6 Verbs with copula-like function

In addition to the four copulas that have been discussed in the preceding sections, Bunan possesses two verbs that may serve a copula-like function: the verb *kja-men* “to become” and the verb *ra-men* “to come”. Both predicates are discussed in the following subsections.

14.6.1 *kja-men* “to become”

The verb *kja-men* “to become” is a copula-like verb in the sense that it is commonly used to derive non-verbal predicates. This does not come as a surprise, as the semantic content of the verb is essentially copula-like. Note that the process of “becoming” is conceptually contiguous to the state of “being”. The main difference between “becoming” and “being” is that the former concept refers to a dynamic / sequential relationship of identity (entity A > entity B), whereas the latter concept denotes a stative / concurrent relationship of identity (entity A = entity B). In my corpus of natural data, the verb *kja-men* is used to derive four different types of non-verbal predicates: proper inclusion, identity, attribution and existence. A number of example sentences are given below.

(825) *bonpots^{hos} liktəipa təunji mi kjats^{hi} eltə^{hok}.*

<i>bonpo-tə^{hos}</i>	<i>lik-tə-i-pa</i>	<i>təunji</i>	<i>mi</i>	<i>kja-tə^{hi}</i>
Bonpo-religion	make-TR-ACT-NZR	few	person	become-CVB.PL

el-tə^{hok}
go-PST.INFER.DJ.PL

“The practitioners of the Bonpo religion have become few people.”

(Zhangzhung 29)

(826) *meme kjanan gampa dej wa.*

<i>meme</i>	<i>kja=nan</i>	<i>gampa</i>	<i>dej</i>	<i>wa</i>
monk	become=COND	monastery	beautiful	FOC

“When there will be monks, the monastery will be beautiful.”

(Tshechu 2.467)

(827) *the dustok ni: dzamlingdok mi noj kjats^{hi} eltə^{hok}.*

<i>the</i>	<i>dus=tok=ni:</i>	<i>dzamling=tok</i>	<i>mi</i>	<i>noj</i>
this	time=DAT=FOC	world=DAT	person	many

kja-tə^{hi} *el-tə^{hok}*
become-CVB.PL go-PST.INFER.DJ.PL

“As for nowadays, people have become numerous in this world.”

(Tulshug Lingpa 231)

14.6.2 *ra-men* “to come”

The verb *ra-men* “to come” is commonly used to express movement towards a deictic center. However, the generic present tense form of the verb is commonly used to derive non-verbal predicates that express generic existence. This is illustrated by the following example sentences.

(828) *durek nuṅtsuk ras ramen men t̬əuŋi ramen.*

<i>durek</i>	<i>nuṅ=tsuk</i>	<i>ras</i>	<i>ra-men</i>	<i>men</i>	<i>t̬əuŋi</i>
earlier	there=REL	cotton	come-INF	NEG.EQ.CJ	few
 <i>ra-men=jen</i>					
come-INF=EQ.CJ					

“Back then, there was no local cotton, there was just a little bit (of local cotton).”
(Tshechu 2.8)

(829) *wa t̬e t̬hopa noj miks ramen.*

<i>wa</i>	<i>t̬e</i>	<i>t̬hopa</i>	<i>noj</i>	<i>miks</i>	<i>ra-men=jen</i>
FOC	this	similar	many	story	come-INF=EQ.CJ

“There are many stories similar to this one.”
(The Fairies of Kullu 1.71)

15 Finite inflection

15.1 Introduction

This chapter describes the inventory of finite verbal forms. In the following, the term “finite” is used in the sense of Langacker (1987–1991, 1: 126–127) to refer to verb forms that are “epistemically grounded”, that is to say, anchored in a specific discourse context through inflectional endings that specify the conditions under which the respective event occurs. Accordingly, a verb form is considered to be fully grounded if it displays an inflectional ending that provides all information that is necessary to conceptualized an event as coherent and self-contained. In Bunan, a verb form may be grounded based on one or several of the following parameters: (1) temporal reference (“tense”), (2) epistemic access (“mood”, “evidentiality”, “conjunct-disjunct”), and (3) identity of participants (“person” and “number”). Note that inflectional endings with relative temporal reference such as the converb ending *-dzi* / *-tə^{hi}* or the progressive participle ending *-ka* / *-k^{ha}* are not considered to be finite. According to the definition of finiteness that has been given above, such endings are merely semi-finite, as their relative temporal interpretation depends on an absolute temporal frame that is provided by another finite verb form.

In what follows, I make a fundamental distinction between two classes of finite inflected forms: (1) “simple forms” and (2) “periphrastic forms”. Simple forms are verb forms that consist of a verb stem and inflectional suffixes and, accordingly, represent one single grammatical word. Periphrastic forms, on the other hand, are verb forms that are composed of a non-finite or semi-finite main verb and a finite auxiliary and, hence, consist of two grammatical words. It is of crucial importance to note that the two grammatical words of a periphrastic form may occur as one phonological word if the auxiliary is cliticized to the non-finite main verb. An illustrative example for a periphrastic verb form that commonly surfaces as a single phonological word is the generic disjunct future tense, which is formed by cliticizing the equative copula *jen-* to a nominalized active participle of a verb. Consider the following example.

(830) ... *tal panzi elipajendzi* ...

<i>tal</i>	<i>pan-ɛ-dzi</i>	<i>el-i-pa=jendzi</i>
3[SG]	fly-MID-CVB.SG	go-ACT-NZR=EQ.DJ.SG

“... he will fly away”

(King Kesar 262)

The example given above contains the generic disjunct future tense form *el-i-pa=jendzi* “go-ACT-NZR=EQ.DJ.SG”. Bunan speakers commonly pronounce this form as [*ˈelipaɪendzi*] or [*ˈelipaɛ*], with the auxiliary being unstressed and at times even reduced

to a voiceless syllable final fricative. Accordingly, one may be tempted to analyze this verb form as morphologically simple, that is to say, as consisting of the verb stem *el-* “to go” and the verbal ending *-ipajendzi* ~ *-ipaɛ* “-FUT.GENER.DJ.SG”. However, if we consider a negated proposition that is based on the same verb form, it becomes obvious that the generic disjunct future tense form is in fact periphrastic. Consider the following example.

(831) *tal otəi danamanj elipa mendzi.*

<i>tal</i>	<i>otəi</i>	<i>dana=manj</i>	<i>el-i-pa</i>	<i>mendzi</i>
3[SG]	tomorrow	Manali=ALL	go-ACT-NZR	EQ.DJ.SG

“He will not go to Manali tomorrow.”

(TD 318.2 [elicited])

As demonstrated in (831), the generic disjunct future tense is not negated by prefixing the negation morpheme *ma-* to the verb root. Rather, negation is expressed on the equative copula, which surfaces as an independent phonological word with a distinctive pitch accent under these circumstances. To be sure, there are some instances in my corpus of natural data in which the negation prefix occurs on the verb root, as illustrated by the following example.

(832) ... *tete madzajpajendzi.*

<i>tete</i>	<i>ma-dza-i-pa=jendzi</i> ~ <i>ma-dza-ipajendzi</i>
grandfather	NEG-eat-ACT-NZR=EQ.DJ.SG ~ NEG-eat-FUT.GENER.DJ.SG

“... grandfather will not eat.”

(Conversation 16.68])

However, examples such as the one given above are extremely rare in my corpus of natural data. All my Bunan consultants considered forms like the one given in (831) as uncommon or even ungrammatical and clearly preferred to attach the negation prefix to the auxiliary. The placement of the negation prefix in the generic disjunct future tense thus indicates that it is more appropriate to analyze the form as periphrastic.

In this chapter, I use the expression of negation as a general diagnostic tool for determining whether a form should be classified as morphologically simple or periphrastic. Forms in which the negation is predominantly expressed on the auxiliary (i.e. constructions of the type *V-NFIN NEG-AUX*) are classified as periphrastic, whereas forms in which the negation is commonly expressed on the main verb (i.e. constructions of the type *NEG-V-FIN*) are classified as simple.

The chapter is divided into two main sections. § 15.2 describes simple forms based on their temporal and modal value. § 15.2.2.4 discusses periphrastic forms based on their morphological structure.

15.2 Simple forms

The simple verb forms of Bunan can be grouped into two classes: (1) temporal forms and (2) modal forms. Temporal forms primarily specify the point in time at which an event takes place (cf. Dahl 1985: 23). Bunan differentiates between three temporal levels, viz. present tense (i.e. events that occur at the moment of speaking), past tense (i.e. events that occurred prior to the moment of speaking), and future tense (i.e. events that will occur after the moment of speaking). Modal forms, on the other hand, primarily specify the speakers personal attitude towards an event (cf. Palmer [1986] 2001: 1). Within the modal domain, we may distinguish four different types of mood, viz. the volitional mood, the consultative mood, the assumptive mood, and the repudiative mood. Temporal and modal forms are described in the following subsections.

15.2.1 Temporal forms

15.2.1.1 Present tense

The present tense is marked by one single set of verbal endings across all three conjugations. The respective morphemes do not only express a present tense value, but at the same time also encode the grammatical categories “conjunct-disjunct” (see § 13.3), “number” (see § 13.6), and, to a lesser extent, “person” (see § 13.5). The present tense endings are listed in the table below.

Table 111: Present tense endings

	INTR		MID		TR	
	SG	PL	SG	PL	SG	PL
CJ	<i>-ek</i>	<i>-hek</i>	<i>-ek</i>	<i>-hek</i>	<i>-ek</i>	<i>-hek</i>
DJ	<i>-are</i>	<i>-hak</i>	<i>-are</i>	<i>-hak</i>	<i>-are</i>	<i>-hak</i>
2	<i>-ana</i>	<i>-hakni</i>	<i>-ana</i>	<i>-hakni</i>	<i>-ana</i>	<i>-hakni</i>

The present tense fulfills a range of different functions. For one thing, it is used to refer to events that are taking place at the moment of speaking. This function is illustrated by the example sentences given below.

(833) *daksam ra:re da ɕilti matɕʰaktsa.*

<i>daksam</i>	<i>ra-k-are</i>	<i>da</i>	<i>ɕilti</i>
now	come-INTR-PRS.DJ.SG	now	rain

ma-tɕʰak-dza

NEG-stop-PST.DIR.DJ.SG

“It is raining now, it has not stopped.”

(Conversation 29.19)

(834) *da datkjare datkjare!*

<i>da</i>	<i>dat-k-are</i>	<i>dat-k-are</i>
now	fall-INTR-PRS.DJ.SG	fall-INTR-PRS.DJ.SG

“Now he is falling, he is falling!”

(King Kesar 267)

(835) *awadzi indzi: pʰos tɕakɕare.*

<i>awa=dzi</i>	<i>indzi=ki</i>	<i>pʰot-s</i>	<i>tɕak-ɕ-are</i>
father=ERG.SG	himself=GEN	put.on-NZR	wash-MID-PRS.DJ.SG

“Father is washing his own clothes.”

(DP unrec 5)

At the same time, the present tense endings can also refer to habitual events that are not taking place at the moment of speaking, but have been regularly taking place in the recent past and will most probably again take place in the future. This is illustrated by the following example sentences.

(836) *mjas tete dza tungare la?*

<i>mjas-tete</i>	<i>dza</i>	<i>tun-k-are=la</i>
Myas-grandfather	tea	drink-INTR-PRS.DJ.SG=Q

“Does the grandfather of the Myas family drink tea?”

(DP unrec 1)

(837) *tɕakna ɕutɕare teterok.*

<i>tɕakna</i>	<i>ɕu-tɕ-are</i>	<i>tete=tok</i>
daily	ask-TR-PRS.DJ.SG	grandfather=DAT

“He asks grandfather every day.”

(Conversation 25.78)

(838) *tʰansuŋɕek memɛzi nwak lik maliktɕʰak.*

<i>tʰansuŋ=ɕek</i>	<i>memɛ=zi</i>	<i>nwak</i>	<i>lik</i>	<i>ma-lik-tɕ-ʰak</i>
this.year=about	monk=PL	so	do	NEG-do-TR-PRS.DJ.PL

“The monks don’t do it that way nowadays.”

(Tshechu 2.419)

In addition, present tense endings can refer to future events in combination with verbs that pertain to the intransitive and the middle conjugation (the transitive conjugation possesses dedicated future tense endings, which are described in § 15.2.1.3).¹²² When used as future tense markers, present tense endings can both refer to events that occur in the immediate future and events that will take place in the distant future. However, as I argue in § 13.3.3, the use of conjunct endings on general access verbs implies that the respective action will take place in the near future. Consider the following examples.

(839) *tɕakdzala tapɕi ragek riŋgare na.*

<i>tɕak-ø-dza=la</i>	<i>tap-s-ɕ-dzi</i>
wash-TR-PST.SG=ANTER	bring.back-DETR-MID-CVB.SG
<i>ra-k-ek</i>	<i>riŋ-k-are=na</i>
come-INTR-PRS.CJ.SG	say-INTR-PRS.DJ.SG=HS

“‘Having washed (my clothes), I will come back’, he told them, it is said.”

(Conversation 22.75)

(840) *otɕi ŋarok ŋaj ɕenɕek.*

<i>otɕi</i>	<i>ŋaro=tok</i>	<i>ŋaj</i>	<i>ɕen-s-ɕ-ek</i>
tomorrow	morning=DAT	early	raise-DETR-MID-PRS.CJ.SG

“I will get up early tomorrow morning.”

(TD 70.17 [elicited])

When the disjunct present tense endings *-are* / *-ʰak* are used with future tense reference, they express a reported future tense. Accordingly, they can only be used in combination with non-first person subjects to indicate that the respective subject told the speaker that she / he intends to perform an action. Consider the following examples.

¹²² Note that present tense endings are consistently glossed as “PRS” (for “present tense”) throughout this thesis even if they have future tense reference.

(841) *ʔan eare dana astok eare ...*

<i>ʔan</i>	<i>el-k-are</i>	<i>dana=astok</i>	<i>el-k-are</i>
today	go-INTR-PRS.DJ.SG	Manali=TERM	go-INTR-PRS.DJ.SG

“He will go today, he will travel to Manali” (The person in question informed the speaker about his leaving)

(Conversation 25.83)

(842) *taldzi ʔe len otʂi likʂare.*

<i>tal=dzi</i>	<i>ʔe</i>	<i>len</i>	<i>otʂi</i>	<i>lik-ʂ-are</i>
3=ERG.SG	this	work	tomorrow	make-TR-PRS.DJ.SG

“He will do this work tomorrow.” (The person in question informed the speaker about his intention to do the work)

(TD 284.16 [elicited])

It is not possible to use the endings *-are* / *-ʂak* as future tense markers in combination with a general access verb that takes a first person subject. In this case, the future tense has to be expressed with the generic disjunct future tense (cf. § 15.3.3.3). Consider the following example sentence.

(843) *nima tiki gi ʂitʂipajendʂi / **ʂitʂare.*

<i>nima=tiki</i>	<i>gi</i>	<i>ʂit-ʂ-i-pa=jendʂi / **ʂit-ʂ-are</i>
day=INDEF	1SG	die-MID-ACT-NZR=EQ.DJ.SG / **die-MID-PRS.DJ.SG

“One day, I will die (because everybody has to die some day).”

(TD 84.6 [elicited])

Finally, present tense endings may also have past tense reference in combination with verbs of saying or thinking. The verb *riŋ-men* “to say”, for example, exclusively takes present tense endings, even if the predicate refers to a speech act that occurred in the past. Consider the following example, which is taken from a recording in which my main consultant told me about events that had occurred five decades earlier.

(844) *gidzi handok tʰaps likkata ringare.*

<i>gi=dzi</i>	<i>han=tok</i>	<i>tʰaps</i>	<i>lik-ø-kata</i>
1SG=ERG.SG	2[SG]=DAT	ritual	do-TR-FUT.CJ.SG

riŋ-k-are

say-INTR-PRS.DJ.SG

“He said, “I will perform a ritual for you.”

(Tulshug Lingpa 59)

The reason as to why the verb *riŋ-men* “to say” never occurs with past tense endings is not entirely clear. It may be that this peculiar restriction is motivated by the fact that quoted speech acts are conceptualized as generic propositions that hold true independent of the original discourse context in which they were uttered. This would entail that the statement reported in (844) is considered to keep its validity, regardless of the fact that it was uttered several decades ago.

15.2.1.2 Past tense

The simple inflected past tense forms revolve around a ternary distinction of (1) direct evidential conjunct forms marked with the endings *-et* (intransitive and middle conjugation) and *-men* (transitive conjugation), (2) direct evidential disjunct forms marked with the endings *-dza* (singular) / *-tsʰa* (plural) and (3) inferential disjunct forms marked with the endings *-dzi* (singular) / *-tɕʰok* (plural) (intransitive and middle conjugation) and *-ta* (transitive conjugation). These forms, which primarily encode the epistemic categories “evidentiality” and “conjunct-disjunct”, constitute the functional core of the past tense domain. In addition to these epistemic markers, there are a number of archaic agreement forms, which are remnants of an old person agreement system (cf. § 13.5.4) and encode first and second person subject agreement on the predicate.

The following table gives an overview of the direct evidential conjunct past tense endings in *-et* ~ *-men* and their corresponding agreement forms. Note that old speakers commonly pronounce the ending *-et*, which occurs in the intransitive and middle conjugation, as *[-eʔt̚ŋ ~ -eʔn]*, i.e. with a final nasal. The same speakers pronounce the archaic agreement forms *-engja* and *-enna* as *[-eʔŋjæ]*, and *[-eʔnnæ]*, respectively. As argued in § 13.3.2.1, the contemporary ending *-et* most probably developed from an original ending **-en*, which was reanalyzed as **-etn* after verb stems ending in a final alveo-dental plosive. The loss of the final nasal eventually gave rise to the now established form *-et*.

Table 112: Direct evidential conjunct past tense endings

	INTR		MID		TR	
	SG	PL	SG	PL	SG	PL
DIR.CJ	<i>-et</i>		<i>-et</i>		<i>-men</i>	
DIR.1	<i>-engja</i>	-	<i>-engja</i>	-	<i>-mengja</i>	-
DIR.2	<i>-enna</i>	-	<i>-enna</i>	-	<i>-menna</i>	-

The following table gives an overview of the direct evidential disjunct forms and their corresponding agreement forms. Note that the second person agreement endings *-dzana* (singular) and *-ts^hani* (plural) are not attested in my corpus of natural data, but only occur in sentences that were elicited from my oldest consultants. It is thus difficult to say whether my oldest consultants still actively use these forms or whether they merely have passive knowledge of these verbal suffixes.

Table 113: Direct evidential disjunct past tense endings

	INTR		MID		TR	
	SG	PL	SG	PL	SG	PL
DIR.DJ	<i>-dza</i>	<i>-ts^ha</i>	<i>-dza</i>	<i>-ts^ha</i>	<i>-dza</i>	<i>-ts^ha</i>
DIR.1	<i>-kidza</i>	<i>-kits^ha</i>	<i>-kidza</i>	<i>-kits^ha</i>	<i>-kidza</i>	<i>-kits^ha</i>
DIR.2	<i>-dzana</i>	<i>-ts^hani</i>	<i>-dzana</i>	<i>-ts^hani</i>	<i>-dzana</i>	<i>-ts^hani</i>

The table below, finally, lists the inferential disjunct forms and their corresponding agreement forms. Note that old speakers usually pronounce the transitive ending *-ta* with a distinctive amount of glottalization on the vowel, i.e. *[-tæʔ]* instead of *[-tæ]*. The origin of this glottalized articulation is not entirely clear, but it is conceivable that it represents a trace of a former final consonant.¹²³

¹²³ Note that Francke (1909: 69) described an opposition of a singular ending “-ta” and a plural ending “-tha^d”. The plural form is no longer attested in contemporary Bunan. The glottalization on the vowel may, however, represent a reflex of the final alveo-dental plosive of the now obsolete plural form.

Table 114: Inferential disjunct past tense endings

	INTR		MID		TR	
	SG	PL	SG	PL	SG	PL
INFER.DJ	<i>-dʒi</i>	<i>-təʰok</i>	<i>-dʒi</i>	<i>-təʰok</i>	<i>-ta</i>	
INFER.1	-	-	-	-	<i>-kita</i>	-
INFER.2	-	-	-	-	<i>-tana</i>	-

Past tense endings refer to events that occurred in the past, i.e. prior the moment of speaking. Bunan does not distinguish between different degrees of temporal remoteness. In other words, direct evidential conjunct endings, direct evidential disjunct endings, and inferential disjunct endings may refer to any kind of past event, regardless of whether it occurred in the remote past or the recent past. The following example sentences are taken from a recording in which my main consultant described events that had taken place five decades earlier. In this recording, we encounter all three types of past endings.

(845) *wa nuŋ eldʒi pʰjadʒi wa gidzi lotmen ...*

wa nuŋ el-dʒi pʰja-dʒi wa gi=dʒi
 FOC there go-CVB.SG talk-CVB.SG FOC 1SG=ERG.SG

lot-ø-men

say-TR-PST.DIR.CJ

“And I went there, talked to him, and said:”

(Tulshug Lingpa 15)

(846) *taldok dʒuteipa noj kjatsʰa kʰorek.*

tal=tok dʒu-tə-i-pa noj kja-tsʰa
 3[SG]=DAT request-TR-ACT-NZR many become-PST.DIR.DJ.PL

kʰorek

later

“The people who requested (teachings) from him became many later.”

(Tulshug Lingpa 90)

(847) *kudzuŋ elteʰi wa durek da tsʰorok dzotteʰok.*

kudzu=man el-teʰi wa durek da tsʰo=tok
 Kullu.Valley=ALL go-CVB.PL FOC before now lake=DAT
dzot-teʰok
 stay-PST.INFER.DJ.PL

“They went to Kullu and first stayed at the lake (of Riwalsar).”

(Tulshug Lingpa 172)

We can contrast the example sentences listed above with a number of further example sentences denoting events that took place just immediately before the moment of utterance. In this context, we again encounter all three types of past tense endings.

(848) *rat la?*

ra-et=la
 come-PST.DIR.CJ=Q

“Have you come (home)?” (asked to a person who had just come home)

(DP unrec 39)

(849) *lepdza la tete?*

lep-ø-dza=la tete
 reach-TR-PST.DIR.DJ.SG=Q grandfather

“Have you come home, grandfather?” (asked to a person who had just come home)

(Conversation 23.1)

(850) *pitaŋ tikta la?*

pitaŋ tik-ø-ta=la
 door close-TR-PST.INFER.DJ=Q

“Have they closed the door?” (asked about some guests had just left the house)

(TD unrec 18)

These examples illustrate that the temporal interpretation of the past tense endings essentially depends on the pragmatic context. To be sure, when contrasting past tense forms in elicitation, my consultants told me that the direct evidential conjunct forms referred to events that were more remote, whereas the direct evidential disjunct past denoted events that belonged to the recent past. However, from a purely synchronic perspec-

tive we may argue that these diverging temporal values merely represent an epiphenomenon of conjunct-disjunct marking.

As I argued in § 13.3, conjunct-disjunct marking indicates whether or not the epistemic source possesses privileged access to the knowledge contained in a proposition. In the present tense, conjunct markers occur whenever the epistemic source willfully instigates an event or perceives an internal stimulus. In the past tense, conjunct marking can have a wider scope and may occur whenever an event is portrayed as being part of the epistemic source's old and personal knowledge. Accordingly, conjunct marking may evoke connotations of temporal remoteness. Consider the following two example sentences.

(851) *ini lepmen šašur gompak lepmen malepmen?*

<i>ini</i>	<i>lep-ø-men</i>	<i>šašur gompak=tok</i>
2[SG].HON	reach-TR-PST.DIR.CJ	Shashur Gompak=DAT
<i>lep-ø-men</i>	<i>ma-lep-ø-men</i>	
reach-TR-PST.DIR.CJ	NEG-reach-TR-PST.DIR.CJ	

“Have you ever visited Shashur Gompak?”

(DP unrec 21)

(852) *sunil guj lepdza?*

<i>sunil</i>	<i>guj</i>	<i>lep-ø-dza</i>
Sunil	where	reach-TR-PST.DIR.DJ.SG

“Sunil, how far have you come?” (said by a speaker who was talking to his nephew on the phone and asked him where he currently was)

(Conversation 65.1)

The question in (851) relates the respective event to the addressee's wealth of personal experiences that she / he has accumulated throughout her / his life. Accordingly, the verb *lep-ø-men* “reach-TR-PST.DIR.CJ” can potentially refer to an event that belongs to the distant past. The question in (852), on the other hand, does not depict the respective event as a part of the addressee's wealth of personal experience. Rather, the event is portrayed as a fact that is potentially accessible to other discourse participants. This suggests that the respective event did not happen a long time ago, but most probably belongs to the immediate past. Accordingly, the supposed differences in temporal reference between the direct evidential conjunct past tense and the direct evidential disjunct past tense in contemporary Bunan can be explained as an epiphenomenon of the epistemic value of the respective endings.

There is evidence, however, that the direct evidential conjunct past tense and the direct evidential disjunct past tense possessed divergent temporal values in earlier stages of Bunan. This claim is corroborated by two observations. First, Francke (1909: 69) referred to the direct evidential conjunct past tense and the direct evidential disjunct past tense as the “first perfect” and the “imperfect”, respectively. Unfortunately, Francke did not define the terms “perfect” and “imperfect”. However, the grammar of contemporary Bunan may still give us some idea of the factors on which the functional opposition between the first perfect paradigm and the imperfect paradigm may originally have been based. When contrasting forms like *lik-ø-men* “do-TR-PST.DIR.CJ” and *lik-ø-kidza* “do-TR-PST.DIR.1SG” in elicitation sessions, my oldest consultant told me that the two verb forms expressed an opposition of “remote past” vs. “recent past”. This is illustrated by the following example sentences.

(853) *gidzi len likmen.*

<i>gi=dzi</i>	<i>len</i>	<i>lik-ø-men</i>
1SG=ERG.SG	work	reach-TR-PST.DIR.CJ

“I did the work (quite some time ago).”

(TD 216.9 [elicited])

(854) *gidzi len likkidza.*

<i>gi=dzi</i>	<i>len</i>	<i>lik-ø-kidza</i>
1SG=ERG.SG	work	reach-TR-PST.DIR.1SG

“I have done the work (just now).”

(TD 329.15 [elicited])

My consultant’s statement suggests that Francke’s first perfect forms and imperfect forms may indeed have possessed divergent temporal / aspectual values. In this context, it is interesting to note that past tense systems with a similar functional opposition of a recent past and a remote past have been described for some Tibetan varieties of Ladakh. For example, Zemp (2014: 727–737) describes an opposition of a “simple past” and a “remote past” for Purik, a Tibetan variety of Lower Ladakh. According to Zemp, it is difficult to delimit the two past tenses from each other in terms of their function, as they can occur in very similar contexts. However, he provides a number of example sentences that illustrate the most basic functional differences between the two verb forms. For one thing, the simple past may receive a resultative or inchoative interpretation, whereas the remote past usually depicts an event as perfective and completed. Consider the following example sentences.

(PUR 1) *thomas* *di-ka* *joŋ-s-a*
 Thomas this-LOC come-PST-Q
 “Has Thomas come here?” (He will be staying here.)
 (Zemp 2014: 731)

(PUR 2) *thomas* *di-ka* *joŋ-s-p-in-a*
 Thomas this-LOC come-PST-NZR-EQ-Q
 “Did Thomas come here?” (He will be staying somewhere else.)
 (Zemp 2014: 731)

For another thing, the simple past commonly refers to an event of which the speaker merely assumes that it may have taken place, whereas the remote past denotes an event of which the speaker knows that it took place. This is illustrated by the following example sentences.

(PUR 3) *o* *marius* *kʰjeran* *thomas* *nambo* *thug-a*
 hey Marius you Thomas with meet-Q
 “Hey, Marius, did you meet Thomas (in Leh)?” (I know that he is there.)
 (Zemp 2014: 732)

(PUR 4) *o* *marius* *kʰjeran* *thomas* *nambo* *thuk-p-in-a*
 hey Marius you Thomas with meet-NZR-EQ-Q
 “Hey, Marius, did you meet Thomas (in Leh)?” (He told me about it!)
 (Zemp 2014: 732)

As noted above, the opposition of a simple past and a remote past is not a specific trait of Purik Tibetan. Similar past tense systems can be found in other western Tibetan varieties, e.g. Balti (Bielmeier 1985: 112–115) and Ladakhi (Koshal 1979: 199–201). These considerations suggest that Bunan may once have had a very similar past tense system and that the opposition of first perfect forms and imperfect forms described by Francke (1909) may have been functionally equivalent to the opposition of simple past forms and remote past forms described by Zemp for Purik Tibetan. There are three observations that substantiate this claim. First, we know that Bunan stood in intense contact with Tibetan varieties of Ladakh for centuries (cf. § 1.2.3.2), and there is ample evidence that this contact had a strong bearing on the structure of the Bunan verbal system (cf. § 13.1). In the light of these facts, it seems highly plausible that the Bunan verbal system may have been reorganized by analogy with the past tense systems of these contact languages. Second, the endings of the remote past in western Tibetan varieties appear to have a similar origin as the direct evidential conjunct past tense of Bunan. The Purik ending *-p-in* is clearly derived from the infinitive marker *-pa* and the equative copula *in* (Zemp

2014: 729). In § 13.3.2.1, I argue that the direct evidential conjunct past tense developed from a periphrastic construction that was based on the infinitive ending **-men* and the equative copula **jen-*. The structural similarity between the two verbal endings makes it even more plausible that the direct evidential conjunct past tense construction of Bunan may originally have been calqued from a Tibetan variety. Third, past tense endings that developed from a combination of the infinitive marker with the equative copula are also common in Tibetan varieties spoken further to the east, e.g. Tabo (Hein 2001: 38–39), Mustang (Kretschmar 1995, 1: 154–155), and Kyirong (Huber 2005: 120–121), among others. However, in these varieties, the ending has developed into a direct evidential conjunct past ending. Accordingly, these idioms bear witness to the same grammaticalization path that is also attested in Bunan, viz. remote past tense > direct evidential conjunct past tense.

15.2.1.3 Future tense

Bunan possesses a number of verbal inflectional suffixes that serve the function of expressing future tense reference. First, there is a set of simple future tense endings, which exclusively occur in the transitive conjugation. Second, there is a set of assertive future endings, which are attested in all three conjugations. The simple future tense endings and the transitive assertive future tense endings clearly go back to one single paradigm, which is why I have decided to summarize all future tense endings in one table below.

Table 115: Future tense endings

	INTR		MID		TR	
	SG	PL	SG	PL	SG	PL
FUT.CJ	-	-	-	-	<i>-kata</i>	<i>-kat^hek</i>
FUT.2	-	-	-	-	<i>-katana</i>	<i>-kat^hatni</i>
ASSER. NON1SG	<i>-kani:</i>	<i>-k^hak</i>	<i>-kani:</i>	<i>-k^hak</i>	<i>-kata</i>	<i>-kat^hat</i>

As noted in § 15.2.1.1, the intransitive and middle conjugation do not possess dedicated endings to express the simple future tense, but rather use present tense endings for this purpose. The transitive conjugation, in turn, displays a specific set of endings that express the simple future tense. These are the conjunct future endings *-kata* (singular) / -

kathek (plural) and the second person endings *-katana* (singular) / *-katatni* (plural). The following example sentences illustrate the use of the simple future tense endings.

(855) *gidzi khimsa otai thumgata.*

<i>gi=dzi</i>	<i>khimsa</i>	<i>otai</i>	<i>thum-ø-kata</i>
1SG=ERG.SG	dust	tomorrow	wrap-TR-FUT.CJ.SG

“I will do the dusting tomorrow.”

(TD 291.1 [elicited])

(856) *kulik thahela! handzi jotkjatana!*

<i>kulik</i>	<i>tha-hel-a</i>	<i>han=dzi</i>	<i>jot-ø-katana</i>
key	PROHIB-take.away-IMP.SG	2=ERG.SG	lose-TR-FUT.2SG

“Do not take the key with you! You will lose it!”

(TD 327.16 [elicited])

As noted above, the assertive future tense endings are attested in all three conjugations. As the label “assertive” implies, these endings express the speaker’s firm belief that a certain event will occur. In combination with human referents, the assertive future tense often indicates that the respective person is obliged to perform a certain action. A number of example sentences that illustrate the use of the assertive future tense are given in the following.

(857) *honak kja:ni: ringa guru rinpotæej sunjai ramen riŋi ni:.*

<i>honak</i>	<i>kja-kani:</i>	<i>riŋ-ka</i>	<i>guru rinpotæ=ki</i>
like.that	become-ASSER.NON1SG	say-PROG.SG	Guru Rinpoche=GEN
<i>sunj-s-ø-i</i>	<i>ra-men=jen</i>	<i>riŋ-i</i>	<i>ni:</i>
say.HON-DETR-MID-ACT	come-INF=EQ.CJ	say-ACT	EX.NON1SG

“(The world) will become like that’, he used to say, ‘there is a prophecy of Guru Rinpoche’, he used to say.”

(Tshechu 2.512)

(858) *epo ra:ni:. mi tʰaŋidok re kitpo tiki ra:ni:.*

epo ra-kani: mi tʰaŋi=tok=re
 good come-ASSER.NON1SG person all=DAT=EXT

kitpo=tiki ra-kani:
 prosperity=INDEF come-ASSER.NON1SG

“It will be good! Also, there will be prosperity for all people!” (The speaker is convinced that his predictions will come true)

(Tulshug Lingpa 155)

(859) *han otəi kelaŋmaŋ ea:ni.*

han otəi kelaŋ=maŋ el-kani:
 2[SG] tomorrow Keylong=ALL go-ASSER.NON1SG

“You are supposed to go to Keylong tomorrow.”

(TD 327.22 [elicited])

(860) *taldok ʃu! taldzi inok letkjata.*

tal=tok ʃu-a tal=dzi ini=tok
 3[SG]=DAT ask-IMP.SG 3=ERG.SG 2[SG].HON=DAT

let-ø-kata
 teach-TR-ASSER.NON1SG

“Ask him, he will teach you!” (The speaker is convinced that the respective person will teach the addressee)

(Conversation 13a.123)

(861) *hantʃi hiŋzok eraŋkat letkjaʰat.*

han=tʃi hiŋ=ʂi=tok eraŋ-kat
 2=ERG.PL 1PL.EXCL=PL=DAT 1PL.INCL-language

let-ø-katʰat
 teach-TR-ASSER.NON1PL

“You will teach us the Bunan language.” (The speakers are convinced that the addressees will teach them the Bunan language)

(TD 261.1 [elicited])

The assertive future tense endings *-kani:* / *-kʰak*, which occur in combination with intransitive and middle verbs, contain an element *-ka-* / *-kʰa-*, which looks like the progres-

sive participle marker (see § 12.7.3), and further morphological formatives, which might be reflexes of the existential copula *ni-* (see § 14.3). Accordingly, these endings might have grammaticalized from a periphrastic construction that is still attested in contemporary Bunan and expresses a progressive aspect (cf. § 15.3.2.1).

The future tense endings that are attested in the transitive conjugation contain an element *-ka-* / *-kʰa-* as well, but the morphological constituents that follow are clearly not reflexes of the existential copula *ni-*. Rather, they look like reflexes of the possessive copula *ta-* (see § 14.5). On the analogy of the assertive future tense endings *-kani:* / *-kʰak*, one might speculate that the he transitive assertive future tense endings must have been grammaticalized from a formerly periphrastic construction involving the progressive participle marker and the possessive copula *ta-*. However, although this internal reconstruction is convincing from a phonological point of view, it is not persuasive from a functional perspective, as the combination of a non-finite verbal ending that derives adverbial expressions and a copula that expresses possession does not result in a meaningful construction. Accordingly, the transitive future tense endings may have a different origin altogether. Based on our current knowledge it is not possible to say what that origin might be, however. We can merely state that the transitive future tense endings of Bunan might be related to the future tense endings of the West Himalayish language Rongpo, e.g. *yũ-kætən* “walk-FUT.2SG” “You will walk.” (Zoller 1982: 69), which would entail that they must be of considerable age.

Eventually, the most important questions about the diachrony of the Bunan future tense paradigm are (1) how the single paradigm of transitive future tense endings functionally diverged into assertive future tense endings and simple future tense endings and (2) how it came about that the intransitive and middle conjugation merely display one set of endings for both present and future time reference, while the transitive conjugation possesses a dedicated set of future tense endings. Based on current knowledge, it is not possible to answer either of these questions. Better descriptions of the closely related languages Rongpo and Sunnami will hopefully allow us to solve these riddles in the future.

15.2.2 Modal forms

15.2.2.1 Volitional mood

The volitional mood expresses that the epistemic source intends to perform a certain action. The verbal category is encoded with the endings *-te* (singular) and *-tʰek* (plural) throughout all conjugations, as the table below illustrates. These endings show certain phonological similarities to the morphemes that encode assumptive mood (cf. § 15.2.2.3). Accordingly, it is conceivable that these endings might have a common origin.

Table 116: Volitional mood endings

	INTR		MID		TR	
	SG	PL	SG	PL	SG	PL
VOL	<i>-te</i>	<i>-^hek</i>	<i>-te</i>	<i>-^hek</i>	<i>-te</i>	<i>-^hek</i>

The volitional mood endings behave like conjunct endings in the sense that they can only be used to express wishes on behalf of a subject that assumes the role of the epistemic source. In other words, the endings *-te* / *-^hek* are only compatible with first person subjects in simple declarative clauses, second person subjects in interrogative clauses, and third person subjects in reported speech acts. Consider the following example sentences.

(862) *nimati gwaŋ^hek hiŋ ginaŋ butsa.*

nima=tiki *gwaŋ-^hek* *hiŋ* *gi=naŋ* *butsa*
 day=INDEF come.PL-VOL.PL 1PL.EXCL 1SG=CON boy

“One day we want to come (over to your place), me and the boy.”

(Conversation 69.7)

(863) *maiptəite.*

ma-ipt-ə-te
 NEG-sleep-MID-VOL.SG

“I do not want to sleep.”

(TD 258.6 [elicited])

(864) *kekir itəik dzate?*

kekir *itəik* *dza-te*
 flatbread how.many eat-VOL.SG

“How many pieces of flatbread do you want to eat?”

(Conversation 22.142)

(865) *ʃu! kʰa ʃute?*

ʃu-a *kʰa* *ʃu-te*
ask-IMP.SG what ask-VOL.SG

“Ask! What do you want to ask?”

(TL 1.2)

(866) *dillitʰi dʒa:skun elte riŋgare.*

dilli=tʰi *dʒa:s_{LN}=kun* *el-te* *riŋ-k-are*
Delhi=ABL plane=LOC go-VOL.SG say-INTR-PRS.DJ.SG

“He_i says that he_i wants to travel from Delhi by plane.”

(Conversation 25.85)

Accordingly, the clause *tal otʰi kullu=maŋ ra-te* “3[SG] tomorrow Kullu=ALL come-VOL.SG” would be ungrammatical if it did not occur as the complement of the speech act verb *riŋ-men* “to say” as in the example below.

(867) *tal otʰi kullumaŋ rate riŋgare.*

tal *otʰi* *kullu=maŋ* *ra-te* *riŋ-k-are*
3[SG] tomorrow Kullu=ALL come-VOL.SG say-INTR-PRS.DJ.SG

“He_i says that he_i will come to Kullu tomorrow.”

(TD 225.6 [elicited])

15.2.2.2 Consultative mood

The consultative mood is marked by the ending *-ki* in all conjugations. There is no distinction between singular and plural forms.

Table 117: Consultative mood endings

	INTR		MID		TR	
	SG	PL	SG	PL	SG	PL
CONSUL	<i>-ki</i>	<i>-ki</i>	<i>-ki</i>	<i>-ki</i>	<i>-ki</i>	<i>-ki</i>

The consultative mood is exclusively attested in interrogative speech acts in which the speaker requests the addressee’s permission to perform a particular action. The consultative mood is often exploited to form polite questions. In my corpus of natural speech, consultative forms commonly occur when young persons ask questions to older persons. The following example sentences illustrate the use of the consultative mood.

(868) *dʒa likki la tete?*

<i>dʒa</i>	<i>lik=ki=la</i>	<i>tete</i>
tea	make-CONSUL=Q	grandfather

“Should I make tea, grandfather?”

(Conversation 23.12)

(869) *tete inok ra:jta: daj la?*

<i>tete</i>	<i>ini=tok</i>	<i>ra:jta:LN</i>	<i>da=ki=la</i>
grandfather	2[SG].HON=DAT	rāytā	give-CONSUL=Q

“Grandfather, can I give you some more *rāytā*?”

(Conversation 42.7)

(870) *hiŋtsʰi inok jato likki la?*

<i>hiŋtsʰi</i>	<i>ini=tok</i>	<i>jato</i>	<i>lik=ki=la</i>
1PL.EXCL=ERG.PL	2[SG].HON=DAT	help	make-CONSUL=Q

“May we help you?”

(TD 329.11 [elicited])

(871) *tʰe soti tuŋgi la?*

<i>tʰe</i>	<i>soti</i>	<i>tuŋ=ki=la</i>
this	water	drink-CONSUL=Q

“May I drink this water?”

(TD 37.7 [elicited])

15.2.2.3 Assumptive mood

The assumptive mood is marked with the conjunct endings *-tek* (singular) / *-tʰek* (plural) and the disjunct endings *-tendzi* (singular) / *-tʰentʰok* (plural). Remarkably, assumptive forms can only be formed from verbs that follow the intransitive and middle conjugations but not from verbs that follow the transitive conjugation. The reason for this restriction is unclear.

Table 118: Assumptive mood endings

	INTR		MID		TR	
	SG	PL	SG	PL	SG	PL
CJ	<i>-tek</i>	<i>-^htek</i>	<i>-tek</i>	<i>-^htek</i>	-	-
DJ	<i>-tendzi</i>	<i>-^hentɕ^hok</i>	<i>-tendzi</i>	<i>-^hentɕ^hok</i>	-	-

As noted in § 15.2.2.1, the assumptive mood endings show certain phonological similarities to the volitional mood endings, which suggests that the two sets of inflectional endings may be diachronically related. In any case, it is highly probable that the assumptive mood endings have been grammaticalized from a formerly periphrastic construction. First, the disjunct endings *-tendzi* and *-^hentɕ^hok* are reminiscent of the disjunct forms of the equative copula, i.e. *jendzi* and *jentɕ^hok*. Second, the conjunct singular form *-tek* is pronounced as *[-ten]* when followed by the question clitic *=la*. The intrusive nasal may be interpreted as a trace of a cliticized equative copula. Accordingly, these observations suggest that the assumptive endings may go back to a non-finite verbal form that was followed by the equative copula.

Proposed historical origin of the assumptive mood endings

<i>-tek</i>	<	* <i>-tek</i> + <i>jen</i>
<i>-^htek</i>	<	* <i>-^htek</i> + <i>jen</i>
<i>-tendzi</i>	<	* <i>-tek</i> + <i>jendzi</i>
<i>-^hentɕ^hok</i>	<	* <i>-^htek</i> + <i>jentɕ^hok</i>

The assumptive mood indicates that a statement is not based on any kind of direct or indirect evidence, but merely represents an assumption on behalf of the speaker. This is exemplified by the following sentence, which is taken from a story about a young man who claimed to have been abducted by three fairies while grazing cattle in the high mountains. The sentence has been taken from the passage in which one of the fairies tells her sisters how sad the young man's fiancée must be because of her future husband's disappearance.

(872) *taldok tʰerok nantsukti lasmirok tʰara kjatek duŋal ratek tsʰer ratek taldok.*

<i>tal=tok</i>	<i>tʰe=tok</i>	<i>nantsuk=tiki</i>	<i>lasmi=tok</i>	<i>tʰara</i>
3[SG]=DAT	this=DAT	poor.wretch=INDEF	woman=DAT	that.other
<i>kja-tek</i>		<i>dukŋal</i>	<i>ra-tek</i>	<i>tsʰer</i>
become-ASSUM.CJ.SG		sorrow	come-ASSUM.CJ.SG	sadness
<i>ra-tek</i>				
come-ASSUM.CJ.SG				

“She, this one, this poor wretch of a woman might feel like that, she might be worried, she might be sad.”

(The Fairies of Kullu 1.29)

Conjunct assumptive forms and disjunct assumptive forms differ in terms of the way in which they relate a proposition to the speaker’s knowledge. This is illustrated by the two example sentences given below.

(873) *gjokpa ra bas ratek.*

<i>gjokpa</i>	<i>ra-a</i>	<i>bas_{LN}</i>	<i>ra-tek</i>
fast	come-IMP.SG	bus	come-ASSUM.CJ.SG

“Come quickly, the bus might come!”

(TDrol unrec 1)

(874) *gjokpa ra bas ratendzi.*

<i>gjokpa</i>	<i>ra-a</i>	<i>bas_{LN}</i>	<i>ra-tendzi</i>
fast	come-IMP.SG	bus	come-ASSUM.DJ.SG

“Come quickly, the bus might come!”

(TD 260.2 [elicited])

The sentence given in (873) was uttered by my main consultant’s wife when we were on our way to the bus stop near their house. As she had been living near that bus stop for many years, she was well acquainted with the daily bus schedule and knew when buses were most likely to show up. Accordingly, she used the conjunct form *ra-tek*, which indicated that her assumption was based on her personal experience. The sentence given in (874) was elicited from my main consultant based on the utterance given in (873). According to him, this sentence implies that the speaker makes a general assumption that is not based on personal experience. This utterance would thus be appropriate in a context in which the speaker is not familiar with the bus schedule and merely guesses that a bus might show up soon.

15.2.2.4 Repudiative mood

The repudiative mood is used in contexts in which the speaker refuses an invitation or rejects an order. With verbs of the intransitive conjugation, repudiative forms are formed by attaching the negative prefix *ma-* to the isolated verb stem. In the case of verbs that pertain to the middle and transitive conjugation, repudiative forms are derived by attaching the negative prefix to the supine form of the respective verbs. Consider the following table.

Table 119: Repudiative mood forms

	INTR		MID		TR	
	SG	PL	SG	PL	SG	PL
REPUD	<i>ma-V</i>	<i>ma-V</i>	<i>ma-V-ε-a</i>	<i>ma-V-ε-a</i>	<i>ma-V-tε-a</i>	<i>ma-V-tε-a</i>

All repudiative mood forms that are attested in my corpus of natural data were recorded during meals. In the Bunan community, politeness demands that a person who is offered food or drinks emphatically reject these refreshments several times before eventually accepting them.¹²⁴ Accordingly, forms like *ma-dza* “NEG-eat” “I am not eating!” and *ma-turj* “NEG-drink” “I am not drinking” are often heard during such polite refusals. Consider the following examples.

(875) *madza! tʰupεum ma de! datle dzat!*

<i>ma-dza</i>	<i>tʰup-s-ε-um</i>	<i>ma-de</i>	<i>datle</i>
NEG-eat	be.able-DETR-MID-INF	NEG.ATT.SG	just.now
<i>dza-et</i>			
eat-PST.DIR.CJ			

“I am not eating anything! I can’t! I just ate!”

(Conversation 13a.107)

(876) *da maturj!*

<i>da</i>	<i>ma-turj</i>
now	NEG-drink

“I won’t drink anything now!”

(Conversation 55.211)

¹²⁴ See footnote 92.

(877) *maiptɕa!*

ma-ipt-ɕ-a

NEG-sleep-TR-SUP

“I won’t sleep!”

(TD 258.8 [elicited])

(878) *majoktɕa!*

ma-jok-tɕ-a

NEG-buy-TR-SUP

“I am not buying (this)!”

(TD 258.5 [elicited])

15.3 Periphrastic forms

It is most sensible to classify periphrastic constructions based on the non-finite verb forms that they are based on. Accordingly, we may distinguish between five different classes of periphrastic verb forms: (1) forms that are based on the infinitive, (2) forms that are based on the progressive participle, (3) forms that are based on the active participle, (4) forms that are based on the converb, and (5) forms that are based on other non-finite verb forms. All of these forms are discussed in the following subsections.

15.3.1 Forms based on the infinitive

15.3.1.1 Infinitive + *jen-* “generic present tense”

The combination of a verbal infinitive form followed by the equative copula *jen-* expresses a generic present tense. In affirmative statements, the equative copula is cliticized to the infinitive form. In the case of the conjunct copula form *=jen*, this process triggers the deletion of the cliticized constituent, hence *ra-men=jen* “come-INF=EQ.CJ” > [*ramen*]. In the case of the disjunct copula forms *=jendzi* / *=jentɕʰok*, the process causes the deletion of the first syllable of the cliticized constituent, hence *ra-men=jendzi* “come-INF=EQ.DJ.SG” > [*ramendzi*] and *ra-men=jentɕʰok* “come-INF=EQ.DJ.PL” > [*ramentɕʰokʰ*]. In negated statements, the copula still surfaces as a separate phonological word with a distinctive pitch accent, hence *ra-men men* “come-INF NEG.EQ.CJ” > [*ramen men*] and *ra-men mendzi* “come-INF NEG.EQ.DJ” ⇔ [*ramen mendzi*].

Speakers use the generic present tense to refer to events that always hold true and represent common knowledge. Accordingly, the generic present tense may have strong habitual connotations in combination with animate referents.

(879) *totkuŋtɕi gwaŋmen melokmaŋtɕi gwaŋmen tinanmaŋtɕi gwaŋmen ...*

<i>tot=kuŋ=tɕi</i>	<i>gwaŋ-men=jen</i>	<i>melok=maŋ=tɕi</i>
Tod=LOC=ABL	come.PL-INF=EQ.CJ	Pattan=ALL=ABL
<i>gwaŋ-men=jen</i>	<i>tinan=maŋ=tɕi</i>	<i>gwaŋ-men=jen</i>
come.PL-INF=EQ.CJ	Tinan=ALL=ABL	come.PL-INF=EQ.CJ

“They come out of the Tod Valley, from the Pattan Valley, from the Tinan Valley
... .”

(Tshechu 1.12)

(880) *matpaɕi dzanare dzamen liktɕum ka apa.*

<i>mat-pa=ɕi</i>	<i>dzanare</i>	<i>dzamen</i>	<i>lik-tɕ-um=jen</i>
lower.valley-NZR=PL	very.much	food	make-TR-INF=EQ.CJ
<i>ka</i>	<i>apa</i>		
ASS	AUTH		

“The people from the lower valley make a lot of different dishes.”

(Conversation 16.111)

Generic present tense forms may not only have present tense reference, but may likewise denote events that will take place in the future. This functional interrelation of the two temporal domains seems natural, as events that are always true are by definition not restricted to the present tense domain, but are bound to hold true for the future tense domain as well. Consider the following examples.

(881) *nitsi ranaŋ wa soj ramen men apa.*

<i>nitsi</i>	<i>ra=naŋ</i>	<i>wa</i>	<i>soj</i>	<i>ra-men</i>	<i>men</i>
sun	come=COND	FOC	cold	come-INF	NEG.EQ.CJ
<i>apa</i>					
AUTH					

“When the sun comes out, it will not be cold anymore.”

(Conversation 22.201)

(882) *kʰjaktsi tʰaraŋ eltsʰala miʒi deŋmen mentɕʰok.*

<i>kʰjak=tsi</i>	<i>tʰaraŋ</i>	<i>el-tsʰa=la</i>	<i>mi=ɕi</i>
here=ABL	that.other.place	go-PST.PL=ANTER	person=PL
<i>deŋ-men</i>	<i>mentɕʰok</i>		
believe-INF	NEG.EQ.DJ.PL		

“Having gone from here to that other place (without proof of our deeds), people will not believe us (that we killed the demon).”

(King Kesar 272)

Finally, the generic present tense may also refer to events that occurred in the past. This use implies that the respective events took place recurrently in the past, but do no longer occur now. This is illustrated by the following example, which is taken from a recording in which my main consultant’s wife tells about the living conditions in Lahaul in the mid-20th century.

(883) *dardzi: noj gwamen nwa:stok. wa kudzuŋtsi ras jokdʒi riktɕum. wa nuŋ kjuma dardzi: rikdzala pʰantɕum.*

<i>dardzi:LN</i>	<i>noj</i>	<i>gwa-men=jen</i>	<i>nwa:stok</i>	<i>wa</i>
tailor	many	EX.PL-INF=EQ.CJ	at.that.time	FOC
<i>kudzu=maŋ=tsi</i>	<i>ras</i>	<i>jok-ø-dʒi</i>	<i>rik-tɕ-um=jen</i>	
Kullu.Valley=ALL=ABL	cotton	buy-TR-CVB	bring-TR-INF=EQ.CJ	
<i>wa</i>	<i>nuŋ</i>	<i>kjuma</i>	<i>dardzi:LN</i>	<i>rik-ø-dza=la</i>
FOC	there	home	tailor	bring-TR-PST=ANTER
<i>pʰan-tɕ-um=jen</i>				
sew-TR-INF=EQ				

“In those days, there were many tailors. People used to buy cotton from the Kullu Valley and bring (the tailors to their homes). Having brought tailors there, to their homes, they would sew clothes.”

(Tshechu 2.3)

15.3.1.2 Infinitive + *ni-* “inferential future tense” / “past conditional”

The infinitive form of a verb can be combined with the existential copula *ni-* to derive two different constructions: (1) an inferential future tense and (2) a past conditional. The inferential future tense is formed with the present tense forms of the existential copula. The resulting construction is structurally and functionally analogous to the inferential forms of the equative copula (see § 14.2.3) and the possessive copula (see § 14.5.4).

Speakers use the inferential future tense in contexts in which they can infer that a given event will occur in the future. The inferential future tense with *ni-* is thus functionally contiguous to the inferential future tense based on the copula *de-* (see § 15.3.1.3 below). The difference between the two constructions is that the inferential future tense in *ni-* refers to an inference that is based on a speaker's general knowledge of the world, while the inferential future tense with *de-* refers to an inference that is grounded on some kind of direct evidence. Consider the following examples.

(884) *bas ramen ni: riŋgare.*

<i>bas_{LN}</i>	<i>ra-men</i>	<i>ni:</i>	<i>riŋ-k-are</i>
bus	come-INF	EX.NON1SG	say-INTR-PRS.DJ.SG

“‘The bus will be coming / must be coming soon’, he says.”

(TDrol unrec 2)

(885) *dillit̃ai gwaŋmen gwak.*

<i>dilli=t̃ai</i>	<i>gwaŋ-men</i>	<i>gwak</i>
Delhi=ABL	come.PL-INF	EX.NON1PL

“They will be coming / must be coming from Delhi.”

(Conversation 79.7)

It is important to note that the combination of an infinitive form and the existential copula does not always express an inferential future tense, but may also express a more literal meaning, viz. the (not) taking place of the event denoted by the predicate. In the following, I will refer to this construction as the “infinitive predication construction”. The infinitive predication construction is illustrated in the following examples.

(886) *lwasmen mej apa amaawazok da ɕit̃a astok lwasmen mej.*

<i>lwat-s-men</i>	<i>ma-ni:</i>	<i>apa</i>	<i>awa-ama=ɕi=tok</i>
forget-DETR-INF	NEG-EX.NON1SG	AUTH	father-mother=PL=DAT
<i>da</i>	<i>ɕit̃-a=astok</i>	<i>lwat-s-men</i>	<i>ma-ni:</i>
now	die-MID-SUP=TERM	forget-DETR-INF	NEG-EX.NON1SG

“The parents will not forget, until they die, they will not forget.” (lit. “There is not forgetting for the parents ...”)

(Conversation 22.262)

(887) *betezi gwaŋmen mej awaamazi gwaŋmen mej.*

<i>bete=ɕi</i>	<i>gwaŋ-men</i>	<i>ma-ni:</i>	<i>awa-ama=ɕi</i>
child=PL	come.PL-INF	NEG-EX.NON1SG	father-mother=PL
 <i>gwaŋ-men</i>	 <i>ma-ni:</i>		
come.PL-INF	NEG-EX.NON1SG		

“The children do not come (to Lahaul), the parents do not come (to Lahaul).” (lit. “As for the children, there is no coming”)
(Tshechu 2.18)

As the examples given above illustrate, the inferential future tense construction and the infinitive predication construction exhibit a different syntactic structure. In the case of the inferential future tense construction, the infinitive has the status of the copula complement, whereas in the case of the infinitive predication construction, the infinitive complement possesses the status of the copula theme and thus agrees with the existential copula in terms of person (third person) and number (singular).

The past conditional construction is formed with infinitive form of a verb and the past tense of the existential copula *ni-*. This construction refers to an event that could have occurred in the past, but eventually did not take place. The form often has a strong obligative connotation, that is to say, it may indicate that a certain event was expected to occur, but eventually did not take place. Depending on the pragmatic context, the Bunan past conditional can thus be translated into English with the conditional perfect constructions *would have ...* or *should have*

(888) *gi:sar on liktɕum nindza.*

<i>gi:sar_{LN}</i>	<i>on_{LN}</i>	<i>lik-tɕ-um</i>	<i>nindza</i>
water.heater	on	make-TR-INF	EX.PST.SG

“I should have switched on / was supposed to switch on the water heater.” (The speaker eventually forgot to switch on the water heater)
(SA unrec 21)

Past conditional constructions are often combined with non-finite conditional clauses to form complex sentences. The event referred to in the non-finite clause is then portrayed as a precondition for the event denoted by the finite clause. Consider the following examples.

(889) *tal makjanaŋ wa kulik tʃakdʒi el tʃirtum nindza apa.*

<i>tal</i>	<i>ma-kja=naŋ</i>	<i>wa</i>	<i>kulik</i>	<i>tʃak-ø-dʒi</i>
3[SG]	NEG-become=COND	FOC	key	put.inside-TR-CVB
<i>el=tʃir-tə-um</i>	<i>nindza</i>	<i>apa</i>		
go=send-TR-INF	EX.PST.SG	AUTH		

“If he would not have been here, we would have locked the house and left.”

(Conversation 22.216)

(890) *tal ŋaj ɕensanaŋ bas ɕortum manindza.*

<i>tal</i>	<i>ŋaj</i>	<i>ɕen-s-ɕ-dza=naŋ</i>	<i>bas_{LN}</i>	<i>ɕor-tə-um</i>
3[SG]	early	raise-DETR-MID-PST.SG=COND	bus	miss-TR-INF

ma-nindza

NEG-EX.PST.SG

“If he would have gotten up early, he would not have missed the bus.”

(TD 233.4 [elicited])

The past conditional construction is the only construction in Bunan in which experiencer backgrounding triggers the inversion of subject and object. This phenomenon is described in § 12.3.2.4 in more detail.

15.3.1.3 Infinitive + *de-* “inferential future tense”

As mentioned in the previous section, Bunan does not only possess an inferential future tense that is based on the infinitive followed by the existential copula *ni-*, but also exhibits a functionally contiguous construction that is based on the infinitive and the attributive copula *de-*. The first construction indicates that a speaker makes an inference about a future event based on his overall knowledge of the world, whereas the latter implies that the speakers make an inference based on some kind of direct evidence that is currently available to her / him. This is illustrated by the following examples.

(891) *təuj milek kjamen de təuj milek kjaʔhok djwak.*

<i>təuj</i>	<i>mi=lek</i>	<i>kja-men</i>	<i>de</i>	<i>təuj</i>	<i>mi=lek</i>
ten	person=APP	become-INF	ATT.SG	ten	person=APP
<i>kja-təʔhok</i>		<i>djwak</i>			
become-PST.INFER.DJ.PL		two.days.ago			

“There will be about ten people (in the monastery), (the number of inhabitants) increased to about ten people recently.”

(Tshechu 2.490)

(892) *da gi khjak khrestoktəi ətəum de tətəi.*

<i>da</i>	<i>gi</i>	<i>khjak</i>	<i>khres=tok=təi</i>	<i>ət-ə-um</i>	<i>de</i>
now	1SG	here	hunger=DAT=ABL	die-MID-INF	ATT.SG
<i>tət-dzi</i>					
think-PST.INFER.DJ.SG					

“Now, here I might die from hunger.”

(The Prodigal Son 17)

In (891), the speaker used the inferential future tense construction based on the attributive copula *de-* because she had heard about the fact that about ten people were going to live at the new monastery. In (892), the use of the same construction is motivated by the fact that the speaker makes an inference based on his direct perception of his momentary living conditions.

15.3.1.4 Infinitive + *ta-* “obligative future tense” / “volitional past tense”

Verbal infinitives can be combined with the possessive copula *ta-* to form two periphrastic constructions: (1) an obligative future tense and (2) a volitional past tense. The obligative future tense is formed with the present tense form of the possessive copula. The resulting construction expresses that the subject is obliged to perform the action referred to by the main verb. Consider the following examples.

(893) *gi niskiŋ buʔa tsuk-tə-um taː.*

<i>gi</i>	<i>niskiŋ</i>	<i>buʔa</i>	<i>tsuk-tə-um</i>	<i>taː</i>
1SG	two	tree	plant-TR-INF	POSS.1SG

“I have to plant two trees.”

(ST unrec 5)

(894) *kʰjak dzɔra wa bristɕum tanəŋ bri!*

<i>kʰjak</i>	<i>dzɔt-a</i>	<i>wa</i>	<i>bris-tɕ-um</i>	<i>ta=naŋ</i>
here	sit-IMP.SG	FOC	write-TR-INF	POSS=COND

bris-a

write-IMP.SG

“You stay here and write whatever you have to write!”

(DP unrec 15)

The volitional past tense, on the other hand, is formed with the past tense form of the possessive copula. The construction expresses that the subject intended to perform an action at some point in the past, but eventually did not manage to do so.

(895) *gi ɕimla=maŋ el-men tandza.*

<i>gi</i>	<i>ɕimla=maŋ</i>	<i>el-men</i>	<i>tandza</i>
1SG	Shimla=ALL	go-INF	POSS.PST.SG

“I wanted to go to Shimla.”

(TD 276.9 [elicited])

(896) *dordʒedzi kudzuŋ kjum likɕum tandza.*

<i>dordʒe=dzi</i>	<i>kudzu=maŋ</i>	<i>kjum</i>	<i>lik-tɕ-um</i>
Dorje=ERG.SG	Kullu.Valley=ALL	house	make-TR-INF

tandza

POSS.PST.SG

“Dorje wanted to build a house in Kullu.”

(TD 305.6 [elicited])

15.3.2 Forms based on the progressive participle

15.3.2.1 *Progressive participle + ni- “progressive aspect”*

Bunan possesses a periphrastic progressive construction, which portrays an action as an ongoing and durative event. The progressive construction is formed by combining a progressive participle with the existential copula *ni-*. Progressive forms only rarely occur in my corpus of natural discourse. This is most probably a consequence of the fact that the construction is only weakly grammaticalized. Bunan speakers most often use the simple present tense to refer to ongoing events (cf. § 15.2.1.1). The following example sentences illustrate the use of the progressive construction.

(897) *gi ini: tɛlnaŋ kjumaj bonʔhek len likka kjaŋka na:*.

<i>gi</i>	<i>ini=ki</i>	<i>tɛl=naŋ</i>	<i>kjuma=ki</i>	<i>bonʔhek</i>
1SG	2[SG].HON=GEN	concern=CON	house=GEN	for.the.sake
<i>len</i>	<i>lik-ka</i>	<i>kjaŋka</i>	<i>na:</i>	
work	do-PROG	permanently	EX.1SG	

“For your sake and the sake of our house, I am permanently working.”

(The Prodigal Son 51)

(898) *... tʰukpa likka gwantsʰa na ...*.

<i>tʰukpa</i>	<i>lik-ka</i>	<i>gwantsʰa=na</i>
soup	make-PROG	EX.PST.PL

“... they were making soup, it is said,”

(Conversation 87.170)

Non-first person singular present progressive forms (*V-ka ni:*) may be easily confounded with assertive future tense forms (*V-kani:*; cf. § 15.2.1.3). In fast speech, the two verb forms may be pronounced in the same way, e.g. *ra-ka ni:* [*ra:ni:*] “come-PROG.SG EX.NON1SG” “(She / he / it) is coming” vs. *ra-kani:* [*ra:ni:*] “come-ASSER.NON1SG” “(She / he / it) will (definitely) come”. Accordingly, the exact interpretation of such a verb form depends on the pragmatic context. However, note that the two constructions can be clearly distinguished when negated, as the negation occurs on the copula in case of the progressive construction (hence *ra-ka ma-ni:* [*ra: mani:*] “(She / he / it) is not coming”), whereas it occurs in front of the verb root in case of the assertive future tense construction (hence *ma-ra-kani:* [*mara:ni:*] “(She / he / it) will (definitely) not come”).

15.3.3 Forms based on the active participle

15.3.3.1 Active participle + *jen-* / *ni-* “habitual aspect”

The active participle can be combined with the equative copula *jen-* or the existential copula *ni-* to express a habitual aspect, i.e. to refer to an event that has been occurring repeatedly in the past and is likely to occur again in the future. The copula determines the relationship that holds between the knowledge contained in the proposition and the knowledge of the speaker.

The equative copula portrays the proposition as a generic fact that may either be based on the speaker’s personal experience (conjunct form) or on common knowledge (disjunct form). It is also possible to combine the active participle with an inferential form of the equative copula (i.e. *jen-men ni:* and *jen-men de*, cf. § 14.2.3) to indicate that the proposition is based on inferred knowledge. Since the equative copula does not possess

an inherent temporal value, the respective constructions can have present, past, or future tense reference, with the exact interpretation depending on the pragmatic context. The following example sentences illustrate the use of habitual forms that are based on the equative copula.

(899) *loktɕi jen la?*

<i>lok-tɕ-i</i>	<i>jen=la</i>
study-TR-ACT	EQ.CJ=Q

“Is he studying?”

(Conversation 14.85)

(900) *... eraŋmi hoɕmej jaksɪ jentɕʰok ka.*

<i>eraŋ-mi</i>	<i>hoɕmej</i>	<i>jaks-i</i>	<i>jentɕʰok</i>	<i>ka</i>
1PL.INCL-person	very.much	speak.badly-ACT	EQ.DJ.PL	ASS

“... our people speak very badly (about such people).”

(Conversation 1.17)

(901) *meme tʰadzu bubu tɕakna tʰaŋtɕi jendzɪ ...*

<i>meme</i>	<i>tʰadzu</i>	<i>bubu</i>	<i>tɕakna</i>	<i>tʰaŋ-tɕ-i</i>	<i>jendzɪ</i>
monk	that	owl	daily	see-TR-ACT	EQ.DJ.SG

“The monk saw that owl every day”

(The Lama and the Owl 5)

(902) *guspatsʰi liktɕi jenmen de.*

<i>gus-pa=tsʰi</i>	<i>lik-tɕ-i</i>	<i>jen-men</i>	<i>de</i>
Gushal-NZR=ERG.PL	make-TR-ACT	EQ-INF	ATT.SG

“The people from Gushal must be the organizers (of the festival).”

(Conversation 39.12)

It is important to note that verbs pertaining to the intransitive and middle conjugations possess generic habitual forms that are highly reminiscent of generic past tense forms in terms of their morphological structure. The similarities and differences between the two constructions are discussed in § 15.3.3.2 below in more detail.

As noted above, habitual aspect constructions can also be based on the existential copula *ni-*. The existential copula portrays a proposition as a fact without specifying the way in which it relates to the speaker’s knowledge. The present tense form of the existen-

tial copula commonly refers to habitual events that still hold true at the moment of speaking, whereas the past tense form refers to habitual events that used to occur in the past. This is illustrated by the following examples.

(903) *gi ta kʰjak laŋɕi kekir dzaj na:. apa dzaj mani:.*

<i>gi=ta</i>	<i>kʰjak</i>	<i>laŋ-s-ɕ-i</i>	<i>kekir</i>	<i>dza-i</i>
1SG=AVS	here	raise-DETR-MID-ACT	flatbread	eat-ACT
<i>na:</i>	<i>apa</i>	<i>dza-i</i>	<i>ma-ni:</i>	
EX.1SG	grandmother	eat-ACT	NEG-EX.NON1SG	

“But I eat flatbread that is made of leavened dough (when I am) here (in Kullu). Grandmother does not eat it.”
(Conversation 74.29)

(904) *tal arak tuŋi nindza.*

<i>tal</i>	<i>arak</i>	<i>tuŋ-i</i>	<i>nindza</i>
3[SG]	alcohol	drink-ACT	EX.PST.SG

“He used to drink alcohol (but does not drink anymore).”
(TD 88.5 [elicited])

However, there are some instances in my corpus of natural discourse in which the present tense form of the existential copula refers to a past event. Consider the example given below.

(905) *tete bras noj dzaj mani: apa. durek dzaj ni:.*

<i>tete</i>	<i>bras</i>	<i>noj</i>	<i>dza-i</i>	<i>ma-ni:</i>	<i>apa</i>
grandfather	rice	much	eat-ACT	NEG-EX.NON1SG	AUTH
<i>durek</i>	<i>dza-i</i>	<i>ni:</i>			
before	eat-ACT	EX.NON1SG			

“Grandfather does not eat a lot of rice. In the past, he used to eat rice.”
(Conversation 16.81)

At present, it is not clear whether there is a functional difference between present tense habitual forms with past tense reference and past tense habitual forms. According to my consultants, *ni:* and *nindza* can be substituted for each other in such contexts. Further research is needed to determine the exact functional differences between the two types of habitual constructions.

15.3.3.2 (Detransitivized) active participle + jen- “generic past tense”

A generic past tense form can be derived by combining the active participle with the equative copula *jen-*. The three conjugation classes employ different morphosyntactic strategies to derive the generic past tense. Verbs that belong to the intransitive and middle conjugations combine a simple active participle with a form of the equative copula. Verbs of the transitive conjugation form their generic past tense by combining a detransitivized active participle with the equative copula. The different constructions are exemplified in the scheme given below:

Morphological structure of the generic past tense

(a) intransitive conjugation

<i>V-i</i>	+	<i>jen-</i>
V-ACT	+	EQ-

(b) middle conjugation

<i>V-ǝ-i</i>	+	<i>jen-</i>
V-MID-ACT	+	EQ-

(c) transitive conjugation

<i>V-s-ǝ-i</i>	+	<i>jen-</i>
V-DETR-MID-ACT	+	EQ-

The structure of the transitive generic past tense suggests that this construction started out as a periphrastic passive, but subsequently became reanalyzed as an active construction. A possible scenario that describes the functional reanalysis of this former passive construction as an active construction is discussed in § 12.3.2.2.

As mentioned in the preceding section, the generic past tense construction of intransitive and middle verbs strongly resembles the habitual aspect construction. The crucial difference between the two constructions lies in the degree of cliticization of the equative copula. In the case of the habitual construction, the copula usually surfaces as a separate phonological word or is at most weakly cliticized to the preceding participle form, hence *ra-i jendzi* [ræj jendzi] ~ *ra-i=jendzi* [ræjendzi] “come-ACT(=)EQ.DJ.SG”. In the case of the generic past tense construction, the copula tends to be strongly cliticized to the preceding active participle and to surface in a phonologically truncated form, hence *ra-i=jendzi* [ræjeɛ ~ ræjeɛ] “come-ACT=EQ.DJ.SG”. Accordingly, it is often possible to distinguish between the two types of constructions based on their phonetic realization. However, it is important to note that the equative copula does not necessarily need to be cliticized to the active participle in the generic past tense. In careful and slow speech, speakers often pronounce the equative copula as a separate phonological word. Moreover, the disjunct plural form =*jentɕʰok* never cliticizes to the preceding active participle in the ge-

neric past tense forms. Accordingly, a form like *el-i jentə^{hok}* “go-ACT EQ.DJ.PL” can either be interpreted as a habitual aspect construction (“They go / used to go”) or a generic past tense construction (“They went”). In such cases, the exact interpretation of the verb form entirely depends on the pragmatic context.

Speakers commonly use the generic past tense construction to describe events that took place in the distant past (cf. § 13.4.3). Accordingly, such verb forms most often occur in traditional myths and epics or biographical accounts of events that took place a long time ago. This is illustrated by the following example sentences. (906) has been taken from a traditional story about the mythical hero King Kesar, while (907) has been adopted from an autobiographical report by my main consultant about events that had taken place five decades earlier.

(906) *tʰadzu gjapo kʰanak kinʒi jen lotnaŋ sare tal tʰuŋsi jen lotnaŋ sare tʰadzuj miks jendʒi.*

<i>tʰadzu</i>	<i>gjapo</i>	<i>kʰanak</i>	<i>kin-ɕ-i=jen</i>	<i>lot=naŋ=sare</i>
that	king	how	be.born-MID-ACT=EQ.CJ	say=COND=EMPH
<i>tal</i>	<i>tʰuŋs-i=jen</i>	<i>lot=naŋ=sare</i>	<i>tʰadzu=ki</i>	
3[SG]	be.reborn.HON-ACT=EQ.CJ	say=COND=EMPH	that=GEN	
<i>miks</i>	<i>jendʒi</i>			
story	EQ.DJ.SG			

“As for how that king was born and how he was reborn, it is the story about that.”
(King Kesar 6)

(907) *nospok jen loəi jen gidzi.*

<i>nospok</i>	<i>jen</i>	<i>lot-s-ɕ-i=jen</i>	<i>gi=dzi</i>
true	EQ.CJ	say-DETR-MID-ACT=EQ.CJ	1SG=ERG.SG

“‘It is true!’, I said.”
(Zhangzhung 71)

However, the generic past tense may not only refer to events that belong to the distant past. My corpus of natural data contains several instances of generic past tense constructions referring to events that took place in the recent past. This is illustrated by the following example sentences. The generic past tense form *ra-i=jendʒi* “come-ACT=EQ.DJ.SG” in (908) denotes an event that had taken place two years earlier, whereas the generic past tense form *el-i jentə^{hok}* “go-ACT EQ.DJ.PL” in (909) refers to an event that had occurred earlier on the same day.

(908) *dwaŋ rajeŋ tal.*

<i>dwaŋ</i>	<i>ra-i=jendzi</i>	<i>tal</i>
two.years.ago	come-ACT=EQ.DJ.SG	3[SG]

“Two years ago he came.”

(Conversation 25.2)

(909) *lasmitsuk radzala ɲampo ʂeʂenpaŋ eli jentɕʰok.*

<i>lasmi=tsuk</i>	<i>ra-dza=la=ɲampo</i>	<i>ʂeʂen-pa=maŋ</i>
woman=DEF	come-PST.SG=ANTER=COM	Sheshen-NZR=ALL
<i>el-i</i>	<i>jentɕʰok</i>	
go-ACT	EQ.DJ.PL	

“After the woman had come, we went to the Sheshenpa family together.”

(Conversation 22.2)

These considerations demonstrate that the generic past tense construction may both refer to events that belong to the remote past and events that occurred in the recent past. Accordingly, the use of the generic past tense construction is not governed by the degree of temporal remoteness, but motivated by its generic evidential value. The interaction of generic evidentiality with temporal reference is discussed in § 13.4.3.

15.3.3.3 Active participle + nominalizer + jen- “generic disjunct future tense”

The active participle serves as a derivational basis for a periphrastic construction that I refer to as the “generic disjunct future tense”. This verb form is derived from a nominalized form of an active participle followed by the equative copula *jen-*. The following scheme illustrates the morphological structure of the generic disjunct future tense for the three conjugations.

Morphological structure of the generic disjunct future tense

(a) intransitive conjugation

<i>V-i-pa=jendzi</i>	<i>V-i-pa=jentɕʰok</i>
V-ACT-NZR=EQ.DJ.SG.SG	V-ACT-NZR=EQ.DJ.PL

(b) middle conjugation

<i>V-ɕ-i-pa=jendzi</i>	<i>V-ɕ-i-pa=jentɕʰok</i>
V-MID-ACT-NZR=EQ.DJ.SG	V-MID-ACT-NZR=EQ.DJ.PL

(c) transitive conjugation

<i>V-tɕ-i-pa=jendzi</i>	<i>V-tɕ-i-pa=jentɕʰok</i>
V-TR-ACT-NZR=EQ.DJ.SG	V-TR-ACT-NZR=EQ.DJ.PL

The generic disjunct future tense construction is currently becoming grammaticalized from a predicate nominal construction that expresses proper inclusion. Accordingly, a clause such as *tal kan-tə-i-pa jendzi* “3[SG] watch-TR-ACT-NZR EQ.DJ.SG” can have two possible interpretations in Bunan. It can be translated as a predicate nominal with the meaning “She / he is a watcher / one who watches”¹²⁵ or it can be translated as a future tense form with the meaning “She / he will watch”. The predicate nominal construction and the generic disjunct future tense are still largely homophonous in Bunan, but there is evidence that the two constructions are gradually becoming more and more dissociated from each other. There are several pieces of evidence for this claim. First, the agentive nominalizer *-pa* can usually only occur on “unergative verbs”. A verb from such as ***dat-i-pa* “**fall-ACT-NZR” “one who falls” would be rejected as ungrammatical by Bunan speakers (cf. § 4.3.2). However, this restriction does not hold for the generic disjunct future tense. It is perfectly possible to have a clause *tal dat-i-pa=jendzi* “3[SG] fall-ACT-NZR=EQ.DJ.SG” “She / he will fall”. Accordingly, the nominalizer *-pa* has lost its agentive semantics in combination with the periphrastic future tense construction. Second, the equative copula tends to be strongly cliticized to the nominalized verb form in the generic disjunct future tense. Especially the singular form of the equative copula is often reduced to an alveo-palatal fricative, i.e. *dat-i-pa=jendzi* [*dæʔjpae*]. Third, there is evidence for an ongoing shift in the locus of negation. Usually, the generic disjunct future tense is negated by prefixing the negative prefix *ma-* to the equative copula, e.g. *dat-i-pa mendzi* “3[SG] fall-ACT-NZR NEG.EQ.DJ.SG” “She / he will not fall”. However, there are a small number of instances in my corpus of natural discourse in which the negation occurs on the main verb, e.g. *ma-dza-i-pa=jendzi* “NEG-eat-ACT-NZR=EQ.DJ.SG” “He will not eat”. This indicates that the copula is currently losing its status as an independent grammatical word and will at some point be reanalyzed as a grammatical morpheme.

It is important to note that the generic disjunct future tense does not possess a corresponding conjunct form. In other words, there is no analogous construction ***V-i-pa=jen*. A clause such as *ipt-ə-i-pa jen* “sleep-MID-ACT-NZR EQ.CJ” would only be understood as a predicate nominal with the meaning “(She / he) is somebody who sleeps (a lot)” but not as a future tense form with the meaning “(She / he) will sleep”.

The generic disjunct future tense can refer to events that will take place in the near future as well as events that will occur in the distant future. The exact semantic interpretation of a specific disjunct future tense form mainly depends on the pragmatic context, but

¹²⁵ Note that the translation of *jendzi* as “is” is somewhat inaccurate, as the equative copula does not possess an inherent temporal value (cf. § 14.2.2).

may also be sensitive to the epistemic accessibility of the event denoted by a given verb. Consider the following example sentence.

(910) *gidzi the len lik-tɛ-i-pa=jendzi.*

<i>gi=dzi</i>	<i>the</i>	<i>len</i>	<i>lik-tɛ-i-pa=jendzi</i>
1SG=ERG.SG	this	work	make-TR-ACT-NZR=EQ.DJ.SG

“I will do this work.” (distant future)

(TD 242.7 [elicited])

A sentence such as the one given above is likely to be interpreted as referring to a temporally remote event. This interpretation is a result of the fact that the subject is coreferent with the epistemic source and the fact that the verb *lik-tɛ-um* “to make” is a privileged access verb. The combination of these two factors suggests that the subject lacks a clear conception of when, where and under which circumstance she / he will be able to perform the respective action (cf. § 13.3.3). Accordingly, the verb form is interpreted as referring to an event that will take place in the distant future.

In the following, I provide a number of example sentences that illustrate the use of the generic disjunct future tense.

(911) *the bris-s-ɛ-i=tsuk tʃanji kan=nan tʃat-i-pa=jentɕʰok.*

<i>the</i>	<i>bris-s-ɛ-i=tsuk</i>	<i>tʃanji</i>	<i>kan=nan</i>
this	write-DETR-MID-ACT=REL	all	show=COND

<i>awa-ama=ɕi</i>	<i>tʃat-i-pa=jentɕʰok</i>
father-mother=PL	be.happy-ACT-NZR=EQ.DJ.PL

“When he will show them all these written things, his father and mother will be happy.”

(Conversation 25.101)

(912) *da tʃan sonam kjumamanj elipaendzi.*

<i>da</i>	<i>tʃan</i>	<i>sonam</i>	<i>kjuma=manj</i>	<i>el-i-pa=jendzi</i>
now	today	Sonam	home=ALL	go-ACT-NZR=EQ.DJ.SG

“Now today Sonam will go home.”

(TD unrec 45)

(913) *manurok p^hanipaɛ*.

manu=tok *p^han-i-pa=jendzi*

Manuel=DAT be.beneficial-ACT-NZR=EQ.DJ.SG

“This will be beneficial for Manuel.”

(Conversation 87.355)

15.3.4 Forms based on the converb

15.3.4.1 Converb + *ni-* / *ta-* “resultative”

The converb endings *-dzi* (singular) and *-tɕ^{hi}* (plural) serve as a basis for two types of resultative constructions: (1) an intransitive resultative and (2) a transitive resultative. As the label “resultative” implies, these constructions refer to states that arise in the consequence of a prior event (cf. Dahl 1985: 133–135).

The intransitive resultative can be formed for both monovalent and plurivalent verbs. The following table illustrates the morphological structure of intransitive resultatives depending on the conjugation class membership of a given verb.

Morphological structure of the intransitive resultative

(a) intransitive conjugation

V-dzi ni-

V-CVB.SG EX.SG-

V-tɕ^{hi} gwa-

V-CVB.PL EX.PL-

(b) middle conjugation

V-ɕ-dzi ni-

V-MID-CVB.SG EX.SG-

V-ɕ-tɕ^{hi} gwa-

V-MID-CVB.PL EX.PL-

(c) transitive conjugation

V-s-ɕ-dzi ni-

V-DETR-MID-CVB.SG EX.SG-

V-s-ɕ-tɕ^{hi} gwa-

V-DETR-MID-CVB.PL EX.PL-

In combination with monovalent verbs, the intransitive resultative can have two possible construals depending on whether it is formed from an atelic verb or a telic verb. In combination with atelic verbs, the construction indicates that the subject has entered a state after having completed the activity referred to by the respective verb. Accordingly, such verb forms are best translated into English as present perfects, e.g. *ra-dzi na*: “come-CVB.SG EX.1SG” “I have come” (lit. “Having come, I am here”). In combination with telic verbs, the construction indicates that the subject remains in the state that represents the endpoint of the process described by the respective verb. Accordingly, these verb forms do not equal English present perfects, but rather correspond to English progressive forms, e.g. *dʒot-dzi na*: “sit.down-CVB.SG EX.1SG” “I am sitting” (lit. “Having sat

down, I am here”). A number of examples that contain intransitive resultative forms of monovalent verbs are given in the following.

(914) *ja: urgjan radzi nindza ka.*

<i>ja:</i>	<i>urgjan</i>	<i>ra-dzi</i>	<i>nindza</i>	<i>ka</i>
yesterday	Urgyan	come-CVB.SG	EX.PST.SG	ASS

“Yesterday, Urgyan had come here (but now he is no longer here).”

(Conversation 49.8)

(915) *gi=nan manu dzot-tshi gwajk wa khjak.*

<i>gi=nan</i>	<i>manu</i>	<i>dzot-tshi</i>	<i>gwajk</i>	<i>wa</i>	<i>khjak</i>
1SG=CON	Manuel	sit-CVB.PL	EX.NON1PL	FOC	here

“I and Manu are here at home.” (lit. “... are sitting here ...”)

(Conversation 63.1)

(916) *ipte nindza la?*

<i>ipte-dzi</i>	<i>nindza=la</i>
fall.asleep-MID-CVB.SG	EX.PST.SG=Q

“Had you been sleeping?”

(Conversation 67.2)

As the scheme given above illustrates, verbs that follow the transitive conjugation form their intransitive resultative from a detransitized converb participle. Accordingly, such intransitive resultatives are either interpreted as anticausatives with a deleted agent argument (cf. § 12.3.2.1) or passives with a suppressed agent argument (§ 12.3.2.2). Resultative passives are most often agentless, but do not necessarily have to be. There are a few instances in my corpus of natural data in which the intransitive resultative of a plurivalent verb occurs with an overt agent argument. The following example sentences illustrate the use of intransitive resultatives that have been derived from plurivalent verbs.

(917) *nwa:stok tal pit-tai rolans sen-s-dzi niei.*

<i>nwa:stok</i>	<i>tal</i>	<i>pit-dzi</i>	<i>rolans</i>	<i>sen-s-dzi</i>
at.that.time	3[SG]	die-CVB.SG	rolangs	raise-DETR-MID-CVB.SG

ni-i=jendzi
EX.SG-ACT=EQ.DJ.SG

“At that time he had died and come back to life as a rolangs.”

(Conversation 87.322)

(918) *bukin likai ni: ringare.*

<i>bukin_{LN}</i>	<i>lik-s-ɛ-dzi</i>	<i>ni:</i>
booking	make-DETR-MID-CVB.SG	EX.NON1SG
<i>rin-k-are</i>		
say-INTR-PRS.DJ.SG		

“He says that the booking (for his flight home) is made.” (lit. “Having been made, the booking is there.”)
(Conversation 25.86)

(919) *ʰadzu kulik guj buai ni: e?*

<i>ʰadzu</i>	<i>kulik</i>	<i>guj</i>	<i>but-s-ɛ-dzi</i>	<i>ni:</i>
that	key	where	put-DETR-MID-CVB.SG	EX.NON1SG
<i>e</i>				
hey				

“Hey, where has that key been put?”
or: “Hey, where is that key (lying)?”
(Conversation 63.62)

(920) *gidzi soti gwatde daai ni:*

<i>gi=dzi</i>	<i>soti</i>	<i>gwat-de</i>	<i>da-s-ɛ-i</i>	<i>ni:</i>
1SG=ERG.SG	water	boil-SUP	give-DETR-MID-ACT	EX.NON1SG

“The water has been boiled by me.”
(TD unrec 33)

As noted in the beginning of this section, the intransitive resultative is not the only resultative construction that we encounter in Bunan. In addition to the intransitive resultative described above, there is another resultative construction that I refer to as the “transitive resultative”. The transitive resultative can only be formed from plurivalent verb stems that follow the transitive conjugation. The construction is based on a detransitivized converb participle and the possessive copula *ta-*. This copula is often cliticized to the preceding participial form, although some speakers pronounce it as a separate phonological word. The morphological structure of the transitive resultative is illustrated by the following scheme.

Morphological structure of the transitive resultative

(a) transitive conjugation

V-s-ɕ-dʒi(=)ta-

V-DETR-MID-CVB.SG(=)POSS-

V-s-ɕ-tɕʰi(=)ta-

V-DETR-MID-CVB.PL(=)POSS-

The transitive resultative essentially fulfills the same function as the intransitive resultative in combination with atelic verbs, that is to say, it indicates that a current state has arisen in consequence of a prior event. A number of example sentences that illustrate the use of the construction are given below.

(921) *gi=dzi kʰjak the tɕʰutoj dumbu rikɕi ta:*.

<i>gi=dzi</i>	<i>kʰjak</i>	<i>the</i>	<i>tɕʰuto=ki</i>	<i>dumbu</i>
1SG=ERG.SG	here	this	beak=GEN	piece

<i>rik-s-ɕ-dʒi</i>	<i>ta:</i>
bring-DETR-MID-CVB.SG	POSS.1SG

“Here, I have brought you this piece of the beak (of the demon).”

(King Kesar 288)

(922) *ʰe=dzi pjak-s-ɕ-i ta*

<i>ʰe=dzi</i>	<i>pijak-s-ɕ-i</i>	<i>ta</i>
this=ERG.SG	hide-DETR-MID-CVB.SG	POSS.NON1SG

<i>lot-ka</i>	<i>lot-ɕ-ta</i>	<i>ʰara</i>	<i>nitsi</i>
say-PROG	say-TR-PST.INFER.DJ	that.other	sun

“‘This one has hidden it’, he said, it is said, ‘that other thing, the sun.’”

(King Kesar 253)

(923) *ʰanɕek tikɕta:*.

<i>ʰan=ɕek</i>	<i>tik-s-ɕ-dʒi=ta:</i>
today=about	close-DETR-MID-CVB.SG=POSS.1SG

“These days, I have closed (my shop).”

(TL unrec 3)

(924) *gi tal=dok pʰjadzi pʰja: pʰja: tʰadzu peltsi lwaɕtaː.*

<i>gi</i>	<i>tal=tok</i>	<i>pʰja-dzi</i>	<i>pʰja-ka</i>
1SG	3[SG]=DAT	speak-CVB.SG	speak-PROG.SG

<i>pʰja-ka</i>	<i>tʰadzu</i>	<i>peltsi</i>	<i>lwat-s-ɕ-dzi=taː</i>
speak-PROG.SG	that	milk	forget-DETR-MID-CVB.SG=POSS.1SG

“I was talking with her and because we kept talking for some more time I have forgotten (to bring) that milk.”

(Conversation 16.4)

(925) *min lwaɕtaː.*

<i>min</i>	<i>lwat-s-ɕ-dzi=taː</i>
name	forget-DETR-MID-CVB.SG=POSS.1SG

“I have forgotten the name (of this village).”

(DP unrec 32)

From a diachronic point of view, the transitive resultative construction of Bunan is functionally reminiscent of early developmental stages of the Standard Average European *have*-perfect (cf. Bybee & Dahl 1989: 67–73). Originally, the transitive resultative must have been restricted to contexts in which the subject had obtained possession of some concrete object in the wake of some previous action. Such a context is given in (921), where the subject is in possession of the object that he is referring to. In contemporary Bunan, this resultative form could still receive the literal interpretation “I possess a brought piece of beak”. As the construction became more grammaticalized, it gradually lost its possessive character, which allowed for a functional extension to contexts in which the subject does no longer physically possess the object in question, such as in (924), or contexts in which the object is an abstract concept rather than a physical object, such as in (925).

As I argue in § 13.4.5.2, the resultative constructions discussed above most probably served as a starting point for the grammaticalization of the inferential past tense. In the course of this process, the resultative constructions lost their present tense relevance and developed into a finite inflected verb form that primarily refers to an event that occurred in the past. Again, this functional shift parallels the development of the perfect in certain Standard Average European languages in which the old *have*- and *be*-perfects have developed into past tenses (cf. Bybee & Dahl 1989: 73–77)

15.3.4.2 Converb + *el-men* “dynamic resultative”

Besides the resultative constructions discussed in the previous section, Bunan possesses another intransitive resultative construction, which I refer to as the “dynamic resultative”. This resultative construction is based on the converb participle and a finite inflected form of the light verb *el-men* “to go”. As the label “dynamic” indicates, the dynamic resultative profiles the process that causes a resultant state rather than the resultant state itself. Consider the following example sentence.

(926) *lak tsore henak ajna kʰjopɕi eldza tʰaj leptɕa astok.*

<i>lak=tsore</i>	<i>henak</i>	<i>ajna</i>	<i>kʰjops-dʒi</i>
hand=ENR	like.this	very.much	go.numb-CVB.SG
<i>el-dza</i>	<i>tʰaj</i>	<i>lep-tɕ-a=astok</i>	
go-PST.DIR.DJ.SG	up.there	reach-TR-SUP=TERM	

“By the time we reached up there, my hands and limbs had gone numb.”

(Conversation 44.4)

It would be perfectly possible to replace the dynamic resultative in the example sentence above with an intransitive resultative construction, i.e. *kʰjops-dʒi nindza* “go.numb-CVB.SG EX.PST.SG”. However, the main clause would then have a slightly different meaning. The dynamic resultative form *kʰjops-dʒi el-dza* portrays the developing of a numb feeling as an incremental and protracted process, whereas the intransitive resultative construction form exclusively focuses on the resultant state. Accordingly, the replacement of the auxiliary *nindza* with the light verb *el-dza* would change the meaning from a processual interpretation (i.e. “had gone numb”) to a stative interpretation (i.e. “were numb”).

Two further example sentences that illustrate the use of the dynamic resultative construction are given in the following.

(927) *tʰan ajna soj kjadʒi eldʒi.*

<i>tʰan</i>	<i>ajna</i>	<i>soj</i>	<i>kja-dʒi</i>	<i>el-dʒi</i>
today	very	cold	become-CVB.SG	go-PST.INFER.DJ.SG

“Today, it has become very cold.”

(Conversation 44.1)

(928) *the dustok ni: dzamliṅdok mi noj kja-tṣʰi el-tṣʰok.*

the *dus=tok=ni:* *dzamliṅ=tok* *mi* *noj* *kja-tṣʰi*
 this time=DAT=FOC world=DAT person many become-
 CVB.PL

el-tṣʰok

go-PST.INFER.DJ.PL

“As for nowadays, people have become numerous in this world.”

(Tulshug Lingpa 231)

15.3.5 Other periphrastic forms

15.3.5.1 V=*thir-tṣ-um* “*completive aspect*”

The verb *thir-tṣ-um* “to send” can be used to form a periphrastic construction that expresses a completive aspect. The relevant construction is formed by cliticizing the verb *thir-tṣ-um* to the bare stem of the main verb and is commonly used in combination with atelic verbs to indicate that the process denoted by a respective verb reaches a state of completion. Consider the following example sentences.

(929) *kʰolak dza thira.*

kʰolak *dza=thir-a*
 tsampa.dish eat=send-IMP.SG

“Finish the tsampa!”

(Conversation 13a.102)

(930) *soti turṅ thira!*

soti *turṅ=thir-a*
 water drink=send-IMP.SG

“Drink up the water!”

(Conversation 55.70)

However, the completive construction can also be formed from verbs that denote a telic event. In this case, the completive construction emphasizes that the process will reach a state of completion and often adds a note of immediateness.

(931) *but thira kitəa but thira but thira.*

<i>but=thir-a</i>	<i>ki-tə-a</i>	<i>but=thir-a</i>
put.down=send-IMP.SG	wash-TR-SUP	put.down=send-IMP.SG

“Stop doing the dishes! Do stop it at once!”

(Conversation 36.136)

(932) *manu pitaŋ tik thirnaŋ dɨk la?*

<i>manu</i>	<i>pitaŋ</i>	<i>tik=thir=naŋ</i>	<i>dɨk=la</i>
Manuel	door	close=send=COND	be.okay=Q

“Manuel, is it ok if I close the door completely?”

(DP unrec 10)

(933) *pur thirəien la?*

pur=thir-s-ə-i=jən=la
kill=send-DETR-MID-ACT=EQ.CJ=Q

“Did they kill him at once?”

(Conversation 22.231)

(934) *taltshɨ girok khet thirtəum.*

<i>tal=tsɨ</i>	<i>gi=tok</i>	<i>khet=thir-tə-um=jən</i>
3=ERG.PL	1SG=DAT	beat=send-TR-INF=EQ.CJ

“They will beat me at once.”

(The Lama and the Owl 29)

15.3.5.2 *Supine + kʰon-tə-um* “completive aspect”

Besides the completive construction based on the light verb *thir-tə-um*, which has been described in the preceding section, Bunan possesses another completive construction, which is based on the verb *kʰon-tə-um* “to finish”. The two constructions do not differ functionally, but rather diverge in terms of the degree to which they have been grammaticalized. The *thir*-construction is clearly more grammaticalized and also more productive than the *kʰon*-construction. This is reflected by the frequency of occurrence of the two constructions. The *thir*-construction occurs more than one hundred times in my corpus of natural data, whereas the *kʰon*-construction is only attested three times. The following example sentences illustrate the use of completive constructions formed with the verb *kʰon-tə-um*.

(935) *ʰadzu petʂa nama lanʂa kʰonmen ringare ...*

<i>ʰadzu</i>	<i>petʂa=nama</i>	<i>lanʂa</i>	<i>kʰon-ø-men</i>
that	book=all	buy-TR-SUP	finish-TR-PST.DIR.CJ

riŋ-k-are
say-INTR-PRS.DJ.SG

“He says that he has sold all those books.”

(Conversation 32.7)

(936) *atʂa: aqqa: lepʂa kʰonmen la?*

<i>atʂa:LN</i>	<i>aqqa:LN</i>	<i>lepʂa</i>	<i>kʰon-ø-men=la</i>
okay	station	reach-TR-SUP	finish-TR-PST.DIR.CJ=Q

“Okay, so you have reached the bus station?”

(Conversation 48.2)

15.3.5.3 =tʂot + ni- “assumptive resultative”

An assumptive resultative can be formed by cliticizing the ending =tʂot to a verb root. The clitic is additionally followed by the existential copula *ni-*, which agrees with the subject in terms of person and number. The clitic =tʂot is most probably related to the Written Tibetan noun *tʂhod* “measure, guess”. The assumptive resultative indicates that the speaker assumes that the subject may have attained a state as a consequence of a prior event. This is illustrated by the following example sentences.

(937) *... lokʂa kʰonŋi jendʒi jentsʂot ni: tal.*

<i>lokʂa</i>	<i>kʰon-s-ŋi=jendʒi</i>	<i>jen=tʂot</i>
learn-TR-SUP	end-DETR-MID-ACT=EQ.DJ.SG	EQ-ASSUM.RESUL

ni: tal
EX.NON1SG 3[SG]

“... he has completed his degree, he may have completed his degree by now.”

(Conversation 87.179)

(938) *tal kullu elʂot ni:.*

<i>tal</i>	<i>kullu</i>	<i>elʂot</i>	<i>ni:</i>
3[SG]	Kullu	go-ASSUM.RESUL	EX.NON1SG

“She may have gone to Kullu.”

(TD 290.11 [elicited])

15.3.5.4 Supine + pangata “apprehensive mood”

The supine may be combined with the verb forms *pangata* (singular) and *pangathat* (plural) to form an apprehensive future tense. This construction indicates a speaker’s concern that an event might take place in the future. The verb forms *pangata* and *pangathat* must originally have been assertive future tense forms (cf. § 15.2.1.3) of a lexical verb **paŋ-tə-um*. However, the root *paŋ-* does no longer exist as a lexical verb stem in Bunan, but only survives in the two forms given above. This is reflected by the fact that native speakers are not able to assign any concrete lexical meaning to the verb root *paŋ-*. Accordingly, I have decided not to analyze the forms *pangata* and *pangathat* as morphologically complex, but to gloss them as “APPR.SG” and “APPR.PL”, respectively. The following example sentences illustrate the use of the apprehensive future tense.

(939) *wa lwattəa pangata heldzi lepdzi re.*

<i>wa</i>	<i>lwat-tə-a</i>	<i>pangata</i>	<i>hel-ø-dzi</i>
FOC	forget-TR-SUP	APPR.SG	take.away-TR-CVB

lep-ø-dzi=re

reach-TR-CVB=EXT

“And they could also forget (to bring the gift to the monastery), once they have taken it with them, once they have reached home.”

(Conversation 48.2)

(940) *munḍak kjare pangata kʰotəi.*

<i>munḍak</i>	<i>kja-de</i>	<i>pangata</i>	<i>kʰotəi</i>
darkness	become-SUP	APPR.SG	later

“It will become dark later.” (said by a person who urged to return home)

(TP unrec 2)

16 The clause

16.1 Introduction

This chapter describes the structure of simple finite clauses in Bunan. A simple finite clause is defined as a clause that consists of a finite predicate and its core arguments¹²⁶ and does not govern any other non-finite clauses. Note that the predicate may either be a morphologically simple verb form or consist of a periphrastic construction (cf. § 15.1).

When discussing the clause structure of Bunan, it is of utter importance to keep in mind that the language makes pervasive use of zero-anaphora. Speakers do not overtly mention predicates and their arguments if their identity is (1) not relevant in the present discourse context, (2) already known to the discourse participants, or (3) inferable from the overall context of the utterance. Bickel (2003: 708) has attributed this telegram-like discourse style to a typological parameter that he refers to as “referential density”, which he defines as “the average ratio of overt argument NP’s (nouns or pronouns) to available argument positions in the clause.” Tibeto-Burman languages in general appear to be characterized by a comparatively low degree of referential density.

The low degree of referential density in Bunan discourse is illustrated by the following example sentence, which was recorded during an elicitation session that was dedicated to middle verb forms. My main consultant and I had been going through a number of plurivalent verbs in order to figure out how their meaning changed if they were reassigned to the middle conjugation. At some point, my consultant’s wife, who had been listening to us for some time, joined in our conversation and provided an illustrative example for the difference between a transitive verb form and its corresponding middle verb form. Her exact words are given in (941) below. In this example, all non-overtly mentioned core arguments and predicates are indicated by square brackets (NP_{AGT} = agent argument, NP_{SOUR} = source argument, V_{NFIN} = non-finite verb form, V_{FIN} = finite verb form). The same is true for their equivalents in the English translation.

¹²⁶ See § 12.4.1.1 for a discussion of the term “core argument”.

- (941) *gidzi* [NP_{SOUR}] *ini: pawla toknaŋ wa* [NP_{AGT}] *toktəa lotəumdzi. gidzi* [NP_{SOUR}] *taj pawla* [V_{NFIN}] [NP_{AGT}] *toktəa* [V_{FIN}]. [NP_{AGT}] [NP_{SOUR}] *ingi: pawla tokəinaŋ* [NP_{AGT}] *tokəa* [V_{FIN}].

<i>gi=dzi</i>	<i>ini=ki</i>	<i>pawla</i>	<i>tok=naŋ</i>	<i>wa</i>
1SG=ERG.SG	2[SG].HON=GEN	sock	take.off=COND	FOC
<i>tok-tə-a</i>	<i>lot-tə-um=jendzi</i>	<i>ingi=ki</i>	<i>pawla</i>	
take.off-TR-SUP	say-TR-INF=EQ.DJ.SG	myself=GEN	sock	
<i>tok-ə=naŋ</i>	<i>tok-ə-a</i>	<i>gi=dzi</i>	<i>taj</i>	
take.off-MID=COND	take.off-MID-SUP	1SG=ERG.SG	3SG.GEN	
<i>pawla</i>	<i>tok-tə-a</i>			
sock	take.off-TR-SUP			

“When I take off your socks [from you], [one] says *toktəa*. When I take off his socks [from him] [one] [says] *toktəa*. When [I] take off my socks [from myself] [one] [says] *tokəa*.”

(TD 152b.1)

The example given above vividly illustrates the telegram-like discourse style of Bunan. My main consultant’s wife left out all non-essential information and only overtly mentioned predicates and arguments that could not be retrieved from preceding utterances. In the first sentence, she used zero-anaphora in the first non-finite clause, where she did not specify the identity of the source argument. The identity of the source argument did not need to be made overt because the combination of the emphatic second person pronoun *ini=ki* in combination with the non-middle verb form *tok=naŋ* indicated that the person who had her / his socks taken off was the addressee. In the following finite clause, the speaker did not overtly mention the agent argument of the generic present tense verb form *lot-tə-um=jendzi*, as the identity of this participant was not essential. In the second sentence, my consultant’s wife again did not mention the source argument of the non-finite clause, nor the agent argument of the finite clause. Furthermore, she left out the non-finite verb form *tok=naŋ* and the finite verb form *lot-tə-um=jendzi*, as both verb forms had already been established in the preceding utterance. In the third sentence, finally, the speaker again mentioned the non-finite verb form, as it had changed from the transitive form *tok=naŋ* to the middle form *tok-ə=naŋ*. However, she now left out the agent argument of the non-finite clause, as the identity of this argument could be inferred from the combination of the middle verb form *tok-ə=naŋ* in combination with the first person emphatic pronoun *ingi=ki*.

The pervasive use of zero-anaphora in Bunan discourse makes the description of Bunan clause structure a challenging task, as both core arguments and adjuncts do not have to be overtly mentioned in a clause. Consider the following example.

(942) *aj kontɔok kʰarok rikmen apa?*

<i>aj kontɔok</i>	<i>kʰa=tok</i>	<i>rik-ø-men</i>	<i>apa</i>
Gosh	what=DAT	bring-TR-PST.DIR.CJ	AUTH

“Gosh! Why did you bring these things to me?”

(Conversation 13a.45)

Based on semantic grounds, one would most probably argue that the verb *rik-tɔ-um* is a trivalent verb, as the act of bringing necessarily involves an agent argument (the person who brings), a theme argument (the entity that is being brought) and a recipient argument (the person who receives the entity). However, in the example sentence given above, none of these arguments are overtly mentioned. The argument structure of a verb thus rarely discloses itself in natural discourse. Accordingly, it is usually necessary to combine elicited sentences with a large number of sentences taken from natural discourse in order to gain a good understanding of a verb’s argument structure.

The chapter exhibits the following structure: § 16.2 discusses the basic order of syntactic constituents as well as deviations from the basic pattern. § 16.3 describes the structure of copula clauses, whereas § 16.4 through § 16.6 describe the clause structure of monovalent, bivalent and trivalent clauses. § 16.7, finally, is dedicated to the clause structure of light verb constructions.

16.2 Order of syntactic constituents

16.2.1 The basic order of syntactic constituents

Based on the number of core arguments and the type of the predicate, we can distinguish four types of simple clauses in Bunan: (1) copula clauses, (2) monovalent clauses, (3) bivalent clauses, and (4) trivalent clauses. As there is only limited evidence for grammatical relations in Bunan (cf. § 16.7), it is more appropriate to describe the basic order of constituents in terms of semantic roles rather than in terms of syntactic notions such as “subject”, “direct object” and “indirect object”. The following schemes illustrate the pragmatically unmarked order of constituents for every major clause type.

Basic order of constituents in simple clauses

(1) : Theme – Complement – Copula

(2) : Agent / Experiencer – Verb

(3) : Agent / Experiencer – Patient / Stimulus – Verb

(4) : Agent – Recipient / Source – Theme – Verb

The unmarked syntactic position for adverbs is the slot after the first constituent of a clause. In the following, I provide a number of examples that illustrate the basic order of syntactic constituents for the four major clause types. Consider the following examples.

Copula clauses

(943) *gi kjuma na:*.

<i>gi</i>	<i>kjuma</i>	<i>na:</i>
1SG	house	EX.1SG

"I am at home."

(Conversation 29.13)

(944) *ʰadzu butsa su jen?*

<i>ʰadzu</i>	<i>butsa</i>	<i>su</i>	<i>jen</i>
that	boy	who	EQ.CJ

"Who is that boy?"

(Conversation 13a.19)

(945) *tal munɕi nindza.*

<i>tal</i>	<i>munɕi_{LN}</i>	<i>nindza</i>
3[SG]	teacher	EX.PST.SG

"He was a teacher."

(NN 47.21 [elicited])

Monovalent clauses

(946) *nunʈɕi ranʈopaj mi jama tsʰanʈi ʰattʰa.*

<i>nunʈɕi</i>	<i>ranʈo-pa=ki</i>	<i>mi=nama</i>	<i>tsʰanʈi</i>
then	Ranglo-NZR=GEN	person=all	all

ʰat-tʰa

be.happy-PST.DIR.DJ.PL

"Then all of the people from Ranglo were happy!"

(Tulshug Lingpa 110)

(947) *gi kwasa.*

gi *kwas-dza*
1SG become.full-PST.DIR.DJ.SG

“I am full.”

(Conversation 74.24)

(948) *qonpozi ja: eltsʰa madzottsʰa.*

qonpo=ɕi *ja:* *el-tsʰa* *ma-dzot-tsʰa*
guest=PL yesterday go-PST.DIR.DJ.PL NEG-stay-PST.DIR.DJ.PL

“Our guests left yesterday, they did not stay.”

(Conversation 63.4)

Bivalent clauses

(949) *ini dzanɖzan liktɕare!*

ini *dzanɖzan* *lik-tɕ-are*
2[SG].HON insincere.refusal do-TR-PRS.DJ.SG

“You are refusing the tea insincerely!”

(Conversation 36.12)

(950) *taltsʰi girok kʰet tʰirtɕum.*

tal=tsʰi *gi=tok* *kʰet=tʰir-tɕ-um=jen*
3=ERG.PL 1SG=DAT beat=send-TR-INF=EQ.CJ

“They will beat me at once.”

(The Lama and the Owl 29)

(951) *hitikɕok mar makʰuktɕʰak.*

hitik=ɕi=tok *mar* *ma-kʰuk-tɕ-ʰak*
other=PL=DAT butter NEG-find-TR-PRS.DJ.PL

“The others do not find butter.”

(The Lama and the Owl 54)

Trivalent clauses

(952) *ʰadzu jondaktsi taldok kʰar kʰar madata.*

<i>ʰadzu</i>	<i>jondak=dzi</i>	<i>tal=tok</i>	<i>kʰa=re</i>
that	head.of.household=ERG.SG	3[SG]=DAT	what=EXT
<i>kʰa=re</i>	<i>ma-da-ø-ta</i>		
what=EXT	NEG-give-TR-PST.INFER.DJ		

“That head of the household did not give him anything at all.”

(The Prodigal Son 14)

(953) *gidzi inirok hiŋʒi: kat letkjata.*

<i>gi=dzi</i>	<i>ini=tok</i>	<i>hiŋ=əi=ki</i>	<i>kat</i>
1SG=ERG.SG	2[SG]=DAT	1PL.EXCL=PL=GEN	language
<i>let-ø-kata</i>			
teach-TR-FUT.CJ.SG			

“I will teach you our language.”

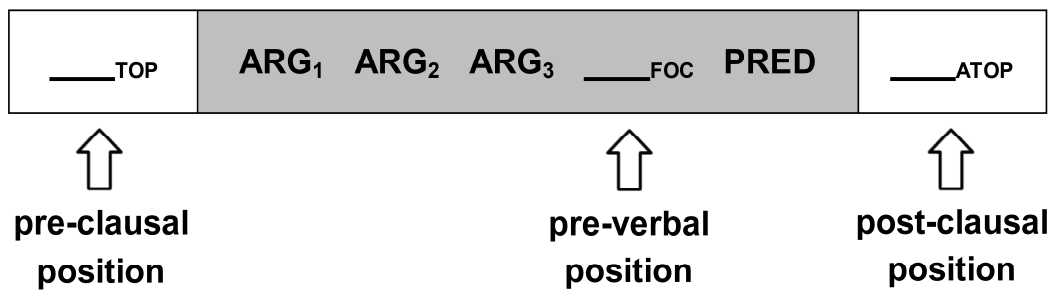
(Conversation 13a.109)

16.2.2 Topic, focus, and antitopic

There are only two major constraints on the possible order of syntactic constituents in Bunan. The first constraint stipulates that noun phrases be not split up into non-contiguous component parts. The second constraint demands that the verb be the final element of a clause. Apart from these two restrictions, word order is more or less free. However, that is not to say that the order of syntactic constituents does not possess any expressive content. The clause structures that have been described in the previous section for the four major types of clauses are pragmatically unmarked. Deviations from these basic patterns have a direct bearing on the level of information structure. In other words, basic clause patterns may be modified to specify how the semantic content of a given constituent contributes to the overall informational content of a clause, that is to say, whether a given participant is topical, focal, or antitopical.

In Bunan, the categories of “topic”, “focus”, and “antitopic” are associated with three different syntactic positions. Topics are placed in pre-clausal position, foci occur in pre-verbal position, and antitopics appear in post-clausal position. These three syntactic positions are illustrated by the following scheme.

Figure 42: Syntactic positions associated with topic, focus, and antitopic



16.2.2.1 The pre-clausal topic slot

In the following, I use the term “topic” in the sense of Lambrecht (1994: 188), who defines it as “the thing which the proposition expressed by the sentence IS ABOUT” (emphasis original). As noted above, topical constituents commonly occur in pre-clausal position in Bunan and are thus not part of the actual clause. Evidence for the syntactic autonomy of the pre-clausal slot comes from two observations. First, topical referents consistently occur at the very beginning of a clause and may additionally be marked with the topic clitic *=ni:* (see § 10.2.1 for a discussion of this morpheme). My data suggests that the clitic commonly occurs on arguments that represent core arguments, whereas adjuncts and adverbials are usually not morphologically marked for their topical status. Second, topical referents always constitute a separate intonation unit that is detached from the intonation contour of the clause. Accordingly, there is both morpho-syntactic and prosodic evidence for the claim that topical referents are detached from their corresponding clause.

The pre-clausal position is commonly used to introduce new topical referents or to reintroduce topical referents that are no longer salient in the relevant discourse context. Topical referents that are highly salient tend to occur as antitopics in post-clausal position (cf. § 16.2.2.3). The following sentences contain instances of topical referents that occur in pre-clausal position and are marked with the topic marker *=ni:*. As these examples illustrate, essentially any syntactic constituent may occur in pre-clausal position, regardless of whether the respective constituent assumes the role of a copula theme, an agent argument, a recipient argument, an oblique noun phrase, or an adverb.

(954) *kʰorek wa tʰadzu lasmi=dzi tantan lotta gi ni: kʰar kʰar mataj lasmiti jengja.*

<i>kʰorek</i>	<i>wa</i>	<i>tʰadzu</i>	<i>lasmi=dzi</i>	<i>tantan</i>
later	FOC	that	woman=ERG.SG	sure
<i>lot-ø-ta</i>		<i>gi=ni:</i>	<i>kʰa=re</i>	<i>kʰa=re</i>
say-TR-PST.INFER.DJ		1SG=TOP	what=EXT	what=EXT
<i>ma-ta-i</i>		<i>lasmi=tiki</i>	<i>jen-gja</i>	
NEG-POSS-ACT		woman=INDEF	EQ-1SG	

“Then this woman assured him, ‘As for me, I am a woman possessing nothing at all.’”

(King Kesar 73)

(955) *gidzi ni: dzanare tʰojti de butsa ta la tes de.*

<i>gi=dzi=ni:</i>	<i>dzanare</i>	<i>tʰoj=tiki</i>	<i>de</i>	<i>butsa</i>
1SG=ERG=TOP	very.much	high=INDEF	ATT.SG	boy
<i>ta=la</i>	<i>tet-s</i>	<i>de</i>		
POSS.NON1SG=Q	think-NZR	ATT.SG		

“As for me, I thought, ‘(Her belly) is extremely big. Is she having a boy?’”

(Conversation 68.51)

(956) *detʂendok ni: anɕa:j tsaps a:dʰa: kilo miʈʰa:j jokmen.*

<i>detʂen=tok=ni:</i>	<i>anɕa:LN=ki</i>	<i>tsaps</i>	<i>a:dʰa:LN</i>	<i>kiloLN</i>
Dechen=DAT=FOC	egg=GEN	substitute	half	kilo
<i>miʈʰa:jLN</i>	<i>jok-ø-men</i>			
sweets	buy-TR-PST.DIR.CJ			

“As for Dechen, I brought her half a kilo of sweets instead of eggs.”

(Conversation 63.138)

(957) *tʰe dustok ni: dzamliŋdok mi noj kjaʈʰi elʈʰok.*

<i>tʰe</i>	<i>dus=tok=ni:</i>	<i>dzamliŋ=tok</i>	<i>mi</i>	<i>noj</i>
this	time=DAT=FOC	world=DAT	person	many
<i>kja-ʈʰi</i>	<i>el-ʈʰok</i>			
become-CVB.PL	go-PST.INFER.DJ.PL			

“As for nowadays, people have become numerous in this world.”

(Tulshug Lingpa 231)

(958) *durek dudzom gutʰok gonmadzi re bejulman helɛi jendzi.*

<i>durek</i>	<i>dudzom gutʰok gonma=dzi=re</i>	<i>bejul=man</i>
before	Dujom Guthog Gongma=ERG.SG=EXT	Beyul=ALL

hel-s-ɛ-i=jendzi

bring-DETR-MID-ACT=EQ.DJ.SG

“In old times, Dujom Guthog Gongma also brought (people) to Beyul.”

(Tulshug Lingpa 106)

16.2.2.2 The pre-verbal focus slot

Lambrecht (1994: 207) defines the pragmatic category “focus” as the information difference between a presupposition (i.e. what the hearer is assumed to know at the time that a given sentence is uttered) and an assertion (i.e. what the hearer is assumed to know after a given sentence has been uttered). Accordingly, focal information represents the semantic content of a proposition that cannot be predicted or recovered from the pragmatic context of an utterance. Lambrecht (1994: 222–223) distinguishes three major focus categories: “predicate-focus”, “argument-focus” and “sentence-focus”. The pre-verbal syntactic position defined above is clearly associated with argument-focus and thus indicates the focal status of noun phrases, pronouns and adverbials. A number of example sentences that contain focal arguments in pre-clausal position are given below.

(959) *handok dzamen tunmen gidzi brakkata.*

<i>han=tok</i>	<i>dzamen</i>	<i>tunmen</i>	<i>gi=dzi</i>
2[SG]=DAT	food	drinks	1SG=ERG.SG

brak-ø-kata

arrange-TR-FUT.CJ.SG

“It is me who shall provide you with food and drinks.”

(King Kesar 174)

(960) *hāj mik lej kʰalak kjadza?*

<i>hāj</i>	<i>mik</i>	<i>lej</i>	<i>kʰalak</i>	<i>kja-dza</i>
2[SG].GEN	eye	yellow	why	become-PST.DIR.DJ.SG

“Why have your eyes become yellow?”

(The Lama and the Owl 47)

(961) *handok sudzi riŋgare.*

han=tok su=dzi riŋ-k-are
 2[SG]=DAT who=ERG.SG say-INTR-PRS.DJ.SG

“Who told you that?”

(NN 10.6 [elicited])

(962) *ini: nambar girok du ne!*

ini=ki nambar gi=tok da-ku-a ne
 2[SG].HON=GEN number_{LN} 1SG=DAT give-UND-IMP.SG SUG

“Give me your phone number!”

(Conversation 13a.125)

16.2.2.3 The post-clausal antitopic slot

As mentioned in § 16.2.2.1, topical referents do not necessarily have to occur in pre-clausal position, but may also appear after the clause. Following Lambrecht (1994: 202), I will refer to such right-dislocated topical referents as “antitopics”. The antitopic slot is usually reserved for referents that are already established and highly accessible in the relevant discourse context, while newly introduced and reactivated topical referents usually occur in pre-clausal position. Essentially any constituent of a clause may appear as an antitopic. This is illustrated by the following sentences, in which the antitopic slot is filled with an experiencer argument, an agent argument of a monovalent verb, an agent argument of a bivalent verb, and a temporal adverbial.

(963) *atɕʰa: ajna dzuk mara:re la inok?*

atɕʰa:LN ajna dzuk ma-ra-k-are=la
 okay much pain NEG-come-INTR-PRS.DJ.SG=Q

ini=tok

2[SG].HON=DAT

“I see, so it is not too bad, your condition?”

(Conversation 32.11)

(964) *phirok wa pandzi eldzi thirtseije bubu.*

<i>phiro=tok</i>	<i>wa</i>	<i>pan-ɛ-dzi</i>	<i>el-dzi</i>
night=DAT	FOC	fly-MID-CVB.SG	go-CVB.SG
<i>thir-tɛ-i=jendzi</i>		<i>bubu</i>	
send-TR-ACT=EQ.DJ.SG		owl	

“And at night, it flew away, the owl.”

(The Lama and the Owl 8)

(965) *dzamen liktɛi gwak tshanjitsʰi.*

<i>dzamen</i>	<i>lik-tɛ-i</i>	<i>gwak</i>	<i>tshanji=tʰi</i>
food	make-TR-ACT	EX.NON1PL	all=ERG.PL

“They cook food, all of them.”

(Conversation 16.107)

(966) *soj de kʰjak tʰanɛk.*

<i>soj</i>	<i>de</i>	<i>kʰjak</i>	<i>tʰan=ɛk</i>
cold	ATT.SG	here	today=about

“It is cold here these days.”

(Conversation 1.31)

16.3 Copula clauses

I analyze copula clauses as consisting of three main constituents: (1) the copula theme, (2) the copula complement and (3) the copula. The copula theme might as well be referred to as the copula subject. However, I have decided not to use this term, as not all copula clauses have a subject in the proper meaning of the word (see § 17.3 for a proper definition of the term). To be sure, most copula forms agree with the copula theme in terms of number, and the existential and possessive copulas even display person agreement. However, there are also some copula forms that do not display any kind of syntactic agreement at all such as the conjunct form of the equative copula *jen-* (cf. § 14.2) or the attributive copula *de-* (cf. § 14.4).¹²⁷ Accordingly, it would be misleading to apply the term “copula subject” to such subject-less constructions.

The structure of a copula clause is not primarily determined by the copula that it is based on but by the function that the respective copula fulfills, that is to say, whether the

¹²⁷ Note that the attributive copula *de-* displays syntactic agreement in the generatiolect of old speakers but not in the generatiolect of young speakers.

copula expresses identity, attribution, location, etc. Accordingly, the following discussion is based on copula functions rather than copula types. Following Payne (1997: 111–113), I distinguish six major functions, which are (1) identity, (2) proper inclusion, (3) attribution, (4) location, (5) existence and (6) possession.

16.3.1 Identity and proper inclusion

In copula clauses that express identity or proper inclusion, the copula theme always stands in the absolutive case. The copula complement, on the other hand, may take a range of different case markers, although it most often stands in the absolutive case as well. This is illustrated by the following sentence.

(967) *ʰadzu butsa su jen?*

<i>ʰadzu</i>	<i>butsa</i>	<i>su</i>	<i>jen</i>
that	boy	who	EQ.CJ

“Who is that boy?”

(Conversation 13a.19)

(968) *gi munɛi jen.*

<i>gi</i>	<i>munɛi_{LN}</i>	<i>jen</i>
1SG	teacher	EQ.CJ

“I am a teacher.”

(TG 30.1 [elicited])

The copula complement can also occur in the genitive case, as the example below illustrates. Such constructions are especially common in contexts in which the identity of the copula theme is specified based on family or clan membership.

(969) *han suj jen?*

<i>han</i>	<i>su=ki</i>	<i>jen</i>
2[SG]	who=GEN	EQ.CJ

“Of which family are you?”

(Tshechu 2.49)

Further, the copula complement may also occur in the dative case. The dative-marked constituent then refers to the purpose that the copula theme is intended to fulfill. This is illustrated by the following sentence.

(970) *the dzamen amtsuṇdok jen.*

<i>the</i>	<i>dzamen</i>	<i>amtsi=kun=tok</i>	<i>jen</i>
this	food	way=LOC=DAT	EQ.CJ

“These are provisions for the journey.” (lit. “These are provisions for on the way.”)
(TD 101.9 [elicited])

16.3.2 Attribution

In copula clauses that express attribution, both the copula theme and the copula complement can exclusively occur in the absolutive case. My data corpus does not contain a single attributive clause that would disprove this generalization. The following example sentences illustrate the use of attributive clauses that are based on the equative copula, the existential copula and the attributive copula.

(971) *theadzu re kaj jendzi ka.*

<i>theadzu=re</i>	<i>kaj</i>	<i>jendzi</i>	<i>ka</i>
that=EXT	difficult	EQ.DJ.SG	ASS

“That is also difficult.”
(Conversation 1.14)

(972) *the man epo ni.*

<i>the</i>	<i>man</i>	<i>epo</i>	<i>ni.</i>
this	medicine	good	EX.NON1SG

“This medicine is good.”
(TD 16.8 [elicited])

(973) *barlak ajna waj de.*

<i>barlak</i>	<i>ajna</i>	<i>waj</i>	<i>de</i>
distance	very	far	ATT.SG

“The distance is very far.”
(Conversation 22.10)

Attributive clauses may contain a number of additional adjuncts. For example, it is possible to add oblique noun phrases that are marked with the dative clitic =*tok* or the postposition *bonthe* “for the sake of”. Such adjuncts may either refer to an entity that is affected by the predicated property or to a purpose that is related to the predicated property. An example of such a clause is given below.

(974) *nuj tʃukɛipazok hoɛmej kaj jendzi apa.*

<i>nuj</i>	<i>tʃuk-ɛ-i-pa=ɛi=tok</i>	<i>hoɛmej</i>	<i>kaj</i>
new	settle.down-MID-ACT-NZR=PL=DAT	extremely	difficult
<i>jendzi</i>	<i>apa</i>		
EQ.DJ.SG	AUTH		

“For those who have settled down recently (in the Kullu Valley), (the situation) is very difficult.”

(Conversation 1.14)

In addition, attributive clauses may contain adjuncts that are marked for the ablative or the intercessive case. In this case, the predicated property is conceptualized as being calculated from the viewpoint of the referent denoted by the oblique noun phrase. Accordingly, the resulting clauses represent comparative constructions, as the following examples illustrate.

(975) *giroktɛi ta tedzi jen.*

<i>gi=tok=tɛi=ta</i>	<i>tedzi</i>	<i>jen</i>
1SG=DAT=ABL=AVS	big	EQ.CJ

“But (he) is older than I am.” (lit. “But he is old from me.”)

(Conversation 87.165)

(976) *winɽar turisam bonɽhek tʃanji basta pujdak sakjat jendzi eranman.*

<i>winɽar turisam_{LN}</i>	<i>bonɽhek</i>	<i>tʃanji=basta</i>	<i>pujdak</i>	<i>sakjat</i>
winter.tourism	for.the.sake	all=INTESS	good	place
<i>jendzi</i>	<i>eran=man</i>			
EQ.DJ.SG	1PL.INCL=ALL			

“For winter tourism, it is the best among all places, Lahaul.”

(Conversation 85.3)

16.3.3 Location and existence

Copula clauses that express location or existence always exhibit a copula theme that stands in the absolutive case. The copula theme, on the other hand, may take any case clitic, postposition, or relator noun that refers to a location. A number of example sentences are given below.

(977) *gi kjuma na:*.

<i>gi</i>	<i>kjuma</i>	<i>na:</i>
1SG	home	EX.1SG

"I am at home."

(Conversation 29.13)

(978) *saj thildok jenmen de.*

<i>sa=ki</i>	<i>thil=tok</i>	<i>jen-men</i>	<i>de</i>
ground=GEN	bottom=DAT	EQ-INF	ATT.SG

"(The abode of the fairies) must be below the ground."

(The Fairies of Kullu 1.19)

(979) *bidzli thadzu eranman ni: la thik?*

<i>bidzli_{LN}</i>	<i>thadzu</i>	<i>eran=man</i>	<i>ni:=la</i>	<i>thik_{LN}</i>
electricity	that	1PL.INCL=ALL	EX.NON1SG=Q	okay

"The electricity, is it working in Lahaul, (is everything) okay?"

(Conversation 29.20)

(980) *k'ju tshaskun ni:*.

<i>k'ju</i>	<i>tshas=kun</i>	<i>ni:</i>
dog	garden=LOC	EX.NON1SG

"The dog is in the garden."

(NN 12.6 [elicited])

Existential predicates that are based on the verb *ra-men* "to come, to exist" have an analogue clause structure. This is illustrated by the following example.

(981) ... *bidzli: maha:devgi gompaj k'otsi astok bufa tedzi tiki ramen bor asti tiki.*

<i>bidzli: maha:dev=ki</i>	<i>gompaj=ki</i>	<i>k'otsi=astok</i>	<i>bufa</i>
Bijli Mahadev=GEN	monastery=GEN	behind=TERM	tree
<i>tedzi=tiki</i>	<i>ra-men=jen</i>	<i>bor=asti=tiki</i>	
big=INDEF	come-INF=EQ.CJ	shrub=SML=INDEF	

"... somewhere behind the temple of Bijli Mahadev, there is a big tree similar to a bush."

(The Fairies of Kullu 1.82)

16.3.4 Possession

In possessive copula clauses, the copula theme most often occurs in the genitive case, but may also take ergative marking in past tense contexts. The copula complement always stands in the absolutive case. Consider the following two examples.

(982) *pʰetsej nwak bete ta ma?*

<i>pʰetse=ki</i>	<i>nwak</i>	<i>bete</i>	<i>ta</i>	<i>ma</i>
uncle=GEN	thus	child	POSS.NON1SG	CNS

“So uncle has children, right?”

(Conversation 14.22)

(983) *kulik anetsʰi tan matantsʰa ka gidzi tandza kulik.*

<i>kulik</i>	<i>ane=tʰi</i>	<i>tan</i>	<i>ma-tantsʰa</i>	<i>ka</i>
key	paternal.aunt=ERG.PL	POSS	NEG-POSS.PST.PL	ASS

<i>gi=dzi</i>	<i>tandza</i>	<i>kulik</i>
1SG=ERG.SG	POSS.PST.SG	key

“My aunts did not have the key (to the house), I had the key.”

(Conversation 87.272)

Possessive clauses sometimes occur with additional adjuncts. Such oblique noun phrases most often refer to the location of the copula complement. This is illustrated by the following two example sentences.

(984) *pustok dzuk mata:na la?*

<i>pus=tok</i>	<i>dzuk</i>	<i>ma-ta:na=la</i>
knee=DAT	pain	NEG-POSS.2SG=Q

“Don’t you have a pain in the knee?”

(Tshechu 2.358)

(985) *atʂa: braŋsa ta la kudzuŋ?*

<i>atʂa:LN</i>	<i>braŋsa</i>	<i>ta=la</i>	<i>kudzu=maŋ</i>
okay	apartment	POSS.NON1SG=Q	Kullu.Valley=ALL

“I see, so he has an apartment in the Kullu Valley?”

(Conversation 47e.23)

16.4 Monovalent clauses

Monovalent clauses are based on a monovalent predicate that takes a single core argument. This single core argument always stands in the absolutive case, regardless of the semantic role that the core argument assumes. Depending on the inflectional ending, the number value of the core argument may be indexed on the predicate. In rare cases, the verb may even display person agreement (cf. § 13.5). However, there are also several subject-less verb forms that do not display any kind of syntactic agreement. A number of examples are given below.

(986) *hanzi guj dzotk^hakni?*

<i>han=ɛi</i>	<i>guj</i>	<i>dzot-k^hakni</i>
2=PL	where	sit-INTR-PRS.2PL

“Where are you staying?”

(Conversation 69.7)

(987) *amtɕa elet maelet hanzi?*

<i>amt-ɕ-a</i>	<i>el-et</i>	<i>ma-el-et</i>	<i>han=ɛi</i>
walk-MID-SUP	go-PST.DIR.CJ	NEG-go-PST.DIR.CJ	2=PL

“Did you go for a walk or not?”

(Conversation 44.15)

(988) *dzora ini dzora!*

<i>dzot-a</i>	<i>ini</i>	<i>dzot-a</i>
sit.down-IMP.SG	2[SG].HON	sit.down-IMP.SG

“Sit down, you sit down!”

(Conversation 14.9)

(989) *p^hangjare la wa man?*

<i>p^han-k-are=la</i>	<i>wa</i>	<i>man</i>
be.beneficial-INTR-PRS.DJ.SG=Q	FOC	medicine

“Does the medicine make you feel better?”

(Conversation 63.27)

(990) *nunṭṣei ranḷopaj mi jama tsʰaŋi tʰattʰa.*

<i>nunṭṣei</i>	<i>ranḷo-pa=ki</i>	<i>mi=ŋama</i>	<i>tsʰaŋi</i>
then	Ranglo-NZR=GEN	person=all	all

tʰat-tsʰa

be.happy-PST.DIR.DJ.PL

“Then all of the people from Ranglo were happy!”

(Tulshug Lingpa 110)

(991) *da tsʰaŋtsʰaŋi grottsa na.*

<i>da</i>	<i>tsʰaŋtsʰaŋi</i>	<i>grot-dza=na</i>
now	everything	be.finished-PST.DIR.DJ.SG=HS

“Now it is all over’, she said.”

(Conversation 22.121)

(992) *taj awa ṣitṣi ma ṣaŋte?*

<i>taj</i>	<i>awa</i>	<i>ṣit-dzi</i>	<i>ma</i>	<i>ṣaŋte</i>
3SG.GEN	father	die-PST.INFER.DJ.SG	CNS	old.man / old.M

“His father died, right, (being) an old man?”

(Conversation 14.159)

Monovalent clauses may contain various types of oblique noun phrases. Often, these adjuncts specify a time frame for the event denoted by the predicate. A few examples are given below.

(993) *pasan nimati radza.*

<i>pasan</i>	<i>nima=tiki</i>	<i>ra-dza</i>
Pasang	day=INDEF	come-PST.DIR.DJ.SG

“Pasang came (to visit me) one day.”

(Conversation 31.2)

(994) *wa gun dzot. sumslalek dzot.*

<i>wa</i>	<i>gun</i>	<i>dzot-et</i>	<i>sum=(s)la=lek</i>	<i>dzot-et</i>
FOC	winter	stay-PST.DIR.CJ	three=month=APP	stay-PST.DIR.CJ

“So I stayed during winter. I stayed for about three months.”

(Conversation 22.370)

(995) *the dustok ni: dzamliṅdok mi noj kjaṭṣʰi elṭṣʰok.*

<i>the</i>	<i>dus=tok=ni:</i>	<i>dzamliṅ=tok</i>	<i>mi</i>	<i>noj</i>
this	time=DAT=FOC	world=DAT	person	many
<i>kja-ṭṣʰi</i>	<i>el-ṭṣʰok</i>			
become-CVB.PL	go-PST.INFER.DJ.PL			

“As for nowadays, people have become numerous in this world.”

(Tulshug Lingpa 231)

In addition, monovalent clauses often contain oblique noun phrases that specify the location in which an event occurs. In combination with verbs of motion, these adjuncts indicate the starting point and the endpoint of a movement. This is illustrated by the following sentences.

(996) *mana:li dzot-i gwak.*

<i>mana:li</i>	<i>dzot-i</i>	<i>gwak</i>
Manali	sit-ACT	EX.NON1PL

“They live in Manali.”

(Conversation 14.141)

(997) *tal phirekmaṅ eldzi ni:.*

<i>tal</i>	<i>phirek=maṅ</i>	<i>el-dzi</i>	<i>ni:</i>
3[SG]	foreign.country=ALL	go-CVB.SG	EX.NON1SG

“He has gone abroad.”

(Conversation 36.69)

(998) *tiki ṣimlaṭṣi ra:ni:.*

<i>tiki</i>	<i>ṣimla=ṭṣi</i>	<i>ra-kani:</i>
one	Shimla=ABL	come-ASSER.NON1SG

“One person is supposed to come from Shimla.”

(Conversation 71.16)

The domain of motion is often metaphorically extended to more abstract domains such as the domain of cognition or the domain of social interaction. Thus, the ablative cannot only mark a location from which the core argument moves away, but may also refer a cognitive state from which the core argument departs. In a similar way, the dative does not only indicate the goal of a movement, but may likewise denote the beneficiary of an event. This is illustrated by the following examples.

(999) *gi dzuktoktɕi gjalgarɛ.*

<i>gi</i>	<i>dzuk=tok=tɕi</i>	<i>gjal-k-are</i>
1SG	pain=DAT=ABL	recover-INTR-PRS.DJ.SG

“I am recovering from the sickness.”

(TD 322.4 [elicited])

(1000) *sasa pʰan-dza talzok.*

<i>sasa</i>	<i>pʰan-dza</i>	<i>tal=ɕi=tok</i>
different	be.beneficial-PST.DIR.DJ.SG	3=PL=DAT

“She was a good match for them.”

(Conversation 22.376)

16.5 Bivalent clauses

Bivalent clauses are clauses that are based on a predicate whose argument structure requires two core arguments. Bivalent clauses can be classified into two major clause types based on their clause structure: (1) agent clauses and (2) experiencer clauses. Agent clauses prototypically denote scenarios in which an agent argument (marked for absolutive or ergative case) acts upon a patient argument (marked for absolutive or dative case). Experiencer clauses, on the other hand, prototypically describe scenarios in which an experiencer argument (marked for dative or ergative case) perceives a sensory impression represented by a stimulus argument (marked for absolutive case). In the following discussion, predicates that form agent clauses are referred to as “agent verbs”, whereas predicates that form experiencer clauses are called “experiencer verbs”. The schemes below illustrate the basic structure of the two types of clauses.

(1) Agent_{ABS/ERG} – Patient_{ABS/DAT} – Verb

(2) Experiencer_{DAT/ERG} – Stimulus_{ABS} – Verb

In addition to these two major clause types, there are a number of minor clause types that are only attested with a small number of predicates. The following subsections discuss the different types of bivalent clauses in more detail.

16.5.1 Agent clauses

The vast majority of agent verbs can assign either the absolutive or the ergative case to their agent arguments in the present and future tense, whereas they exclusively assign the ergative case in the past tense. However, there is a small group of agent verbs

that allow for differential argument marking¹²⁸ on agent arguments in all tenses. This group comprises a few bivalent verbs that follow the intransitive conjugation, for example the ingestive verbs *dza-men* “to eat”, *tun-men* “to drink”, and *don-men* “to eat, to drink (h)”. The verbs that allow for differential argument marking in the past tense share the trait of exhibiting a low degree of semantic transitivity and can thus be considered as peripheral members of the class of agent verbs.

While case marking on agent arguments is often sensitive to the pragmatic context, this is not true for case marking on patient arguments. Whether a patient argument receives absolutive or dative marking is not governed by pragmatic principles but rather determined by the argument structure of the corresponding predicate, which in turn depends on the semantics of the respective predicate, as I argue in the following. The vast majority of agent verbs assign the absolutive case to their patient argument. I refer to this group as “absolutive patient verbs”. A number of sentences that exemplify the clause structure of absolutive patient verbs are given below.

(1001) *mjas tete dza tun-gare la?*

<i>mjas</i>	<i>tete</i>	<i>dza</i>	<i>tun-k-are=la</i>
Myas	grandfather	tea	drink-INTR-PRS.DJ.SG=Q

“Does the grandfather of the Myas family drink tea?”

(DP unrec 1)

(1002) *tetedzi eranman t^hopa likta dzamen ma?*

<i>tete=dzi</i>	<i>eran=man</i>	<i>t^hopa</i>	<i>lik-ø-ta</i>
grandfather=ERG.SG	1PL.INCL=ALL	similar	make-TR-PST.INFER.DJ
<i>dzamen</i>	<i>ma</i>		
food	CNS		

“Grandfather has prepared traditional Lahaul food, hasn’t he?” (The speaker did not see grandfather cooking, but he sees the prepared food.)

(Conversation 70a.1)

¹²⁸ The pragmatic effects associated with differential argument marking are discussed in § 4.4.4.2.

(1003) ... *taltsh'i gi pur thirtsum*.

<i>tal=ts'h'i</i>	<i>gi</i>	<i>pur=thir-tə-um=jen</i>
3=ERG.PL	1SG	kill=send-TR-INF=EQ.CJ

"They will kill me at once."

(The Lama and the Owl 28)

(1004) *wangmodzi kaldzor thakta*.

<i>wangmo=dzi</i>	<i>kaldzor</i>	<i>thak-ø-ta</i>
Wangmo=ERG.SG	cup	break-TR-PST.INFER.DJ

"Wangmo broke the cup."

(NN 40.29 [elicited])

In addition to the class of absolutive patient verbs, there is a class of verbs that assign the dative case rather than the absolutive case to their patient arguments. I refer to these verbs as "dative patient verbs". In the following, I provide a number of example sentences of dative patient verbs.

(1005) *taltsh'i girok khet thirtsum*.

<i>tal=ts'h'i</i>	<i>gi=tok</i>	<i>khet=thir-tə-um=jen</i>
3=ERG.PL	1SG=DAT	beat=send-TR-INF=EQ.CJ

"They will beat me at once."

(The Lama and the Owl 29)

(1006) *apadzi girok tantan dziŋtəipajendzi*.

<i>apa=dzi</i>	<i>gi=tok</i>	<i>tantan</i>	<i>dziŋ-tə-i-pa=jendzi</i>
grandmother=ERG.SG	1SG=DAT	surely	scold-TR-ACT-NZR=EQ.DJ.SG

"Grandmother will surely scold me."

(TD 103.16 [elicited])

(1007) *kʰjudzi girok kretkjudza*.

<i>kʰju=dzi</i>	<i>gi=tok</i>	<i>kret-ø-ku-dza</i>
dog=ERG.SG	1SG=DAT	bite-TR-UND-PST.DIR.DJ.SG

"The dog bit me."

(TD 63.6 [elicited])

When going through the sentences provided above, one might receive the impression that absolutive patient verbs and dative patient verbs represent arbitrary classes. It may, for example, not be evident why the patient argument of the verb *thak-tə-um* “to break” stands in the absolutive case, while the patient argument of the verb *kret-tə-um* “to bite” is marked for the dative case. However, on closer examination it becomes clear that this difference in case marking is motivated by verbal semantics. DeLancey (2000) has convincingly demonstrated this for Lhasa Tibetan, which distinguishes between two classes of verbs that are equivalent to the classes of absolutive patient verbs and dative patient verbs in Bunan. As DeLancey points out, the two verb classes correspond to the categories of “change-of-state verbs” and “surface-contact verbs” postulated by Fillmore (1970).

According to Fillmore’s definition, change-of state verbs describe events that involve a change of state on behalf of the respective patient argument. Surface-contact verbs, on the other hand, describe actions that involve some kind of physical contact between the patient argument and another object, but do not necessarily result in a change of state. Fillmore demonstrated that the two verb classes can be identified based on two syntactic criteria in English. First, change-of-state verbs can usually occur as either monovalent or bivalent predicates (*The stick broke* vs. *John broke the stick*), whereas surface-contact verbs can only occur as bivalent predicates (*John hit the three* vs. ***The tree hit*). Second, the passive form of change-of-state verbs can either refer to an achievement or a state (*The window was broken*), while the passive form of surface-contact verbs can only denote an achievement (*The window was hit*).

When applying Fillmore’s approach to Bunan clause structure, it becomes obvious that the distinction between absolutive patient verbs and dative patient verbs is semantically motivated. Absolutive patient verbs possess a patient argument that undergoes a change of state, whereas dative patient verbs exhibit a patient argument that represents the endpoint of a movement. As DeLancey (2000: 10–13) has pointed out for Lhasa Tibetan, this interpretation of verbal semantics is coherent with the overall function of the absolutive case and the dative case, as the first commonly marks arguments that undergo some kind of change (e.g. the theme argument of a trivalent verb), whereas the latter is commonly used to mark arguments that refer to locations (e.g. the oblique goal argument of a monovalent motion verb or the recipient argument of a trivalent verb). In this context, it is important to keep in mind that absolutive patient verbs and dative patient verbs do not necessarily refer to events that involve a concrete change of state or a concrete movement. Rather, the two classes of verbs may likewise denote abstract changes of state and abstract movements. In the case of the absolutive patient verb *təhil-tə-um* “to choose”, for example, the absolutive marked patient argument undergoes an abstract change of state

from “being unchosen” to “being chosen”. In the case of the dative patient verb *dziŋ-tə-um* “to scold”, on the other hand, the dative marked patient argument represents the goal of the scolding.

In Bunan, absolutive patient verbs and dative patient verbs do not only differ from each other with regard to their argument structure. In addition, the two verb classes are also distinct with regard to valency-changing derivational mechanisms. The (unproductive) voicing opposition described in § 12.3.5 is only attested in combination with patient argument verbs (e.g. *bjak-men* “to hide oneself” vs. *pjak-men* “to hide someone” or *dakt-ə-um* “to break (intr.)” vs. *thak-tə-um* “to break (tr.)”) but not with dative patient verbs (e.g. *kʰet-tə-um* “to beat” but not ***get-men* ~ ***get-ə-um* “to be beaten”).

Further, the two classes of verbs also behave differently with regard to possible clause structures. For example, absolutive patient verbs can commonly take an additional dative-marked argument that refers to the beneficiary of an action. If dative patient arguments take an additional recipient argument, this argument has to be marked with the postposition *bonʰek* “for the sake” (cf. § 4.5.9), but cannot stand in the dative case.

(1008) *thadzu tinji manji taldok le!*

<i>thadzu</i>	<i>tinji</i>	<i>manji</i>	<i>tal=tok</i>	<i>le</i>
those	blue	red	3[SG]=DAT	make.IMP.SG

“Make those blue and red (socks) for him!”

(Conversation 16.3)

(1009) *handok dzamen tunmen gidzi brakkata.*

<i>han=tok</i>	<i>dzamen</i>	<i>tunmen</i>	<i>gi=dzi</i>
2[SG]=DAT	food	drinks	1SG=ERG.SG

brak-ø-kata

arrange-TR-FUT.CJ.SG

“It is me who shall provide you with food and drinks.”

(King Kesar 174)

(1010) *gidzi taj bon^hek / **taldok k^hjurok k^hetmen.*

<i>gi=dzi</i>	<i>taj</i>	<i>bon^hek / **tal=tok</i>	<i>k^hju=tok</i>
1SG=ERG.SG	3SG.GEN	for.the.sake / **3[SG]=DAT	dog=DAT

k^het-ø-men

beat-TR-PST.DIR.CJ

“I beat the dog for her / him.”

(TD 330.4 [elicited])

Dative patient verbs, on the other hand, may take an additional argument in the absolutive that refers to the instrument with which the respective action is performed. If absolutive patient verbs take such an instrument argument, it can only stand in the ergative or the comitative but never in the absolutive. This is demonstrated by the following examples.

(1011) ... *gidzi pu^əak ral^qiti k^hetd^zi ...*

<i>gi=dzi</i>	<i>pu^əa=tok</i>	<i>ral^qi=tiki</i>	<i>k^het-ø-d^zi</i>
1SG=ERG.SG	head=DAT	sword=INDEF	beat-TR-CVB

“... having beaten (your) head with a sword”

(King Kesar 38)

(1012) *gidzi k^hjurok berka / berkadzi / berka nampo k^hetmen.*

<i>gi=dzi</i>	<i>k^hju=tok</i>	<i>berka / berka=dzi / berka=nampo</i>
1SG=ERG.SG	dog=DAT	stick / stick=ERG.SG / stick=COM

k^het-ø-men

beat-TR-PST.DIR.CJ

“I beat the dog with a stick.”

(TD 330.3 [elicited])

(1013) *taldzi t^əataramdzi / t^əataram nampo / **t^əataram t^əi twa:re.*

<i>tal=dzi</i>	<i>t^əataram=dzi / t^əataram=nampo / **t^əataram</i>	<i>t^əi</i>
3=ERG.SG	sickle=ERG.SG / sickle=COM / **sickle	grass

twa-k-are

mow-INTR-PRS.DJ.SG

“He is cutting grass with a sickle.”

(TD 148.11 [elicited])

16.5.2 Experiencer clauses

The class of experiencer verbs can be divided into two subgroups: (1) experiencer verbs that exclusively assign the dative case to their experiencer arguments and (2) experiencer verbs that can assign either the dative or the ergative case to their experiencer argument. The first group comprises experiencer verbs that follow the intransitive and middle conjugation, i.e. *bap-men* “to be responsible”, *pʰok-men* “to be hurt”, *tant-men* “to see” and *tot-men* “to be affected”. These verbs consistently assign the dative case to their experiencer argument, even if the verb stands in the past tense.¹²⁹ Consider the following example sentences.

(1014) *girok karma tankjare.*

<i>gi=tok</i>	<i>karma</i>	<i>tant-k-are</i>
1SG=DAT	star	see-INTR-PRS.DJ.SG

“I can see stars (in the sky).”

(TD 230.9 [elicited])

(1015) *girok gran pʰoktsa.*

<i>gi=tok</i>	<i>gran</i>	<i>pʰok-dza</i>
1SG=DAT	stone	be.hurt-PST.DIR.DJ.SG

“I was hurt by a stone.”

(TD 23.1 [elicited])

The second group consists of experiencer verbs that belong to the transitive conjugation, to wit, *ha: go-tə-um* “to understand”, *hen-tə-um* “to hear, to listen”, *kʰuk-tə-um* “to find”, *tʰup-tə-um* “to be able to”, and *tsʰor-tə-um* “to feel”. These five verbs are similar in two respects. First, they possess an identical argument structure, with the experiencer argument either standing in the dative or the ergative case and their stimulus argument standing in the absolutive case. Second, they may be affected by the process of experiencer backgrounding (cf. § 12.3.2.4), that is to say, they may undergo detransitivization without receiving a passive interpretation.

It is of crucial importance to note that the phenomenon of differential argument marking on the experiencer argument is independent from the phenomenon of experiencer backgrounding. Differential argument marking is associated with the expression of focal status (cf. § 4.4.4.2), whereas experiencer backgrounding is used to indicate the low

¹²⁹ Note that the verb *tant-men* is never inflected for past tense, but is rather replaced by the verb *tʰarj-tə-um* “to see” in this grammatical context.

degree of pragmatic salience of a given referent (cf. § 12.3.2.4). The table below illustrates this based on the two feature oppositions [- salient / + salient] and [- focal / + focal].

Table 120: Differential argument marking and experiencer backgrounding

transitive		detransitivized	
		transitive	detransitivized
argument marking	DAT	✓ [+ salient] / [- focal]	✓ [- salient] / [- focal]
	ERG	✓ [+ salient] / [+ focal]	*not possible* [- salient] / [+ focal]

As the table illustrates, not all logical combinations of features are attested in my corpus of natural language data. While transitive verb forms regularly occur with both dative-marked and ergative-marked experiencer arguments in my material, detransitivized verb forms are only attested with dative-marked experiencer arguments. Example sentences that illustrate these combinations are given below.

(1016) ... *tsʰik girok dzanare kʰuksa dʒaŋdʒaŋgi kat*.

<i>tsʰik</i>	<i>gi=tok</i>	<i>dzanare</i>	<i>kʰuk-s-ɕ-dza</i>
word	1SG=DAT	very.much	find-DETR-MID-PST.DIR.DJ.SG
<i>dʒaŋdʒuŋ=ki</i>		<i>kat</i>	
Zhangzhung=GEN		language	

“... I found a lot of words (in those dictionaries), Zhangzhung words.”
(Zhangzhung 83)

(1017) *hitikɕok mar makʰuktɕʰak*.

<i>hitik=ɕi=tok</i>	<i>mar</i>	<i>ma-kʰuk-tɕ-ʰak</i>
other=PL=DAT	butter	NEG-find-TR-PRS.DJ.PL

“The others do not find butter.”
(The Lama and the Owl 54)

(1018) *eraŋmitsʰi maʰuptɕʰak ʰapatsʰi maʰuptɕʰak ʰelekti.*

eraŋ-mi=tsʰi

ma-ʰup-tɕʰak

1PL.INCL-person=ERG.PL

NEG-be.able-TR-PRS.DJ.PL

ʰa-pa=tsʰi

ma-ʰup-tɕʰak

ʰe=lek=tiki

India-NZR=ERG.PL

NEG-be.able-TR-PRS.DJ.PL

this=APP=INDEF

“Neither our people, nor Indians are able (to learn) this much (of a foreign language).”

(Conversation 25.23)

The combination of a detransitivized verb form with an ergative-marked experiencer argument is not attested in my corpus of natural data. When I tried to elicit such clauses from my main consultant, he told me that the combination of an ergative-marked experiencer argument with a detransitivized verb form was not possible. This is illustrated by the following example sentence.

(1019) *girok / **gidzi kulik kʰukɕipajendzi.*

*gi=tok / **gi=dzi*

kulik

kʰuk-s-ɕ-i-pa=jendzi

1SG=DAT / **1SG=ERG.SG

key

find-DETR-MID-ACT-

NZR=EQ.DJ.SG

“I will find the key.”

(TD 314.19 [elicited])

From the perspective of information structure, it is logical that detransitivized experiencer verbs cannot take an ergative-marked experiencer argument. Remember that the detransitivized verb form backgrounds the experiencer argument. This entails that the experiencer argument does not play a pragmatically prominent role and that its identity is either irrelevant, recoverable, or predictable. The ergative case, on the other hand indicates the focal status of the experiencer argument. As Lambrecht (1995: 262) points out, prototypical focal constituents are “pragmatically inaccessible discourse referents”, that is to say, referents whose identity cannot be recovered from the pragmatic context of an utterance. Accordingly, such constituent are pragmatically prominent by virtue of being pragmatically inaccessible. The two morphosyntactic strategies thus encode conflicting pragmatic categories. As a consequence, they cannot occur together in the same clause.

Finally, there is an additional transitive experiencer verb *ʰaŋ-tɕ-um* “to see”, which shows an idiosyncratic morphosyntactic behavior and thus has to be discussed separately. The verb *ʰaŋ-tɕ-um* distinguishes itself from the verbs given above in two respects. First, it is only attested in past tense contexts. This is a consequence of the fact that it stands in a suppletive relationship with the verb *tant-men* “to see”, which is used in present and

future tense contexts. Second, the verb *thaŋ-tə-um* cannot undergo experiencer backgrounding and thus always occurs in its transitive form. Two examples of clauses that contain the verb *thaŋ-tə-um* are given below.

(1020) ... *da hiŋzok kʰa itɕik thaŋ θirɕi jen apa.*

da *hiŋ=ɕi=tok* *kʰa* *itɕik*
 now 1PL.EXCL=PL=DAT what how.much

thaŋ=θir-s-ɕ-i=jen *apa*
 see=send-DETR-MID-ACT=EQ.CJ AUTH

“... now we have seen so many (bad things happen to good people).”
 (Conversation 22.294)

(1021) ... *the meme thaŋmen gidzi the awa thaŋmen.*

the *meme* *thaŋ-ø-men* *gi=dzi* *the* *awa*
 this monk see-TR-PST.DIR.CJ 1SG=ERG.SG this father

thaŋ-ø-men
 see-TR-PST.DIR.CJ

“... I have seen this monk, I have seen this father.”
 (Conversation 36.90)

16.5.3 Minor bivalent clause types

In addition to the major classes of agent verbs and experiencer verbs, which were discussed in the preceding sections, there are a small number of bivalent verbs that do not assign the ergative or the dative case to their more “agent-like” core arguments, but only allow for absolutive marking on such constituents. As these predicates possess a clause structure that clearly sets them apart from both agent verbs and experiencer verbs, I do not describe them on the basis of the semantic role pairs “agent / patient” or “experiencer / stimulus”, but rather characterize their clause structure in terms of intrinsic participant roles. Consider the following table.

Figure 43: Predicates displaying minor clause patterns

Predicate	Meaning	Clause structure	
<i>kent-men</i>	“to give birth”	participant giving birth:	ABS
		participant being born:	ABS
<i>kja-men</i>	“to become”	participant in original state:	ABS
		participant in new state:	ABS

<i>derj(s)-men</i>	“to believe”	believing participant: ABS participant being believed in: DAT
<i>şunt-men</i>	“to guard”	guarding participant: ABS participant being guarded: DAT
<i>şunt-ε-um</i>	“to wait for”	waiting participant: ABS participant being waited for: DAT
<i>lep-tε-um</i>	“to arrive, to reach”	arriving participant: ABS location: DAT
<i>dot-men</i>	“to meet”	meeting participant: ABS / DAT participant being met: DAT / ABS

The verb *dot-men* “to meet” is remarkable in the sense that it displays a variable case frame. One of the two participants has to be marked with the absolutive case, while the other participant has to stand in the dative case. However, according to the intuition of native speakers, it is irrelevant which participant is marked with which case. My consultants all stated that there is no substantial difference in meaning between sentence pairs such as the following.

(1022) *gi taldok dot.*

gi *tal=tok* *dot-et*
1SG 3[SG]=DAT meet-PST.DIR.CJ

“I met him.”

(TD 230.2 [elicited])

(1023) *girok tal dot.*

gi=tok *tal* *dot-et*
1SG=DAT 3[SG] meet-PST.DIR.CJ

“I met him.”

(TD 230.3 [elicited])

Note that the verb *dot-men* can also take a plural subject. In this case, the verb does not take a second “patient-like” argument and, accordingly, displays the clause structure of a monovalent verb, as the following example illustrates.

(1024) *hiŋ ja: dot.*

<i>hiŋ</i>	<i>ja:</i>	<i>dot-et</i>
1PL.EXCL	yesterday	meet-PST.DIR.CJ

“We met yesterday.”

(NN 5.1 [elicited])

16.6 Trivalent clauses

Trivalent clauses are defined as clauses that comprise three core arguments: (1) an agent argument, which can either occur in the absolutive or the ergative case, (2) a recipient argument, which is marked for the dative case and (3) a theme argument, which stands in the absolutive case. Trivalent clauses always describe events in the course of which an agent argument transfers a theme argument to a recipient argument. This transfer often involves the physical motion of a concrete object, but may also refer to the transmission of more abstract entities such as speech acts, knowledge, ideas etc. This is illustrated by the following examples.

(1025) *taltsʰi handok dʒa dawtsʰa la?*

<i>tal=tʰi</i>	<i>han=tok</i>	<i>dʒa</i>	<i>da-ø-ku-tsʰa=la</i>
3=ERG.PL	2[SG]=DAT	tea	give-TR-UND-PST.DIR.DJ.PL=Q

“Did they serve you tea?”

(TD 327.23 [elicited])

(1026) *gidzi inirok hiŋʒi: kat letkjata.*

<i>gi=dzi</i>	<i>ini=tok</i>	<i>hiŋ=ʒi=ki</i>	<i>kat</i>
1SG=ERG.SG	2[SG]=DAT	1PL.EXCL=PL=GEN	language

let-ø-kata

teach-TR-FUT.CJ.SG

“I will teach you our language.”

(Conversation 13a.109)

(1027) *handok sudzi riŋgare?*

han=tok *su=dzi* *riŋ-k-are*
 2[SG]=DAT who=ERG.SG say-INTR-PRS.DJ.SG

“Who told you that?”

(NN 10.6 [elicited])

(1028) *wa eraŋtshi nuŋ awarok lotkja^hek kana.*

wa *eraŋ=tshi* *nuŋ* *awa=tok* *lot-ø-kat^hek*
 FOC 1PL.INCL=ERG.PL there father=DAT say-TR-FUT.CJ.PL

kan-a

watch-IMP.SG

“And there we will tell it to father, you see?”

(Conversation 96.11)

Trivalent clauses may be affected by the process of recipient backgrounding (§ 12.3.2.4), that is, the clause may be detransitivized without displaying any of the syntactic or semantic effects that are commonly associated with detransitivization. Recipient backgrounding occurs in pragmatic contexts in which the recipient argument of trivalent predicate displays a low degree of pragmatic salience. A sentence that exemplifies the phenomenon is given below.

(1029) *k^handomatshi talzok tɕ^hos daɕum loɕi ...*

k^handoma=tshi *tal=ɕi=tok* *tɕ^hos* *da-s-ɕ-um=jen*
 fairy=ERG.PL 3=PL=DAT religion give-DETR-MID-INF=EQ.CJ

lot-s-ɕ-tɕ^hi

say-DETR-MID-CVB.PL

“The fairies give them religious teachings, they say.”

(The Fairies of Kullu 2.2)

16.7 Light verb constructions

Following Butt (2010), I define light verbs as verbs that (1) are part of monoclausal complex predicates¹³⁰ and (2) are form identical with a full verb. Bunan possesses two main types of light verb constructions. First, there are light verbs that occur in verb-verb complex predicates. In such constructions, light verbs are commonly used to modify the

¹³⁰ Note that Butt (2010: 50; emphasis original) uses the term “complex predicate” to refer “to any construction in which two or more predicative elements each contribute to a **joint predication**.”

lexical aspect inherent to the main verb (cf. § 15.3.5 for a discussion of such constructions). Second, there are light verbs that form a part of noun-verb complex predicates. In such constructions, light verbs serve as grammatical devices to verbalize the event that is associated with the corresponding noun. In the following subsections, I confine myself to the discussion of light verbs that occur in noun-verb complex predicates.

16.7.1 Light verbs based on monovalent verbs

In Bunan, the experience of feelings and sensations is commonly expressed with light verb constructions that are based on the verb *ra-men* “to come”. Such light verb constructions consist of three basic constituents: (1) an experiencer argument in the dative, (2) a stimulus argument in the absolutive, and (3) an inflected form of the verb *ra-men*.¹³¹

Experiencer_{DAT} Stimulus_{ABS} *ra-men*

The experiencer argument commonly occurs in clause-initial position. Accordingly, light verb constructions deviate from the basic clause structure outlined in § 16.2.1 and § 16.5 in the sense that the subject (i.e. the stimulus argument) is consistently preceded by the goal argument (i.e. the experiencer argument). This deviation can be explained as a consequence of a systematic mismatch between syntactic structure and event structure. Even though light verb experiencer constructions are based on the monovalent verb *ra-men*, they essentially refer to two-participant events that involve an experiencer and a stimulus. From the perspective of semantics, the experiencer argument represents a core argument, as a sensory perception cannot be conceptualized without an experiencer argument. Accordingly, the experiencer argument is assigned the usual syntactic position of experiencer arguments in two-participant events.

It is important to keep in mind that there are various feelings and sensations that can either be predicated by means of a light verb construction or a finite inflected verb form. The feeling of happiness, for example, can both verbalized with the light verb construction *that-s ra-men* “be.happy-NZR come-INF” or the verb *that-men* “be.happy-INF”. The two strategies are illustrated by the sentences given below.

(1030) *awaamazok that ramen de.*

<i>awa-ama=ɛi=tok</i>	<i>that-s</i>	<i>ra-men</i>	<i>de</i>
father-mother=PL=DAT	be.happy-NZR	come-INF	ATT.SG

“(His) parents will be happy.”
(Conversation 25.28)

¹³¹ As Ebert (2001: 1536–1538) points out, such constructions are common throughout South Asia with the exception of Northeast India.

(1031) *the briɕitsuk tsʰaŋi kannəŋ awaamazi tʰaʔjpaentɕʰok.*

<i>the</i>	<i>bris-s-ɕ-i=tsuk</i>	<i>tsʰaŋi</i>	<i>kan=naŋ</i>
this	write-DETR-MID-ACT=REL	all	show=COND
<i>awa-ama=ɕi</i>	<i>tʰat-i-pa=jentɕʰok</i>		
father-mother=PL	be.happy-ACT-NZR=EQ.DJ.PL		

“When he will show them all these written things, his father and mother will be happy.”

(Conversation 25.101)

The two examples given above were taken from the same recording and were uttered by the same speaker at an interval of six minutes. In both sentences, the speaker expressed her belief that my parents would be pleased when they would get to see the data that I had collected in India. In the first sentence, she predicated the experiencing of happiness with the light verb construction *tʰat-s ra-men de* “be.happy-NZR come-INF ATT.SG”. In the second sentence, she referred to the same event with the finite verb form *tʰat-i-pa=jentɕʰok* “be.happy-ACT-NZR=EQ.DJ.PL”. I have not been able to identify a substantial difference in meaning between the light verb construction and the corresponding simple verb form. According to my consultants, the two constructions possess the same meaning. Intuitively, one would assume that the light verb construction *tʰat-s ra-men*, which is based on the motion verb *ra-men*, has stronger inchoative overtones than the corresponding verb *tʰat-men*. However, my consultants did not agree with this view and instead asserted that there was no functional difference between light verb constructions and corresponding simple verb forms.

A number of additional example sentences that illustrate the use of light verb constructions based on the verb *ra-men* are given below.

(1032) *dranɕis ramen de eraŋɕok.*

<i>dran-ɕ-i-s</i>	<i>ra-men</i>	<i>de</i>	<i>eraŋ=ɕi=tok</i>
miss-MID-ACT-NZR	come-INF	ATT.SG	1PL.INCL=PL=DAT

“We will miss (him).”

(Conversation 25.91)

(1033) *soti tur=nanj wa dan=tok dzuk ra-men mendzi.*

<i>soti</i>	<i>tur=nanj</i>	<i>wa</i>	<i>dan=tok</i>	<i>dzuk</i>	<i>ra-men</i>
water	drink=COND	FOC	belly=DAT	pain	come-INF

mendzi

NEG.EQ.DJ.SG

“If you drink water, you will not get a stomachache.”

(Conversation 55.74)

(1034) *manu sums ra:re la?*

<i>manu</i>	<i>sums</i>	<i>ra-k-are=la</i>
Manuel	boredom	come-INTR-PRS.DJ.SG=Q

“Manuel, are you feeling bored?”

(Conversation 59.10)

The following list gives an overview of all light verb constructions based on the verb *ra-men* that are attested in my corpus.

Light verb constructions based on *ra-men* “to come”

<i>ɕal ra-men</i>	“to suffer from diarrhea”
<i>ɕotɕes ra-men</i>	“to suffer from heartburn”
<i>dran-ɕ-i-s ra-men</i>	“to miss”
<i>dzuk ra-men</i>	“to be sick”
<i>dziŋdziŋ ra-men</i>	“to feel dizzy”
<i>gjar ra-men</i>	“to be afraid”
<i>goks ra-men</i>	“to cough”
<i>ipt-s ra-men</i>	“to feel sleepy”
<i>kʰams ra-men</i>	“to have an appetite, to be in the mood for”
<i>kʰamloks ra-men</i>	“to feel nausea”
<i>kʰjas ra-men</i>	“to feel itchy”
<i>kʰres ra-men</i>	“to be hungry”
<i>loŋ-ɕ-i-s ra-men</i>	“to vomit”
<i>maŋs ra-men</i>	“to dream”
<i>niŋs ra-men</i>	“to feel like doing sth., to be in the mood for”
<i>phrips ra-men</i>	“to sneeze”
<i>reks ra-men</i>	“to tremble, to shiver”
<i>rewa ra-men</i>	“to hope”
<i>nwal-ɕ-i-s ra-men</i>	“to feel drowsy”
<i>soj ra-men</i>	“to feel cold”

<i>sums ra-men</i>	“to be bored”
<i>set-s ra-men</i>	“to laugh”
<i>tak-s ra-men</i>	“to smell”
<i>tet-s ra-men</i>	“to think”
<i>tiskar ra-men</i>	“to be thirsty”
<i>toba ra-men</i>	“to be in a hurry”
<i>tʰat-s ra-men</i>	“to be happy”
<i>tʰat-s ra-men</i>	“to be exhausted”
<i>tʰat ra-men</i>	“to have a fever”
<i>tʰatpa ra-men</i>	“to feel hot”
<i>tʰer ra-men</i>	“to be sad, to be worried”
<i>tʰikpa ra-men</i>	“to be angry”
<i>ukstuks ra-men</i>	“to breath hard”
<i>war ra-men</i>	“to belch”

Light verb constructions that are based on the disjunct present tense form *ra-k-are* “come-INTR-PRS.DJ.SG” or the direct evidential disjunct past tense form *ra-dza* “come-PST.DIR.DJ.SG” are sensitive to the pragmatic role of the epistemic source (cf. § 13.2.2). This is demonstrated by the example sentences given below that are all based on the present tense form *ra-k-are*.

(1035) *girok kʰres ra:re*.

<i>gi=tok</i>	<i>kʰres</i>	<i>ra-k-are</i>
1SG=DAT	hunger	come-INTR-PRS.DJ.SG

“I am hungry.” (lit. “Hunger is coming to me.”)
(TD 254.2 [elicited])

(1036) *kʰres ra:re la?*

<i>kʰres</i>	<i>ra-k-are=la</i>
hunger	come-INTR-PRS.DJ.SG=Q

“Are you hungry?” (lit. “Is hunger coming (to you)?”)
(TD unrec 49)

(1037) *taldok kʰres ra: dʒotkja ni: / **ra:re.*

tal=tok *kʰres* *ra-ka*
3[SG]=DAT hunger come-PROG.SG

*dʒot-ka=ni: / **ra-k-are*
sit-PROG.SG=EX.NON1SG / **come-INTR-PRS.DJ.SG

“He must be hungry.” (lit. “Hunger must be coming to you.”)
(TD 254.2 [elicited])

As the sentences given above illustrate, a light verb construction that is based on the present tense form *ra-k-are* is only grammatical if the experiencer argument is coreferent with the epistemic source. This is the case in (1035), where the current speaker states that she / he feels hungry, and in (1036), where the current addressee is asked whether she / he feels hungry. However, this is not true for (1037), where the current source is making a statement about the hunger that is experienced by another person. Such a proposition is only grammatical if the light verb *ra-men* occurs in a finite form that expresses inferential or generic evidentiality.

In contexts of quoted speech, this epistemic restriction leads to logophoric effects. In a sentence like the one given below, the subject of the main clause and the experiencer of the embedded clause have to be coreferent, as the construction would be ungrammatical if the dative-marked pronoun *tal=tok* referred to a different person.

(1038) *taldok tʰas ra:re riŋgare.*

tal=tok *tʰat-s* *ra-k-are*
3[SG]=DAT be.happy-NZR come-INTR-PRS.DJ.SG

riŋ-k-are
say-INTR-PRS.DJ.SG

“He_i says that he_i / **j is happy.” (lit. “He_i says that happiness is coming to him_i / **j.”)
(TD 218.4 [elicited])

The epistemic restrictions described above can be accounted for in the framework of Hargreaves’ (2005: 5) notion of “privileged access to mental states” (cf. § 13.3). An internal sensation such as, for example, the feeling of hunger is only ultimately accessible for the person who experiences this feeling. To be sure, one may infer or guess that another person may be hungry, but one cannot be entirely certain because one does not possess direct access to the respective person’s internal state of mind. Accordingly, finite forms of the light verb *ra-men* that imply a high degree of certainty (i.e. simple present tense forms and direct evidential past tense forms) can only be used in contexts in which

the experiencer argument is coreferent with the person who has direct access to the relevant feeling, that is to say, the (reported) speaker in (reported) declarative contexts and the (reported) addressee in (reported) interrogative contexts. Hence, the sentence ***tal=tok k^hres ra-k-are* “3[SG]=DAT hunger come-INTR-PRS.DJ.SG” is ungrammatical, as the speaker does not possess the epistemic authority to make this statement.

Another light verb construction that has to be mentioned is *truks waŋs-men* “to sweat”. It represents the only light verb construction in my corpus that is based on the verb *waŋs-men* “to come out” rather than the verb *ra-men* “to come”. The following sentence illustrates the use of the light verb construction.

(1039) *handok truks waŋɕi ni:*.

<i>han=tok</i>	<i>truks</i>	<i>waŋs-dʒi</i>	<i>ni:</i>
2[SG]=DAT	sweat	come.out-CVB.SG	EX.NON1SG

“You are all sweaty.”

(TG 25.18 [elicited])

Note that the light verb *truks waŋs-men* is not subject to the epistemic restrictions that have been described above for light verb constructions based on the verb *ra-men* “to come”. The reason for this is rather obvious. The act of sweating is not an internal state of mind but a physical process that is directly accessible for other persons.

16.7.2 Light verbs based on bivalent verbs

Bunan possesses a great number of light verbs that are based on the bivalent verbs *lik-tə-um* “to make, to do” and *tat-tə-um* “to prepare, to perform, to put”. Such light verbs most often denote activities that involve an agent argument that performs some activity and a theme argument that specifies the activity being performed. However, in rare cases these constructions may also refer to events in which an experiencer argument perceives a stimulus argument. The basic clause structure of such light verb constructions is illustrated by the scheme given below.

Agent / Experiencer _{ABS/ERG}	Theme / Stimulus _{ABS}	Verb
---	--	-------------

This basic clause structure may be augmented with an additional dative-marked adjunct that refers to the beneficiary of the respective activity. A number of example sentences illustrating light verb constructions that are based on the verbs *lik-tə-um* and *tat-tə-um* are given in the following.

(1040) *kʰjak kjum likɛtat kudzuŋ likɛtat.*

<i>kʰjak</i>	<i>kjum</i>	<i>lik-s-ɛ-dʒi=tat</i>
here	house	make-DETR-MID-CVB.SG=POSS.NON1PL
<i>kudzu=maŋ</i>		<i>lik-s-ɛ-dʒi=tat</i>
Kullu.Valley=ALL		make-DETR-MID-CVB.SG=POSS.NON1PL

“So they built houses here, they have built houses in the Kullu Valley.”
(Tshechu 2.15)

(1041) *dordʒe=dʒi dzaŋpo=tok dzamen lik-tɕare.*

<i>dordʒe=dʒi</i>	<i>dzaŋpo=tok</i>	<i>dzamen</i>	<i>lik-tɕare</i>
Dorje=ERG.SG	Zangpo=DAT	food	do-TR-PRS.DJ.SG

“Dorje makes food for Zangpo.”
(NN 39.4 [elicited])

(1042) *taldʒi eraŋ hit lik-tɕi-pa=jendʒi.*

<i>taldʒi</i>	<i>eraŋ</i>	<i>hit</i>	<i>lik-tɕi-pa=jendʒi</i>
3=ERG.SG	1PL.INCL	memory	make-TR-ACT-NZR=EQ.DJ.SG

“He will remember us.”
(Conversation 25.94)

(1043) *tʰadzuŋ el-tɕʰi eraŋtsʰi kontɕoktok molam tat-katʰek.*

<i>tʰadzuŋ</i>	<i>el-tɕʰi</i>	<i>eraŋtsʰi</i>	<i>kontɕok=tok</i>	<i>molam</i>
there	go-CVB.PL	1PL.INCL=ERG.PL	god=DAT	prayer
<i>tat-ø-katʰek</i>				
perform-TR-FUT.CJ.PL				

“We will go there and perform a prayer for the god.”
(King Kesar 20)

(1044) *bu bu riŋga ŋaro tatka henak dzoʔj jendzi.*

<i>bu</i>	<i>bu</i>	<i>riŋ-ka</i>	<i>ŋaro</i>	<i>tat-ka</i>
ONOM	ONOM	say-PROG.SG	noise	perform-PROG.SG
<i>henak</i>	<i>dzot-i=jendzi</i>			
like.this	sit-ACT=EQ.DJ.SG			

“Saying ‘bu bu’, making noise, (the owl) used to sit like that.”

(The Lama and the Owl 7)

In the following, I provide an overview of the light verb constructions based on *lik-tə-um* “to make, to do” and *tat-tə-um* “to prepare, to perform, to put” that are attested in my database.

Light verb constructions based on *lik-tə-um* “to do, to make”

<i>am lik-tə-um</i>	“to eat” (child language)
<i>bakma lik-tə-um</i>	“to marry”
<i>bu lik-tə-um</i>	“to carry a child wrapped in a cloth on one’s back”
<i>dor lik-tə-um</i>	“to slaughter”
<i>dzamen lik-tə-um</i>	“to cook”
<i>dzarjdzarj lik-tə-um</i>	“to refuse food / drinks insincerely”
<i>dzuk lik-tə-um</i>	“to be sick, to be in pain”
<i>dzunma lik-tə-um</i>	“to cheat”
<i>dzu lik-tə-um</i>	“to greet (with the right hand touching one’s forehead)”
<i>hatʰo lik-tə-um</i>	“to cut off the crown of a tree”
<i>hi lik-tə-um</i>	“to sniff back one’s snot” (child language)
<i>hit lik-tə-um</i>	“to remember”
<i>jato lik-tə-um</i>	“to help”
<i>kjum lik-tə-um</i>	“to build a house”
<i>kʰarlen lik-tə-um</i>	“to rebuild a house”
<i>kʰartsa lik-tə-um</i>	“to spend money” (cf. Hindi <i>kharca</i> “cost, expenses”)
<i>lan lik-tə-um</i>	“to revenge”
<i>lardze lik-tə-um</i>	“to work as a doctor of traditional medicine”
<i>latmo lik-tə-um</i>	“to imitate, to fake”
<i>lema lik-tə-um</i>	“to discuss”
<i>nekor lik-tə-um</i>	“to go on a pilgrimage”
<i>nokri lik-tə-um</i>	“to work in a government job” (cf. Hindi <i>naukarī</i> “job, position”)
<i>o lik-tə-um</i>	“to dance” (child language)
<i>pak lik-tə-um</i>	“to slap”

<i>puŋ lik-tɛ-um</i>	“to take side, to support”
<i>pʰon lik-tɛ-um</i>	“to make a phone call” (cf. English <i>phone</i>)
<i>tʰul lik-tɛ-um</i>	“to meditate”
<i>tʃel lik-tɛ-um</i>	“to look after, to care for”
<i>tɕoko lik-tɛ-um</i>	“to sit down” (child language)
<i>tʃaptsʰap lik-tɛ-um</i>	“to wrinkle”

Light verb constructions based on *tat-tɛ-um* “to prepare, to perform, to put”

<i>lak tat-tɛ-um</i>	“to touch (by hand)”
<i>molam tat-tɛ-um</i>	“to pray”
<i>dzu tat-tɛ-um</i>	“to revenge”
<i>min tat-tɛ-um</i>	“to call names”
<i>ŋaro tat-tɛ-um</i>	“to make noise”

16.7.3 Light verbs based on trivalent verbs

Bunan also possesses a number of light verb constructions that are based on the verb *da-tɛ-um* “to give”. Such constructions commonly involve four main constituents: (1) an agent argument, (2) a recipient argument, (3) a theme argument and (4) an inflected form of the verb *da-tɛ-um* “to give”. The basic clause structure of light verb constructions that are based on the verb *da-tɛ-um* is illustrated by the following scheme.

Agent_{ABS/ERG} Recipient_{DAT} Theme_{ABS} *da-tɛ-um*

In the following, I provide a number of example sentences that illustrate the use of such light verb constructions.

(1045) *aw data*.

aw *da-ø-ta*
kiss give-TR-PST.INFER.DJ

“(The father) gave (his son) a kiss.”
(The Prodigal Son 25)

(1046) *girok lan dat̪sa maʔ^hupsa.*

<i>gi=tok</i>	<i>lan</i>	<i>da-t̪s-a</i>
1SG=DAT	answer	give-TR-SUP

ma-ʔ^hup-s-ɛ-dza
NEG-be.able-DETR-MID-PST.DIR.DJ.SG

“He was not able to give me an answer.”

(PS 27.10)

The following list gives an overview of the light verbs based on the verb *da-t̪s-um* that are attested in my corpus.

Light verb constructions based on *da-t̪s-um* “to give”

<i>aw da-t̪s-um</i>	“to kiss”
<i>gora da-t̪s-um</i>	“to circumambulate”
<i>lan da-t̪s-um</i>	“to answer”
<i>papa da-t̪s-um</i>	“to feed” (child language)
<i>warna da-t̪s-um</i>	“to sacrifice an animal”

17 Grammatical relations

17.1 Introduction

This chapter addresses the question of whether or not there is evidence for the existence of grammatical relations in Bunan. The typology of grammatical relations builds on a number of syntactic roles that ultimately go back to Dixon (1972: 128), although various other scholars have made important contributions to their development and popularization (see Haspelmath 2011: 539–541 for an overview of the relevant literature). There is broad consent among linguists to distinguish five syntactic roles: S, A, O, T and R¹³² (cf. Bickel 2011: 202–204). A list with definitions of these roles is given in the following.

Syntactic roles

- S = single argument of a monovalent verb
- A = most agent-like argument of a bivalent / trivalent verb
- O = most patient-like argument of a bivalent verb
- T = most patient-like argument of a trivalent verb
- R = most goal-like argument of a trivalent verb

In a recent article, Haspelmath (2011: 536–539) has pointed out that there is no universally accepted theoretical approach towards grammatical relations. Rather, there are three major traditions, which Haspelmath refers to as the “Dixonian approach”, the “Comrian approach”, and the “Bickelian approach”. These traditions are based on rather divergent conceptions of syntactic roles. For the following discussion, I adopt an approach that is largely based on Comrie ([1990] 2007). Within Comrie’s framework, the labels A and O are defined in relation to clauses that are based on prototypically transitive verbs like *to kill*, *to hit*, etc. and applied to any clause that exhibits similar morphosyntactic properties. With regard to Bunan, this means that the syntactic roles A and O are only applied to agent clauses, which consist of an agent argument in the absolutive or ergative case and a patient argument in the absolutive or dative case (cf. § 16.5.1). Experiencer clauses, which exhibit morphosyntactic properties that clearly set them apart from agent clauses (cf. § 16.5.2), are not analyzed in terms of the labels A and O. Following an approach that is advocated by Croft ([2001] 2009: 164, 2012: 22) and Haspelmath (2011: 563), I use the labels Ex and St to refer to the experiencer argument and stimulus argument of an experiencer clause.

With regard to grammatical relations, I adopt definitions and terms proposed by Bickel (2011: 401), who defines grammatical relations as “the syntactic relation that an

¹³² Note that the labels “O” and “R” are often used instead of “P” and “G”, respectively.

argument bears *to a specific construction or rule*" (emphasis original). Following Keenan (1976), Bickel distinguishes between grammatical relations that are defined by coding constructions such as case marking, verb agreement, phrase structure, and valency-changing operations and grammatical relations that are defined by behavioral constructions such as constraints on control and coreference in multiclausal constructions.

In the following subsections, I first address the question of whether coding constructions such as case marking (§ 17.2), verb agreement (§ 17.3), transitivity-decreasing operations (§ 17.4), and phrase structure (§ 17.5) provide evidence for grammatical relations. Subsequently, I investigate whether behavioral constructions that involve more than one clause (§ 17.6) define particular sets of syntactic roles. In § 17.7, I summarize the major findings of the chapter.

17.2 Case marking

This section considers the question as to whether the case marking system of Bunan provides evidence for the existence of grammatical relations. I begin the discussion with the class of monovalent verbs. S arguments can exclusively occur in the absolutive, regardless of whether they assume the semantic role of an agent, an experiencer, or a patient. This is demonstrated by the following examples.

(1047) *hanzi guj dzotk^hakni?*

<i>han=ɛi</i>	<i>guj</i>	<i>dzot-k^hakni</i>
2=PL	where	sit-INTR-PRS.2PL

"Where are you staying?"

(Conversation 69.6)

(1048) *gi kwasa.*

<i>gi</i>	<i>kwasa-dza</i>
1SG	become.full-PST.DIR.DJ.SG

"I am full."

(Conversation 74.24)

(1049) *nunan lasmi re gjardzi.*

<i>nunan</i>	<i>lasmi=re</i>	<i>gjar-dzi</i>
therefore	woman=EXT	be.afraid-PST.INFER.DJ.SG

"Therefore, the woman even became afraid."

(King Kesar 92)

(1050) *tal re dattəi ma?*

<i>tal=re</i>	<i>dat-dzi</i>	<i>ma</i>
3[SG]=EXT	fall-PST.INFER.DJ.SG	CNS

“He also fell (to his death), right?”

(Conversation 22.221)

Unlike S arguments, A arguments are not associated with a single case marker. Depending on the form of the predicate and the pragmatic context, A arguments may appear in the absolutive or the ergative case. Consider the following examples.

(1051) *gi nalma pankek.*

<i>gi</i>	<i>nalma</i>	<i>pan-k-ek</i>
1SG	wool	spin-INTR-PRS.CJ.SG

“I am spinning wool.”

(TD 194.9 [elicited])

(1052) *hantshi nira kha lik-tə-hakni?*

<i>han=tshi</i>	<i>nira</i>	<i>kha</i>	<i>lik-tə-hakni</i>
2=ERG.PL	daytime	what	make-TR-PRS.2PL

“What are you doing all day?”

(Conversation 69.6)

Ex arguments are not associated with a single case marker either and may stand in the dative or the ergative case. This is illustrated by the following examples.

(1053) ... *the meme thaŋmen gidzi the awa thaŋmen.*

<i>the</i>	<i>meme</i>	<i>thaŋ-ø-men</i>	<i>gi=dzi</i>	<i>the</i>	<i>awa</i>
this	monk	see-TR-PST.DIR.CJ	1SG=ERG.SG	this	father

thaŋ-ø-men
see-TR-PST.DIR.CJ

“... I have seen this monk, I have seen this father.”

(Conversation 36.90)

(1054) *hitikɕok mar makʰuktɕʰak.*

<i>hitik=ɕi=tok</i>	<i>mar</i>	<i>ma-kʰuk-tɕʰak</i>
other=PL=DAT	butter	NEG-find-TR-PRS.DJ.PL

“The others do not find butter.”

(The Lama and the Owl 54)

Both A arguments and Ex arguments exploit ergative marking as a morphosyntactic strategy to indicate the focal status of a given referent (cf. § 4.4.4.2). In present and future tense contexts, ergative marking is exclusively pragmatically conditioned. In the past tense, the situation is somewhat more complex. Here, agent verbs of the intransitive conjugation and experiencer verbs commonly allow differential argument marking on their A arguments, as the following examples illustrate.

(1055) *gi dzamen dzat.*

<i>gi</i>	<i>dzamen</i>	<i>dza-et</i>
1SG	food	eat-PST.DIR.CJ

“I ate (the food).”

(TD 167.5 [elicited])

(1056) *gidzi dzamen dzat.*

<i>gi=dzi</i>	<i>dzamen</i>	<i>dza-et</i>
1SG=ERG.SG	food	eat-PST.DIR.CJ

“It was me who ate (the food).”

(TD 167.6 [elicited])

(1057) *taldok kulik kʰukdza.*

<i>tal=tok</i>	<i>kulik</i>	<i>kʰuk-ø-dza</i>
3[SG]=DAT	key	find-TR-PST.DIR.DJ.SG

“She / he found the key.”

(TD 314.14 [elicited])

(1058) *taldzi kulik kʰukdza.*

<i>tal=dzi</i>	<i>kulik</i>	<i>kʰuk-ø-dza</i>
3=ERG.SG	key	find-TR-PST.DIR.DJ.SG

“It was her / him who found the key.”

(TD 314.15 [elicited])

Verbs that belong to the transitive conjugation, on the other hand, exclusively assign the ergative case to their A argument in the past tense. In this case, ergative marking does not evoke a pragmatically marked scenario, but merely represents the only possible option for marking the A argument. Consider the following example.

(1059) *gidzi / **gi len likmen.*

<i>gi=dzi / **gi</i>	<i>len</i>	<i>lik-ø-men</i>
1SG=ERG.SG / **1SG	work	find-TR-PST.DIR.DJ.SG

“I did the work.”

(TD 48.2 [elicited])

The syntactic role of O arguments is not marked by a single case clitic either. O arguments can occur in the absolutive or the dative case. However, the opposition of absolutive marking vs. dative marking on O arguments does not represent an instance of differential argument marking (see above for differential argument marking on A arguments). Accordingly, bivalent predicates can either assign the absolutive or the dative to their O arguments, but they never allow both options. In § 16.5.1, I introduced the terms “absolutive patient verb” and “dative patient verb” to refer to these two classes of verbs and argued that they correspond rather neatly to the classes of “change-of-state verbs” and “surface contact verbs” postulated by Fillmore (1970). This is exemplified in (1060) and (1061) below.

(1060) ... *talts^{hi} gi pur thirt^{um}.*

<i>tal=ts^{hi}</i>	<i>gi</i>	<i>pur=thir-t^ə-um=jen</i>
3=ERG.PL	1SG	kill=send-TR-INF=EQ.CJ

“They will kill me at once.”

(The Lama and the Owl 28)

(1061) *talts^{hi} girok k^{het} thirt^{um}.*

<i>tal=ts^{hi}</i>	<i>gi=tok</i>	<i>k^{het}=thir-t^ə-um=jen</i>
3=ERG.PL	1SG=DAT	beat=send-TR-INF=EQ.CJ

“They will beat me at once.”

(The Lama and the Owl 29)

St arguments exclusively occur in the absolutive case, as the following example sentences demonstrate.

(1062) *girok gran phoktsa.*

<i>gi=tok</i>	<i>gran</i>	<i>phok-dza</i>
1SG=DAT	stone	be.hurt-PST.DIR.DJ.SG

“I was hurt by a stone.”

(TD 23.1 [elicited])

(1063) *bas kʰuksala ma sidda?*

<i>bas_{LN}</i>	<i>kʰuk-s-ø-dza=la</i>	<i>ma</i>	<i>sidda_{LN}</i>
bus	find-DETR-MID-PST.DIR.DJ.SG	CNS	direct

“So you found a bus, (one that went) straight (to Dharamsala), right?”

(Conversation 48.7)

The same is true for T arguments, which can only ever occur in the absolutive case. This is illustrated by the example sentences below.

(1064) *wa mitsʰi dawa datum.*

<i>wa</i>	<i>mi=tsʰi</i>	<i>dawa</i>	<i>da-tə-um=jen</i>
FOC	person=ERG.PL	money	give-TR-INF=EQ.CJ

“And people give (him) money.”

(Tshechu 1.21)

(1065) *gidzi inirok hiŋzi: kat letkjata.*

<i>gi=dzi</i>	<i>ini=tok</i>	<i>hiŋ=øi=ki</i>	<i>kat</i>
1SG=ERG.SG	2[SG]=DAT	1PL.EXCL=PL=GEN	language

let-ø-kata

teach-TR-FUT.CJ.SG

“I will teach you our language.”

(Conversation 13a.109)

R arguments, finally, are not consistently marked with a specific case morpheme. Most often, they take dative case marking. However, they may also receive ablative marking in rare instances.¹³³ The distinction between dative marking and ablative marking is semantically motivated. Dative marking indicates that the respective R argument is the receiver of the T argument, while ablative marking indicates that the R argument is the provider of the T argument. This is illustrated by the following examples.

¹³³ Note that the ablative form of a noun is commonly derived from its locative form (cf. § 4.4.4.4).

(1066) *taltsh'i girok dzamen re dawts'ha nuŋ.*

tal=ts'hi *gi=tok* *dzamen=re* *da-ø-ku-ts'ha*
 3=ERG.PL 1SG=DAT food=EXT give-TR-UND-PST.DIR.DJ.PL

nuŋ
 there

“They also gave me food there.”

(Zhangzhung 38)

(1067) ... *wa the rinpotæedzi girok æatmen.*

wa *the* *rinpotæ=dzi* *gi=tok* *æat-ø-men*
 FOC this Rinpoche=ERG.SG 1SG=DAT tell-TR-PST.DIR.CJ

“... and this is what the Rinpoche told me.”

(Tulshug Lingpa 225)

(1068) *ts'hos taldokts'i dzutæhek hiŋ gompā dzotk'hek.*

ts'hos *tal=tok=ts'i* *dzu-ts'hek* *hiŋ*
 religion 3[SG]=DAT=ABL ask.HON-TR-PRS.CJ.PL 1PL.EXCL

gompā *dzot-k-k'hek*
 monastery stay-INTR-PRS.CJ.PL

“We will request religious teachings from him and stay at the monastery!”

(Tulshug Lingpa 70)

The following table summarizes the correlation between syntactic roles and case marking. Note that I do not list the ablative (which may be assigned to R arguments; see above) as a separate case, but merely treat it as a particular manifestation of the dative case, from which it is ultimately derived.

Table 121: Correlation between syntactic roles and case marking

	S	A	Ex	O	St	T	R
ABS	x	x		x	x	x	
ERG		x	x				
DAT			x	x			x

Scholars that are interested in alignment typology might ask the question whether it is possible to identify “dominant alignment patterns” based on the distribution of case markers that is depicted in the table above. This question is more difficult to answer than one might expect. Given the fact that Bunan possesses a case that I have labelled as “ergative” and another case that I refer to as “absolutive”, one might assume that Bunan displays a straightforward ergative pattern. In other words, one would expect that A arguments commonly receive the ergative case, whereas S and O arguments most often take the absolutive case. On closer examination, however, it becomes clear that such an interpretation does not do justice to the diversity of the attested alignment patterns. To be sure, it is true that A arguments often occur in the ergative case. However, we have to keep in mind that the ergative on A arguments is pragmatically marked in the majority of cases and only represents the default option in combination with agent verbs that follow the transitive conjugation and are inflected for past tense. In all other contexts, A arguments usually occur in the pragmatically unmarked absolutive case. At the same time, we have to be aware of the existence of “dative patient verbs” (cf. § 16.5.1), which take a dative-marked rather than an absolutive-marked O argument. Depending on the predicate and the pragmatic context, the alignment pattern displayed by clauses can thus be “neutral” (S, A & O = absolutive), “accusative” (S & A = absolutive / O = dative), “ergative” (A = ergative / S & O = absolutive), or “tripartite” (S = absolutive / A = ergative / O = dative).

With regard to the “object-like” syntactic roles of O arguments, T arguments, and R arguments, it is equally difficult to define a dominant alignment type. T arguments and R arguments always receive absolutive and dative marking, respectively, but O arguments may either take absolutive or dative marking. Accordingly, Bunan can be said to possess both “indirective” alignment (T & O = absolutive / R = dative) and “secundative” alignment (T = absolutive / O & R = dative) (cf. Haspelmath 2011: 541).

All in all, it is doubtful whether the search for dominant alignment types provides insight into the functional motivation of the Bunan case marking system. Rather, it seems that the search for typologically well-established alignment types such as “ergative”, “neutral”, “indirective”, etc. may obscure the presence of less well-known but more fundamental case marking relations. If we put aside more traditional approaches for the time being and simply concentrate on describing the evidence at hand, we are able to identify three basic relations: an {A_{ERG}, Ex_{ERG}}-relation, an {S, A_{ABS}, O_{ABS}, T}-relation, and an {Ex_{DAT}, O_{DAT}, R}-relation. The first of these relations evidently reflects an ergative alignment pattern that comprises both A arguments and Ex arguments. The last two relations, on the other hand, are rather difficult to reconcile with classic alignment types. However, they appear to correspond rather neatly to semantic categories that have been postulated by DeLancey (2000) in his theory of semantic case roles.

DeLancey's model is based on three basic case roles "Agent", "Theme", and "Location", which are defined as semantic rather than syntactic entities. The Agent corresponds to the argument that causes an event, the Theme represent the argument that remains in a state or undergoes a change of state, and the Location is the argument that indicates the endpoint of an event.¹³⁴ The following list relates the case roles as defined by DeLancey (2000: 7) to the grammatical relations identified above.

DeLancey's case roles

- Agent** = (a) single argument of an unergative verb (S)
 (b) agent argument of a bivalent agent verb (A_{ABS} , A_{ERG})
 (c) agent argument of a trivalent verb (A_{ABS} , A_{ERG})
- Theme** = (a) single argument of an unaccusative verb (S)
 (b) patient argument of an absolutive patient verb (O_{ABS})
 (c) stimulus argument of an experiencer verb (St)
 (d) theme argument of a bivalent verb (T)
- Location** = (a) experiencer argument of an experiencer verb (Ex_{DAT} , Ex_{ERG})
 (b) patient argument of a dative patient verb (O_{DAT})
 (c) recipient argument of a trivalent verb (R)

As the list given above demonstrates, the three case roles correlate rather neatly with the three grammatical relations that have been established above. The ergative case marks Agents, the absolutive case marks Themes, and the dative case marks Locations. Admittedly, there are mismatches between case marking and case roles with regard to the category Agent and, to a lesser extent, Location. However, I believe that these mismatches do not compromise the usefulness of DeLancey's model. Rather, the presence of mismatches indicates that the Bunan case system does not correspond to DeLancey's prototype, but displays certain deviations that reflect the influence of syntactic and pragmatic principles that are in competition with DeLancey's case roles.

Consider the distribution of the ergative case, which violates DeLancey's model in two ways. First, the ergative occurs on Ex arguments (i.e. where it is not supposed to occur). Second, the ergative is not attested on S arguments of unergative verbs (i.e. where it should occur). This mismatch suggests that ergative marking does not directly reflect the semantic case role "Agent" but rather the syntactic role A as defined in the Bickelian tradition (cf. § 17.1), that is to say, a superordinate role that comprises both agent arguments and experiencer arguments. The relationship between the case role "Agent" and the erga-

¹³⁴ DeLancey (2000: 3, 10–11) argues that the three case roles ultimately represent manifestations of three fundamental concepts of perceptual psychology: Cause, Figure, and Ground.

tive is additionally obscured by differential argument marking. In a large number of contexts, ergative marking is not obligatory, but merely serves as a morphosyntactic strategy to indicate the focal status of an A argument.

All in all, it is evident that case marking in Bunan does not display a unified and consistent alignment pattern. Rather, case assignment is governed by a number of different factors which reflect syntactic, semantic, and pragmatic principles and thus give rise to a number of rather different alignment patterns. As I have argued above, the Bunan case marking system essentially seems to reflect three basic semantic categories that correspond to DeLancey's (2000) case roles. However, syntactic and pragmatic concepts are equally important to account for all attested case patterns. Whatever analysis one may prefer, I hope to have shown in this section that the Bunan case marking system is too versatile to be reduced to a single alignment type.

17.3 Verb agreement

A morphosyntactic feature that plays a prominent role in grammatical relations typology is syntactic agreement between the verb and its arguments. In Bunan, verb agreement provides evidence for an {S, A, Ex}-relation. In keeping with established terminology, I will refer to this relation as the “subject”. Subjects are privileged syntactic arguments¹³⁵ whose number and person features are indexed on the verb. Note that the indexation of number is restricted by the referential property of animacy. That is to say, a verb will only appear in its plural form if the subject of the verb refers to a plural entity that is animate (see § 4.4.3 for similar restrictions regarding number marking on nouns).

Since person agreement is a rare phenomenon in Bunan, the privileged syntactic status of S, A and Ex arguments is most often only based on agreement in terms of number. This is, for example, the case with conjunct and disjunct present tense endings, as the following examples demonstrate.

(1069) *tʰadzu gjardoktɕi gi nira el maegek.*

<i>tʰadzu</i>	<i>gjar=tok=tɕi</i>	<i>gi</i>	<i>nira</i>	<i>el</i>	<i>ma-el-k-ek</i>
that	fear=DAT=ABL	1SG	daytime	go	NEG-go-INTR-PRS.CJ.SG

“Because of that fear I do not go during daytime.”

(The Lama and the Owl 30)

¹³⁵ See Van Valin & LaPolla (1997: 281–286) for a definition of the term “privileged syntactic argument”, which figures prominently in Role and Reference Grammar.

(1070) *eraŋ nuŋ ek^{hek}*.

eraŋ nuŋ el-k^{hek}
1PL.INCL there go-INTR-PRS.CJ.PL

“We will go there.”

(Tulshug Lingpa 177)

(1071) *awa k^{ha} lik^{ts}are?*

awa k^{ha} lik-ts-are
father what do-TR-PRS.DJ.SG

“What is father doing?”

(Conversation 53.3)

(1072) *t^hansuŋ^ɕek meme^ɕi nwak lik ma-lik-ts^{hak}*.

t^hansuŋ=ɕek meme=ɕi nwak lik ma-lik-ts^{hak}
this.year=about monk=PL so do NEG-do-TR-PRS.DJ.PL

“The monks don’t do it that way nowadays.”

(Tshechu 2.419)

(1073) *hitik^ɕok mar ma-k^huk-ts^{hak}*.

hitik=ɕi=tok mar ma-k^huk-ts^{hak}
other=PL=DAT butter NEG-find-TR-PRS.DJ.PL

“The others do not find butter.”

(The Lama and the Owl 54)

(1074) *eraŋmits^{hi} ma^hupts^{hak} t^hapats^{hi} ma^hupts^{hak} t^he^{lekti}*.

eraŋ-mi=t^{hi} ma-t^hup-ts^{hak}
1PL.INCL-person=ERG.PL NEG-be.able-TR-PRS.DJ.PL

t^ha-pa=t^{hi} ma-t^hup-ts^{hak} t^he=lek=tiki
India-NZR=ERG.PL NEG-be.able-TR-PRS.DJ.PL this=APP=INDEF

“Neither our people, nor Indians are able (to learn) this much (of a foreign language).”

(Conversation 25.23)

(1075) *dordzedzi taldok dawa datcare.*

<i>dordze=dzi</i>	<i>tal=tok</i>	<i>dawa</i>	<i>da-tc-are</i>
Dorje=ERG.SG	3[SG]=DAT	money	give-TR-PRS.DJ.SG

“Dorje gives him money.”

(TD 214.2 [elicited])

(1076) *khatciktsʰi dawa re datcʰak.*

<i>khatcik=tsʰi</i>	<i>dawa=re</i>	<i>da-tc-ʰak</i>
some=ERG.PL	money=EXT	give-TR-PRS.DJ.PL

“Some also give money.”

(Conversation 39.1)

As noted above, person agreement is exceedingly rare and only occurs in a few constructions in combination with number agreement. Most of these forms are archaic second person agreement endings that represent remnants of a once full-fledged agreement system (cf. § 13.5.4). The occurrence of these morphemes is restricted to interrogative speech acts and particular types of declarative speech acts in Bunan. The following examples illustrate the second person present agreement endings for the present tense (see § 13.5.2 for a more elaborate description of these endings).

(1077) *han kʰa liktcana?*

<i>han</i>	<i>kʰa</i>	<i>lik-tc-ana</i>
2[SG]	what	do-TR-PRS.2SG

“What are you doing?”

(TD 216.6 [elicited])

(1078) *hantʰi nira kʰa liktcʰakni hanzi guj dzotkʰakni?*

<i>han=tsʰi</i>	<i>nira</i>	<i>kʰa</i>	<i>lik-tc-ʰakni</i>	<i>han=ɕi</i>	<i>guj</i>
2=ERG.PL	daytime	what	make-TR-PRS.2PL	2=PL	where

dzot-kʰakni
sit-INTR-PRS.2PL

“What are you doing all day? Where are you staying?”

(Conversation 69.6)

Further, there are some first person agreement forms, which have been retained in the past tense (see § 13.5.1 for a more elaborate description of these endings). The fol-

lowing examples illustrate the first person endings of the direct evidential past tense for the singular and the plural.

(1079) *gi re tsunati lotkidza.*

<i>gi=re</i>	<i>tsuna=tiki</i>	<i>lot-ø-kidza</i>
1SG=EXT	little.bit=INDEF	say-TR-PST.DIR.1SG

“I also said a few words.”

(Conversation 39.5)

(1080) ... *kʰjak eranʃtsʰi tʰe purgitsʰa.*

<i>kʰjak</i>	<i>eranʃ=tsʰi</i>	<i>tʰe</i>	<i>pur-ø-kitsʰa</i>
here	1PL.INCL=ERG.PL	this	kill-TR-PST.DIR.1PL

“... (see) here, we have killed this one (i.e. the demon).”

(King Kesar 271)

Finally, it is important to note that there are some constructions in which the person and number features of S and A arguments are not indexed on the verb at all. This is, for example, the case in the conjunct past tense, as the following examples demonstrate.

(1081) *gi dzamen dzat.*

<i>gi</i>	<i>dzamen</i>	<i>dza-et</i>
1SG	food	eat-PST.DIR.CJ

“I have eaten.”

(TD 167.5 [elicited])

(1082) *hiŋ dzamen dzat.*

<i>hiŋ</i>	<i>dzamen</i>	<i>dza-et</i>
1PL.EXCL	food	eat-PST.DIR.CJ

“We have eaten.”

(Conversation 48.16)

Based on the evidence presented above, the ending *-et* could of course still be interpreted as a first person agreement form. That this morpheme encodes epistemic categories rather than a syntactic agreement is made clear by the two examples below, in which the verb *dza-men* occurs in combination with second person A arguments.

(1083) *təuŋi dzadza!*

<i>təuŋi</i>	<i>dza-dza</i>
little	eat-PST.DIR.DJ.SG

“You only ate a little amount (of rice)!”

(Conversation 42.41)

(1084) *dzamen dzat madzat hanzi?*

<i>dzamen</i>	<i>dza-et</i>	<i>ma-dza-et</i>	<i>han=ɛi</i>
food	eat-PST.DIR.CJ	NEG-eat-PST.DIR.CJ	2=PL

“Have you eaten or not?”

(Conversation 22.13)

In the declarative speech act in (1083), the verb receives the disjunct ending *-dza*, whereas in the interrogative speech act in (1084), the verb takes the conjunct ending *-et*. This demonstrates that the endings *-et* encodes privileged access to an event (see § 13.3 for a discussion of the term “privileged access”), which in turn proves that the pronouns *gi* and *hiŋ* in (1081) and (1082), respectively, do not possess the status of subjects in the relevant constructions.

17.4 Transitivity-decreasing operations

Bunan possesses two verbal suffixes that can be used to decrease the transitivity of a verb stem: (1) the middle conjugation marker *-ɛ* and (2) the detransitivizing suffix *-s* (the two suffixes are described in § 12.4.3 and § 12.3.2, respectively, in more detail). It is important to note that the detransitivizing suffix most often cooccurs with the conjugation marker *-ɛ*, as verbs that pertain to the transitive conjugation are commonly assigned to the middle conjugation when being detransitivized by means of the suffix *-s* (cf. § 12.3.2). In the following two subsections, the middle conjugation marker and the detransitivizing suffix are discussed from the perspective of grammatical relations.

17.4.1 Middle marking

Middle marking is relevant for grammatical relations in two ways. For one thing, middle marking is always tied to a controlling argument. Recall that middle marking indicates that an argument is in some way affected by the event denoted by the corresponding predicate (cf. § 12.4.3 for a more elaborate definition). This notion of “affectedness” cannot relate to any given argument, but exclusively bears upon a small set of controller arguments and, accordingly, defines a grammatical relation. For another thing, middle marking may change the valency of a given predicate by projecting a given argument into a derived grammatical relation, for example by turning the O argument of the transitive

verb form into the derived S argument of the detransitivized verb form. In this case, middle marking does not only define a controlling argument but also an “input grammatical relation” (see Bickel 2011: 419).

Let us first consider middle marking under the aspect of control. The following example sentences illustrate middle marking on monovalent, bivalent, and trivalent verbs.

(1085) *hitik pjatsi nama tshaŋtsʰaŋi nira panzak.*

<i>hitik</i>	<i>pjatsi=nama</i>	<i>tshaŋtsʰaŋi</i>	<i>nira</i>	<i>pan-ɕ-hak</i>
other	bird=all	all	daytime	fly-MID-PRS.DJ.PL

“All other birds fly during the day.”

(The Lama and the Owl 18)

(1086) *awadzi indzi: pʰos tɕakɕare.*

<i>awa=dzi</i>	<i>indzi=ki</i>	<i>pʰot-s</i>	<i>tɕak-ɕ-are</i>
father=ERG.SG	himself=GEN	put.on-NZR	wash-MID-PRS.DJ.SG

“Father is washing his own clothes.”

(DP unrec 5)

(1087) *taldzi girok papu lanzare.*

<i>tal=dzi</i>	<i>gi=tok</i>	<i>papu</i>	<i>lan-ɕ-are</i>
3=ERG.SG	1SG=DAT	socks	sell-MID-PRS.DJ.SG

“She / he sells me socks.” (The subject sells socks to earn her / his living)

(TD 325.13 [elicited])

In the examples given above, middle marking does not change the number of arguments of the respective predicates. Rather, it expresses that the most agent-like argument of a clause is in some way affected by the action denoted by the respective predicate. Accordingly, middle marking is controlled by the subject and hence defines an {S, A}-relation. Ex arguments are not part of this grammatical relation as there are no genuine middle verbs that qualify as experiencer verbs (see § 16.5.2 for the definition of the term “experiencer verb”).

Note that there are grammatical contexts in which middle marking seems to have scope over experiencer and recipient arguments, as in the sentences given below.

(1088) *girok soj tʰorǽare.*

<i>gi=tok</i>	<i>soj</i>	<i>tʰor-s-ǽ-are</i>
1SG=DAT	cold	feel-DETR-MID-PRS.DJ.SG

“I feel cold.”

(TD 315.5 [elicited])

(1089) *taldzi girok ɖawa daǽare.*

<i>tal=dzi</i>	<i>gi=tok</i>	<i>ɖawa</i>	<i>da-s-ǽ-are</i>
3=ERG.SG	1SG=DAT	money	give-DETR-MID-PRS.DJ.SG

“He gives me money.”

(TD 327.24 [elicited])

However, the verb forms *tʰor-s-ǽ-are* “feel-DETR-MID-PRS.DJ.SG” and *da-s-ǽ-are* “give-DETR-MID-PRS.DJ.SG” do not only contain the middle conjugation marker *-ǽ* but also the detransitivizing suffix *-s*. Accordingly, the middle conjugation marker merely occurs as an epiphenomenon of the detransitivizing suffix, which is discussed in the following section.

As noted above, middle marking may also change the number of core arguments of a predicate under certain circumstances. Some example sentences that illustrate the valency-changing effect of middle marking on plurivalent predicates are given below.

(1090) *gidzi tal ǽukmen.*

<i>gi=dzi</i>	<i>tal</i>	<i>ǽuk-ǽ-men</i>
1SG=ERG.SG	3[SG]	comb-TR-PST.DIR.CJ

“I combed him.”

(NN 34.5 [elicited])

(1091) *gi ǽukǽet.*

<i>gi</i>	<i>ǽuk-ǽ-et</i>
1SG	comb-MID-PST.DIR.CJ

“I combed myself.”

(NN 34.4 [elicited])

(1092) *beterok ʔopi to!*

<i>bete=tok</i>	<i>ʔopi_{LN}</i>	<i>to-a</i>
child=DAT	hat	put.on-IMP.SG

“Dress the child with a hat!”

(TD 323.13 [elicited])

(1093) *ʔopi toʔi!*

<i>ʔopi_{LN}</i>	<i>to-ʔ-i</i>
hat	put.on-MID-IMP.SG

“Put on a hat!”

(TD 51.13 [elicited])

In case of the bivalent verb *ʔuk-tʂ-um* “to comb”, the middle suffix demotes the O argument by merging it with the A argument into a derived S argument. In case of the trivalent verb *to-tʂ-um* “to dress (with a hat)”, the middle suffix demotes the R argument by merging it with the A argument into derived A argument. Accordingly, middle marking defines an input grammatical relation that comprises the syntactic roles {O, R}.

17.4.2 Detransitivization

As noted in § 12.3.2, Bunan possesses a detransitivizing suffix *-s*, which affects the transitivity of plurivalent verbs in a number of different ways. The morpheme may derive anticausative, passive, and reciprocal verb forms. In addition, the suffix is also involved in the pragmatic backgrounding of experiencer and recipient arguments (see § 12.3.2 for a detailed description of these functions). The following discussion addresses the question as to whether the detransitivizing suffix provides evidence for the existence of grammatical relations.

Let us begin our discussion with two-participant events. The following sentence is based on the verb *al-tʂ-um* “to open”, a bivalent predicate that pertains to the transitive conjugation. In the example sentence given below, the verb occurs with an A argument *tal=dzi* “3=ERG.SG” and an O argument *pitaŋ* “door”.

(1094) *taldzi pitaŋ aldza.*

<i>tal=dzi</i>	<i>pitaŋ</i>	<i>al-ʔ-dza</i>
3=ERG.SG	door	open-TR-PST.DIR.DJ.SG

“She / he opened the door.”

(TD 108.9 [elicited])

The valency of the verb *al-tə-um* may be decreased by means of the detransitivizing suffix *-s*. In the following, I provide two example sentences which contain detransitivized instances of the verb form.

(1095) *datle mik alsa.*

<i>datle</i>	<i>mik</i>	<i>al-s-ə-dza</i>
just.now	eye	open-DETR-MID-PST.DIR.DJ.SG

“Now my eyes have opened!” (said by a person who had drunk too much alcohol the night before when finally overcoming his hangover)
(TP unrec 4)

(1096) *haʔi aləi ni:.*

<i>haʔi</i>	<i>al-s-ə-dzi</i>	<i>ni:</i>
shop	open-DETR-MID-CVB.SG	EX.NON1SG

“The shop is open.”
or: “The shop has been opened.” (lit. “Having been opened, the shop is there.”)
(Conversation 36.62)

As the two examples illustrate, the detransitivized verb form possesses an anticausative meaning in (1095), whereas it can receive a resultative or a passive interpretation in (1096). The factors that govern the exact semantic interpretation of a particular detransitivized verb form are irrelevant in the context of the present discussion (see § 12.3.2.5 for a detailed account). The crucial point here is that both examples bear witness to a similar valency-decreasing process, to wit, the deletion / demotion of the A argument and the conversion of the O argument into the derived S argument of the detransitivized construction. The detransitivizing suffix thus defines an input grammatical relation that consists of the syntactic role {O}.

As noted above, the detransitivizing suffix cannot only be used to form anticausatives and passives, but may also derive reciprocals (see § 12.3.2.5 for a more elaborate discussion). This function is exemplified by the two sentences below.

(1097) *awadzi hiŋzok dziŋdza.*

<i>awa=dzi</i>	<i>hiŋ=ɕi=tok</i>	<i>dziŋ-ə-dza</i>
father=ERG.SG	1PL.INCL=PL=DAT	scold-TR-PST.DIR.DJ.SG

“Father scolded us.”
(TD 332.3 [elicited])

(1098) *miz̥i dziŋsa.*

mi=ɕi *dziŋ-s-tʂa*
person=PL scold-DETR-PST.DIR.DJ.PL

“The people were quarreling.”

(TD 332.5 [elicited])

Reciprocal verb forms are clearly different from anticausatives and passives in terms of their semantics, as the A argument is not deleted or suppressed, but merely merges with the O argument. However, the morphosyntactic process ultimately provides evidence for the same grammatical relation that has been established above, that is to say, the conversion of a bivalent predicate with two core arguments A and O into a monovalent predicate with the single core argument S. Accordingly, the detransitivizing suffix again bears witness to a relation that comprises the syntactic role {O}.

So far, we have only considered bivalent verb stems in our discussion. Accordingly, we still need to address the question as to whether the detransitivizing suffix also provides evidence for grammatical relations in combination with trivalent verb stems. Two example sentences are provided below.

(1099) *dordzedzi palmorok ɖawa damen riŋgare.*

dordze=dzi *palmo=tok* *ɖawa* *da-ø-men*
Dorje=ERG.SG Palmo=DAT money give-TR-PST.DIR.CJ

riŋ-k-are
say-INTR-PRS.DJ.SG

“Dorje_i says that he_i gave Palmo the money.”

(TD 296.7 [elicited])

(1100) *erĩ: peltsi hitikɕok daɕi ni: la?*

erĩ: *peltsi* *hitik=ɕi=tok* *da-s-ɕ-dzi*
1PL.INCL.GEN milk other=PL=DAT give-DETR-MID-CVB.SG

ni:=la
EX.NON1SG=Q

“Has our milk been given to other people?”

(Conversation 59.34)

In (1100) above, the detransitivizing suffix -s clearly has a valency-decreasing effect on the trivalent verb *da-tɕ-um* “to give”. The original A argument of the ditransitive verb stem is demoted. The original T argument, on the other hand, assumes the function

of the derived A argument, which is indicated by its ability to trigger agreement on the predicate. Based on this evidence, one might assume that the detransitivizing suffix defines an input grammatical relation that comprises T and O arguments, i.e. a directive alignment pattern. However, the detransitivizing suffix does not always bear witness to directive alignment. In combination with the trivalent verb *lot-tə-um* “to say”, the morpheme has a rather different effect, as the following examples illustrate.

(1101) *therok kʰa lottəum e tɕi tuptəumtsuktok?*

<i>the=tok</i>	<i>kʰa</i>	<i>lot-tə-um=jen</i>	<i>e</i>	<i>tɕi</i>
this=DAT	what	say-TR-INF=EQ.CJ	hey	grass

tup-tə-um=tsuk=tok
cut-TR-INF=REL=DAT

“How do we call this again, this (thing that is used) to cut the grass?”
(TD 24.1)

(1102) *katɕa ni: memɕi nwak loɕum.*

<i>katɕa=ni:</i>	<i>meme=ɕi</i>	<i>nwak</i>	<i>lot-s-ɕ-um=jen</i>
story=TOP	monk=PL	so	say-DETR-MID-INF=EQ.CJ

“As for the story, the monks tell it among themselves like that.”
(The Fairies of Kullu 2.6)

In (1102), the detransitivizing suffix does not delete the original A argument, but rather causes the A argument to merge with the R argument of the ditransitive verb form into the derived A argument of the detransitivized verb form. Accordingly, the detransitivizing suffix also provides evidence for a secundative {O, R}-relation.

It is important to note that the detransitivizing suffix does not always cause the deletion or demotion of a core argument. In combination with experiencer verbs, the morpheme does not derive verb forms with anticausative, passive, or reciprocal meaning, but rather displays the pragmatic effect of experiencer backgrounding. As argued in § 12.3.2.4, experiencer backgrounding indicates a low degree of pragmatic salience on behalf of the experiencer argument. In the following, I provide two example sentences that contain detransitivized experiencer verbs.

(1103) *girok soj tsʰorǽare.*

gi=tok soj tsʰor-s-ǽ-are
1SG=DAT cold feel-DETR-MID-PRS.DJ.SG

“I feel cold / I feel the cold.”

(TD 315.15 [elicited])

(1104) *talǽdzamen kʰotǽitsuk diǽ maskjanan̄ epo matsʰorǽak.*

tal=ǽi=tok dzamen kʰotǽi=tsuk diǽ_{LN} ma-(s)kja=nan̄
3=PL=DAT food after=REL dish NEG-become=COND

epo ma-tsʰor-s-ǽ-ʰak
well NEG-feel-DETR-MID-PRS.DJ.PL

“If they (i.e. people from Europe) do not get a dessert, they do not feel well.”

(Conversation 36.13)

As (1103) and (1104) illustrate, the detransitivizing suffix does not delete or demote one of the two arguments of the verb *tsʰor-tǽ-um* “to feel”. Rather, the experiencer arguments *gi=tok* “1SG=DAT” and *tal=ǽi=tok* “3=PL=DAT” retain their status as subjects. This is demonstrated by the fact that their number features are still indexed on the verb. Accordingly, the structure of an experiencer clause is not affected by the presence of the detransitivizing suffix. However, although experiencer backgrounding does not have a direct bearing on the structure of a clause, the process still serves the pragmatic function that is commonly associated with passivizing morphology, to wit, the backgrounding of the agent-like argument and the foregrounding of the patient-like argument (cf. Keenan and Dryer 2007: 325). Accordingly, one might say that the St argument is projected into the detransitivized relation, but fails to attain subjecthood, as the original subject is not demoted but merely backgrounded.

The detransitivizing suffix does not only display such pragmatic effects in combination with experiencer clauses, but may also serve a similar function in combination with trivalent clauses. Consider the following example sentences.

(1105) *taldzi girok qawa daǽare.*

tal=dzi gi=tok qawa da-s-ǽ-are
3=ERG.SG 1SG=DAT money give-DETR-MID-PRS.DJ.SG

“He gives me money.”

(Conversation 59.34)

(1106) *takpoti tʰattɕʰi wa girok loɕak ...*

<i>takpo=tiki</i>	<i>tʰat=tɕʰi</i>	<i>wa</i>	<i>gi=tok</i>
strong=INDEF	be.happy-CVB.PL	FOC	1SG=DAT

lot-s-ɕʰak

say-DETR-MID-PRS.DJ.PL

“They were very happy and said to me”

(Zhangzhung 87)

The example sentences that are given above contain detransitivized verb forms of the trivalent verbs *da-tɕ-um* “to give” and *lot-tɕ-um* “to say”. In both cases, the detransitivizing suffix does not cause the demotion or deletion of the A argument, which retains its status as the subject of the clause. Rather, the morpheme indicates that the recipient argument displays a low degree of pragmatic salience in the current discourse situation (cf. § 12.3.2.4). Accordingly, the detransitivizing suffix again does not affect the clause structure, but merely backgrounds the R argument by projecting the T argument into the detransitivizing relation.

The data considered so far may convey the impression that the detransitivizing suffix does never affect the structure of experiencer clauses by deleting or demoting the subject, that is to say, the Ex argument. However, this is not entirely true. As a matter of fact, the experiencer argument may lose its subject status to the stimulus argument. I refer to this phenomenon as “subject commutation”. Subject commutation is exclusively attested in combination with a particular construction, viz. the past conditional mood. The past conditional mood is a periphrastic construction that consists of the infinitive form of the main verb and the past tense of the existential copula *ni-* (cf. § 15.3.1.2), which serves as an auxiliary in this construction.

When occurring in its transitive form, the past conditional construction bears witness to the canonical subject relation that has been described earlier in this section. This is illustrated by the following example sentence.

(1107) *hantʰi kurti pʰottʰananəj soj tsʰortɕum magwantsʰa.*

<i>han=tʰi</i>	<i>kurti_{LN}</i>	<i>pʰot-ɕ-tsʰa=nənəj</i>	<i>soj</i>	<i>tsʰor-tɕ-um</i>
2=ERG.PL	jacket	put.on-MID-PST.PL=COND	cold	feel-TR-INF

ma-gwantsʰa

NEG-EX.PST.PL

“If you guys had put on jackets, you would not have been cold.”

(TD 282.10 [elicited])

However, if the experiencer argument is backgrounded, it loses its subject status to the stimulus argument. This is exemplified by the two sentences provided below.

(1108) *han tʰoj rwaŋmaŋ eldzaŋa handok tsemetɕi kʰukɕum gwaŋtsʰa.*

<i>han</i>	<i>tʰoj</i>	<i>rwaŋ=maŋ</i>	<i>el-dza=naŋ</i>	<i>han=tok</i>
2[SG]	high	mountain.pasture=ALL	go-PST.SG=COND	2[SG]=DAT
<i>tsemet=ɕi</i>	<i>kʰuk-s-ɕ-um</i>	<i>gwaŋtsʰa</i>		
girl=PL	find-DETR-MID-INF	EX.PST.PL		

“If you had gone up to the mountain pasture, you would have found the girls (who are missing).”

(TD 327.6 [elicited])

(1109) *han ɲama tʰoj rwaŋmaŋ eldzaŋa hanɬok tsemet kʰukɕum nindza.*

<i>han=ɲama</i>	<i>tʰoj</i>	<i>rwaŋ=maŋ</i>	<i>el-dza=naŋ</i>
2=all	high	mountain.pasture=ALL	go-PST.SG=COND
<i>han=ɕi=tok</i>	<i>tsemet</i>	<i>kʰuk-s-ɕ-um</i>	<i>nindza</i>
2=PL=DAT	girl	find-DETR-MID-INF	EX.PST.SG

“If you guys had gone up to the mountain pasture, you would have found the girl (who is missing).”

(TD 327.7 [elicited])

In the two examples above, the controller of the agreement is no longer the second person Ex argument (*han=tok* / *han=ɕi=tok*) but the third person St argument (*tsemet* / *tsemet=ɕi*). Still, the clause does not receive a passive interpretation, but retains an active construal. Accordingly, subject commutation can be considered as an extreme case of experiencer backgrounding (cf. § 12.3.2.4) in the sense that the detransitivizing morphology does not only display a pragmatic effect, but simultaneously projects the St argument into the subject relation.

It is important to note that the phenomenon of subject commutation is only attested in combination with backgrounded Ex arguments but not in combination with backgrounded R arguments. This is illustrated by the following example sentences, in which the A argument does not lose its subjecthood to another argument.

(1110) *anedzi hanzok dza daɕum nindza.*

<i>ane=dzi</i>	<i>han=ɕi=tok</i>	<i>dza</i>	<i>da-s-ɕ-um</i>
paternal.aunt=ERG.SG	2=PL=DAT	tea	give-DETR-MID-INF

nindza
EX.PST.SG

“Auntee should have given you tea.”

(TD 328.5 [elicited])

(1111) *taltshi handok dza daɕum gwantsʰa.*

<i>tal=tshi</i>	<i>han=tok</i>	<i>dza</i>	<i>da-s-ɕ-um</i>	<i>gwantsʰa</i>
3=ERG.PL	2=DAT	tea	give-DETR-MID-INF	EX.PST.PL

“They should have given you tea.”

(TD 328.6 [elicited])

17.5 Phrase structure

Grammatical relations cannot only be defined by morphological marking such as case morphemes, verb agreement etc., but may likewise be defined in terms of the position of a syntactic constituent within a clause. In Bunan, there is only one major constraint on phrase structure, which stipulates that the verb be the final element of a clause. Apart from that restriction, word order is more or less free. This does not mean that phrase structure does not serve any function in Bunan, however. As argued in § 16.2, the order of constituents is sensitive to pragmatic differences. This is illustrated by the following sentences.

(1112) *wa gidzi inok tʰadzu dzikme liŋpaj da.ta.*

<i>wa</i>	<i>gi=dzi</i>	<i>ini=tok</i>	<i>tʰadzu</i>	<i>dzikme liŋpa=ki</i>
FOC	1SG=ERG.SG	2[SG].HON=DAT	that	Jigme

Lingpa=GEN

da-ø-kata
give-TR-FUT.CJ.SG

“I will teach you about Jigme Lingpa’s teachings.”

(Tulshug Lingpa 36)

(1113) *handok dzamen tunmen gidzi brakkata.*

<i>han=tok</i>	<i>dzamen</i>	<i>tunmen</i>	<i>gi=dzi</i>
2[SG]=DAT	food	drinks	1SG=ERG.SG

brak-ø-kata

arrange-TR-FUT.CJ.SG

“It is me who shall provide you with food and drinks.”

(King Kesar 174)

(1114) *tete assi: lepdza ini?*

<i>tete</i>	<i>assi:LN</i>	<i>lep-ø-dza</i>	<i>ini</i>
grandfather	eighty	reach-TR-PST.DIR.DJ.SG	2[SG].HON

“Grandfather, you have reached eighty years old, right?”

(Conversation 36.108)

In (1112), (1113), and (1114), the A argument occurs in clause-initial, pre-verbal, and post-verbal position, respectively. The different pragmatic effects that are associated with these different syntactic positions are not discussed at this point, as they have already been described in § 16.2. The crucial point is that the A argument is not bound to a particular syntactic position, but may assume different positions in the clause. This demonstrates that phrase structure does not define grammatical relations in Bunan. Rather, the order of syntactic constituents is governed by pragmatic principles.

17.6 Multiclausal constructions

While the preceding sections are dedicated to grammatical relations that are defined by coding constructions, the present section focuses on grammatical relations that are defined by behavioral constructions. In the following, I discuss three different types of non-finite constructions in order to determine whether they provide evidence for grammatical relations. The relevant non-finite constructions are (1) relative clauses, (2) adverbial clauses, and (3) complement clauses.

17.6.1 Relative clauses

In Bunan, relative clauses are based on clausal nominalizations (see § 19.2 for a more detailed description of relative clauses). The most common types of relative clauses are derived from the active participle *-i*, to which the agentive nominalizer *-pa* or the relativizing nominalizer *=tsuk* are attached. As Bickel (2011: 428) points out, relative clauses often bear witness to grammatical relations in terms of their behavioral properties. In other words, a specific type of relative clause may relativize on certain syntactic roles but not on

others. In the following, I examine whether the formation of relative clauses provides evidence for the existence of grammatical relations.

Let us first consider relative clauses that are based on the active participle and the agentive nominalizer *-pa*. Consider the following example sentences.

(1115) *thoŋ iptɕipa su jen?*

<i>thoŋ</i>	<i>ipt-ɕ-i-pa</i>	<i>su</i>	<i>jen</i>
inside	sleep-MID-ACT-NZR	who	EQ.CJ

“Who is the person who is sleeping inside?”

(TD 162.2 [elicited])

(1116) *bonpotɕhos liktɕipa tɕunji mi kja-tɕhi el-tɕhok.*

<i>bonpo-tɕhos</i>	<i>lik-tɕ-i-pa</i>	<i>tɕunji</i>	<i>mi</i>	<i>kja-tɕhi</i>
Bonpo-religion	make-TR-ACT-NZR	few	person	become-CVB.PL

el-tɕhok
go-PST.INFER.DJ.PL

“The people who practice the Bonpo religion have become few.”

(Zhangzhung 29)

(1117) *thadzu len khuktɕipa mi gi: atɕho jen.*

<i>thadzu</i>	<i>len</i>	<i>khuk-tɕ-i-pa</i>	<i>mi</i>	<i>gi=ki</i>
that	work	find-TR-ACT-NZR	person	1SG=GEN

atɕho *jen*
older.brother EQ.CJ

“That person who found work is my brother.”

(TD 328.9 [elicited])

As the examples above demonstrate, relative clauses that are based on the relative participle and the agentive nominalizer *-pa* may relativize on S, A, and Ex arguments. However, it is not possible for them to refer to any “object-like” syntactic role, that is to say, the syntactic roles O, St, T, or R. In addition, this type of relative clause can exclusively relativize on S arguments that exhibit a high degree of agentivity but not on S arguments of so-called “unaccusative verbs”, e.g. ***dat-i-pa* “somebody who falls” or ***ɕit-ɕ-i-pa* “somebody who dies” (cf. § 4.3.2). Accordingly, this relativization strategy provides evidence for a split between agent-like S_A arguments and patient-like S_O arguments and defines a grammatical relation $\{S_A, A, Ex\}$.

Let us now turn to relative clauses that are based on the agentive participle and the relativizing nominalizer =*tsuk*. When considering clausal nominalizations that are based on intransitive or middle verbs, one may at first get the impression that this relativization strategy does not provide evidence for grammatical relations. As the following example sentences illustrate, such relative clauses may relativize on essentially any argument of a one-participant or a two participant-event.

(1118) *nuj rajtsuk mu a:da: fuʔtoktɕi noj ni: la ma?*

<i>nuj</i>	<i>ra-i=tsuk</i>	<i>mu</i>	<i>a:da:LN</i>	<i>fuʔLN=tok=tɕi</i>	<i>noj</i>
new	come-ACT=REL	snow	half	foot=DAT=ABL	much
<i>ni:=la</i>		<i>ma</i>			
EX.NON1SG=Q		CNS			

“The snow that has newly fallen is higher than half a foot, right?”
(Conversation 29.5)

(1119) *rwaŋtɕi daʔjtsuk hambu ɕittɕi.*

<i>rwaŋ=tɕi</i>	<i>dat-i=tsuk</i>	<i>hambu</i>	<i>ɕit-dʒi</i>
mountain.pasture=ABL	fall-ACT=REL	cow	die-PST.INFER.DJ.SG

“The cow that fell from the mountain pasture died.”
(NN 37.5 [elicited])

(1120) *tɕi twajtsuk mi gi: awa jen.*

<i>tɕi</i>	<i>twa-i=tsuk</i>	<i>mi</i>	<i>gi=ki</i>	<i>awa</i>	<i>jen</i>
grass	mow-ACT=REL	person	1SG=GEN	father	EQ.CJ

“The person who is cutting grass is my father.”
(TD 330.7 [elicited])

(1121) *twajtsuk tɕi rotɕokkuŋ tsak!*

<i>twa-i=tsuk</i>	<i>tɕi</i>	<i>rotɕok=kuŋ</i>	<i>tsak-a</i>
mow-ACT=REL	cut	hayloft=LOC	put.inside-IMP.SG

“Put the grass that has been cut into the hayloft!”
(TD 330.8 [elicited])

Indeed, the relativization strategy that is illustrated in the examples above does not define a subset of particular syntactic roles. The head noun of the relative clause may be an S_A, an S_O, an A, or an O argument. Accordingly, the relationship between the relative

clause and the head noun is not constrained by the syntactic role of the head noun. Rather, the formation of relative clauses from intransitive and middle verbs is governed by pragmatic principles, as I argue in § 19.2.2. Things are different, however, in case of verbs that follow the transitive conjugation. Consider the following example sentences.

(1122) *hertsuk jato tsʰoŋ lik-tɕ-i=tsuk jato tapɕi radzi.*

<i>her=tsuk</i>	<i>jato</i>	<i>tsʰoŋ</i>	<i>lik-tɕ-i=tsuk</i>	<i>jato</i>
again	friend	trade	make-TR-ACT=REL	friend
<i>tap-s-ɕ-dzi</i>			<i>ra-dzi</i>	
bring.back-DETR-MID-CVB.SG			come-PST.INFER.DJ.SG	

“The other friend, the friend that had been trading, came back.”
(Conversation 87.341)

(1123) *ʰadzu len kʰuktɕitsuk mi gi: atɕʰo jen.*

<i>ʰadzu</i>	<i>len</i>	<i>kʰuk-tɕ-i=tsuk</i>	<i>mi</i>	<i>gi=ki</i>
that	work	find-TR-ACT=REL	person	1SG=GEN
<i>atɕʰo</i>		<i>jen</i>		
older.brother		EQ.CJ		

“That person who got the job is my older brother.”
(TD 328.8 [elicited])

(1124) *pasanɖok ɖawa datɕitsuk mi kudzuŋtsuk jen.*

<i>pasan=tok</i>	<i>ɖawa</i>	<i>da-tɕ-i=tsuk</i>	<i>mi</i>
Pasang=DAT	money	give-TR-ACT=REL	person
<i>kudzu=maŋ=tsuk</i>		<i>jen</i>	
Kullu.Valley=ALL=REL		EQ.CJ	

“The man who gave money to Pasang is from the Kullu Valley.”
(TD 213.1 [elicited])

In the examples listed above, the nominalized verb forms relativize on A and Ex arguments. There is no instance of a transitive participle relativizing on an S argument, as there are no monovalent verbs in the transitive conjugation. A and Ex arguments are the only syntactic roles which may be relativized on by a clausal nominalization that is based on a transitive verb form. In other words, the non-finite form *lik-tɕ-i=tsuk* “make-TR-ACT=REL” can only refer to the agent argument (i.e. the person who makes something) but not to the patient argument (i.e. the object being made), while the non-finite form *da-*

tə-i=tsuk “give-TR-ACT=REL” can only refer to the agent argument (i.e. the person who gives) but not to the theme argument (i.e. the object being given) or the recipient argument (i.e. the person who receives the object). “Object-like” syntactic roles can only be relativized on by relative clauses that are based on detransitivized active participles. This is illustrated by the following examples.

(1125) *men men likəitsuk thaminətəi rikəi jendzi.*

<i>men</i>	<i>men</i>	<i>lik-s-ə-i=tsuk</i>
NEG.EQ.CJ	NEG.EQ.CJ	make-DETR-MID-ACT=REL
<i>thaminətəi</i>	<i>rik-s-ə-i=jendzi</i>	
down.there=ABL	bring-DETR-MID-ACT=EQ.DJ.SG	

“No, no, he is bringing (the ovens) that are made (in the factory) from down there.”
(Conversation 55.175)

(1126) *girok khukəitsuk petəa soltak tok ni.*

<i>gi=tok</i>	<i>khuk-s-ə-i=tsuk</i>	<i>petəa</i>	<i>soltak=tok</i>
1SG=DAT	find-DETR-MID-ACT=REL	book	table=DAT
<i>ni:</i>			
EX.NON1SG			

“The book that I have found is lying on the table.”
(TD 332.10 [elicited])

(1127) *girok daəitsuk qawa niskin ton jendzi.*

<i>gi=tok</i>	<i>da-s-ə-i=tsuk</i>	<i>qawa</i>	<i>niskin</i>	<i>ton</i>
1SG=DAT	give-DETR-MID-ACT=REL	money	two	thousand
<i>jendzi</i>				
EQ.DJ.SG				

“The amount of money that has been given to me is two thousand (rupees).”
(TD 214.23 [elicited])

(1128) *gidzi dawa dasitsuk lasmi nawang ama jendzi*

<i>gi=dzi</i>	<i>dawa</i>	<i>da-s-ɕ-i=tsuk</i>	<i>lasmi</i>
1SG=ERG.SG	money	give-DETR-MID-ACT=REL	woman
<i>nawang=ki</i>	<i>ama</i>	<i>jendzi</i>	
Nawang=GEN	mother	EQ.DJ.SG	

“The woman whom I gave money to is Nawang’s mother.”

(TD 137.6 [elicited])

The example sentences considered so far suggest that relative clauses that are based on the relativizing morpheme =*tsuk* define two mutually exclusive subsets of syntactic roles: an {S, A, Ex}-relation and an {O, St, T, R}-relation. However, the situation is in fact more complex. For one thing, experiencer arguments can be backgrounded by projecting them into the “object-like” relation, which is illustrated by the following sentence.

(1129) *thadzu len khukɕitsuk mi gi: atɕho jen.*

<i>thadzu</i>	<i>len</i>	<i>khuk-s-ɕ-i=tsuk</i>	<i>mi</i>	<i>gi=ki</i>
that	work	find-DETR-MID-ACT=REL	person	1SG=GEN
<i>atɕho</i>	<i>jen</i>			
older.brother	EQ.CJ			

“That person who got the job is my older brother.”

(TD 328.10 [elicited])

As argued in § 12.3.2.4, the backgrounding of experiencer arguments depends on the pragmatic salience of the relevant participant. Pragmatically non-salient experiencer arguments are likely to be backgrounded, whereas pragmatically prominent experiencer arguments do not trigger the detransitivization of the corresponding predicate.

Experiencer arguments are not the only arguments that may be backgrounded. The same phenomenon is also attested in combination with recipient arguments. The phenomenon is, however, exclusively attested with relative clauses that take A arguments as their head nouns. In other words, recipient backgrounding is restricted to contexts in which (1) the agent argument is being relativized on and (2) the corresponding recipient argument exhibits a low degree of pragmatic salience. Consider the following example sentence.

(1130) *girok qawa daɕitsuk mi kudzuŋtsuk jen.*

<i>gi=tok</i>	<i>qawa</i>	<i>da-s-ɕ-i=tsuk</i>	<i>mi</i>
1SG=DAT	money	give-DETR-MID-ACT=REL	person
<i>kudzu=maŋ=tsuk</i>		<i>jen</i>	
Kullu.Valley=ALL=REL		EQ.CJ	

“The person who gave me money is from Kullu.”

(TD 328.8 [elicited])

All in all, relativization is subject to certain constraints that provide evidence for grammatical relations. However, these constraints cannot be established for all predicate classes. Relative clauses that are derived from intransitive or middle verbs may relativize on essentially any syntactic role. Relative clauses that are based on transitive verbs, on the other hand, bear witness to two different grammatical relations: a role set {S, A, Ex}, which is defined by transitive active participles, and a role set {A, Ex, O, St, T, R}, which is defined by detransitivized active participles. The projection of A and Ex arguments into one of the two grammatical relations is governed by the pragmatic salience of the corresponding recipient and experiencer argument, respectively.

17.6.2 Adverbial clauses

Adverbial clauses have the status of non-finite clauses in Bunan. Adverbial clauses do not provide evidence for grammatical relations, as the deletion of arguments as well as the coreference between arguments is entirely governed by the pragmatic context of an utterance. This is illustrated by the following example sentences.

(1131) *qolmadzi dzaŋporok qawa data wa kjumamaŋ eldʒi.*

<i>qolma=dzi</i>	<i>dzaŋpo=tok</i>	<i>qawa</i>	<i>da-ɕ-ta</i>
Drolma=ERG.SG	Zangpo=DAT	money	give-TR-PST.INFER.DJ
<i>wa</i>		<i>kjuma=maŋ el-dʒi</i>	
FOC	home=ALL	go-PST.INFER.DJ.SG	

“Drolma_i gave Zangpo_j the money and (she_i / he_j) went home.”

(TD 108.1 [elicited])

(1132) *amadzi dɔlmarok kʰetdʒi tʃodza.*

<i>ama=dzi</i>	<i>dɔlma=tok</i>	<i>kʰet-ø-dʒi</i>	<i>tʃo-dza</i>
mother=ERG.SG	Drolma=DAT	beat-TR-CVB	cry-PST.DIR.DJ.SG

“Mother_i beat Drolma_j and then (ʔshe_i / she_j) cried.”

(TD 189.6 [elicited])

(1133) *amadzi dɔlmarok kʰetɛistanɔ tal tʃodza.*

<i>ama=dzi</i>	<i>dɔlma=tok</i>	<i>kʰet-tɛ-i-s=tan</i>
mother=ERG.SG	Drolma=DAT	beat-TR-ACT-NZR=CAUS

tʃo-dza

cry-PST.DIR.DJ.SG

“Because mother_i beat Drolma_j, (ʔshe_i / she_j) cried.”

(TD 245.2 [elicited])

In the examples given above, the subject position in the finite clause can be assumed by both the A argument and the O argument of the non-finite clause. In case of (1132) and (1133), the pragmatic context strongly suggests that it was Drolma who cried, as she is the participant who was beaten. However, in an appropriate context, it might as well be the mother who cried after having beaten Drolma. Note that there is no restriction on the occurrence of overt pronouns in either of the two clauses. Accordingly, the presence / absence of overt pronouns as well as the coreference between arguments of the non-finite clause and arguments of the finite clause is entirely based on pragmatics.

17.6.3 Complement clauses

Bunan makes extensive use of non-finite verb forms to form complement clauses. As Bickel (2011: 422) points out, clause chaining may provide evidence for grammatical relations in forms of constraints that ban the overt occurrence of arguments or impose restrictions on their reference. Complement clauses in Bunan only provide limited evidence for grammatical relations. This evidence comes from embedded supine clauses. In Bunan, non-finite supine forms are commonly used to form final clauses. As final clauses presuppose that the relevant event entails a willful instigator, such clauses can only be formed from verbs that involve an “agent-like” argument, i.e. an agent argument or a recipient argument. Three example sentences of final clauses are given below.

(1134) *gi iptəa elte.*

<i>gi</i>	<i>ipt-ə-a</i>	<i>el-te</i>
1SG	sleep-MID-SUP	go-VOL.SG

“I will go to sleep.”

(SZ 13.1 [elicited])

(1135) *gi lottəipazi hentəa elte.*

<i>gi</i>	<i>lot-tə-i-pa=əi</i>	<i>hen-tə-a</i>	<i>el-et</i>
1SG	say-TR-ACT-NZR=PL	hear-TR-SUP	go-PST.DIR.CJ

“I went to hear the speakers (at the meeting).”

(TD 332.12 [elicited])

(1136) *dordze aru joktəa eldza.*

<i>dordze</i>	<i>aru</i>	<i>jok-tə-a</i>	<i>el-dza</i>
Dorje	potato	buy-TR-SUP	go-PST.DIR.DJ.SG

“Dorje went to buy potatoes.”

(TD 328.17 [elicited])

The three examples each consist of a main clause and an embedded supine clause. (1134) contains the supine clause *ip-tə-a* “to sleep”, (1135) contains the supine clause *lot-tə-i-pa=əi hen-tə-a* “to hear the speakers”, and (1136) contains the supine clause *aru jok-tə-a* “to buy potatoes”. In these embedded clauses, it is not possible to have an overt S, Ex, or A argument. Rather, this empty syntactic position is controlled by an argument of the main clause. This is illustrated by the following syntactic schemes.

Deletion of S, Ex & A arguments in embedded supine clauses

(1134): [*gi* [___ / ***gi ipt-ə-a*]_{DepCl} *el-te*]_{MainCl}

(1135): [*gi* [___ / ***gi=tok lot-tə-i-pa=əi hen-tə-a*]_{DepCl} *el-et*]_{MainCl}

(1136): [*dordze* [___ / ***tal aru jok-tə-a*]_{DepCl} *el-dza*]_{MainCl}

The deletion of S, Ex, and A arguments in embedded supine clauses defines an {S, Ex, A}-relation. The examples given above suggest that the empty syntactic position in the embedded supine clause can only be related to the S, Ex, or A argument of the matrix clause. This constraint on coreference would define an input grammatical relation. However, the empty syntactic position may also be related to other arguments, as the following example illustrates.

(1137) *awadzi dordzerok aru joktəa qawa dadza.*

<i>awa=dzi</i>	<i>dordze=tok</i>	<i>aru</i>	<i>jok-tə-a</i>	<i>qawa</i>
father=ERG.SG	Dorje=DAT	potato	buy-TR-SUP	money

da-ø-dza

give-TR-PST.DIR.DJ.SG

“Father gave Dorje money to buy potatoes.”

(TD 328.16 [elicited])

17.7 Summary

This section provides an overview of grammatical relations in Bunan. The following list summarizes the evidence for the existence of grammatical relations in seven different domains: (1) case marking, (2) verb agreement, (3) middle marking, (4) detransitivization, (5) phrase structure, (6) relative clauses, (7) adverbial clauses, and (8) complement clauses.

1) Case marking

a) {A_{ERG}, Ex_{ERG}}

b) {S, A_{ABS}, O_{ABS}, St, T}

c) {Ex_{DAT}, O_{DAT}, R}

These three relations are defined by ergative, absolutive, and dative case marking, respectively. The {A_{ERG}, Ex_{ERG}}-relation is most often pragmatically motivated and indicates the focal status of the respective referents. Ergative marking is only obligatory on A arguments of predicates that (1) belong to the transitive conjugation and (2) are inflected for past tense. The {S, A_{ABS}, O_{ABS}, St, T}-relation as well as the {Ex_{DAT}, O_{DAT}, R}-relation are semantically motivated and bear witness to the semantic case roles Theme and Location.

2) Verb agreement

a) {S, A, Ex}

The {S, A, Ex}-relation is defined by the ability of the respective arguments to trigger agreement on the predicate in terms of number and, to a lesser extent, person.

3) Middle marking

a) {S, A}

b) {O, R}

The {S, A}-relation refers to the controller argument of middle marking, whereas the {O, R}-relation refers to the input relation defined by valency-decreasing operations.

4) Detransitivization

a) {O, St, T, R}

The {O, St, T, R}-relation is defined as an input grammatical relation for the detransitivizing operations of passivization, anticausativization, and reciprocalization. Note that the detransitivizing suffix does usually not change the structure of experiencer clauses, but merely display the pragmatic effect of experiencer backgrounding.

5) Phrase structure

a) pragmatic

The order of constituents in a clause does not bear witness to grammatical relations, as phrase structure is exclusively governed by pragmatic principles.

6) Relative clauses

a) {S_A, A, Ex}

b) {S, A, Ex}

c) {A, Ex, O, St, T, R}

d) pragmatic

The {S_A, A, Ex}-relation is defined by relative clauses that are based on the agentive nominalizer *-pa*. Relative clauses that are based on the relativizing nominalizer *=tsuk* define two different relations in combination with transitive verbs. Transitive participles define an {S, A, Ex}-relation, whereas detransitivized participles bear witness to an {A, Ex, O, St, T, R}-relation. The projection of A and Ex arguments into one of the two relations is governed by the pragmatic salience of the corresponding experiencer and recipient argument, respectively. In combination with intransitive and middle verbs, relativization is entirely based on the pragmatic context.

7) Adverbial clauses

a) {pragmatic}

There are no control constraints on empty positions in chained clauses. The relationship between overt arguments and empty positions is entirely governed by the pragmatic context.

8) Complement clauses

a) {S, A, Ex}

The {S, A, Ex}-relation is defined through the empty position in embedded supine clauses that is controlled by an argument from the matrix clause.

This summary reveals that the seven domains listed above bear witness to a bewildering number of grammatical relations. To be sure, there are alignment patterns that recur across different domains. There is, for example, robust evidence for a subject relation {S, A, Ex} as well as somewhat limited evidence for an “object-like” relation {O, St, T, R}. However, these relations are by no means pervasive. The grammatical relations defined by case marking, for example, do not reflect a “subject relation” and an “object relation”, but rather bear witness to a split ergative pattern and a trichotomy of semantic case roles, viz. Agent, Theme, and Location. At the same time, intransitive relative clauses do not provide evidence for grammatical relations at all. Here, the relationship between the head noun and the relative clause is entirely construed on grounds of the pragmatic context of the utterance. The same holds true for chained clauses, where the relationship between arguments and empty positions is established on the basis of the pragmatic context as well. Finally, it is important to note that phrase structure does not identify grammatical relations either, as the order of syntactic constituents is also governed by pragmatics rather than syntactic roles.

These considerations demonstrate that Bunan is a language in which coding properties and behavioral properties do not consistently converge on the same grammatical relations. To be sure, the two types of grammatical relations are not entirely dissociated from each other. For example, the subject relation defined by verb agreement also emerges from control and reference constraints in relativization and complementation. However, a number of other domains provide evidence for different types of grammatical relations (e.g. case marking) or do not specify grammatical relations at all (e.g. intransitive relative clauses).¹³⁶ Accordingly, it is not sensible to call Bunan an “absolutive-ergative

¹³⁶ As Bickel (Bickel 1999: 3–7, 2004: 184) points out, the dissociation of grammatical relations as defined by coding properties and grammatical relations as defined by behavioral properties is a characteristic trait of Tibeto-Burman languages.

language” or a “nominative-accusative language”. Assigning the language to a single type does not do justice to the variety of individual alignment patterns attested. Rather, we may characterize Bunan as a language with a verbal system that provides robust evidence for accusative alignment and a case marking system that provides limited evidence for split ergative alignment. The accusative pattern defined by the verbal system is relevant for two further grammatical domains, viz. relativization and complementation. The split ergative pattern, on the other hand, does not appear to have a bearing on any other grammatical domain.

18 Non-declarative speech acts

18.1 Introduction

This chapter describes non-declarative speech acts. Under the label “non-declarative speech acts”, I subsume the grammatical domains of interrogative speech acts and imperative speech acts. As will be demonstrated in the following, the domain of interrogative speech acts is essentially related to the domain of declarative speech acts. In other words, the morphosyntactic structure of questions is not fundamentally different from the morphosyntactic structure of statements. Rather, interrogative speech acts are derived from declarative speech acts by means of the question clitic *=la* or by use of interrogative pronouns. The domain of imperative speech acts, on the other hand, is not linked to another grammatical domain in a similar manner. Imperatives are formed from a particular set of verbal endings that exclusively serve the function of expressing commands.

In what follows, the two grammatical domains are discussed in two separate sections. § 18.2 describes interrogative speech acts, whereas § 18.3 discusses imperative speech acts.

18.2 Interrogative speech acts

This section describes the structure of interrogative speech acts. Following established terminology, I distinguish between two major types of interrogative speech acts: (1) “polar questions” and (2) “information questions” (cf. König & Siemund 2007: 291). Polar questions are speech acts that demand the verification or falsification of the relevant proposition, which is why they are sometimes also referred to as “yes/no questions”. Information questions, on the other hand, are speech acts that request information about an entity that is specified by an interrogative pronoun. Such speech acts are also commonly known under the term “wh-questions”. In the following subsections, the two types of interrogative speech acts are discussed in more detail.

18.2.1 Polar questions

In Bunan, polar questions are derived from declarative statements by attaching the phrasal clitic *=la* to the predicate. This is illustrated by the following two examples.

(1138) *apa tʰi:k ni: la?*

<i>apa</i>	<i>tʰi:k_{LN}</i>	<i>ni:=la</i>
grandmother	alright	EX.NON1SG=Q

“Is grandmother alright?”

(Conversation 29.11)

(1139) *manu sums ra:re la?*

<i>manu</i>	<i>sums</i>	<i>ra-k-are=la</i>
Manuel	boredom	come-INTR-PRS.DJ.SG=Q

“Manuel, are you feeling bored?”

(Conversation 59.10)

Besides the simple polar interrogative construction exemplified above, Bunan possesses another type of polar interrogative construction that has been referred to as “balanced question” (Burling 1961: 72), “A-not-A question” (Li & Thompson 1984: 52–54), or “alternative choice question” (Givón [1984–1990] 2001, 2: 299). For the following discussion, I will adopt the term “balanced question” proposed by Burling. Balanced questions are frequently encountered in the languages of Asia (cf. König & Siemund 2007: 292). They are formed by repeating the negative finite inflected form of the predicate at the end of the clause. The question particle *=la* may occur on both, either, or none of the two verb forms. The fact that the question particle does not necessarily have to occur in a balanced question suggests that the syntactic structure of such a construction sufficiently indicates that the speech act is interrogative. The following example sentences illustrate balanced question constructions in Bunan.

(1140) *dzamen dzat madzat handzi?*

<i>dzamen</i>	<i>dza-et</i>	<i>ma-dza-et</i>	<i>han=dzi</i>
food	eat-PST.DIR.CJ	NEG-eat-PST.DIR.CJ	2=ERG.SG

“Have you eaten or not?”

(Conversation 22.13)

(1141) *amtəa elet la maelet hanzi?*

<i>amt-ə-a</i>	<i>el-et=la</i>	<i>ma-el-et</i>	<i>han=əi</i>
walk-MID-SUP	go-PST.DIR.CJ=Q	NEG-go-PST.DIR.CJ	2=PL

“Did you go for a walk or not?”

(Conversation 44.15)

(1142) ... *ṭadzu barlakkunḡ gamgamti tankjare mastankjare la lotkja lotta.*

<i>ṭadzu</i>	<i>barlak=kunḡ</i>	<i>gamgam=tiki</i>	<i>tant-k-are</i>
that	intermediate.space=LOC	gap=INDEF	see-INTR-PRS.DJ.SG
<i>ma-(s)tant-k-are=la</i>			
NEG-see-INTR-PRS.DJ.SG=Q	<i>lot-ka</i>	<i>lot-ø-ta</i>	
	say-PROG	say-TR-PST.INFER.DJ	

“... between that can you see a gap or not?’ he said.”

(King Kesar 260)

(1143) *ṣugu tokna kja:re la makja:re la?*

<i>ṣugu</i>	<i>tokna</i>	<i>kja-k-are=la</i>
paper	correct	become-INTR-PRS.DJ.SG=Q
<i>ma-kja-k-are=la</i>		
NEG-become-INTR-PRS.DJ.SG=Q		

“Are you getting the paperwork done as required or not?”

(Conversation 14.62)

Finally, it is also possible to form information questions by adding the consent particle *ma* (§ 10.3.2) or the querying particle *ake* (§ 10.3.3) to a clause. This option is illustrated by the two example sentences given below.

(1144) *apa ṭhi:k ni: ma?*

<i>apa</i>	<i>ṭhi:k_{LN}</i>	<i>ni:</i>	<i>ma</i>
grandmother	okay	EX.NON1SG	CNS

“Grandmother is well, right?”

(Conversation 29.23)

(1145) *amtsi ṭharkā ni: ake?*

<i>amtsi</i>	<i>ṭharkā</i>	<i>ni:</i>	<i>ake</i>
road	be.cleared-PROG.SG	EX.NON1SG	QUE

“The road (to Lahaul) is open, isn’t it?”

(Conversation 49.31)

However, unlike simple polar questions and balanced questions, interrogative constructions that are based on the particles *ma* and *ake* make certain presuppositions about the truth content of a given proposition. These pragmatic effects are discussed in § 10.3.2 and § 10.3.3, respectively.

18.2.2 Information questions

Information questions display the same syntactic structure as affirmative statements, but contain an interrogative pronoun (see § 5.2.3) that designates them as interrogative speech acts. The interrogative pronoun commonly occurs in the preverbal position, which is the preferred syntactic slot for focal elements (cf. § 16.2.2.2). A number of example sentences that contain information questions are given below.

(1146) *dakpo su jen?*

<i>dakpo</i>	<i>su</i>	<i>jen</i>
husband	who	EQ.CJ

“Who is your husband?”

(King Kesar 64)

(1147) *kekir itaik dzate?*

<i>kekir</i>	<i>itaik</i>	<i>dza-te</i>
flatbread	how.many	eat-VOL.SG

“How many pieces of flatbread do you want to eat?”

(Conversation 22.142)

(1148) *hāj mik lej kʰalak kjadza?*

<i>hāj</i>	<i>mik</i>	<i>lej</i>	<i>kʰalak</i>	<i>kja-dza</i>
2SG.GEN	eye	yellow	why	become-PST.DIR.DJ.SG

“Why have your eyes become yellow?”

(The Lama and the Owl 47)

As the examples above demonstrate, information questions do not usually contain the interrogative clitic *=la*, which is commonly found in polar questions (see above). However, my corpus contains some information questions that display both an interrogative pronoun and the clitic *=la*. An example is given below.

(1149) *kʰanak de la?*

<i>kʰanak</i>	<i>de=la</i>
how	ATT.SG=Q

“How is your condition?”

(King Kesar 96)

The difference between information questions that contain the clitic *=la* and information questions that do not exhibit the clitic is not entirely clear. Some of my consultants

stated that information questions that display the interrogative clitic are more emphatic and insistent. However, further research is needed to confirm this claim.

18.3 Imperative speech acts

This section discusses different types of imperative speech acts. In keeping with well-established descriptive concepts, I use the term “imperative” to refer to a type of mood that expresses commands to 2nd person addressees and the term “prohibitive” to refer to a type of mood that expresses negative imperatives (cf. König & Siemund 2007: 303–4). The imperative and prohibitive are discussed in the following subsections.

18.3.1 Imperatives

Bunan possesses a set of particular endings to form imperative clauses. In the case of verbs that follow the intransitive or the transitive conjugation, imperatives are derived by suffixing the endings *-a* (singular) and *-ni* (plural) directly to the verb stem. In case of verbs that belong to the middle conjugation, imperatives are formed by attaching the endings *-i* (singular) and *-ni* (plural) to the verb stem including the middle conjugation marker *-ɛ*. This is illustrated by the following table.

Table 122: Imperative endings

	INTR	MID	TR
SG	<i>V-a</i> V-IMP.SG	<i>V-ɛ-i</i> V-MID-IMP.SG	<i>V-a</i> V-IMP.SG
PL	<i>V-ni</i> V-IMP.PL	<i>V-ɛ-ni</i> V-MID-IMP.PL	<i>V-ni</i> V-IMP.PL

After verb roots that end in the vowel /a/, the imperative singular suffix is dropped. Accordingly, the imperative singular forms of the verb *dza-men* is not pronounced as [za:] (with a long vowel) but as [zæ] (with a short vowel). In other phonological contexts, old speakers generally pronounce the imperative singular endings as a distinctive phonological element. However, members of the young and middle speaker generations do not generally pronounce the imperative singular endings anymore. Accordingly, the imperative singular form *thaks-a* “get.ready-IMP.SG” is pronounced as [thɑʔχsæ ~ thɑʔχsə] by old speakers but as [thɑʔχs] by younger speakers.

Most verbs derive their imperative forms according to the morphological processes outlined above. However, the verbs *lik-tɛ-um* “to do, to make” and *rik-tɛ-um* “to bring” exhibit the irregular singular imperative forms *le* “do.IMP.SG” and *re* “bring.IMP.SG”. These irregular forms are truncated versions of the formerly regular forms **lik-a* “do-IMP.SG” and

*rik-a “bring-IMP.SG”. A number of example sentences that illustrate imperative forms are given in the following.

(1150) *dza da biskit̚ dza!*

<i>dza-a</i>	<i>da</i>	<i>biskit̚_{LN}</i>	<i>dza-a</i>
eat-IMP.SG	now	cookie	eat-IMP.SG

“Eat, now, eat a cookie!”

(Conversation 1.26)

(1151) *dzani dzani!*

<i>dza-ni</i>	<i>dza-ni</i>
eat-IMP.PL	eat-IMP.PL

“Eat, eat!”

(Conversation 55.215)

(1152) *girok şunt̚i!*

<i>gi=tok</i>	<i>şunt-ə-i</i>
1SG=DAT	wait-MID-IMP.SG

“Wait for me!”

(NN 25.45 [elicited])

(1153) *da ipt̚ini!*

<i>da</i>	<i>ipt-ə-ni</i>
now	sleep-MID-IMP.PL

“Sleep now!”

(NN 25.56 [elicited])

(1154) *bura wa ne!*

<i>but-a</i>	<i>wa</i>	<i>ne</i>
put.down-IMP.SG	FOC	SUG

“Well, let’s leave it then!”

(Conversation 58.68]

(1155) *nunṭṭai nunṭṭai rere da tṣʰospa likni riŋi ni:*

<i>nunṭṭai</i>	<i>nunṭṭai</i>	<i>rere</i>	<i>da</i>	<i>tṣʰos-pa</i>	<i>lik-ni</i>
then	then	everybody	now	religion-NZR	make-IMP.PL
<i>riŋ-i</i>	<i>ni:</i>				
say-ACT	EX.NON1SG				

“And then he used to say to everybody, ‘Become followers of the Dharma now!’”
(Tshechu 2.514)

Imperative forms may be followed by the suggestive particle *ne* (see § 10.3.4). This particle is commonly used to make polite but slightly emphatic orders. Accordingly, *ne* is commonly encountered in contexts in which somebody urges a person with a similar or higher social status to perform a particular action. Consider the following example sentences.

(1156) *tantan le ne!*

<i>tantan</i>	<i>le</i>	<i>ne</i>
sure	make.IMP.SG	SUG

“Do make sure (that there will be enough people in the audience)!”
(Conversation 79.15)

(1157) *dzani dzani ne!*

<i>dza-ni</i>	<i>dza-ni</i>	<i>ne</i>
eat-IMP.PL	eat-IMP.PL	SUG

“Eat, eat, please!”
(Conversation 55.214)

In addition, imperative forms can also be followed by the interjection *ho* “yes”, which is then cliticized to the predicate. Commands that are formed with *ho* are rather direct and emphatic. Accordingly, they are only common in contexts in which a person gives a command to a person who is younger or has a lower social status. An example is given below.

(1158) *manu raw!*

<i>manu</i>	<i>ra-a=ho</i>
Manuel	come-IMP.SG=yes

“Manuel, come at once!”
(YC unrec 1)

Imperatives of verbs that follow the transitive conjugation may contain the secondary conjunct suffix *-ku* (see § 13.3.2.2). The suffix indicates that the addressee is supposed to perform an action for the benefit of the speaker or – more generally – the epistemic source. A number of example sentences that illustrate the use of *-ku* in imperatives is given below.

(1159) *tsuna kjanan daw!*

<i>tsuna</i>	<i>kja=nan</i>	<i>da-ku-a</i>
little.bit	become=COND	give-UND-IMP.SG

“Just give me a little bit (of stew)!” (lit. “If it is a little bit, give it to me!”)
(Conversation 42.19)

(1160) *wa otɕi pata: dawni ɕabe!*

<i>wa</i>	<i>otɕi</i>	<i>pata:LN</i>	<i>da-ku-ni</i>	<i>ɕabe</i>
FOC	tomorrow	clue	give-UND-IMP.PL	please

“And let me know by tomorrow, please!”
(Conversation 76.9)

Note that in imperative forms that contain the secondary conjunct suffix *-ku*, the singular imperative ending *-a* is never pronounced. Accordingly, the imperative form *da-ku-a* “give-UND-IMP.SG” surfaces as [*daw ~ du*] rather than [***dawæ ~ **duæ*].

18.3.2 Prohibitives

Negative commands are expressed by prefixing the morpheme *thə-* to the imperative form of a verb. A number of examples are given below.

(1161) *dzandzan thəle!*

<i>dzandzan</i>	<i>thə-le</i>
insincere.refusal	PROHIB-make.IMP.SG

“Stop refusing the food!”
(Conversation 16.119)

(1162) *ip thəiptɕi!*

<i>ipt</i>	<i>thə-ipt-ɕ-i</i>
sleep	PROHIB-sleep-MID-IMP.SG

“Don’t sleep!”
(NN 46.9 [elicited])

(1163) *ini nwak tʰadzara loŋi rinpotʂerok!*

<i>ini</i>	<i>nwak</i>	<i>tʰa-dzat-a</i>	<i>lot-s-ŋ-dʒi</i>
2[SG].HON	thus	PROHIB-do.HON-IMP.SG	say-DETR-MID-CVB.SG

rinpotʂe=tok

Rinpoche=DAT

“Do not do it like that!’, I said to the Rinpoche.”

(Tulshug Lingpa 150)

The prohibitive form of a verb may be preceded by the bare verb stem of the same verb. This strategy is commonly employed to add emphasis to a negative command (see § 12.6 for similar strategies employed in the formation of negative statements). Consider the following example.

(1164) *gjar tʰagjara!*

<i>gjar</i>	<i>tʰa-gjar-a</i>
be.afraid	PROHIB-be.afraid-IMP.SG

“Do not be afraid!”

(Words of Life 2.33)

Negative commands can also be expressed by combining a supine form of a main verb with the negated form of the defective verb *gjut* “to need” (cf. § 12.10.1). This construction is considered to be more polite than the simple prohibitive form. An example is given below.

(1165) *nunaŋ kʰorek gjarde magjut ... lotkja.*

<i>nunaŋ</i>	<i>kʰorek</i>	<i>gjar-de</i>	<i>ma-gjut</i>	<i>lot-ka</i>
therefore	later	be.afraid-SUP	NEG-need	say-PROG

“Therefore he said after that, ‘There is not need to be afraid!’”

(King Kesar 69)

In negative commands that are based on the construction exemplified above, the negated verb *ma-gjut* “NEG-need” is often truncated to a single syllable and pronounced as [maʔt̚]. This suggests that the verb form *ma-gjut* may currently become grammaticalized into a morpheme that expresses polite negative commands.

19 Combined clauses

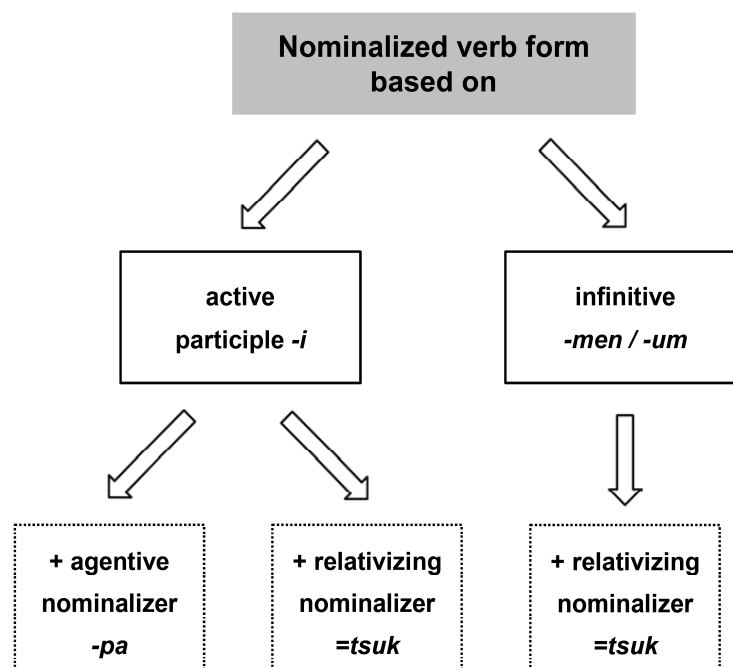
19.1 Introduction

This chapter is dedicated to syntactic constructions that consist of more than one clause. Multi-clausal constructions commonly consist of a main clause and a dependent clause (or several dependent clauses). Based on functional considerations, we may distinguish between three major types of dependent clauses that can occur in multi-clausal constructions: (1) relative clauses, (2) adverbial clauses, and (3) complement clauses. These three clause types are described in § 19.2, § 19.3, and § 19.4, respectively. § 19.5 gives an overview of the lexical class of discourse coordinators, § 19.6 describes reported speech constructions, and § 19.7, finally, discusses periphrastic causative constructions that are based on the verb *da-tə-um* “to give”.

19.2 Relative clauses

Relative clauses are commonly defined as clauses that serve the function of noun modification (Andrews 2007: 206). From a crosslinguistic perspective, Bunan can be characterized as a language in which relative clauses commonly occur in prenominal position and are formed by means of a “gap strategy” (cf. Comrie [1990] 2007, chap. 7). In terms of their morphosyntactic structure, Bunan relative clauses are based on clausal nominalizations, a strategy of relative clause formation that is commonly encountered among Tibeto-Burman languages of the Himalayan region (DeLancey 2002). It is possible to distinguish two major classes of relative clauses in Bunan: relative clauses that are based on the active participle and relative clauses that are based on the infinitive. Based on the nominalizing morpheme that attaches to the infinitive verb form, we may eventually distinguish three types: (1) relative clauses that are based on the active participle *-i* + the agentive nominalizer *-pa*, (2) relative clauses that are based on the active participle *-i* + the relativizing clitic *=tsuk*, and (3) relative clauses that are based on the infinitive *-men* ~ *-um* + the relativizing clitic *=tsuk*. Those three types of relative clauses are summarized in the figure below.

Figure 44: Types of relative clauses in Bunan



Relative clauses that are based on active participles differ from relative clauses that are based on infinitives with regard to temporal reference. Relative clauses of the first type denote events that took place in the past or are occurring at the moment of speaking, whereas relative clauses of the latter type refer to events that will take place in the future or have a generic quality. In the following subsections, the individual types of relative clauses are discussed in more detail.

19.2.1 Active participle + *-pa*

As noted in § 4.3.2, the nominalizer *-pa* is commonly used to derive agentive nouns from active participles. As a consequence, the nominalizer is only compatible with verb roots that denote an action that involves an agent argument or a participant that displays a high degree of agentivity.¹³⁷ This restriction on the use of the nominalizing morpheme *-pa* is also reflected in relative clauses. As a consequence, relative clauses that contain the nominalizer *-pa* can only relativize on agent arguments or arguments that are construed as possessing some a high degree of agentivity. A number of example sentences are given below.

¹³⁷ An exception to this rule is the generic disjunct future tense, in which the nominalizer *-pa* may occur in combination with all types of verbs, regardless of whether they denote an action that involves an agent argument or not (cf. § 15.3.3.3). This extended use of the nominalizing morpheme is clearly a consequence of an advanced grammaticalization process in the course of which the agentive nature of the nominalization has been lost.

(1166) *thoŋ iptəipa su jen?*

<i>thoŋ</i>	<i>ipt-ə-i-pa</i>	<i>su</i>	<i>jen</i>
inside	sleep-MID-ACT-NZR	who	EQ.CJ

“Who is the person who is sleeping inside?”

(TD 162.2 [elicited])

(1167) ... *erĩ himalejan belʈrok botkat pʰajpa noj gwak ...*

<i>erĩ</i>	<i>himalajan_{LN}</i>	<i>belʈ_{LN}=tok</i>	<i>bot-kat</i>
1PL.INCL.GEN	Himalayan	belt=DAT	Tibet-language

<i>pʰja-i-pa</i>	<i>noj</i>	<i>gwak</i>
speak-ACT-NZR	many	EX.NON1PL

“... in our area of the Himalayas (i.e. Himachal Pradesh), there are many people who speak Tibetan”

(Conversation 84.68)

(1168) *šəšur gompa dzaŋtəipa tal jendzi lošak.*

<i>šəšur gompa</i>	<i>dzaŋ-tə-i-pa</i>	<i>tal</i>	<i>jendzi</i>
Shashur monastery	build.HON-TR-ACT-NZR	3[SG]	EQ.DJ.SG

lot-s-ə-ʰak
say-DETR-MID-PRS.DJ.PL

“People say that he was the one who built Shashur Monastery.”

(Tshechu 2.127)

(1169) *bonpo-təʰos lik-tə-i-pa təunji mi kja-təʰi el-təʰok.*

<i>bonpo-təʰos</i>	<i>lik-tə-i-pa</i>	<i>təunji</i>	<i>mi</i>	<i>kja-təʰi</i>
Bonpo-religion	make-TR-ACT-NZR	few	person	become-CVB.PL

el-təʰok
go-PST.INFER.DJ.PL

“The people who practice the Bonpo religion have become few.”

(Zhangzhung 29)

My corpus of elicited data suggests that the nominalizer *-pa* is also compatible with experiencer verbs. However, the use of the morpheme is only licensed if the relevant experiencer verb does not occur in its detransitivized form (see § 12.3.2.4). Otherwise, only

the relativizing nominalizer =*tsuk* (see § 19.2.2 below) can be attached to the participle. This is demonstrated by the following example sentences.

(1170) *tʰadzu soj tʰor-tɕ-i-pa / tʰor-tɕ-i=tsuk mi gi: atɕʰo jen.*

<i>tʰadzu</i>	<i>soj</i>	<i>tʰor-tɕ-i-pa / tʰor-tɕ-i=tsuk</i>	<i>mi</i>
that	cold	feel-TR-ACT-NZR / feel-TR-ACT=REL	person
<i>gi=ki</i>	<i>atɕʰo</i>	<i>jen</i>	
1SG=GEN	older.brother	EQ.CJ	

“The person who is feeling cold is my brother.”

(TD 328.15 [elicited])

(1171) *tʰadzu soj tʰor-s-ɕ-i=tsuk / **tʰor-s-ɕ-i-pa mi gi: atɕʰo jen.*

<i>tʰadzu</i>	<i>soj</i>	<i>tʰor-s-ɕ-i=tsuk / **tʰor-s-ɕ-i-pa</i>	
that	cold	feel-DETR-MID-ACT=REL / **feel-DETR-MID-ACT-NZR	
<i>mi</i>	<i>gi=ki</i>	<i>atɕʰo</i>	<i>jen</i>
person	1SG=GEN	older.brother	EQ.CJ

“The person who is feeling cold is my brother.”

(TD 328.10 [elicited])

Arguments that are prototypical undergoers and do not display any kind of agentivity can never be relativized on with the agentive nominalizer *-pa*. In this case, only the morpheme =*tsuk* can be used.

(1172) *ja: ɕit-ɕ-i=tsuk / **ɕit-ɕ-i-pa hambu.*

<i>ja:</i>	<i>ɕit-ɕ-i=tsuk / **ɕit-ɕ-i-pa</i>	<i>hambu</i>
yesterday	die-MID-ACT=REL / **die-MID-ACT-NZR	cow

“The cow that died yesterday.”

(TD 126.7 [elicited])

19.2.2 Active participle + =*tsuk*

Relative clauses that are based on a combination of the active participle and the relativizing nominalizer =*tsuk* are by far the most common type of relative clauses attested in my data. Without doubt, this is due to the functional versatility of the clitic =*tsuk*. The morpheme is not subject to any restrictions related to verbal semantics like the nominalizer *-pa* (see above) and, accordingly, may occur in a much wider array of contexts than the latter morpheme. In combination with verbs that follow the intransitive and the middle conjugation, the clitic =*tsuk* may relativize on any given argument of a clause. In the following

sentences, the morpheme relativizes on the single core argument of a monovalent verb, regardless of the semantic role that the respective participant assumes.

(1173) *nuj rajtsuk mu a:da: fuʔtoktəi noj ni: la ma?*

<i>nuj</i>	<i>ra-i=tsuk</i>	<i>mu</i>	<i>a:da:LN</i>	<i>fuʔLN=tok=təi</i>	<i>noj</i>
new	come-ACT=REL	snow	half	foot=DAT=ABL	much
<i>ni:=la</i>		<i>ma</i>			
EX.NON1SG=Q		CNS			

“The snow that has newly fallen is higher than half a foot, right?”

(Conversation 29.5)

(1174) *nunʔtəi tʰadzu magjaritsuk mi tʰadzu ho the brutkja tʰadzu juəi tʰadzu tatka elieə.*

<i>nunʔtəi</i>	<i>tʰadzu</i>	<i>ma-gjar-i=tsuk</i>	<i>mi</i>	<i>ho</i>	<i>tʰe</i>
then	that	NEG-be.afraid-ACT=REL	person	yes	this
<i>brut-ka</i>	<i>tʰadzu</i>	<i>juəi</i>	<i>tʰadzu</i>	<i>tat-ka</i>	
wipe.off-PROG	that	flour	that	put-PROG	
<i>el-i=jendzi</i>					
go-ACT=EQ.DJ.SG					

“Then that man who was not afraid, yes, wiped this off, that flour, while that (rolangs) kept putting (marks of flour on other people), and went (with them).”

(Conversation 87.396)

(1175) *rwanʔtəi daʔjtsuk hambu ɕittəi.*

<i>rwanʔtəi</i>	<i>dat-i=tsuk</i>	<i>hambu</i>	<i>ɕit-dzi</i>
mountain.pasture=ABL	fall-ACT=REL	cow	die-PST.INFER.DJ.SG

“The cow that fell from the mountain pasture died.”

(NN 37.5 [elicited])

In combination with bivalent verbs that follow the intransitive or middle conjugations, *=tsuk* may form relative clauses that refer to an agent argument or a patient argument. This is exemplified by the sentence given below, in which the nominalized verb form *dza-i=tsuk* “eat-ACT=REL” may both relativize on the person who eats the food or the food that is being eaten by the person.

(1176) *gi dzajtsuk dzamen.*

<i>gi</i>	<i>dza-i=tsuk</i>	<i>dzamen</i>
1SG	eat-ACT=REL	food

“The food that I ate.”

(TD 194.24 [elicited])

(1177) *dzamen dzajtsuk mi.*

<i>dzamen</i>	<i>dza-i=tsuk</i>	<i>mi</i>
food	eat-ACT=REL	person

“The persons who ate the food.”

(TD 214.19 [elicited])

Moreover, the clitic *=tsuk* may relativize on participants that do not have the status of core arguments, as the following sentences demonstrate.

(1178) *the gi gun dzot-i=tsuk kjum jendzi.*

<i>the</i>	<i>gi</i>	<i>gun</i>	<i>dzot-i=tsuk</i>	<i>kjum</i>	<i>jendzi</i>
this	1SG	winter	stay-ACT=REL	house	EQ.DJ.SG

“This is the house in which I stay during winter.”

(TD 275.4 [elicited])

(1179) *ja: gidzi tɛi twajtsuk tɛataram guj ni:?*

<i>ja:</i>	<i>gi=dzi</i>	<i>tɛi</i>	<i>twa-i=tsuk</i>	<i>tɛataram</i>
yesterday	1SG=ERG.SG	grass	mow-ACT=REL	sickle

<i>guj</i>	<i>ni:</i>
where	EX.NON1SG

“Where is the sickle with which I mowed the grass yesterday?”

(TD 275.2 [elicited])

In (1178), the non-finite verb form *dzot-i=tsuk* “stay-ACT=REL” refers to the location where the speaker spends the winter months, whereas in (1179), the non-finite verb form *twa-i=tsuk* “mow-ACT=REL” relativizes on the instrument with which the speaker cut grass. This demonstrates that the relativizing nominalizer *=tsuk* is not sensitive to particular grammatical relations or a specific set of semantic roles. Rather, the relationship that holds between the relative clause and the relativized noun is entirely based on pragmatic principles. The formation of relative clauses that are based on intransitive and middle verbs is thus best described on the basis of a frame semantics approach (see Fillmore

1977, 1982 for a theoretical background and Matsumoto 1997 and Zemp 2014: 945–958 for descriptive implementations of the approach). Within a frame semantic approach, every lexical item is thought of as evoking a semantic frame. The verb *twā-men* “to mow”, for example, evokes a semantic frame that contains an agent (i.e. a mowing person), a patient (i.e. a grass being mowed), an instrument (i.e. a sickle), a location (i.e. a field), a time frame (i.e. the time at which the grass is being mowed), etc. The morpheme *=tsuk* may establish a relationship between a relative clause and any argument that pertains to the semantic frame evoked by the predicate on which the relative clause is based. The following example sentences illustrate this based on the verb *twā-men* “to mow”.

(1180) *tɕi twajtsuk mi gi: awa jen.*

<i>tɕi</i>	<i>twā-i=tsuk</i>	<i>mi</i>	<i>gi=ki</i>	<i>awa</i>	<i>jen</i>
grass	mow-ACT=REL	person	1SG=GEN	father	EQ.CJ

“The person who is cutting grass is my father.”

(TD 330.7 [elicited])

(1181) *twajtsuk tɕi rotɕokkuŋ tsak!*

<i>twā-i=tsuk</i>	<i>tɕi</i>	<i>rotɕok=kuŋ</i>	<i>tsak-a</i>
mow-ACT=REL	grass	hayloft=LOC	put.inside-IMP.SG

“Put the grass that has been cut into the hayloft!”

(TD 330.8 [elicited])

(1182) *gidzi ja: tɕi twajtsuk tɕataram dupdup de.*

<i>gi=dzi</i>	<i>ja:</i>	<i>tɕi</i>	<i>twā-i=tsuk</i>
1SG=ERG.SG	yesterday	grass	mow-ACT=REL
<i>tɕataram</i>	<i>dupdup</i>	<i>de</i>	
sickle	blunt	ATT.SG	

“The sickle with which I cut grass yesterday is blunt.”

(TD 330.9 [elicited])

(1183) *gidzi tɕi twajtsuk daŋ ralak jen.*

<i>gi=dzi</i>	<i>tɕi</i>	<i>twa-i=tsuk</i>	<i>daŋ</i>	<i>ralak</i>
1SG=ERG.SG	grass	mow-ACT=REL	meadow	left.bank
<i>jen</i>				
EQ.CJ				

“The meadow where I cut grass is on the left bank of the river.”

(TD 330.10 [elicited])

(1184) *gidzi tɕi twajtsuk baktak awadzi hambu tɕʰurdza.*

<i>gi=dzi</i>	<i>tɕi</i>	<i>twa-i=tsuk</i>	<i>bakta_{LN}=tok</i>	<i>awa=dzi</i>
1SG=ERG.SG	grass	mow-ACT=REL	time=DAT	father=ERG.SG
<i>hambu tɕʰur-ø-dza</i>				
cow	milk-TR-PST.DIR.DJ.SG			

“At the time when I was mowing the grass father was milking the cow.”

(TD 330.11 [elicited])

In the five example sentences given above, the non-finite verb form *twa-i=tsuk* “mow-ACT=REL” relativizes on an agent argument (i.e. the mowing person), a patient argument (i.e. the grass), an instrument argument (i.e. the sickle), a location argument (i.e. the meadow), and a temporal adjunct (i.e. the time at which the mowing took place).

While a frame semantic approach is helpful for the description of relative clauses that are based on intransitive and middle verbs and the nominalizer *=tsuk*, the model is not appropriate to describe other types of relative clauses. Relative clauses that are based on the agentive nominalizer *-pa* (see preceding section), for example, cannot be described in a frame semantic approach, as the nominalizer *-pa* imposes semantic restrictions on relative clause formation. As noted in § 19.2.1, relative clauses that are formed with the nominalizer *-pa* can only relativize on arguments that possess a high degree of agentivity. Accordingly, the number of participants to which the morpheme can refer is restricted to a small class of participants that comprises agent and experiencer arguments.

Further restrictions on relativization can be found in the transitive conjugation, where the formation of relative clauses interacts with the morphological form of the active participle. Fully transitive active participles can relativize on agent arguments and experiencer arguments, as the following examples demonstrate.

(1185) *hertsuk jato tʰoŋ liktəitsuk jato tapəi radʒi.*

<i>her=tsuk</i>	<i>jato</i>	<i>tʰoŋ</i>	<i>lik-tə-i=tsuk</i>	<i>jato</i>
again=REL	friend	trade	make-TR-ACT=REL	friend
<i>tap-s-ə-dʒi</i>			<i>ra-dʒi</i>	
bring.back-DETR-MID-CVB.SG			come-PST.INFER.DJ.SG	

“The other friend, the friend who had been trading, came back.”

(Conversation 87.319)

(1186) *tʰadzu soj tʰor-tə-i=tsuk mi gi: atəʰo jen.*

<i>tʰadzu</i>	<i>soj</i>	<i>tʰor-tə-i=tsuk</i>	<i>mi</i>	<i>gi=ki</i>
that	cold	feel-TR-ACT=REL	person	1SG=GEN
<i>atəʰo</i>		<i>jen</i>		
older.brother		EQ.CJ		

“The person who is feeling cold is my brother.”

(TD 328.15 [elicited])

However, if the argument that is being relativized on is a patient argument, a theme argument, or a goal argument, relativization is only possible if the active participle occurs in its detransitivized form. This is illustrated by the following sentences.

(1187) *hiŋtʰi ja: duəitsuk ɕiŋ tʰi: kjadʒi eldza.*

<i>hiŋ=tʰi</i>	<i>ja:</i>	<i>du-s-ə-i=tsuk</i>	<i>ɕiŋ</i>
1PL.EXCL=ERG.PL	yesterday	collect-DETR-MID-ACT=REL	wood
<i>tʰi:</i>	<i>kja-dʒi</i>	<i>el-dza</i>	
wet	become-CVB.SG	go-PST.DIR.DJ.SG	

“The firewood that we collected yesterday has become wet.”

(TD 214.14 [elicited])

(1188) *girok daəitsuk qawa niskiŋ ʈoŋ jendʒi*

<i>gi=tok</i>	<i>da-s-ə-i=tsuk</i>	<i>qawa</i>	<i>niskiŋ</i>	<i>ʈoŋ</i>
1SG=DAT	give-DETR-MID-ACT=REL	money	two	thousand
<i>jendʒi</i>				
EQ.DJ.SG				

“The amount of money that has been given to me is two thousand (rupees).”

(TD 214.23 [elicited])

(1189) *gidzi dawa dasitsuk lasmi nawangi ama jendzi*

<i>gi=dzi</i>	<i>dawa</i>	<i>da-s-ɛ-i=tsuk</i>	<i>lasmi</i>
1SG=ERG.SG	money	give-DETR-MID-ACT=REL	woman
<i>nawang=ki</i>	<i>ama</i>	<i>jendzi</i>	
Nawang=GEN	mother	EQ.DJ.SG	

“The woman whom I gave money to is Nawang’s mother.”

(TD 137.6 [elicited])

Detransitivized active participles may also be used to relativize on experiencer argument of bivalent experiencer verbs and agent arguments of trivalent verbs, as the examples given below illustrate. This is a consequence of experiencer / recipient back-grounding, a process that is described in § 12.3.2.4 in more detail.

(1190) *thadzu soj tshorɛitsuk mi gi: atɕho jen.*

<i>thadzu</i>	<i>soj</i>	<i>tshor-s-ɛ-i=tsuk</i>	<i>mi</i>	<i>gi=ki</i>
that	cold	feel-DETR-MID-ACT=REL	person	1SG=GEN
<i>atɕho</i>	<i>jen</i>			
older.brother	EQ.CJ			

“The person who is feeling cold is my brother.”

(TD 328.10 [elicited])

(1191) *girok dawa dasitsuk mi kudzuŋtsuk jen.*

<i>gi=tok</i>	<i>dawa</i>	<i>da-s-ɛ-i=tsuk</i>	<i>mi</i>
1SG=DAT	money	give-DETR-MID-ACT=REL	person
<i>kudzu=maŋ=tsuk</i>	<i>jen</i>		
Kullu.Valley=ALL=REL	EQ.CJ		

“The person who gave me the money is from the Kullu Valley.”

(TD 213.2 [elicited])

With regard to the relativization of adjuncts, the situation is rather complex. Oblique noun phrases that refer to instrument arguments and temporal adjuncts are commonly relativized on with a transitive active participle.

(1192) *handzi ɤa tuptɤitsuk kʰur dupdup de.*

<i>han=dzi</i>	<i>ɤa</i>	<i>tup-tɤ-i=tsuk</i>	<i>kʰur</i>	<i>dupdup</i>	<i>de</i>
2=ERG.SG	meat	cut-TR-ACT=REL	knife	blunt	ATT.SG

“The knife with which you cut meat is blunt.”

(TD 330.5 [elicited])

(1193) *gidzi pʰos tɤaktɤitsuk baktak amadzi kʰimsa tʰumdza.*

<i>gi=dzi</i>	<i>pʰot-s</i>	<i>tɤak-tɤ-i=tsuk</i>	<i>bakta_{LN}=tok</i>
1SG=ERG.SG	cover-NZR	wash-TR-ACT=REL	time=DAT

<i>ama=dzi</i>	<i>kʰimsa</i>	<i>tʰum-ø-dza</i>
mother=ERG.SG	dust	warp-TR-PST.DIR.DJ.SG

“At the time when I was washing the clothes, mother was doing the dusting.”

(TD 331.7 [elicited])

Oblique noun phrases that denote locations, on the other hand, are commonly relativized on by a detransitivized active participle.

(1194) *gidzi ja: ras jokɤitsuk haʔi tikɤi ni:.*

<i>gi=dzi</i>	<i>ja:</i>	<i>ras</i>	<i>jok-s-ɤ-i=tsuk</i>
1SG=ERG.SG	yesterday	cotton	buy-DETR-MID-ACT=REL

<i>haʔi_{LN}</i>	<i>tik-s-ɤ-dzi</i>	<i>ni:</i>
shop	close-DETR-MID-CVB.SG	EX.NON1SG

“The shop from which I bought cloth yesterday is closed.”

(TD 330.6 [elicited])

19.2.3 Infinitive + =tsuk

As noted above, relative clauses that are based on verbal infinitives differ from relative clauses that are based on active participles with regard to their temporal reference. Relative clauses of the first type refer to future or generic events, whereas relative clauses of the latter type refer to past and present events. Moreover, infinitive relative clauses may have modal overtones and indicate the necessity that a particular action be performed.

Infinitive relative clauses that are derived from verbs that pertain to the intransitive or middle conjugation may relativize on agent arguments, patient arguments, and oblique adjuncts. Consider the following examples.

(1195) ... *pentislekti petṣa loknaṇ ṭakpoti kḥaspa kjamentsuk jendzi.*

<i>penti:s_{LN}=lek=tiki</i>	<i>petṣa</i>	<i>lok=naṇ</i>	<i>ṭakpo=tiki</i>	<i>kḥaspa</i>
thirty-five=APP=INDEF	book	read=COND	strong=INDEF	expert
<i>kja-men=tsuk</i>	<i>jendzi</i>			
become-INF=REL	EQ.DJ.SG			

“If you read (the *Tripitaka*), a bunch of about thirty-five books, you will become an expert (on Buddhism).” (lit. “... you are one who will become an expert.”)
(Conversation 84.36)

(1196) *gi otṣi dotmentsuk mi kudzuṇtsuk jen.*

<i>gi</i>	<i>otṣi</i>	<i>dot-men=tsuk</i>	<i>mi</i>	<i>kudzu=maṇ=tsuk</i>
1SG	tomorrow	meet-INF=REL	person	Kullu.Valley=ALL=REL
	<i>jen</i>			
	EQ.CJ			

“The person whom I will meet tomorrow is from the Kullu Valley.”
(TD 4.1 [elicited])

(1197) *tal elmentsuk dza lepdza.*

<i>tal</i>	<i>el-men=tsuk</i>	<i>dza</i>	<i>lep-ø-dza</i>
3[SG]	go-INF=REL	day	reach-TR-PST.DIR.DJ.SG

“It’s time for him to leave.” (lit. “He has reached the day on which he will leave.”)
(Conversation 25.82)

(1198) *hiṇ otṣi elmentsuk sakjat kḥjaktṣi dzanare waj de.*

<i>hiṇ</i>	<i>otṣi</i>	<i>el-men=tsuk</i>	<i>sakjat</i>	<i>kḥjak=tṣi</i>	<i>dzanare</i>
1PL.EXCL	tomorrow	go-INF=REL	place	here=ABL	very.much
<i>waj</i>	<i>de</i>				
far	ATT.SG				

“The place which we will go to tomorrow is very far from here.”
(TD 137.14 [elicited])

As argued in the previous section, this relativizing strategy is not sensitive to syntactic or semantic roles. Rather, it is entirely based on pragmatic principles and can be accounted for in the framework of Fillmore’s (1977, 1982) theory of “frame semantics”. The same is true for infinitive relative clauses that are based on verbs that pertain to the

transitive conjugation. Here, we do not observe the opposition of transitive and detransitivized verb forms that has been described in the previous section. Rather, the infinitive occurs as a transitive verb stem, regardless of the syntactic or semantic role of the head noun. This is illustrated by the following examples.

(1199) *šimla šok-tə-um=tsuk da kja-dza*.

<i>šimla</i>	<i>šok-tə-um=tsuk</i>	<i>da</i>	<i>kja-dza</i>
Shimla	send-TR-INF=REL	now	become-PST.DIR.DJ.SG

“(The letter) that needs to be sent to Shimla is ready.”

(Conversation 22b.21)

(1200) *the awarok datə-um=tsuk qawa jendzi*.

<i>the</i>	<i>awa=tok</i>	<i>da-tə-um=tsuk</i>	<i>qawa</i>	<i>jendzi</i>
this	father=DAT	give-TR-INF=REL	money	EQ.DJ.SG

“This is the money that needs to be given to father.”

(TD 331.3 [elicited])

(1201) ... *the mannaŋ tʰadzu tsore rikkata buʃa pʰat-tə-um=tsuk ka*.

<i>the</i>	<i>man=nan</i>	<i>tʰadzu=tsore</i>	<i>rik-ø-kata</i>	<i>buʃa</i>
this	pesticide=CON	that=ENR	bring-TR-FUT.CJ.SG	tree

<i>pʰat-tə-um=tsuk</i>	<i>ka</i>
sprinkle-TR-INF=REL	ASS

“... I will bring this pesticide and that other stuff (that we need) to spray the trees.”

(Conversation 39.72)

19.2.4 The syntax of relative clauses

As noted in § 9.2, noun-modifying constituents such as adjectives and genitive adjuncts usually precede the nouns that they modify. Relative clauses are no exception to this rule and commonly occur in prenominal position. To be sure, it is possible for relative clauses to follow the noun whose identity they specify, as the following example illustrates.

(1202) *tʰadzu mi seu jok-tə-i-pa dordze jendzi*.

<i>tʰadzu</i>	<i>mi</i>	<i>seu</i>	<i>jok-tə-i-pa</i>	<i>dordze</i>	<i>jendzi</i>
that	person	apple	sell-TR-ACT-NZR	Dorje	EQ.DJ.SG

“That person, the one who sells apples, is Dorje.”

or: “That person, the apple seller, is Dorje.”

(TD 137.9 [elicited])

However, in such cases, the relative clause may also be interpreted as an apposition, that is to say, and independent noun phrase that refers to the same participant as the preceding noun phrase. The status of postnominal relative clauses as appositions is indicated by sentence intonation, as such relative clauses commonly fall under a separate intonation contour.

The sentence given in (1202) above illustrates yet another characteristic property of relative clauses. Despite the fact that relative clauses primarily serve the function of noun modification, they essentially possess the status of independent nominal expressions. As a consequence, Bunan is rich in headless relative clauses. Such headless constructions are especially common in contexts in which the identity of the respective referent is already known, inferable, or simply irrelevant. An example of a headless relative clause is given below.

(1203) *nuj tʃuk-ɛ-i-pa=ɛi=tok hoɛmej kaj jendʒi apa.*

<i>nuj</i>	<i>tʃuk-ɛ-i-pa=ɛi=tok</i>	<i>hoɛmej</i>	<i>kaj</i>
new	settle.down-MID-ACT-NZR=PL=DAT	extremely	difficult
<i>jendʒi</i>	<i>apa</i>		
EQ.DJ.SG	AUTH		

“For those who have settled recently (in the Kullu Valley) it is very difficult.”
(Conversation 1.14)

The relative clause in the example above might as well exhibit the form *nuj tʃuk-ɛ-i-pa mi=ɛi=tok* “new settle.down-MID-ACT-NZR person=PL=DAT” with an additional head noun *mi* “person”. However, as it is understood that the participants in question are human beings, the head noun is simply dropped and the inflectional clitics are directly attached to the non-finite verb form. Some additional examples of headless relative clauses are given below.

(1204) *ini dʒoʔjtsukkunʃ braŋsapazi nwak gwak la?*

<i>ini</i>	<i>dʒot-i=tsuk=kunʃ</i>	<i>braŋsa-pa=ɛi</i>	<i>nwak</i>
2[SG].HON	stay-ACT=REL=LOC	apartment-NZR=PL	so
<i>gwak=la</i>			
EX.NON1PL=Q			

“So your roommates are in the place where you stay?”
(Conversation 36.57)

(1205) *tʰerok kʰa lottɕum e tɕi tuptɕumtsuktok?*

tʰe=tok kʰa lot-tɕ-um=jen e tɕi
 this=DAT what say-TR-INF=EQ.CJ hey grass

tup-tɕ-um=tsuk=tok
 cut-TR-INF=REL=DAT

“How do we call this again, this (thing that is used) to cut the grass?”
 (TD 24.1)

(1206) ... *tʰadzu lanɣi nanɣnak pjakɕitsukkunɣ eldzi* ...

tʰadzu lanɣ=ki nanɣnak pjak-s-ɕ-i=tsuk=kunɣ
 that cow.dung=GEN inside hide-DETR-MID-ACT=REL=LOC

el-dzi
 go-CVB.SG

“... and he went to that place where it had been hidden in the cow dung”
 (King Kesar 137)

19.2.5 Related syntactic constructions

The relativizing clitic =*tsuk* may not only be used to establish a modifying relationship between a non-finite clause and a noun, but can also occur in a number of functionally contiguous constructions. For one thing, =*tsuk* can occur on adjectives that modify a noun. Two examples that illustrate this construction are given in the following.

(1207) *tedzitsuk tete giroktɕi tedzi jen.*

tedzi=tsuk tete gi=tok=tɕi tedzi jen
 big=REL grandfather 1SG=DAT=ABL big EQ.CJ

“The older grandfather (of yours) is older than me.” (lit. “(Your) grandfather, the one who is older,”)
 (Conversation 36.112)

(1208) *epotsuk rik nama şwatsi tatdzala kʰare liktsum mej.*

<i>epo=tsuk</i>	<i>rik=nama</i>	<i>şwatsi</i>	<i>tat-ø-dza=la</i>
good=DEF	field=all	buckwheat	put-TR-PST.SG=ANTER

<i>kʰa=re</i>	<i>lik-tə-um</i>	<i>ma-ni</i>
what=EXT	do-TR-INF	NEG-EX.NON1SG

“Having sowed buckwheat on all the fertile fields, nothing is done (to ameliorate the unproductive soil).” (lit. “Having sowed buckwheat on all the fields that are good,”)

(Conversation 16.45)

As the two examples demonstrate, the construction *ADJECTIVE=REL NOUN* does not simply refer to a definite referent with a particular property that is specified by the adjective. Rather, the property itself is portrayed as the defining feature of the referent. Accordingly, such constructions possess the status of verbless restrictive relative clause. The construction *tedzi=tsuk tete* implies that there are other grandfathers who are younger than the grandfather in question, whereas the construction *epo=tsuk rik=nama* profiles all good fields against an unspecified number of fields that are less fertile.

For another thing, the relativizing clitic may also be exploited to turn certain lexical items into noun-modifying constituents. For example, *=tsuk* is commonly attached to place names to derive expressions that refer to the origin of the modified noun. This is illustrated by the following sentences.

(1209) *mana:li=tsuk meme jendzi.*

<i>mana:li=tsuk</i>	<i>meme</i>	<i>jendzi</i>
Manali=REL	monk	EQ.DJ.SG

“He is a monk from Manali.”

(Conversation 22.51)

(1210) *tʰe şimla=tsuk=ki min kʰa nindza butsa=ki tʰara=ki*

<i>tʰe</i>	<i>şimla=tsuk=ki</i>	<i>min</i>	<i>kʰa</i>	<i>nindza</i>	<i>butsa=ki</i>
this	Shimla=REL=GEN	name	what	EX.PST.SG	boy=GEN

tʰara=ki

that.other=GEN

“What was the name of this (person) from Shimla, the boy’s name, that other one’s name?”

(Conversation 13a.18)

In addition, the clitic =*tsuk* is also commonly used to turn adverbs and expressions with adverbial function into noun-modifying constituents. This function is exemplified in the sentences below.

(1211) *the khjaksuk nambar jen la?*

<i>the</i>	<i>khjak=tsuk</i>	<i>nambar_{LN}</i>	<i>jen=la</i>
this	here=REL	number	EQ.CJ=Q

“Is this a local phone number?”

(Conversation 13a.127)

(1212) *han gujtsuk jen?*

<i>han</i>	<i>guj=tsuk</i>	<i>jen</i>
2[SG]	where=REL	EQ.CJ

“Where are you from?”

(SA unrec 27)

(1213) *talzok dzamen k'otɕitsuk diɕ maskjanaŋ epo matsʰorɕak.*

<i>tal=ɕi=tok</i>	<i>dzamen</i>	<i>k'otɕi=tsuk</i>	<i>diɕ_{LN}</i>	<i>ma-(s)kja=naŋ</i>
3=PL=DAT	food	after=REL	dish	NEG-become=COND

<i>epo</i>	<i>ma-tsʰor-s-ɕ-ʰak</i>
well	NEG-feel-DETR-MID-PRS.DJ.PL

“If they (i.e. people from Europe) do not get a dessert, they do not feel well.”

(Conversation 36.13)

(1214) *hertsuk jato tsʰoŋ liktɕitsuk jato tapɕi radzi.*

<i>her=tsuk</i>	<i>jato</i>	<i>tsʰoŋ</i>	<i>lik-tɕ-i=tsuk</i>	<i>jato</i>
again	friend	trade	make-TR-ACT=REL	friend

<i>tap-s-ɕ-dzi</i>	<i>ra-dzi</i>
bring.back-DETR-MID-CVB.SG	come-PST.INFER.DJ.SG

“The other friend, the friend that had been trading, came back.”

(Conversation 87.341)

19.3 Adverbial clauses

Adverbial clauses are commonly defined as clauses that serve the function of modifying another clause (cf. Thompson, Longacre & Hwang 2007: 237). In Bunan, adverbial clauses are non-finite constructions. Based on morphological criteria, we may dis-

tinguish two types of adverbial clauses: (1) adverbial clauses that are based on clitics and (2) adverbial clauses that are based on suffixes. The following tables provide an overview of the clitics and suffixes that are used to derive adverbial clauses.

Table 123: Types of adverbial clauses based on clitics

Morpheme	Meaning	Gloss	Morpheme cliticized to
<i>=naŋ</i>	a) temporal: consecutive b) real / unreal conditional	CONSEC COND	verb stem
<i>=naŋ</i>	unreal conditional	COND	past tense in <i>-dza</i> / <i>-tsʰa</i>
<i>=naŋ ~ =taŋ</i>	a) temporal: punctual b) causal	PUNCT CAUS	nominalized active participle
<i>=astok</i>	a) temporal: terminative b) temporal: simultaneous	TERM SIM	progressive participle ~ supine
<i>=la</i>	temporal: anterior	ANTER	past tense in <i>-dza</i> / <i>-tsʰa</i>
<i>=den</i>	temporal: immediate	IMMED	verb stem
<i>=tok</i>	circumstantial	CIRCUM	active participle

Table 124: Types of adverbial clauses based on suffixes

Morpheme	Meaning	Gloss
<i>-dzi</i>	temporal: sequential	CVB
<i>ma-V-ka + durek</i>	temporal: anterior	NEG-V-PROG before
<i>-ka</i>	manner	PROG
<i>-de / -a</i>	purposive	SUP

Adverbial clauses that are based on suffixes (i.e. the converb suffix, the progressive suffix, and the supine suffix) have already been described in § 12.7. Accordingly, they are not again discussed at this point. The following discussion focuses on adverbial clauses that are based on clitics. Note that I treat the relevant adverbial clause formatives as clitics on the basis of two factors. First, a considerable number of these morphemes are derived from case markers. As I argued in § 4.4.4, case markers should be analyzed as clitics rather than suffixes. Accordingly, it is consequent to assume that the respective morphemes are also clitics when functioning as adverbial clause markers. Second, the

relevant morphemes do not participate in the complex morphophonological processes that are characteristic of verbal morphology (cf. § 3.2). This indicates that the morphological ties between the respective morphemes and the corresponding verb forms are rather weak, which in turn suggests that they should be analyzed as clitics rather than suffixes.

In the following subsection, the different types of non-finite adverbial clauses are discussed in more detail. Based on their semantic content, they are classified into four different groups: (1) temporal clauses, (2) conditional clauses, (3) causal clauses, and (4) circumstantial clauses.

19.3.1 Temporal clauses

19.3.1.1 Consecution

Consecutive temporal clauses refer to events that temporally precede and at the same time serve as a precondition for the event denoted by the main clause (e.g. *When the does not shine, it becomes cold*). Such clauses are formed by attaching the clitic =naŋ to the verb stem (intransitive and transitive conjugation) or the verb stem plus conjugation marker (middle conjugation). Consider the following table.

Table 125: Consecutive adverbial clauses

INTR	MID	TR
V=naŋ V=CONSEC	V-ε=naŋ V-MID=CONSEC	V=naŋ V=CONSEC

An example of a consecutive adverbial clause is given below.

(1215) *kudzumaŋ mi ɛitɛ=naŋ kaj de ake?*

<i>kudzu=maŋ</i>	<i>mi</i>	<i>ɛit-ε=naŋ</i>	<i>kaj</i>
Kullu.Valley=ALL	person	die-MID=CONSEC / COND	difficult
<i>de</i>	<i>ake</i>		
ATT.SG	QUE		

“It is difficult when / if people (belonging to our community) die in Kullu, isn’t it?”

(Conversation 1.1)

As a consecutive temporal relationship frequently entails a conditional relationship as well, consecutive temporal clauses can most often also be interpreted as conditional clauses, that is to say, clauses that refer to a precondition necessary for the event denoted by the main clause to occur. However, this type of adverbial clause is not discussed as this point, but is considered in more detail in § 19.3.2 below.

19.3.1.2 Punctuality

Punctual temporal clauses indicate that a punctual event occurred simultaneously with the event denoted by the main clause (e.g. *On hitting the ground, the cup broke*). Such clauses are formed by attaching the clitics =*naŋ* or =*taŋ* to a verb stem (intransitive conjugation) or an active participle (intransitive, middle, and transitive conjugation) that is additionally augmented with the nominalizing suffix -s. In such contexts, the clitics =*naŋ* and =*taŋ* are glossed as “=PUNCT”. Consider the following table.

Table 126: Punctual adverbial clauses

INTR	MID	TR
<i>V(-i)-s=naŋ / V-s=taŋ</i> V(-ACT)-NZR=PUNCT	<i>V-ɕ-i-s=naŋ / V-ɕ-i-s=taŋ</i> V-MID-ACT-NZR=PUNCT	<i>V-tɕ-i-s=naŋ / V-tɕ-i-s=taŋ</i> V-TR-ACT-NZR=PUNCT

A sentence that exemplifies the use of adverbial clauses with punctual temporal reference is given below.

(1216) *sarkak leptɕisnaŋ bas radza ...*

*sarka*_{LN}=*tok* *lep-tɕ-i-s=naŋ* *bas*_{LN} *ra-dza*
road=DAT reach-TR-ACT-NZR=CAUS bus come-PST.DIR.DJ.SG

“In the moment that we reached the road, a bus came”

(Conversation 22.207)

Adverbial clauses with clear punctual temporal reference are exceedingly rare in my corpus of natural data. Most often, this type of adverbial clause describes a causal relationship between the event denoted by the non-finite clause and the event expressed by the main clause. However, this function is not addressed at this point, as it is discussed in § 19.3.3 below in more detail.

19.3.1.3 Immediateness

Bunan possesses a type of temporal adverbial clause that refers to events that immediately precede the event denoted by the main clause. These adverbial clauses are remarkable with regard to their syntactic structure, as the verb root on which they are based occurs twice, once with the conjunction clitic =*naŋ* and once with the adverbial clitic =*den*, which is glossed as “=IMMED”. Consider the following table.

Table 127: Immediate sequential adverbial clauses

INTR	MID	TR
<i>V(-i)-s=naŋ / V-s=taŋ</i> V(-ACT)-NZR=PUNCT	<i>V-ɛ-i-s=naŋ / V-ɛ-i-s=taŋ</i> V-MID-ACT-NZR=PUNCT	<i>V-tɛ-i-s=naŋ / V-tɛ-i-s=taŋ</i> V-TR-ACT-NZR=PUNCT

Immediate sequential clauses are extremely rare in my corpus of natural speech. They exclusively occur in the traditional story of King Kesar, which suggests that their use is associated with a rather formal and archaic register of speech. Two example sentences that illustrate their use are given below.

(1217) ... *kʰetnaŋ kʰetden eŋiː kjaŋ tsʰaŋ wa eli asti ɕukna elnaŋ elden ɕukna tʰadzuŋ naŋnak dzukski naŋnak tsakɕi el tʰirdza taj ɕim.*

<i>kʰet=naŋ</i>	<i>kʰet=den</i>	<i>eŋiː</i>	<i>kjaŋ</i>	<i>tsʰaŋ</i>
shoot=CON	shoot=IMMED	1PL.INCL.GEN	jackdaw	nest
<i>wa</i>	<i>el-i=asti</i>	<i>ɕukna</i>	<i>el=naŋ</i>	<i>el=den</i>
FOC	go-ACT=SML	straight	go=CON	go=IMMED
<i>ɕukna</i>	<i>tʰadzu=ki</i>	<i>naŋnak</i>	<i>dzuks=ki</i>	<i>naŋnak</i>
straight	that=GEN	inside	body=GEN	inside
<i>tsak-s-ɛ-dʒi</i>	<i>el=tʰir-ø-dza</i>			
put.inside-DETR-MID-CVB.SG	go=send-TR-PST.DIR.DJ.SG			
<i>taj</i>	<i>ɕim</i>			
3SG.GEN	arrow			

“... and immediately after he had discharged (the arrow), like one of our jackdaws going to its nest, it went inside, straight into that, into the body (of the demon), his arrow.”

(King Kesar 264)

(1218) *jartoktɕi ranaŋ raden sarok dattɕi na.*

<i>jartok=tɕi</i>	<i>ra=naŋ</i>	<i>ra=den</i>	<i>sa=tok</i>
above=ABL	come=CON	come=IMMED	ground=DAT
<i>dat-dʒi=na</i>			
fall-PST.INFER.DJ.SG=HS			

“Having come from above, he immediately fell on the ground, it is said.”

(King Kesar 270)

19.3.1.4 Termination / simultaneity

Bunan possesses a class of adverbial clauses that can either stand in a terminative or a simultaneous temporal relationship to the event denoted by the main clause. Such adverbial clauses are formed by attaching the terminative case clitic =*astok* to the progressive participle (intransitive and middle conjugation) or the supine (transitive conjugation). Depending on the pragmatic context, the clitic =*astok* is either glossed as “=TERM” (for “terminative”) or “=SIM” (for “simultaneous”). Consider the table below.

Table 128: Terminative / simultaneous adverbial clauses

	INTR	MID	TR
SG	<i>V-ka=astok</i> V-PROG.SG=TERM ~ =SIM	<i>V-ε-ka=astok</i> V-MID-PROG.SG=TERM ~ =SIM	<i>V-tε-a=astok</i> V-TR-SUP=TERM ~ =SIM
PL	<i>V-kʰa=astok</i> V-PROG.PL=TERM ~ =SIM	<i>V-ε-kʰa=astok</i> V-MID-PROG.PL=TERM ~ =SIM	

The following example sentences illustrate the use of temporal adverbial clauses that are formed with the terminative case clitic.

(1219) *taldzi εitεa astok tunɟza tamak tsetdza.*

tal=dzi *εit-ε-a=astok* *tunɟ-dza* *tamak*
3=ERG.SG die-MID-SUP=TERM drink-PST.DIR.DJ.SG tobacco

tset-ε-dza
pull-TR-PST.DIR.DJ.SG

“He smoked until he died.”

(Conversation 74.3)

(1220) *kinεa astok handzi pura: tanpo likdzi dzora!*

kin-ε-a=astok *han=dzi* *pura:LN* *tanpo*
give.birth-MID-SUP=TERM 2=ERG.SG full careful

lik-ε-dzi *dzot-a*
make-TR-CVB sit-IMP.SG

“Until you give birth, be extremely careful and stay here!”

(King Kesar 86)

(1221) *wa abi para:ṭha: sore tatka daṣi ni: rwakde ea astok.*

<i>wa</i>	<i>abi</i>	<i>para:ṭha:LN=tsore</i>	<i>tat-ka</i>
FOC	grandmother	parāṭha=ENR	prepare-PROG
<i>da-s-ḡ-i</i>	<i>ni:</i>	<i>rwak-de</i>	<i>el-kḥa=astok</i>
give-DETR-MID-ACT	EX.NON1SG	graze-SUP	go-PROG.PL=SIM

“And grandmother used to prepare *parāṭhā* and things like that and gave them to us when we were on our way to graze (the sheep in the mountains).”

(Tshechu 2.304)

(1222) *lak tsore henak ajna kḥjopsi eldza ṭhaj leptḡa astok.*

<i>lak=tsore</i>	<i>henak</i>	<i>ajna</i>	<i>kḥjops-dži</i>
hand=ENR	like.this	very.much	go.numb-CVB.SG
<i>el-dza</i>	<i>ṭhaj</i>	<i>lep-tḡ-a=astok</i>	
go-PST.DIR.DJ.SG	up.there	reach-TR-SUP=TERM	

“By the time we reached up there, my hands and limbs had gone numb.”

(Conversation 44.4)

The synchronic multifunctionality of this type of adverbial clause must be the result of a hypoanalysis (Croft 2000: 126–127). Non-finite verb forms marked with =*astok* originally must have expressed a terminative temporal relation. This is implied by the fact that the case clitic =*astok* still serves the primary function of denoting (spatial) movement unto a certain location (cf. § 4.4.4.6). A terminative temporal relationship between an event A and an event B often entails that there is a brief temporal overlap between the two events. In certain contexts, this simultaneous temporal relationship was reanalyzed as the more salient semantic feature. Accordingly, the terminative clitic =*astok* acquired a new semantic interpretation as denoting a simultaneous temporal relationship.

19.3.1.5 Anteriority

Anterior temporal clauses refer to events that occurred prior to the events denoted by the main clause. This type of adverbial clause is formed by attaching the clitic =*a*, which is glossed as “=ANTER” (for “anterior”), to the past tense endings *-dza* / *-tsḥa*. This is illustrated by the table below.

Table 129: Anterior adverbial clauses

	INTR	MID	TR
SG	<i>V-dza=la</i> V-PST.SG=ANTER	<i>V-ɛ-dza=la</i> V-MID-PST.SG=ANTER	<i>V-ø-dza=la</i> V-TR-PST.SG=ANTER
PL	<i>V-tʰa=la</i> V-PST.PL=ANTER	<i>V-ɛ-tʰa=la</i> V-MID-PST.PL=ANTER	<i>V-ø-tʰa=la</i> V-TR-PST.PL=ANTER

A few examples of adverbial clauses with anterior temporal reference are given below. Note that the clitic *=la* is often followed by the comitative clitic *=nampo*. My material suggests that the comitative clitic is commonly attached to adverbial clauses that refer to an event that gives rise to a resultant state.

(1223) *tʰakdzala tapɕi ragek riŋare na.*

tʰak-ø-dza=la *tap-s-ɛ-dʒi*
wash-TR-PST.SG=ANTER bring.back-DETR-MID-CVB.SG

ra-k-ek *riŋ-k-are=na*
come-INTR-PRS.CJ.SG say-INTR-PRS.DJ.SG=HS

“‘Having washed (my clothes), I will come back’, he told them, it is said.”
(Conversation 22.75)

(1224) *wa nuŋtɕi lekstoktɕi ralak eldzala nampo ...*

wa *nuŋtɕi* *lekstok=tɕi* *ralak* *el-dza=la=nampo*
FOC then village=ABL left.bank go-PST.SG=ANTER=COM

“And then, after having gone to the left bank of the river ...”
(Tulshug Lingpa 176)

(1225) *kʰjaktɕi tʰaraŋ eltʰala miʒi deŋmen mentɕʰok.*

kʰjak=tɕi *tʰaraŋ* *el-tʰa=la* *mi=ɕi*
here=ABL that.other.place go-PST.PL=ANTER person=PL

deŋ-men *mentɕʰok*
believe-INF NEG.EQ.DJ.PL

“Having gone from here to that other place (without proof of our deeds), people will not believe us (that we killed the demon).”
(King Kesar 272)

It is important to note that the past tense endings *-dza* / *-tsʰa* do not possess an epistemic value (i.e. direct evidence and disjunct knowledge) when occurring with the clitic *=la*. This supports the claim that the endings *-dza* / *-tsʰa* originally did not express epistemic categories, but only acquired this function in the recent past (cf. § 13.4.5.3 and § 13.5.4).

19.3.2 Conditional clauses

A conditional clause refers to an event that represents a precondition for the occurrence of the event referred to by the main clause (e.g. *If she will give me money, I will buy clothes*). Bunan possess two types of conditional clauses. The first type is formed by attaching the conjunction clitic *=naŋ* to a verb stem (intransitive and transitive conjugation) or a verb stem plus conjugation marker (middle conjugation). As noted in § 19.3.1.1, such adverbial clauses may also receive a consecutive temporal interpretation (e.g. *When she will give me money, I will buy clothes*), which entails that the clitic *=naŋ* is either glossed as “=COND” (for “conditional”) or “=CONSEC” (for “consecutive”) depending on the pragmatic context. Consider the following table.

Table 130: Conditional adverbial clauses I

INTR	MID	TR
<i>V=naŋ</i> V=COND ~ =CONSEC	<i>V-ε=naŋ</i> V-MID=COND ~ =CONSEC	<i>V=naŋ</i> V=COND ~ =CONSEC

The second type of conditional clauses is formed by attaching the clitic *=naŋ* to the past tense endings *-dza* / *-tsʰa*. Such adverbial clauses can only receive a conditional interpretation but not a consecutive construal. Accordingly, the clitic *=naŋ* is always glossed as “=COND” in such constructions. This is exemplified by the table given below.

Table 131: Conditional adverbial clauses II

	INTR	MID	TR
SG	<i>V-dza=naŋ</i> V-PST.SG=COND	<i>V-ε-dza=naŋ</i> V-MID-PST.SG=COND	<i>V-ø-dza=naŋ</i> V-TR-PST.SG=COND
PL	<i>V-tsʰa=naŋ</i> V-PST.PL=COND	<i>V-ε-tsʰa=naŋ</i> V-MID-PST.PL=COND	<i>V-ø-tsʰa=naŋ</i> V-TR-PST.PL=COND

Conditional clauses of the first type occur in a variety of contexts. First, they occur as “reality conditionals” (Thompson, Longacre & Hwang 2007: 255), which refer to conditions that hold true at the moment of speaking, that held true in the past, or that are always true. Consider the following examples.

(1226) *tsuna kjanan daw!*

<i>tsuna</i>	<i>kja=nan</i>	<i>da-ku-a</i>
little.bit	become=COND	give-CJ.UND-IMP.SG

“Just give me a little bit.” (lit. “If it is a little bit, give it to me!”)
(Conversation 42.19)

(1227) *madanar wa bronṭsum. madanar khetṭsum taltsʰi.*

<i>ma-da=nan</i>	<i>wa</i>	<i>bron-tṣ-um=jen</i>
NEG-give=COND	FOC	make.fun.of-TR-INF=EQ.CJ

<i>ma-da=nan</i>	<i>kʰet-tṣ-um=jen</i>	<i>tal=tsʰi</i>
NEG-give=COND	beat-TR-INF=EQ.CJ	3=ERG.PL

“If (people) do not give them money, they will make fun of them. If (people) do not give them money, they will beat them.”
(Tshechu 1.22)

(1228) *nitsi ranar wa soj ramen men apa.*

<i>nitsi</i>	<i>ra=nan</i>	<i>wa</i>	<i>soj</i>	<i>ra-men</i>
sun	come=CONSEC / COND	FOC	cold	come-INF
<i>men</i>	<i>apa</i>			
NEG.EQ.CJ	AUTH			

“When / if the sun will come out, it will not be cold anymore.”
(Conversation 22.201)

In addition, conditional clauses of the first type may also occur as “unreality conditionals” (Thompson, Longacre & Hwang 2007: 255), that is to say, conditional clauses that refer to events that might have occurred in the past (“imaginative conditionals”) or might occur in the future (“predictive conditionals”).

(1229) *tal makjanar wa kulik tʰakdzɿ el ʰirtsum nindza apa.*

<i>tal</i>	<i>ma-kja=nan</i>	<i>wa</i>	<i>kulik</i>	<i>tʰak-ø-dzɿ</i>
3[SG]	NEG-become=COND	FOC	key	put.inside-TR-CVB
<i>el=ʰir-tṣ-um</i>	<i>nindza</i>	<i>apa</i>		
go=send-TR-INF	EX.PST.SG	AUTH		

“If he would not have been here, we would have locked the house and left.”
(Conversation 22.216)

(1230) *da handzi maliknan gidzi likkata.*

<i>da</i>	<i>han=dzi</i>	<i>ma-lik=nan</i>	<i>gi=dzi</i>
now	2=ERG.SG	NEG-do=COND	1SG=ERG.SG

lik-ø-kata

do-TR-FUT.CJ.SG

“Now, if you will not do it, I will do it.”

(Conversation 97.15)

Conditional clauses of the second type are much less common than conditional clauses of the first type. They can exclusively occur in imaginative contexts and refer to a condition that might have occurred in the past. Consider the following example.

(1231) *nam nosanan hiŋtʃi karma tʰaŋtʰum gwantsʰa.*

<i>nam</i>	<i>nos-dza=nan</i>	<i>hiŋ=tsʰi</i>	<i>karma</i>
sky	clear.up-PST.SG=COND	1PL.EXCL=ERG.PL	star

tʰaŋ-tʰum gwantsʰa

see-TR-INF EX.PST.PL

“If the sky would have cleared up, we would have seen the stars.”

(TD 328.7 [elicited])

Conditional clauses are often combined with clitics such as the focus clitic *=ni*: (cf. § 10.2.1), the comitative clitic *=nampo* (cf. § 4.4.4.9), the clitic *=sare*, and the extended topic clitic *=re* (cf. § 10.2.2). As I argue in § 10.2.1, the topic clitic *=ni*: commonly occurs in contexts in which the event denoted by the conditional clause stands in contrast to some alternative condition. Consider the following example.

(1232) *su tiki re lasmi su tiki re dan taj kja^ha girok ts^han^hts^han^hi dudut^əi ts^han^hi bastan^h dudut^əi girok pata dawni! t^hadzu nan^handz^hun^h t^hadzu pata: madana^h ni: gidzi ini epo malikkata!*

<i>su=tiki=re</i>	<i>lasmi</i>	<i>su=tiki=re</i>	<i>dan</i>	<i>ta-i</i>
who=INDEF=EXT	woman	who=INDEF=EXT	belly	POSS-ACT
<i>kja-k^ha</i>	<i>gi=tok</i>	<i>ts^han^hts^han^hi</i>	<i>dudut^əi</i>	
become-PROG.PL	1SG=DAT	all	before	
<i>ts^han^hi=bastan^h</i>	<i>dudut^əi</i>	<i>gi=tok</i>	<i>pata:LN</i>	<i>da-ku-ni</i>
all=INTESS	before	1SG=DAT	clue	give-UND-IMP.PL
<i>t^hadzu</i>	<i>nan^handz^hun^h</i>	<i>t^hadzu</i>	<i>pata:LN</i>	<i>ma-da=nan^h=ni:</i>
that	if	that	clue	NEG-give=COND=TOP
<i>gi=dzi</i>	<i>ini</i>	<i>epo</i>	<i>ma-lik-ø-kata</i>	
1SG=ERG.SG	2[SG].HON	good	NEG-do-TR-FUT.CJ.SG	

“Whichever women, whichever women become pregnant, tell me before telling anybody else, tell me first of all! If you do not give me notice, I will not be kind to you!”

(King Kesar 35)

The comitative clitic *=nampo* most often attaches to conditional clauses that denote a durative rather than a punctual event. This is illustrated by the following examples sentences.

(1233) *ni^hma^hj t^əhos inok likt^əum k^hams rana^hn^h nampo wa gidzi t^əhos da:ta.*

<i>ni^hma=ki</i>	<i>t^əhos</i>	<i>ini=tok</i>	<i>lik-t^ə-um</i>	<i>k^hams</i>
Nyingma=GEN	religion	2[SG].HON=DAT	make-TR-INFs	desire
<i>ra=nan^h=nampo</i>	<i>wa</i>	<i>gi=dzi</i>	<i>t^əhos</i>	
come=COND=COM	FOC	1SG=ERG.SG	religion	
<i>da-ø-kata</i>				
give-TR-FUT.CJ.SG				

“If you want Nyingma teachings, then I shall teach you.”

(Tulshug Lingpa 19)

(1234) *da the thansunṭəi nuṭsuk tɕʰos tsaknaŋ nampo nunaŋ daŋpotsuk tɕʰos luɕi eare la.*

<i>da</i>	<i>the</i>	<i>thansunṭəi</i>	<i>nuṭ=tsuk</i>	<i>tɕʰos</i>
now	this	this.year=ABL	new=REL	religions
<i>tsak=naŋ=nampo</i>		<i>nunaŋ</i>	<i>daŋpo=tsuk</i>	<i>tɕʰos</i>
put.inside=COND=COM		so	early=REL	religion
<i>lus-dzi</i>		<i>el-k-are=la</i>		
fall.behind-CVB.SG		go-INTR-PRS.DJ.SG=EVO		

“Now, if one were to propagate a new religion from now on, the old religion would become obsolete.”

(Conversation 84.49)

The conditional clause in (1233) refers to the addressee’s desire to receive religious teachings, whereas the conditional clause in (1234) refers to the foundation and propagation of a new religion. Both conditional clauses can be construed as denoting durative events that are not strictly bounded. A person’s wish to receive religious teachings prototypically represents a permanent acquired state, whereas the foundation and propagation of a new religion is an undirected activity (cf. Croft 2012: 57–69). Accordingly, the comitative clitic *=nampo* serves the function of profiling the durativity and unboundedness of the events denoted by the respective conditional clauses.

The function of the clitic *=sare*, which is only attested in combination with conditional clauses, is not entirely clear. The distribution of the morpheme in my data corpus suggests that the clitic portrays the conditional clause as a precondition that will have clear and unavoidable consequences. Accordingly, *=sare* seems to put additional emphasis on the precondition of the event that is denoted by the main clause, which is why the morpheme is glossed as “EMPH” (“for emphatic”) in the following.

(1235) *otəi ɕilti ranaŋ sare tsampa tsʰaŋtsʰaŋi grotṭəi θirtəum de.*

<i>otəi</i>	<i>ɕilti</i>	<i>ra=naŋ=sare</i>	<i>tsampa</i>	<i>tsʰaŋtsʰaŋi</i>
tomorrow	rain	come=COND=EMPH	crops	all
<i>grot-dzi</i>		<i>θir-tə-um</i>	<i>de</i>	
be.finished-CVB.SG		send-TR-INF	ATT.SG	

“If it rains tomorrow, all the crops might be destroyed.”

(AS 2.7 [elicited])

(1236) *rāj meme kjanan sare nuntsuk kʰa kaj apa?*

<i>rāj</i>	<i>meme</i>	<i>kja=nan=sare</i>	<i>nuntsuk</i>	<i>kʰa</i>
self.GEN.SG	monk	become=COND=EMPH	that.kind.of	what
<i>kaj</i>	<i>apa</i>			
difficult	AUTH			

“If (everybody) had own monks, that kind of difficulties would not occur.”

(Tshechu 2.484)

In addition, conditional forms may also be augmented with the extended topic clitic =*re* (cf. § 10.2.2). Such verb forms express that the proposition of the finite clause will (or will not) hold true, regardless of the proposition made in the conditional clause. Accordingly, such conditional clauses are best translated with the English phrase “(Not) even if ...”. Consider the following example.

(1237) *wa tsʰeḡu mi maleptʰak lepnan re dziṅs madziṅskʰak apa.*

<i>wa</i>	<i>tsʰeḡu</i>	<i>mi</i>	<i>ma-lep-tʰak</i>
FOC	Tshechu	person	NEG-reach-TR-PRS.DJ.PL
<i>lep=nan=re</i>	<i>dziṅ-s</i>	<i>ma-dziṅ-s-kʰak</i>	
reach=COND=EXT	scold-DETR	NEG-scold-DETR-INTR-PRS.DJ.PL	
<i>apa</i>			
AUTH			

“And (nowadays) people do not come to the Tshechu festival, and even if they come, they do not quarrel.”

(Tshechu 2.73)

A particular type of conditional construction that needs to be mentioned here is the conditional marker *menan*. Diachronically, *menan* goes back to the negated conditional form of the equative copula **ma-jen=nan* “if it is not (the case)”. However, most speakers are no longer aware of this etymological link and consider the conditional marker as a morphologically simple word. Following the intuition of native speakers, I do not treat the conditional marker *menan* as a morphologically complex construction and simply gloss it as “except for, unless”.

The conditional marker *menan* prototypically serves the function of deriving negative conditional clauses from verbless clauses. This is illustrated by the following two example sentences.

(1238) *gi ŋaroknaŋ pʰitok menaŋ dzaj maŋaː.*

<i>gi</i>	<i>ŋaro=tok=naŋ</i>	<i>pʰitok</i>	<i>menaŋ</i>	<i>dza-i</i>
1SG	morning=DAT=CON	evening	except.for	eat-ACT

ma-ŋaː

NEG-EX.1SG

“Except for the morning and the evening, I do not eat (a meal).”

(Tshechu 2.108)

(1239) *tsuna tɕʰaːʈaj menaŋ elde re muɕkil de la.*

<i>tsuna</i>	<i>tɕʰaː=ʈa-i</i>	<i>menaŋ</i>	<i>el-te=re</i>	<i>muɕkil_{LN}</i>
little.bit	knowledge=POSS-ACT	unless	come-SUP=EXT	difficult

de=la

ATT.SG=EVOC

“Unless you know (somebody who supports you), it is also very difficult to go (to Chandigarh and apply for a job).”

(Conversation 94.39)

The discourse coordinator often occurs after noun phrases that denote an amount of something. In this context, *menaŋ* indicates that the actual quantity does not exceed the amount specified by the noun phrase. The examples below illustrate this.

(1240) *jaː ta aːʈʰ no intɕ menaŋ maniː na.*

<i>jaː=ta</i>	<i>aːʈʰ_{LN}</i>	<i>no_{LN}</i>	<i>intɕ_{LN}</i>	<i>menaŋ</i>
yesterday=AVS	eight	nine	inch	except.for

ma-niː=na

NEG-EX.NON1SG=HS

“But yesterday there were not more than eight, nine inches of snow, they say.”

(Conversation 39.59)

(1241) *tsokna dzotnaŋ kʰres ramen men tɕuŋi menaŋ.*

<i>tsokna</i>	<i>dzot=naŋ</i>	<i>kʰres</i>	<i>ra-men</i>	<i>men</i>	<i>tɕuŋi</i>
cross-legged	sit=COND	hunger	come-INF	NEG.EQ.CJ	little

menaŋ
except.for

“If you sit around (all the time), you do not become hungry, only a little bit.”

(DP unrec 8)

Furthermore, *menaŋ* often occurs after conditional forms, in which case it again indicates that the proposition in the main clause will not hold if the proposition in the conditional clause is true. Consider the following example sentences.

(1242) *mani: kraŋga butnaŋ menaŋ.*

<i>ma-ni:</i>	<i>kraŋ-ka</i>	<i>but=naŋ</i>	<i>menaŋ</i>
NEG-EX.NON1SG	pile.up-PROG	put=COND	unless

“There is not (enough space for the cups inside the cupboard), unless you pile them up.”

(Conversation 60.23)

(1243) *dzotderok elnaŋ menaŋ tapɕarok kʰalak elmen apa tapɕa?*

<i>dzot-de=tok</i>	<i>el=naŋ</i>	<i>menaŋ</i>	<i>tap-ɕ-a=tok</i>
stay-SUP=DAT	go=COND	unless	return-MID-SUP=DAT

<i>kʰalak</i>	<i>el-men=jen</i>	<i>apa</i>	<i>tap-ɕ-a</i>
for.what.reason	go-INF=EQ.CJ	AUTH	return-MID-SUP

“Unless we would have gone back (there) to stay (for the night), for what reason should we have returned to their house, (why) return?”

(Conversation 22.7)

19.3.3 Causal clauses

Causal adverbial clauses refer to an event that causes the event described by the main clause. Causal adverbial clauses are formed by attaching the clitics *=naŋ* or *=taŋ* to a nominalized verb root (intransitive conjugation) or a nominalized active participle (intransitive, middle, and transitive conjugation). As noted in § 19.3.1.2, the same kind of non-finite construction can also be used to form adverbial clauses with punctual temporal reference. Accordingly, the clitics *=naŋ* and *=taŋ* are either glossed as “=CAUS” (for “causal”) or “=PUNCT” (for “punctual”) depending on the semantic interpretation of a given non-finite form. Consider the following table.

Table 132: Causal adverbial clauses

INTR	MID	TR
<i>V(-i)-s=nanj / V(-i)-s=tanj</i> V(-ACT)-NZR=CAUS	<i>V-ɛ-i-s=nanj / V-ɛ-i-s=tanj</i> V-MID-ACT-NZR=CAUS	<i>V-tɛ-i-s=nanj / V-tɛ-i-s=tanj</i> V-TR-ACT-NZR=CAUS

The following example sentences illustrate the use of *=nanj* / *=tanj* to form adverbial clauses that denote the cause of an event.

(1244) *tal kja-s=tanj gwanj-jentɛʰok.*

<i>tal</i>	<i>kja-s=tanj</i>	<i>gwanj-i</i>	<i>jentɛʰok</i>
3[SG]	become-NZR=CAUS	come.PL-ACT	EQ.DJ.PL

“Because he is here, we came (back).”

(Conversation 22.215)

(1245) *gjapo maskjastanj tʰadzu mi jama tsʰanjtsʰanjitsʰi loɕi jentɛʰok ...*

<i>gjapo</i>	<i>ma-(s)kja-s=tanj</i>	<i>tʰadzu</i>	<i>mi=ɲama</i>
king	NEG-become-NZR=CAUS	that	person=all

<i>tsʰanjtsʰanj=tsʰi</i>	<i>lot-s-ɛ-i</i>	<i>jentɛʰok</i>
all=ERG.PL	say-DETR-MID-ACT	EQ.DJ.PL

“Since there was no king, all of those people were saying: ...

(King Kesar 11)

(1246) *hitikɛok dan maskjastanj da tʰe jenmen de tettɛi.*

<i>hitik=ɕi=tok</i>	<i>dan</i>	<i>ma-(s)kja-s=tanj</i>	<i>da</i>	<i>tʰe</i>
other=PL=DAT	belly	NEG-become-NZR=CAUS	now	this

<i>jen-men</i>	<i>de</i>	<i>tet-dzi</i>
EQ-INF	ATT.SG	think-PST.INFER.DJ.SG

“Now, as the others have not become pregnant, this (woman) must be the one (who will give birth to our new king)’, he thought.”

(King Kesar 82)

Both *=nanj* and *=tanj* are sometimes augmented with the comitative clitic *=ɲampo*. In such contexts, the comitative clitic seems to serve the same function as in combination with conditional clauses (see § 19.3.2 above), viz. the portraying of the causing event as durative and unbounded. Two examples are given in the following.

(1247) *tal rastanɲ ɲampo sumser dzagek dzamen.*

<i>tal</i>	<i>ra-s=tanɲ=ɲampo</i>	<i>sum=ser</i>	<i>dza-k-ek</i>
3[SG]	come-NZR=CAUS=COM	three=time	eat-INTR-PRS.CJ.SG
<i>dzamen</i>			
food			

“Because he has come here, I eat three meals a day.”
(Conversation 42.44)

(1248) *ɛilti tʰok-s=nanɲ=ɲampo taldok biɛwa:s kjadzi agu kʰargan ga:nirok.*

<i>ɛilti</i>	<i>tʰok-s=nanɲ=ɲampo</i>	<i>tal=tok</i>	<i>biɛwa:s_{LN}</i>
rain	drip-NZR=CAUS / PUNCT=COM	3[SG]=DAT	hope
<i>kja-dzi</i>		<i>agu kʰargan ga:ni=tok</i>	
become-PST.INFER.DJ.SG		Agu Khargan Gani=DAT	

“Because rain was falling, he became hopeful, Agu Khargan Gani.”
or: “In the moment that rain was falling, he became hopeful, Agu Khargan Gani.”
(King Kesar 43)

Note that (1248) above is a rare case of a context in which it is possible to interpret the non-finite verb form as either temporal or causal. It is conceivable that adverbial clauses based on *=nanɲ* or *=tanɲ* could originally only receive a temporal construal, but acquired a more abstract causal meaning in contexts such as the one given above.

19.3.4 Circumstantial clauses

Circumstantial adverbial clauses specify the circumstances under which an event takes place. Circumstantial adverbial clauses are formed by attaching the dative clitic *=tok* to the active participle of a verb. In its function as an adverbial clause marker, the dative clitic *=tok* is glossed as “=CIRCUM”. Consider the following table.

Table 133: Circumstantial adverbial clauses

INTR	MID	TR
<i>V-i=tok</i> V-ACT=CIRCUM	<i>V-ɛ-i=tok</i> V-MID-ACT=CIRCUM	<i>V-tɛ-i=tok</i> V-TR-ACT=CIRCUM

All circumstantial adverbial clauses that are attested in my corpus of natural data are based on the existential copula *ni-*. This does not come as a surprise, as concomitant circumstances of events are usually durative in nature. Accordingly, it is very likely that they will be denoted with a stative predicate. Consider the following example sentences.

(1249) *mar mejdok kʰa jendzi.*

<i>mar</i>	<i>ma-ni-i=tok</i>	<i>kʰa</i>	<i>jendzi</i>
butter	NEG-EX.SG-ACT=DAT	what	EQ.DJ.SG

“How tasteless this dish tastes without butter!” (lit. “There not being butter, what is (this dish)?”)

(Conversation 55.54)

(1250) *nunan nima tiki naɲsmettok bek kʰar mejdok nitsi dzer madzertsi.*

<i>nunan</i>	<i>nima=tiki</i>	<i>naɲsmettok</i>	<i>bek</i>	<i>kʰa=re</i>
and.so	day=INDEF	suddenly	well	what=EXT
<i>ma-ni-i=tok</i>		<i>nitsi</i>	<i>dzer</i>	<i>ma-dzert-dzi</i>
NEG-EX.SG-ACT=DAT		sun	rise	NEG-rise-PST.INFER.DJ.SG

“And one day, all of a sudden, well, without there being any (reason), the sun did not rise.”

(King Kesar 194)

19.4 Complement clauses

Complement clauses are commonly defined as subordinate clauses that function as arguments of a predicate (Noonan 2007: 52). In Bunan, the majority of complement clauses are non-finite constructions. My data corpus suggests that Bunan possess two types of non-finite complement clauses: a more common type that is based on supine forms and a less frequent type that is based on active participles. In addition to non-finite complement clauses, Bunan also possesses finite complement clauses. However, finite complements are only attested in the domain of reported speech, which is treated as a separate phenomenon in § 19.6.

Bunan does not possess any kind of complementizer, i.e. a morpheme that serves the function of introducing complement clauses. To be sure, my corpus of natural speech comprises a small number of sentences in which young speakers used the complementizer *ki* to introduce complement clauses. However, this complementation strategy has clearly been borrowed from Indo-Aryan, where complement clauses are commonly formed with *ki* or phonologically similar morphemes (Masica 1991: 402–404). As this complementation strategy is only marginally attested in my data, I do not discuss the phenomenon in more detail here.

In addition, it is important to note that we have already come across a number of complementation constructions in § 15.3, which is dedicated to periphrastic constructions.

Consider the following sentence, which is based on the obligative future tense construction, viz. the possessive copula *ta-* and an infinitive complement.

(1251) *gi niskiŋ buɬa tsuk-tə-um ta:*.

<i>gi</i>	<i>niskiŋ</i>	<i>buɬa</i>	<i>tsuk-tə-um</i>	<i>ta:</i>
1SG	two	tree	plant-TR-INF	POSS.1SG

“I have to plant two trees.”

(DP unrec 15)

Constructions such as the obligative future tense construction clearly represent instances of complementation. However, such constructions will not be discussed in this chapter, as they represent special instances of complementation, since the infinitive complement does not possess the status of a semantic argument of the predicate in such constructions (cf. Croft [2001] 2009: 216–218). In other words, the sentence above does not express that the speaker possesses two trees that are to be planted. Rather, the construction indicates that the speaker is obliged to plant two trees and, accordingly, expresses more than the sum of its parts. The particular semantics of the construction *POSS + V-INF* clearly is the consequence of a hypoanalysis in the course of which the originally contextual prospective and obligative overtones were reanalyzed as the primary meaning of the construction (cf. Croft 2000: 126–127).¹³⁸ The metalinguistic function of the construction is most obvious in combination with monovalent verbs, where there is no possessive relationship between the subject and the action denoted by the complement clause. Consider the following example sentence.

(1252) *gi elmen ta:*.

<i>gi</i>	<i>el-men</i>	<i>ta:</i>
1SG	go-INF	POSS.1SG

“I have to go.”

(PS 28.6 [elicited])

Consequently, complementation strategies that have acquired a metalinguistic function in the course of a grammaticalization process are not discussed in this section, as they have already been described in § 15.3 in the context of periphrastic constructions. Rather, the following discussion focuses on combinations of predicates and non-finite complement clauses whose function has not been affected by grammaticalization processes. Based on their semantics, the respective predicates can be categorized into six

¹³⁸ Note that the *to have to* construction in English bears witness to the same grammaticalization process (cf. Heine & Kuteva 2002: 242–245).

major groups: (1) copulas, (2), ability verbs, (3) cognition verbs, (4) necessity verbs, (5) obligation verbs, and (6) perception verbs. These verb classes are discussed individually in the following subsections.

19.4.1 Complements of copulas

In my corpus of natural data, there are some instances of copulas taking complement clauses as their theme. These complement clauses are all based on supine forms. A number of example sentences are given below.

(1253) *kjum joktəa hoəmej kaj jendzi.*

<i>kjum</i>	<i>jok-tə-a</i>	<i>hoəmej</i>	<i>kaj</i>	<i>jendzi</i>
house	buy-TR-SUP	very.much	difficult	EQ.DJ.SG

“Buying a house is very difficult.”

(Conversation 14.52)

(1254) *the tuləuk liŋpa tulku wantəa kʰoj manindza loəi loəak na.*

<i>the</i>	<i>tuləuk liŋpa</i>	<i>tulku</i>	<i>wan-tə-a</i>	<i>kʰoj</i>
this	Tulshug Lingpa	reincarnation	take.out-TR-SUP	suitable

<i>ma-nindza</i>	<i>lot-s-ə-təʰi</i>
NEG-EX.PST.SG	say-DETR-MID-CVB.PL

lot-s-ə-ʰak=na

say-DETR-MID-PRS.DJ.PL=HS

“‘Identifying this reincarnation of Tulshug Lingpa was not suitable’, they told them, people say, I have heard.”

(Tulshug Lingpa 242)

19.4.2 Complements of ability verbs

The verb *tʰup-tə-um* “to achieve, to be able to” takes non-finite complement clauses that are based on supine forms. Two examples of such complement clauses are given below.

(1255) *mjoŋmaŋ indzi elde tʰuptəare wa.*

<i>mjoŋ=maŋ</i>	<i>indzi</i>	<i>el-de</i>	<i>tʰup-tə-are</i>	<i>wa</i>
downstairs=ALL	herself	go-SUP	be.able-TR-PRS.DJ.SG	FOC

“She is able to go downstairs on her own (i.e. without the help of another person).”

(Conversation 68.14)

(1256) *phjare ha: gotəare phjare mat^huptəare.*

<i>phja-de</i>	<i>ha: go-tə-are</i>	<i>phja-de</i>
speaking-SUP	understand-TR-PRS.DJ.SG	speaking-SUP
<i>ma-t^hup-tə-are</i>		
NEG-be.able-TR-PRS.DJ.SG		

“She can understand (when people) speak (our language), (but) she is not able to speak (our language herself).”

(Conversation 42.6)

19.4.3 Complements of cognition verbs

As noted in § 14.5.5, Bunan does not possess a lexical verb with the meaning “to know”. Instead, the language uses a periphrastic construction that consists of the noun *tə^ha*: “knowledge” to which the possessive copula *ta-* is cliticized. This construction commonly occurs with non-finite complement clauses that are based on supine forms. The two following examples illustrate this complementation strategy.

(1257) *thezi liktəa matə^ha:ta jentə^hok.*

<i>the=əi</i>	<i>lik-tə-a</i>	<i>ma-tə^ha:=ta-i</i>	<i>jentə^hok</i>
this=PL	make-TR-SUP	NEG-knowledge=POSS-ACT	EQ.DJ.PL

“These people do not know how to make (traditional food).”

(Conversation 39.30)

(1258) *əalde tə^ha:ta men.*

<i>əal-de</i>	<i>tə^ha:=ta-i</i>	<i>men</i>
have.diarrhea-SUP	knowledge=POSS-ACT	NEG.EQ.CJ

“He never has diarrhea.” (lit. “He does not know suffering from diarrhea.”)

(Tshechu 2.450)

The verb *ha: go-tə-are* “to understand” likewise occurs with non-finite complement clauses that are based on the supine form. An example is given below.

(1259) *phjare ha: gotɕare phjare maʔhuptɕare.*

<i>phja-de</i>	<i>ha: go-tɕ-are</i>	<i>phja-de</i>
Speak-SUP	understand-TR-PRS.DJ.SG	Speak-SUP
<i>ma-ʔhup-tɕ-are</i>		
NEG-be.able-TR-PRS.DJ.SG		

“She can understand (when people) speak (our language), (but) she is not able to speak (our language herself).”

(Conversation 42.6)

Cognition verbs cannot only take non-finite complements, but are also attested in combination with finite complement clauses. However, these constructions are not discussed at this point, as they are treated in § 19.6.3 in the context of reported thought constructions.

19.4.4 Complements of necessity verbs

The necessity to perform a particular action is expressed by the defective verb *gjut* “to need” (cf. § 12.10.1) and a number of periphrastic constructions that are derived from this predicate. All of these forms may take supine complement clauses. Two sentences that illustrate this complementation strategy are given below.

(1260) *the khwame barbargun tɕhetɕa gjunɕi lektɕa gjunɕi bjaj kjanan her ʔadzu kwatde datɕa gjunɕi tɕetɕa gjunɕi jendzi la.*

<i>the</i>	<i>khwame</i>	<i>barbargun</i>	<i>tɕhe-tɕ-a</i>	<i>gjun-s-ɕ-dzi</i>
this	red.dye	sometimes	warm.up-TR-SUP	need-DETR-MID-CVB.SG
<i>lek-tɕ-a</i>		<i>gjun-s-ɕ-dzi</i>		<i>bjaj</i> <i>kja=nan</i>
change-TR-SUP		need-DETR-MID-CVB.SG		thin become=COND
<i>her</i>	<i>ʔadzu</i>	<i>kwat-de</i>	<i>da-tɕ-a</i>	<i>gjun-s-ɕ-dzi</i>
again	that	boil-SUP	give-TR-SUP	need-DETR-MID-CVB.SG
<i>tɕe-tɕ-a</i>		<i>gjun-s-ɕ-dzi</i>		<i>jendzi=la</i>
warm.up-TR-SUP		need-DETR-MID-CVB.SG		EQ.DJ.SG=EVO

“From time to time it is necessary to warm up this red dye and when it becomes thin, it needs to be boiled again, it needs to be heated up (as people should know).”

(Tshechu 2.438)

(1261) *kʰorek ama nampo phjare gjus de.*

<i>kʰorek</i>	<i>ama=nampo</i>	<i>phja-de</i>	<i>gjut-s</i>	<i>de</i>
later	mother=COM	speak-SUP	need-NZR	ATT.SG

“Later, I will need to talk to mother.”

(Conversation 97.13)

19.4.5 Complements of obligation verbs

Bunan possesses a verb *baps-men* “to be forced, to be obliged”, which commonly takes a complement clause as one of its core arguments. The verb only rarely occurs in my corpus of natural data, as obligation is more commonly expressed with a periphrastic construction based on the infinitive form and the possessive copula *ta-* (see § 15.3.1.4). Like the verbs discussed in the preceding sections, *baps-men* takes complement clauses that are based on supine forms. The following example sentences illustrate this.

(1262) *girok tʰe len liktʰa baptsa.*

<i>gi=tok</i>	<i>tʰe</i>	<i>len</i>	<i>lik-tʰa</i>	<i>bap-dza</i>
1SG=DAT	this	work	do-TR-SUP	be.forced-PST.DIR.DJ.SG

“I was bound to do this work.”

(TD 100.9 [elicited])

(1263) *taldzi mjorenəŋ sampa puŋde kʰoj sakjat tʰoltʰa bonʰtʰek phirek elde babi jen.*

<i>tal=dzi</i>	<i>mjo-de=nəŋ</i>	<i>sampa</i>	<i>puŋt-de</i>	<i>kʰoj</i>
3=ERG.SG	plough-SUP=CON	crops	grow-SUP	suitable
<i>sakjat</i>	<i>tʰol-tʰa</i>	<i>bonʰtʰek</i>	<i>phirek</i>	<i>el-de</i>
place	search-TR-SUP	for.the.sake	abroad	go-SUP
<i>bap-i</i>	<i>jen</i>			
be.forced-ACT	EQ.CJ			

“He was forced to go abroad in order to search for a place suitable for ploughing and for growing crops.”

(Words of Life 1.51)

19.4.6 Complements of perception verbs

The only perception predicates that occur in combination with complement clauses in my data corpus are the verbs *tant-men* “to see” and *tʰaŋ-tʰum* “to see”. Remember that these two verbs stand in a suppletive relationship, with *tant-men* occurring in present and future tense contexts and *tʰaŋ-tʰum* occurring in past tense and conditional contexts. The

two verbs take non-finite complement clauses that are based on the active participle *-i*, as the following examples illustrate.

(1264) *tal tsʰaskuŋ leni tankjare.*

<i>tal</i>	<i>tsʰas=kun</i>	<i>lent-i</i>	<i>tant-k-are</i>
3[SG]	garden=LOC	work-ACT	see-INTR-PRS.DJ.SG

“I see him working in the garden.”

(TD 332.18 [elicited])

(1265) ... *gi panzi eli tʰaŋnaŋ taltsʰi gi pur tʰirtsum.*

<i>gi</i>	<i>pan-ɕ-dzi</i>	<i>el-i</i>	<i>tʰaŋ=naŋ</i>	<i>tal=tsʰi</i>
1SG	fly-MID-CVB.SG	go-ACT	see=COND	3=ERG.PL

<i>gi</i>	<i>pur=tʰir-tɕ-um=jen</i>
1SG	kill=send-TR-INF=EQ.CJ

“... if they see me flying away, they will kill me at once.”

(The Lama and the Owl 28)

(1266) *dʒaŋgal_{LN}kuŋ=tɕi henak eli tʰaŋmen gidzi.*

<i>dʒaŋgal_{LN}=kun=tɕi</i>	<i>henak</i>	<i>el-i</i>	<i>tʰaŋ-ø-men</i>
wood=LOC=ABL	like.this	go-ACT	see-TR-PST.DIR.CJ

<i>gi=dzi</i>
1SG=ERG.SG

“I saw him come through the wood like this.”

(Conversation 14.81)

19.5 Discourse coordinators

Bunan possesses a class of lexical items that specify semantic relations between clauses. These parts of speech may, for example, indicate whether the relation between two clauses is causal, concessive, adversative, etc. Following Watters (2002: 190), I refer to such words as “discourse coordinators”. Discourse coordinators are functionally reminiscent of discourse particles (see § 10.3 for a discussion of this word class). However, they should be treated as a separate lexical class, as they differ from discourse particles both in terms of their function and syntactic distribution. First, discourse coordinators operate across clauses, while discourse particles operate within clauses. Second, discourse coordinators prototypically occur in clause-initial position, whereas discourse particles most often occur in clause-final position.

A list of the discourse coordinators that are attested in my data is given below.

Discourse coordinators

<i>hena</i>	“either, or”
<i>jaŋna</i>	“or”
<i>jenan(=re)</i>	“however”
<i>jende</i>	“but”
<i>nanthan</i>	“if”
<i>nunan</i>	“and so, and therefore”
<i>nun^{tə}i</i>	“and then, after that”
<i>nwak</i>	“so, thus, therefore”

In the following subsections, I provide brief descriptions of the discourse coordinators that are attested in my corpus.

19.5.1 *jaŋna* “or” / *hena ... jaŋna* “either ... or”

The discourse coordinator *jaŋna* serves a disjunctive function and introduces clauses that stand in a disjunctive relationship to a preceding clause. Accordingly, *jaŋna* is functionally equivalent to the English conjunction *or*. The following example illustrates the use of *jaŋna* as a disjunctive discourse coordinator.

(1267) *thadzun makjanan ni: tal panzi elipajendzi jaŋna eran^zok taldzi hamla: liktəipa-jendzi lotkja lotta.*

<i>thadzun</i>	<i>ma-kja=nan=ni:</i>	<i>tal</i>	<i>pan-^ə-dzi</i>
there	NEG-become=COND=TOP	3[SG]	fly-MID-CVB.SG
<i>el-i-pa=jendzi</i>	<i>jaŋna</i>	<i>eran^z=^əi=tok</i>	<i>tal=dzi</i>
go-ACT-NZR=EQ.DJ.SG	otherwise	1PL.INCL=PL=DAT	3=ERG.SG
<i>hamla:LN</i>	<i>lik-tə-i-pa=jendzi</i>	<i>lot-ka</i>	
attack	make-TR-ACT-NZR=EQ.DJ.SG	say-PROG	
<i>lot-^ə-ta</i>			
say-TR-PST.INFER.DJ			

“‘If (your arrow) does not hit (his heart) there, he will fly away, or he will attack us’, he said.”

(King Kesar 262)

The preceding clause may additionally be introduced with the discourse coordinator *hena*. The combination of *hena ... jaŋna* expresses a similar meaning as the English construction *either ... or ...*. Consider the following example.

(1268) *tal hena tʰandɨgar lokkata jaŋna ʂimla lokkata.*

<i>tal</i>	<i>hena</i>	<i>tʰandɨgar</i>	<i>lok-ø-kata</i>	<i>jaŋna</i>
3[SG]	either	Chandigarh	study-TR-ASSER.NON1SG	or
<i>ʂimla</i>	<i>lok-ø-kata</i>			
Shimla	study-TR-ASSER.NON1SG			

“He will either study in Chandigarh or in Shimla.”

(TD 161.1 [elicited])

19.5.2 *jenan* “however, anyway”

Bunan possesses a discourse coordinator *jenan*, which expresses concessive relations between clauses. In other words, *jenan* introduces clauses that refer to circumstances that might be expected to preclude a given event, but eventually do not. The discourse coordinator often occurs with the topic extension clitic =*re* (cf. § 10.2.2) or the emphatic clitic =*sare* (cf. § 19.3.2) attached to it. Consider the following examples.

(1269) ... *erĩ himalejan belʈrok botkat phʲajpa noj gwak jenanre taltsʰi loʂak tʰe botpaj kat jendzi.*

<i>erĩ</i>	<i>himalajan_{LN}</i>	<i>belʈ_{LN}=tok</i>	<i>bot-kat</i>	
1PL.INCL.GEN	Himalayan	belt=DAT	Tibet-language	
<i>phʲa-i-pa</i>	<i>noj</i>	<i>gwak</i>	<i>jenanre</i>	<i>tal=tsʰi</i>
speak-ACT-NZR	many	EX.NON1PL	however	3=ERG.PL
<i>lot-s-ʂʰak</i>		<i>tʰe</i>	<i>bot-pa=ki</i>	<i>kat</i>
say-DETR-MID-PRS.DJ.PL		this	Tibet-NZR=GEN	language
<i>jendzi</i>				
EQ.DJ.SG				

“... in our area of the Himalayas (i.e. Himachal Pradesh), there are many people who speak Tibetan. However, they (i.e. the Hindu nationalist organization RSS) keep telling us that this is the language of the Tibetans.”

(Conversation 84.68)

(1270) *da kʰanak jenəŋ sare da tʰadzuj nuŋ amanaŋ ɲampo nuŋ butkjata tətɕi.*

<i>da</i>	<i>kʰanak</i>	<i>jenəŋ=sare</i>	<i>da</i>	<i>tʰadzu=ki</i>	<i>nuŋ</i>
now	how	however=EMPH	now	that=GEN	there
<i>ama=naŋ=ɲampo</i>		<i>nuŋ</i>	<i>but-ø-kata</i>	<i>tet-dɕi</i>	
mother=CON=COM		there	put-TR-FUT.CJ.SG	think-PST.INFER.DJ.SG	

“Now, whatever the situation may be, now I will have the child stay in that other one’s place, I will have it stay there with his mother’, he thought.”

(King Kesar 164)

The phonological form of *jenəŋ* suggests that this discourse coordinator may represent an original construction **jen=naŋ*, the conditional form of the equative copula, which eventually became lexicalized as a marker of concessive clauses.

19.5.3 *jende* “but”

The discourse coordinator indicates that a proposition stands in an adversative relation with a preceding clause. Accordingly, it fulfills a function similar to the phrasal clitic =*ta* (cf. § 10.2.3), but takes scope over entire propositions rather than individual arguments. Consider the following example.

(1271) *jende eraŋmi jendɕi ake tal?*

<i>jende</i>	<i>eraŋ-mi</i>	<i>jendɕi</i>	<i>ake</i>	<i>tal</i>
but	1PL.INCL-person	EQ.DJ.SG	QUE	3[SG]

“But he was one of our people, wasn’t he?”

(Tshechu 2.108)

From a synchronic perspective, the discourse coordinator *jende* seems to be composed of the equative copula *jen-* and the supine ending *-de*. However, whereas it is conceivable that the first syllable *jen* is indeed diachronically related to the equative copula, it remains doubtful whether the second syllable *de* represents the supine suffix, as Bunan copulas do not possess supine forms. Accordingly, the etymology of the morpheme *-de* remains unclear.

19.5.4 *nantʰan* ~ *nantʰandɕuŋ* “if”

The discourse coordinator *nantʰan* ~ *nantʰandɕuŋ* occasionally occurs as the first element of conditional clauses and hence indicates that the relevant clause denotes a circumstance that serves as a precondition for the event referred to by the main clause. However, it is important to note that the use of *nantʰan* ~ *nantʰandɕuŋ* in conditional clauses is not obligatory and merely represents a stylistic option (see below). Consider the following example sentence.

(1272) *nanthandzun handzi gi nuŋ astok heltəa tʰupnaŋ sare ...*

<i>nanthandzun</i>	<i>han=dzi</i>	<i>gi</i>	<i>nuŋ=astok</i>	<i>hel-tə-a</i>
if	2=ERG.SG	1SG	there=TERM	bring-TR-SUP

tʰup=naŋ=sare

be.able=COND=EMPH

“If you are able to take me there,”

(King Kesar 217)

The discourse coordinator *nanthān* ~ *nanthandzun* only rarely occurs in my corpus of natural data and is exclusively attested in stories that I recorded from my two oldest consultants, which indicates that the use of the discourse coordinator is associated with a more formal register.

19.5.5 *nunaŋ* “and so, and therefore”

nunaŋ is a discourse coordinator that indicates a clausal relationship between two clauses and, accordingly, fulfills a function similar to the discourse coordinator *nwak* (see § 19.5.7 below). However, the use of *nunaŋ* additionally implies that there is a sequential temporal relationship between the relevant events. This is illustrated by the following example sentence.

(1273) *the ni: gjaŋo kjamendzi lotkja lotta. nunaŋ lasmidzi lotta gi bete kʰanak tʰadzu gjaŋo kjamən?*

<i>the=ni:</i>	<i>gjaŋo</i>	<i>kja-men=jendzi</i>	<i>lot-ka</i>
this=TOP	king	become-INF=EQ.DJ.SG	say-PROG

<i>lot-ø-ta</i>	<i>nunaŋ</i>	<i>lasmi=dzi</i>
say-TR-PST.INFER.DJ	therefore	woman=ERG.SG

<i>lot-ø-ta</i>	<i>gi=ki</i>	<i>bete</i>	<i>kʰanak</i>	<i>tʰadzu</i>
say-TR-PST.INFER.DJ	1SG=GEN	child	how	that

<i>gjaŋo</i>	<i>kja-men=jən</i>
king	become-INF=EQ.CJ

“As for this one, he will become king’, he said. Therefore the woman said, ‘How can my child become king?’”

(King Kesar 167)

19.5.6 *nunṭəi* “and then, after that”

The discourse coordinator *nunṭəi* is used to establish a sequential temporal relationship between two clauses. Accordingly, it is best translated as “and then, after that”. The following example sentences illustrate the use of *nunṭəi*.

(1274) *durek tɛaŋ twat nuŋtɛi tɛaŋ matwat nidzaj nisbiŋdɔktɛi kʰorek.*

<i>durek</i>	<i>tɛaŋ</i>	<i>twat</i>	<i>nuŋtɛi</i>	<i>tɛaŋ</i>
earlier	beer	drink.PST.DIR.CJ	then	beer
<i>ma-twat</i>		<i>nidza=ki</i>	<i>nis=biŋ=tok=tɛi</i>	<i>kʰorek</i>
NEG-drink.PST.DIR.CJ		twenty=GEN	two=year=DAT=ABL	later

“Earlier I used to drink beer, but then I did not drink beer (anymore), after (having reached) twenty-two years.”

(Conversation 74.57)

(1275) *da:stok tʰadzu rolaŋs ɛenɛa tsukɛijendzi. ro ɛenɛi nuŋtɛi tiki niendzi magjariti hoɛmej.*

<i>da:stok</i>	<i>tʰadzu</i>	<i>rolaŋs</i>	<i>ɛen-s-ɛ-a</i>
meanwhile	that	rolangs	raise-DETR-MID-SUP
<i>tsuk-s-ɛ-i=jendzi</i>		<i>ro</i>	<i>ɛen-s-ɛ-dzi</i>
begin-DETR-MID-ACT=EQ.DJ.SG		dead.body	raise-DETR-MID-CVB.SG
<i>nuŋtɛi</i>	<i>tiki</i>	<i>ni-i=jendzi</i>	<i>ma-gjar-i=tiki</i>
then	one	EX.SG-ACT=EQ.DJ.SG	NEG-be.afraid-ACT=INDEF
<i>hoɛmej</i>			
very.much			

“In the meantime, that (dead body) had started to rise as a rolangs. Then, when the dead body had come back to life, there was one (man), an extremely bold one.”

(Conversation 87.378)

19.5.7 *nwak* “so, thus, therefore”

The discourse coordinator *nwak* commonly indicates that there is a causal relationship between two sentences. This is illustrated by the following example sentence.

(1276) *taj a:dat sumser dzamengi. apa nwak dzaj ni: sumser her.*

<i>taj</i>	<i>a:dat_{LN}</i>	<i>sum=ser</i>	<i>dzamen=ki</i>	<i>apa</i>
3SG.GEN	habit	three=times	food=GEN	grandmother
<i>nwak</i>	<i>dza-i</i>	<i>ni:</i>	<i>sum=ser</i>	<i>her</i>
therefore	eat-ACT	EX.NON1SG	three=time	again

“He is used to having three meals (per day). Therefore, grandmother also eats three times (per day).”

(Conversation 42.47)

In addition, *nwak* can also be used as a demonstrative of manner “like this, like that”. This is illustrated by the example below.

(1277) A: *henak jendzi wa tete*.

B: *nwak jendzi*.

<i>henak</i>	<i>jendzi</i>	<i>wa</i>	<i>tete</i>	<i>nwak</i>	<i>jendzi</i>
like.this	EQ.DJ.SG	FOC	grandfather	thus	EQ.DJ.SG

A: “It is like this, grandfather, right?”

B: “It is like this.”

19.6 Reported speech constructions

As we have seen in the preceding section, most complement clauses in Bunan are non-finite constructions. However, Bunan possesses one grammatical domain in which finite complement clauses are attested: the domain of reported speech. In what follows, I use the term “reported speech” as a cover term for the two major types of reported speech constructions that occur in Bunan, i.e. “direct speech” and “hybrid reported speech”. The two types of reported speech are discussed in the following subsections.

Reported speech constructions have already been described in § 13.2.2 and § 13.4.4 in the context of epistemic marking. In this section, reported speech constructions are discussed in terms of their syntactic structure. As noted in § 13.4.4, reported speech constructions may be formed in three different ways. The quoted proposition may be (1) marked with the hearsay clitic *=na*, (2) followed by a participial form of a verb of saying, or (3) subordinated to a matrix clause that is based on a verb of saying. Strictly speaking, only reported speech constructions of the third type represent canonical instances of complementation. However, it is not sensible to distinguish between the three types of reported speech constructions when studying the syntax of reported speech clauses, as the syntactic structure of a reported speech clause is entirely independent of the strategy employed to mark its status as a reported utterance. Accordingly, the following discussion incorporates all types of reported speech constructions, regardless of whether they are true instances of complementation or not.

19.6.1 Direct speech

Following Evans (2012: 68) canonical approach to the typology of reported speech constructions, I define a “direct speech clause” as a reported utterance that represents an exact and unaltered quote of the original speaker’s words. Canonical direct speech retains all the linguistic peculiarities of the original utterances in terms of intonation, style, and the alignment of deictically sensitive expressions. Two example sentences that contain direct speech clauses are given below.

(1278) *nunaŋ tal lama=dzi girok ringare tuləuk liŋpadzi han kʰjak dʒotɕi wa barbaruŋ eraŋ dotkʰek.*

<i>nunaŋ</i>	<i>tal</i>	<i>lama=dzi</i>	<i>gi=tok</i>	<i>riŋ-k-are</i>	
then	3[SG]	lama=ERG.SG	1SG=DAT	say-INTR-PRS.DJ.SG	
<i>tuləuk liŋpa=dzi</i>		<i>han</i>	<i>kʰjak</i>	<i>dʒot-dʒi</i>	<i>wa</i>
Tulshug Lingpa=ERG.SG		2[SG]	here	stay-CVB.SG	FOC
<i>barbaruŋ</i>	<i>eraŋ</i>	<i>dot-kʰek</i>			
sometimes	1PL.INCL	meet-INTR-PRS.CJ.PL			

“Then he, the lama, Tulshug Lingpa, said (to me), ‘You will stay here, and we will meet from time to time.’”

(Tulshug Lingpa 17)

(1279) *nunaŋ lasmi=dzi lotta gi bete kʰanak tʰadzu gjaŋpo kjaŋmen?*

<i>nunaŋ</i>	<i>lasmi=dzi</i>	<i>lot-ø-ta</i>	<i>gi=ki</i>	
therefore	woman=ERG.SG	say-TR-PST.INFER.DJ	1SG=GEN	
<i>bete</i>	<i>kʰanak</i>	<i>tʰadzu</i>	<i>gjaŋpo</i>	<i>kja-men=jen</i>
child	how	that	king	become-INF=EQ.CJ

“Therefore the woman said, ‘How can my child become a king?’”

(King Kesar 168)

As (1278) and (1279) illustrate, direct speech complement clauses do not display any kind of morphosyntactic marking that indicates their status as subordinate clauses. Rather, they represent finite utterances that are perfectly coherent in terms of structure and content and, accordingly, would not become ungrammatical if they were to occur without an accompanying matrix clause. The fact that direct speech complement clauses exhibit a high degree of structural independence does not come as a surprise. After all, a canonical direct speech is defined as a word-for-word quotation of the reported speaker’s original proposition (cf. Evans 2012: 68). Consequently, a quoted proposition retains its independent syntactic status when being subordinated to a matrix clause.

19.6.2 Hybrid reported speech

The term “hybrid reported speech” has been adopted from Tournadre (2003: 215–216), who introduced the term to describe a particular type of reported speech construction in Lhasa Tibetan. In hybrid reported speech, pronouns, demonstratives, and temporal adverbs are adjusted to the perspective of the current speaker, whereas the verb is calculated from the viewpoint of the original speaker. Accordingly, hybrid reported speech complement clauses differ from direct speech complement clauses with regard to the align-

ment of deictically sensitive expressions. More precisely, they are characterized by an incomplete deictic shift.

The structure of hybrid reported speech complement clauses is illustrated in the figure below. Sentence (1) is a statement in which a speaker A asserts her / his attention to meet with the addressee B in an unspecified location on the following day. Sentence (3) gives the same statement in the form of hybrid reported speech when it is reproduced by a current speaker B on the following day.

Table 134: Deictic shifts in hybrid reported speech

(1)	<i>gi</i>	<i>otɕi</i>	<i>nun</i>	<i>ra-k-ek</i>	
	1SG	tomorrow	there	come-INTR-PRS.CJ.SG	
	⇓	⇓	⇓		
(2)	<i>tal</i>	<i>ʰan</i>	<i>kʰjak</i>	<i>ra-k-ek</i>	<i>riŋ-k-are</i>
	3SG	today	here	come-INTR-PRS.CJ.SG	say-INTR-PRS.DJ.SG

The deictic split between the viewpoint of the current speaker and the viewpoint of the original speaker is observed in all contexts, regardless of whether the subject of the subordinate clause refers to the current speaker, the current addressee, or a non-participant. This is illustrated by the following sentences.

(1280) *gi ra:re riŋgare.*

<i>gi</i>	<i>ra-k-are</i>	<i>riŋ-k-are</i>
1SG	come-INTR-PRS.DJ.SG	say-INTR-PRS.DJ.SG

“She / he says that I will come.”

(TL 1.5 [elicited])

(1281) *han ra:re riŋgare.*

<i>han</i>	<i>ra-k-are</i>	<i>riŋ-k-are</i>
2[SG]	come-INTR-PRS.DJ.SG	say-INTR-PRS.DJ.SG

“She / he says that you will come.”

(TL 1.8 [elicited])

(1282) *tal ra:re riŋgare.*

<i>tal</i>	<i>ra-k-are</i>	<i>riŋ-k-are</i>
3[SG]	come-INTR-PRS.DJ.SG	say-INTR-PRS.DJ.SG

“She_i / he_i says that she_j / he_j will come.”

(TD 296.9 [elicited])

Since pronouns and predicates are grounded in two distinct perspectives, hybrid reported speech may display logophoric effects in combination with third person pronouns. Compare the example sentences given in (1237) above and (1283) below.

(1283) *tal ragek riŋgare.*

<i>tal</i>	<i>ra-k-ek</i>	<i>riŋ-k-are</i>
3[SG]	come-INTR-PRS.CJ.SG	say-INTR-PRS.DJ.SG

“She_i / he_i says that she_i / he_i will come.”

(TL 1.9 [elicited])

In (1283), the use of a conjunct form indicates that the subject of the matrix clause and the subject of the complement clause are coreferent. In (1282), the use of a disjunct form indicates that the opposite is true. Such logophoric effects are only attested in combination with privileged access verbs, however. If the predicate of the complement clause is a general access verb, the resulting construction is potentially ambiguous. This is demonstrated by the following sentence.

(1284) *ja: bup-tsa riŋgare.*

<i>ja:</i>	<i>bup-dza</i>	<i>riŋ-k-are</i>
yesterday	stumble-PST.DIR.DJ.SG	say-INTR-PRS.DJ.SG

“She_i / he_i says that she_{i/j} / he_{i/j} stumbled yesterday.”

(TD 219.5 [elicited])

In the examples that we have seen so far, hybrid reported speech can be explained as a direct consequence of the fact that epistemic verbal categories are sensitive to the category of the epistemic source. Remember that the epistemic source is defined as a superordinate speech act category that comprises speech-act participants possessing privileged epistemic access to the knowledge contained in a particular proposition (cf. § 13.2.2). In contexts of reported speech, the reported speaker possesses privileged access to the knowledge on which the reported speech act is based, as she / he was the person who originally uttered the sentence based on her / his personal knowledge.

However, it is important to note that hybrid reported speech is not only attested in combination with the epistemic verbal categories “conjunct-disjunct” and “evidentiality”. The syntactic verbal category “person” is subject to the same pattern and, accordingly, remains tied to the perspective of the original speaker in contexts of reported speech. Consider the following sentences.

(1285) *ʔaʕi kjuma ketdzi ɲa: na.*

<i>ʔaʕi</i>	<i>kjuma</i>	<i>ketdzi</i>	<i>ɲa:=na</i>
Tashi	home	alone	EX.1SG=HS

“Tashi_i says that he_i is home alone.”

(Conversation 39.62)

In (1285) we observe the same deictic split that has been described above in combination with epistemic categories. The person value of the existential copula *ni-* is invariably bound to the perspective of the original speaker, whereas the personal name *ʔaʕi* renders the viewpoint of the current speaker. However, the hybrid reported speech pattern does not occur in combination with first person subjects. This is illustrated by the following example.

(1286) *taldzi riɲgare gi ʕa dzaɟ maɲa:.*

<i>tal=dzi</i>	<i>riɲ-k-are</i>	<i>gi</i>	<i>ʕa</i>	<i>dza-i</i>
3=ERG.SG	say-INTR-PRS.DJ.SG	1SG	meat	eat-ACT

ma-ɲa:

NEG-EX.1SG

“He_i says that I do not eat meat.”

or: “He says, ‘I do not eat meat.’”

(TD 62.8 [elicited])

According to my consultants, it is impossible to have a hybrid reported speech construction ***gi ʕa dza-i ma-ni*: “1SG meat eat-ACT NEG-EX.NON1SG” in (1286) above. Consequently, the sentence is ambiguous and can either be interpreted as canonical direct speech (i.e. all deictically sensitive expressions represent the perspective of the original speaker) or canonical indirect speech (i.e. all deictically sensitive expressions represent the perspective of the current speaker).

19.6.3 Reported thoughts

The complementation strategies discussed in the preceding sections are not confined to reported speech constructions proper, that is to say, to the reproduction of *spoken* words. Similar constructions are also attested in combination with cognition verbs such as

tet-men ~ *tets-men* “to think” and *mi-ε-um* “to think, to think about”. In my corpus of natural data, cognition verbs most often occur in combination with direct speech complements. Two examples are given below.

(1287) *gidzi su jen tes de ka.*

<i>gi=dzi</i>	<i>su</i>	<i>the</i>	<i>jen</i>	<i>tet-s</i>	<i>de</i>
1SG=ERG.SG	who	this	EQ.CJ	think-NZR	ATT.SG
<i>ka</i>					
ASS					

“I thought, ‘Who is this?’”

(Conversation 20.22)

(1288) *da gi khjak khrestok εitεum de tettεi.*

<i>da</i>	<i>gi</i>	<i>khjak</i>	<i>khres=tok</i>	<i>εit-ε-um</i>	<i>de</i>
now	1SG	here	hunger=DAT	die-MID-INF	ATT.SG
<i>tet-dzi</i>					
think-PST.INFER.DJ.SG					

“‘Now here I will die from hunger’, he thought.”

(The Prodigal Son 17)

However, cognition verbs may also take hybrid reported speech complements. The following sentences illustrate this based on the verbs *mi-ε-um* “to think, to think about”, and *tεha:=fa-men* “to know”.

(1289) *atεhe mizare tal epo kjorgek.*

<i>atεhe</i>	<i>mi-ε-are</i>	<i>tal</i>	<i>epo</i>	<i>kjor-k-ek</i>
sister	think-MID-PRS.DJ.SG	3[SG]	well	come-INTR-PRS.CJ.SG

“My sister_i thinks that she_i dances well.”

(TD 198.4 [elicited])

(1290) *atεhe mizare tal epo kjorgare.*

<i>atεhe</i>	<i>mi-ε-are</i>	<i>tal</i>	<i>epo</i>	<i>kjor-k-are</i>
sister	think-MID-PRS.DJ.SG	3[SG]	well	come-INTR-PRS.DJ.SG

“My sister_i thinks that she_j dances well.”

(TD 198.5 [elicited])

(1291) *atə^ho tə^ha:ʔa taldzi t^hopo t^hakmen.*

<i>atə^ho</i>	<i>tə^ha:ʔa</i>	<i>tal=dzi</i>	<i>t^hopo</i>
older.brother	knowledge=POSS.NON1SG	3=ERG.SG	cup

t^hak-ø-men

break-TR-PST.DIR.CJ

“My brother_i knows that he_i broke the cup.”

(TD 198.7 [elicited])

(1292) *atə^ho tə^ha:ʔa taldzi t^hopo t^hakdza.*

<i>atə^ho</i>	<i>tə^ha:ʔa</i>	<i>tal=dzi</i>	<i>t^hopo</i>
older.brother	knowledge=POSS.NON1SG	3=ERG.SG	cup

t^hak-ø-dza

break-TR-PST.DIR.DJ.SG

“My brother_i knows that she_j / he_j broke the cup.”

(TD 198.6 [elicited])

19.6.4 Ambiguity resulting from zero anaphora

As noted in § 16.1, Bunan discourse is characterized by the pervasive use of zero anaphora. Arguments are usually not overtly mentioned if they refer to a participant whose identity is known, inferable, or irrelevant in the relevant discourse context. As a consequence, it is often not possible to distinguish between direct speech and hybrid reported speech in a straightforward manner. Consider the following sentence.

(1293) *t^hadzu petəa nama lanj-tə-a k^honmen ringare ...*

<i>t^hadzu</i>	<i>petəa=nama</i>	<i>lanj-tə-a</i>	<i>k^hon-ø-men</i>
that	book=all	buy-TR-SUP	finish-TR-PST.DIR.CJ

riŋ-k-are

say-INTR-PRS.DJ.SG

“He says that he has sold all those books.”

or: ?“He says, ‘I have sold all those books.’”

(Conversation 32.7)

In the example that is given above, the agent argument of the speech complement clause is not overtly mentioned, as the identity of the respective participant has already been established. Accordingly, the syntactic structure of the reported utterance does not allow us to determine whether the sentence represents an instance of direct speech or an instance of hybrid reported speech. To be sure, it is usually still possible to identify the

type of construction based on intonational information. In case of the utterance given in (1293) above, the intonation of the speech complement suggests that the sentence represents an instance of hybrid reported speech. However, intonational information does not always resolve this ambiguity, especially in contexts in which the reported speech complement clause only consists of the predicate (e.g. *ra-k-ek riŋ-k-are* “come-INTR-PRS.CJ.SG say-INTR-PRS.DJ.SG” “She / he says, ‘I will come.’” ~ “She_i / he_i says that she_i / he_i will come.”).

19.7 Causative constructions

As noted in § 12.4.1.3, Bunan possesses two derivational morphemes to decrease the valency of verbs roots: the detransitivizing suffix *-s* (cf. § 12.3.2) and the middle conjugation marker *-ø* (cf. § 12.4.3). However, the language does not exhibit any productive derivational morphology to increase the number of core arguments of a given verb root. As a natural consequence, Bunan resorts to a periphrastic causative construction that is based on the supine form of the relevant main verb and a finite inflected form of the verb *da-tə-um* “to give”. As the label “causative” suggests, the causative constructions adds an agent argument to the clause that acts as the instigator of the event denoted by the main verb.

The causative construction can have two different meanings. First, it can express a “proper” causative. In this case, the additional agent argument is portrayed as the participant that ultimately causes the respective event to occur. This is illustrated by the following two example sentences.

(1294) *rinpotəedzi talzok bejul nama elderok tsʰaŋi tʰakste data.*

<i>rinpotəe=dzi</i>	<i>tal=ɕi=tok</i>	<i>bejul</i>	<i>nama</i>	<i>el-te=tok</i>
Rinpoche=ERG.SG	3=PL=DAT	Beyul	all	go-SUP=DAT

<i>tʰaks-de</i>	<i>da-ø-ta</i>
get.ready-SUP	give-TR-PST.INFER.DJ

“The Rinpoche made them get ready so that all of them would go to Beyul.”
(Tulshug Lingpa 132)

(1295) *tʰəj likkata gwatde da:ta.*

<i>tʰəj</i>	<i>lik-ø-kata</i>	<i>gwat-de</i>	<i>da-ø-kata</i>
warm	make-TR-FUT.CJ.SG	boil-SUP	give-TR-FUT.CJ.SG

“I will heat up the water, I will bring it to boil.”
(Conversation 16.236)

Second, the causative construction can express a permissive. In this case, the additional agent argument is not portrayed as the instigator of the event denoted by the main verb but rather as the authority that allows the respective event to occur. The permissive function is illustrated by the following example sentences.

(1296) *taldok dzotde dæi ni:*

<i>tal=tok</i>	<i>dzot-de</i>	<i>da-s-ɛ-dzi</i>	<i>ni:</i>
3[SG]=DAT	stay-SUP	give-INTR-MID-CVB.SG	EX.NON1SG

“He has been allowed to stay.”

(ST unrec 4)

(1297) *the liktæa da.tana la.*

<i>the</i>	<i>lik-tæ-a</i>	<i>da-ø-katana=la</i>
this	do-TR-SUP	make-TR-FUT.2SG=Q

“Will you allow me to do this?”

(TD 37.1 [elicited])

Since the causative construction is based on the trivalent verb *da-tæ-um* “to give”, causative clauses commonly exhibit a clause structure that is reminiscent of a trivalent clause. The subject of the non-finite verb form is treated like the recipient argument of the verb “to give” and, accordingly, most often receives dative marking. However, in my data corpus, there are several instances of causative construction in which the “causee” occurs in an unmarked absolutive form. The non-finite verb form, on the other hand, is treated like the theme argument, which does not receive any overt case marking. All additional arguments that a supine clause might contain do not undergo any change in terms of case marking. Accordingly, a causative construction may contain two dative-marked arguments, as the following example illustrates.

(1298) *dordzedzi dzanporok khjurok khet-tæa data.*

<i>dordze=dzi</i>	<i>dzanpo=tok</i>	<i>khju=tok</i>	<i>khet-tæ-a</i>
Dorje=ERG.SG	Zangpo=DAT	dog=DAT	beat-TR-SUP

da-ø-ta

give-TR-PST.INFER.DJ

“Dorje made Zangpo beat the dog.”

(NN 39.11 [elicited])

20 Appendix A: Texts

20.1 The Kesar epic

The epic of King Kesar is a traditional oral narrative that is widely known and popular throughout the Tibetan-speaking area as well as neighboring regions (cf. Stein 1959: 56–64). The epic does not exist as a coherent and unified version, but is attested in a number of different versions, some of which strongly deviate from each other.¹³⁹ However, as Stein (1959: 3–4) points out, all of these stories are built around a common plot that revolves around a hero called Kesar (WT *ke sar* ~ *ge sar*), who is born in poor conditions, but eventually becomes the ruler of the country of Ling (WT *glin*).

In August 2010, I recorded the opening chapter of the Kesar epic from my second oldest consultant Nawang Norbu (*1939) in Keylong. As he was only able to recite the opening chapter, I tried to find other speakers who might be familiar with other parts of the epic. However, although I came across a number of Bunan speakers who could tell me what the other chapters “were about”, I could not find anybody who was able to recite another chapter. Accordingly, it must be assumed that the opening chapter that I was able to record represents the last remnant of a much longer version, the other parts of which have been lost.

The recording has a total length of eighteen minutes and is composed of four different thematic parts: (1) the introduction to the epic, (2) the prophecy of the birth of King Kesar, (3) the birth and youth of King Kesar, and (4) King Kesar’s defeat of the demon Dud Acung. The following text is a transcription of the first three and a half minutes of the recording, in which the narrator gives a general introduction to the epic and tells about the events that happened prior to the birth of King Kesar.

(1) *the miks lin kesar gjapoj miks jendzi.*

<i>the</i>	<i>miks</i>	<i>lin</i>	<i>kesar</i>	<i>gjapo=ki</i>	<i>miks</i>	<i>jendzi.</i>
this	story	Ling	Kesar	king=GEN	story	EQ.DJ.SG

“This story is the story of King Kesar of Ling.”

¹³⁹ See Herrmann (1991: 9–12) for an overview of different sources.

- (2) *gidzi mi: akkuṇṭṭei henṭitsuk itṭaik tʰup tʰup hit rajtsuk ɲama gidzi ɕatkjata.*

<i>gi=dzi</i>	<i>mi=ki</i>	<i>ak=kuṇ=ṭei</i>
1SG=ERG.SG	person=GEN	mouth=LOC=ABL
<i>hen-s-ḡ-i=tsuk</i>	<i>itṭaik</i>	<i>tʰup-tʰup</i>
hear-DETR-MID-ACT=REL	how.much	be.able-be.able
<i>hit</i>	<i>ra-i=tsuk=ɲama</i>	<i>gi=dzi</i>
memory	come-ACT=REL=all	1SG=ERG.SG
<i>ɕat-ḡ-kata</i>		
tell-TR-FUT.CJ.SG		

“What I have heard from the mouth of people, as much as I can remember, I will tell.”

- (3) *liṇ riṇnaṇ sare durek tiki jul tiki: min jendzi liṇ riṇnaṇ.*

<i>liṇ</i>	<i>riṇ=naṇ=sare</i>	<i>durek</i>	<i>tiki</i>	<i>jul</i>	<i>tiki=ki</i>
Ling	say=COND=EMPH	earlier	one	country	INDEF=GEN
<i>min</i>	<i>jendzi</i>	<i>liṇ</i>	<i>riṇ=naṇ</i>		
name	EQ.DJ.SG	Ling	say=COND		

“As for Ling, earlier there was a country of that name, as for Ling.”

- (4) *kesar gjapo riṇnaṇ nuṇtsuk taj gjapo.*

<i>kesar gjapo</i>	<i>riṇ=naṇ</i>	<i>nuṇ=tsuk</i>	<i>ta-i</i>	<i>gjapo</i>
King Kesar	say=COND	there=REL	POSS-ACT	king

“As for King Kesar, he (was) the king from there, owning (the country).”

- (5) *tʰadzu gjapo kʰanak kinzi jen lotnaṇ sare tal tʰuṇsi jen lotnaṇ sare tʰadzuj miks jendzi.*

<i>tʰadzu</i>	<i>gjapo</i>	<i>kʰanak</i>	<i>kin-ḡ-i=jen</i>	<i>lot=naṇ=sare</i>
that	king	how	be.born-MID-ACT=EQ.CJ	say=COND=EMPH
<i>tal</i>	<i>tʰuṇs-i=jen</i>	<i>lot=naṇ=sare</i>		
3[SG]	be.reborn.HON-ACT=EQ.CJ	say=COND=EMPH		
<i>tʰadzu=ki</i>	<i>miks</i>	<i>jendzi</i>		
that=GEN	story	EQ.DJ.SG		

“As for how that king was born and how he was reborn, it is the story about that.”

- (6) *durek durek tʰadzu liŋdok taj gjapo ta matatəʰwak.*

<i>durek</i>	<i>durek</i>	<i>tʰadzu</i>	<i>liŋ=tok</i>	<i>ta-i</i>	<i>gjapo</i>
earlier	earlier	that	Ling=DAT	POSS-ACT	king
<i>ta</i>	<i>ma-ta-i=jentəʰwak</i>				
POSS	NEG-POSS-ACT=EQ.DJ.PL				

“In old days, in that country of Ling (people) did not have a King who owned the country.”

- (7) *gjapo maskjastan tʰadzu mi jama tsʰaŋtsʰaŋitsʰi loŋi jentəʰok gjapo mani: sasati bardo de.*

<i>gjapo</i>	<i>ma-(s)kja-s=tan</i>	<i>tʰadzu</i>	<i>mi=nama</i>
king	NEG-become-NZR=CAUS	that	person=all
<i>tsʰaŋtsʰaŋi=tsʰi</i>	<i>lot-s-ə-i=jentəʰok</i>	<i>gjapo</i>	<i>ma-ni:</i>
all=ERG.PL	say-DETR-MID-ACT=EQ.DJ.PL	king	NEG-EX.NON1SG
<i>sasa=tiki</i>	<i>bardo</i>	<i>de</i>	
different=INDEF	difficult	ATT.SG	

“Since there was no king, all of those people were saying, ‘It is very difficult that there is no king.’”

- (8) *kʰalak riŋnan sare tʰadzun tiki talzi: tedzitsuk tʰarati ni: jendzi erĩ pradhā:n tʰopa asti tiki agu kʰargan ga:ni riŋga.*

<i>kʰalak</i>	<i>riŋ=nan=sare</i>	<i>tʰadzun</i>	<i>tiki</i>	<i>tal=ɕi=ki</i>	<i>tedzi=tsuk</i>
why	say=COND=EMPH	there	one	3=PL=GEN	big=REL
<i>tʰara=tiki</i>	<i>ni-i=jendzi</i>	<i>erĩ</i>	<i>pradhā:n_{LN}</i>		
that.other=INDEF	EX.SG-ACT=EQ.DJ.SG	1PL.INCL.GEN	chief		
<i>tʰopa=asti=tiki</i>	<i>agu kʰargan ga:ni</i>	<i>riŋ-ka</i>			
similar=SML=INDEF	Agu Khargan Gani	say-PROG.SG			

“To tell you why, there was one of them, that other important one, one similar to our chiefs, called Agu Khargan.”

- (9) *tal bar tʰadzu betʂen dzottʂi ni: jendʒi.*

<i>tal</i>	<i>bar</i>	<i>tʰadzu</i>	<i>betʂen_{LN}</i>	<i>dzot-dʒi</i>
3[SG]	sometimes	that	anxious	sit-CVB.SG

ni-i=jendʒi

EX.SG-ACT=EQ.DJ.SG

“Sometimes, he, that one, was sitting anxiously.”

- (10) *erʃ khjak gjapo mani:.*

<i>erʃ</i>	<i>khjak</i>	<i>gjapo</i>	<i>ma-ni:</i>
1PL.INCL.GEN	here	king	NEG-EX.NON1SG

“There is no king here in our place.”

- (11) *erʃ khjak gjapo tiki rare gjunʂi nindza gjapo waŋste gjunʂi nindza.*

<i>erʃ</i>	<i>khjak</i>	<i>gjapo=tiki</i>	<i>ra-de</i>
1PL.INCL.GEN	here	king=INDEF	come-SUP

<i>gjun-s-ʂ-dʒi</i>	<i>nindza</i>	<i>gjapo</i>	<i>waŋs-de</i>
need-DETR-MID-CVB.SG	EX.PST.SG	king	come.out-SUP

<i>gjun-s-ʂ-dʒi</i>	<i>nindza</i>
need-DETR-MID-CVB.SG	EX.PST.SG

“It is necessary that a king come here, it is necessary that a king appear.”

- (12) *erʃ khjak gjapo mani:.*

<i>erʃ</i>	<i>khjak</i>	<i>gjapo</i>	<i>ma-ni:</i>
1PL.INCL.GEN	here	king	NEG-EX.NON1SG

“There is no king here in our place.”

- (13) *bardo de lotkja.*

<i>bardo</i>	<i>de</i>	<i>lot-ka</i>
difficult	ATT.SG	say-PROG

“‘It is difficult’, he said.”

- (14) *erĩ juldok gjapo maskjasnaŋ deskit ramen made lotta.*

<i>erĩ</i>	<i>jul=tok</i>	<i>gjapo</i>	<i>ma-(s)kja-s=naŋ</i>
1PL.INCL.GEN	country=DAT	king	NEG-become-NZR=CAUS
<i>deskit</i>	<i>ra-men</i>	<i>ma-de</i>	<i>lot-ø-ta</i>
prosperity	come-INF	NEG-ATT.SG	say-TR-PST.INFER.DJ

“As our country does not have a king, there will be no prosperity’, he said.”

- (15) *tʰadzuj bonʰek kanʰanmej tʰertʰwak.*

<i>tʰadzu=ki</i>	<i>bonʰek</i>	<i>kanʰanmej</i>	<i>tʰer-tʰwak</i>
that=GEN	for.the.sake	very.much	be.sad-PST.INFER.DJ.PL

“Because of that they were extremely sad.”

- (16) *nima tiki wa tʰadzudzi agu kʰargan ga:ni riŋitsuktsi taldzi lekski tʰaŋi bastan tedzitsuk ʂaŋʰe=naŋ tʰa:ʰajnaŋ tʰaŋi bastan tedzi taldzi leks ʤama tʰaŋtʰaŋi tum-ta.*

<i>nima=tiki</i>	<i>wa</i>	<i>tʰadzu=dzi</i>	<i>agu kʰargan ga:ni</i>
day=INDEF	FOC	that=ERG.SG	Agu Khargan Gani
<i>riŋ-i=tsuk=dzi</i>		<i>tal=dzi</i>	<i>leks=ki</i> <i>tʰaŋi=bastan</i>
say-ACT=REL=ERG.SG		3=ERG.SG	village=GEN all=INTESS
<i>tedzi=tsuk</i>	<i>ʂaŋʰe=naŋ</i>	<i>tʰa:ʰa:ʰa-i=naŋ</i>	<i>tʰaŋi=bastan</i>
big=REL	old.M=CON	knowledge=POSS-ACT=CON	all=INTESS
<i>tedzi</i>	<i>tal=dzi</i>	<i>leks=ʤama</i>	<i>tʰaŋtʰaŋi</i>
big	3=ERG.SG	village=all	all
<i>tum-ø-ta</i>			
summon-TR-PST.INFER.DJ			

“One day, that one, the one called Agu Khargan Gani, he summoned the most important among the old ones and the wise ones of the village, the important ones among them, he summoned the whole village.”

- (17) *nwak tumdʒi tʰadzun leks nama tʰanʒidok lotta tʰe jenaŋ ni: ramen made.*

nwak *tum-ø-dʒi* *tʰadzun* *leks=nama* *tʰanʒi=tok*
 so summon-TR-CVB there village=all all=DAT
lot-ø-ta *tʰe* *jenaŋ=ni:* *ra-men*
 say-TR-PST.INFER.DJ this however=FOC come-INF
ma-de
 NEG-ATT.SG

“Thus, having summoned them, he told to the whole village there, ‘Whatever (our situation may be), this (situation) will not persist!’”

- (18) *eř khjak gjapoti tamste dzaruri: gjus de.*

eř *khjak* *gjapo=tiki* *tams-de* *dzaruri:LN*
 1PL.INCL.GEN here king=INDEF be.born.HON-SUP necessary
gjut-s *de*
 need-NZR ATT.SG

“It is absolutely necessary that a king be born here.”

- (19) *da eraŋ eltʰi tʰaraŋ tʰaj satki tʰarati ni: dʒagati ni:.*

da *eraŋ* *el-tʰi* *tʰaraŋ* *tʰaj* *sat=ki*
 now 1PL.INCL go-CVB.PL that.other.place up.there god=GEN
tʰara=tiki *ni:* *dʒagaLN=tiki* *ni:*
 that.other=INDEF EX.NON1SG place=INDEF EX.NON1SG

“Now we will go to that other place and there will be that other (thing) of a god, the abode of a god.”

- (20) *tʰadzun eltʰi eraŋtsʰi kontʰoktok molam tatkatʰek.*

tʰadzun *el-tʰi* *eraŋ=tsʰi* *kontʰok=tok* *molam*
 there go-CVB.PL 1PL.INCL=ERG.PL god=DAT prayer
tat-ø-katʰek
 perform-TR-FUT.CJ.PL

“We will go there and perform a prayer for the god.”

(21) *hĩ: juldok gjapoti hiŋzok daəa gjut lotkja.*

<i>hĩ:</i>	<i>jul=tok</i>	<i>gjapo=tiki</i>	<i>hiŋ=əi=tok</i>
1PL.EXCL	country=DAT	king=INDEF	1PL.EXCL=DAT
<i>da-s-ə-a</i>	<i>gjut</i>	<i>lot-ka</i>	
give-DETR-MID-SUP	need	say-PROG	

“We will say, ‘You need to give a king to our village, to us.’”

(22) *molam tatkathek lotkja lotta.*

<i>molam</i>	<i>tat-ø-kathek</i>	<i>lot-ka</i>	<i>lot-ø-ta</i>
prayer	perform-TR-FUT.CJ.PL	say-PROG	say-TR-PST.INFER.DJ

“‘We will perform a prayer’, he said.”

(23) *nunŋəi tshaŋtsʰaŋi leks ɲama tshaŋtsʰaŋi tʰuntəʰok tshaŋtsʰaŋi.*

<i>nunŋəi</i>	<i>tshaŋtsʰaŋi</i>	<i>leks=ɲama</i>	<i>tshaŋtsʰaŋi</i>	<i>tʰunt-təʰok</i>
then	all	village=all	all	agree-PST.INFER.DJ.PL
<i>tshaŋtsʰaŋi</i>				
all				

“Then, all, the whole village, agreed, all of them.”

(24) *tʰi:k de loəi wa eltəʰwak.*

<i>tʰi:k_{LN}</i>	<i>de</i>	<i>lot-s-ə-təʰi</i>	<i>wa</i>	<i>el-təʰwak</i>
okay	ATT.SG	say-DETR-MID-CVB.PL	FOC	go-PST.INFER.PL

“‘So be it’, they said and went off.”

- (25) *saṅṅurnaj da kanṅanmej molam tsore tatka kanṅanmej kiki soso largjalo lotkja el-tṣʰwak.*

saṅṅur=naṅ *da* *kanṅanmej* *molam=tsore* *tat-ka*
incense=CON now very.much prayer=ENR perform-PROG

kanṅanmej *kiki soso largjalo* *lot-ka* *el-tṣʰwak*
very.much kiki soso largyalo say-PROG go-PST.INFER.PL

“Burning incense, saying many prayers, saying the phrase ‘kiki soso largyalo’¹⁴⁰ many times, they went.”

- (26) *ṭʰaj ṭʰadzu satki dzaga astok ṭʰadzun el-tṣʰi wa molam tatka tsʰaṅtsʰaṅitsʰi.*

ṭʰaj *ṭʰadzu* *sat=ki* *dzaga_{LN}=astok* *ṭʰadzun* *el-tṣʰi*
up.there that god=GEN place=TERM there go-CVB.PL

wa *molam* *tat-ka* *tsʰaṅtsʰaṅi=tṣʰi*
FOC prayer perform-PROG all=ERG.PL

“Having gone up there, to that god’s place, having gone there, all of them prayed.”

- (27) *hiṅzok gjapo kʰukṣa gjut.*

hiṅ=ṣi=tok *gjapo* *kʰuk-s-ṣ-a* *gjut*
1PL.INCL=PL=DAT king find-DETR-MID-SUP need

“We need to find a king.”

- (28) *hiṅzok gjapo ṭʰirtṣa gjut lotkja kontṣoktok molam tatka.*

hiṅ=ṣi=tok *gjapo* *ṭʰir-tṣ-a* *gjut* *lot-ka*
1PL.INCL=PL=DAT king send-TR-SUP need say-PROG

kontṣok=tok *molam* *tat-ka*
god=DAT prayer perform-PROG

“‘You need to send a king to us’, they said, performing prayers for the god.”

¹⁴⁰ This phrase (WT *ki ki bswo bswo lha rgyal lo*) has been borrowed from a western Tibetan variety and translates into English as “May the gods always be victorious”.

- (29) *nunanj molam tattəa astok nunanj wa tʰadzu gjapo tʰaradzi re agu kʰargan ga:nidzi riŋitsuk tʰaŋtsʰaŋidok biəwa:s dila:j likta.*

nunanj *molam* *tat-tə-a=astok* *nunanj* *wa* *tʰadzu*
then prayer perform-TR-SUP=TERM then FOC that

gjapo *tʰara=dzi=re* *agu kʰargan ga:ni=dzi*
king that.other=ERG.SG=EXT Agu Khargan Gani=ERG.SG

riŋ-i=tsuk *tʰaŋtsʰaŋi=tok* *biəwa:s_{LN}* *dila:j_{LN}*
say-ACT=REL all=DAT hope relaxation

lik-ø-ta

make-TR-PST.INFER.DJ

“Then, while they were praying, that king¹⁴¹, that other one, the one called Agu Khargan Gani, also gave them hope.”

- (30) *bek eraŋtsʰi kʰjak molam taəitsuktok tantan eraŋzok gjapoti kontəoktsi tʰirtəipajendzi lotkja lotta.*

bek *eraŋ=tsʰi* *kʰjak* *molam*
well 1PL.INCL=ERG.PL here prayer

tat-s-ə-i=tsuk=tok *tantan* *eraŋ=əi=tok*
perform-DETR-MID-ACT=REL=DAT definitely 1PL.INCL=PL=DAT

gjapo=tiki *kontəok=dzi* *tʰir-tə-i-pa=jendzi*
king=INDEF god=ERG.SG send-TR-ACT-NOM=EQ.DJ.SG

lot-ka *lot-ø-ta*

say-PROG say-TR-PST.INFER.DJ

“Well, on this prayer that we have performed here, the god will surely sent us a king’, he said.”

¹⁴¹ Here, the word king refers to Agu Khargan Gani.

- (31) *da:stok nwak dzottɔi ni astok nam brakna ɲosi ni:dok namdoktɔi ɛilti siksiksiksik tʰoktɔi.*

<i>da:stok</i>	<i>nwak</i>	<i>dzot-dzi</i>	<i>ni=astok</i>	<i>nam</i>	<i>brakna</i>
meanwhile	thus	sit-CVB.SG	EX.SG=TERM	sky	bright
<i>ɲos-dzi</i>	<i>ni-i=tok</i>	<i>nam=tok=tɔi</i>	<i>ɛilti</i>	<i>siksiksiksik</i>	
clear.up-CVB.SG	EX.SG-ACT=DAT	sky=DAT=ABL	rain	ONOM	
<i>tʰok-dzi</i>					
drip-CVB-SG					

“In the meantime, as he was sitting there, with the sky being bright and clear, rain fell from the sky ‘siksiksiksik’.”

- (32) *ɛilti tʰoksnan ɲampo taldok biɛwa:s kjadzi agu kʰargan ga:nirok.*

<i>ɛilti</i>	<i>tʰok-s=nan=ɲampo</i>	<i>tal=tok</i>	<i>biɛwa:s_{LN}</i>
rain	drip-NZR=CAUS=COM	3[SG]=DAT	hope
<i>kja-dzi</i>	<i>agu kʰargan ga:ni=tok</i>		
become-PST.INFER.DJ.SG	Agu Khargan Gani=DAT		

“As rain was falling, he became hopeful, Agu Khargan Gani.”

- (33) *bek tʰan kontɔoktsi tantan erĩ: loɛitsuk hendza.*

<i>bek</i>	<i>tʰan</i>	<i>kontɔok=dzi</i>	<i>tantan</i>	<i>erĩ:</i>
well	today	god=ERG.SG	definitely	1PL.INCL.GEN
<i>lot-s-ɛ-i=tsuk</i>	<i>hen-ø-dza</i>			
say-DETR-MID-ACT=REL	hear-TR-PST.DIR.DJ.SG			

“Well, today the god has surely heard what we have said.”

- (34) *da erĩ: juldok tantan tiki thara gjapo tiki erĩ: khjak nun kinzipadzi lotkja lotta.*

<i>da</i>	<i>erĩ:</i>	<i>jul=tok</i>	<i>tantan</i>	<i>tiki</i>	<i>thara</i>
now	1PL.INCL.GEN	country=DAT	definitely	one	that.other

<i>gjapo=tiki</i>	<i>erĩ:</i>	<i>khjak</i>	<i>nun</i>
king=INDEF	1PL.INCL.GEN	here	there

<i>kin-ε-i-pa=jendzi</i>	<i>lot-ka</i>	<i>lot-ø-ta</i>
be.born-MID-ACT-NZR=EQ.DJ.SG	say-PROG	say-TR-PST.INFER.DJ

“Now, one such other person, a king, will surely be born here in our country’, he said.”

- (35) *nwak nunṭṭṛi tapṛi gwanṭṭṛi nunaṇ thadzu agu khargan ga:nidzi leks nama tshanjidok lotta su tiki re lasmi su tiki re dan taj kjakha girok tshanṭshanṭi dudutṛi tshanṭi bastan dudutṛi girok pata dawni!*

<i>nwak</i>	<i>nunṭṭṛi</i>	<i>tap-s-ε-tṛi</i>	<i>gwanṭṭṛi</i>
thus	then	bring.back-DETR-MID-CVB.PL	come-CVB.PL

<i>nunaṇ</i>	<i>thadzu</i>	<i>agu khargan ga:ni=dzi</i>	<i>leks=nama</i>	<i>tshanṭi=tok</i>
then	that	Agu Khargan Gani=ERG.SG	village=all	all=DAT

<i>lot-ø-ta</i>	<i>su=tiki=re</i>	<i>lasmi</i>	<i>su=tiki=re</i>
say-TR-PST.INFER.DJ	who=INDEF=EXT	woman	who=INDEF=EXT

<i>dan</i>	<i>ta-i</i>	<i>kja-kha</i>	<i>gi=tok</i>	<i>tshanṭshanṭi</i>
belly	POSS-ACT	become-PROG.PL	1SG=DAT	all

<i>dudutṛi</i>	<i>tshanṭi=bastan</i>	<i>dudutṛi</i>	<i>gi=tok</i>	<i>pata:LN</i>
before	all=INTESS	before	1SG=DAT	clue

da-ku-ni

give-UND-IMP.PL

“And thus they went back, and then, that one, Agu Khargan Gani said to the whole village, ‘Whichever women, whichever women become pregnant, tell me before telling anybody else, tell me first of all!’”

- (36) *tʰadzu nanthandzʊŋ tʰadzu pata: madanaŋ ni: gidzi ini epo malikkata.*

tʰadzu nanthandzʊŋ tʰadzu pata:LN ma-da=naŋ=ni:
that if that clue NEG-give=COND=TOP

gi=dzi ini epo ma-lik-ø-kata
1SG=ERG.SG 2[SG].HON good NEG-do-TR-FUT.CJ.SG

“If you do not give me notice, I will not be kind to you.”

- (37) *agu kʰargan ga:ni riŋ-i=tsuk hoəmej pro tsakəitinaŋ tunikti ni: jendzi.*

agu kʰargan ga:ni riŋ-i=tsuk hoəmej pro
Agu Khargan Gani say-ACT=REL very.much anger

tsak-s-ə-i=tiki=naŋ tunik=tiki
put.inside-DETR-MID-ACT=INDEF=CON rough=INDEF

ni-i=jendzi
EX.SG-ACT=EQ.DJ.SG

“The one called Agu Khargan Gani was being angry and rough.”

- (38) *gidzi ini wa tʰadzu ini wa nanthandzʊŋ girok pata: madanaŋ ni: gidzi puəak ralqiti kʰetdʒi pʰet jasmanʔəi pʰet jonmanʔəi nisdumbu lik tʰja:t lotkja lik tʰja:t tʰaŋidok.*

gi=dzi ini wa tʰadzu ini wa
1SG=ERG.SG 2[SG].HON FOC that 2[SG].HON FOC

nanthandzʊŋ gi=tok pata:LN ma-da=naŋ=ni: gi=dzi
if 1SG=DAT clue NEG-give=COND=FOC 1SG=ERG.SG

puəa=tok ralqi=tiki kʰet-ø-dʒi pʰet jas=manʔəi pʰet
head=DAT sword=INDEF beat-TR-CVB half right=ALL=ABL half

jon=manʔəi nis=dumbu lik=tʰir-ø-kata lot-ka
left=ALL=ABL two=piece make=send-TR-FUT.CJ.SG say-PROG

lik=tʰir-ø-kata tʰaŋi=tok
make=send-TR-FUT.CJ.SG all=DAT

“‘I (will do the following) to you if you do not give me notice, I will cleave your head open, one half going to the right, one half to the left, two pieces I will make’, he said, ‘I will do this to all of you!’”

- (39) *nwak tʰaŋtsʰaŋitsʰi hiŋtsʰi nwak likkatʰek tʰara lekstok lasmi dan tajtsuk tʰaŋidok hiŋtsʰi dan kjanan sare tʰaŋtsʰaŋitsʰi inirok inok hun likkatʰek lotkja lotta.*

<i>nwak</i>	<i>tʰaŋtsʰaŋi=tʰi</i>	<i>hiŋ=tʰi</i>	<i>nwak</i>	<i>lik-ø-katʰek</i>
thus	all=ERG.PL	1PL.EXCL=ERG.PL	thus	do-TR-FUT.CJ.PL
<i>tʰara</i>	<i>leks=tok</i>	<i>lasmi</i>	<i>dan</i>	<i>ta-i=tsuk</i>
that.other	village=DAT	woman	belly	POSS-ACT=REL
<i>tʰaŋi=tok</i>	<i>hiŋ=tʰi</i>	<i>dan</i>	<i>kja=nan=sare</i>	
all=DAT	1PL.EXCL=ERG.PL	belly	become=COND=EMPH	
<i>tʰaŋtsʰaŋi=tʰi</i>	<i>ini=tok</i>	<i>ini=tok</i>	<i>hun</i>	
all=ERG.PL	2[SG].HON=DAT	2[SG].HON=DAT	message	
<i>lik-ø-katʰek</i>	<i>lot-ka</i>	<i>lot-ø-ta</i>		
make-TR-FUT.CJ.PL	say-PROG	say-TR-PST.INFER.DJ		

“Thus, everybody said, ‘We will do it like that! If in the village among all of us a pregnant woman ... we ... if (a woman) becomes pregnant, all of us will give notice to you ... you’, they said.”

20.2 The Tshechu festival

The following text is a transcription of a recording that was made in February 2012. In this recording, my main consultant's wife, Tshetan Drolma (*1938), and my main consultant's nephew, Sonam Angrup (*1981), explain to me how much the living conditions in Lahaul have changed over the past few decades. The following text renders the first three minutes of the recording. Note that the text features both passages spoken by Tshetan Drolma ("A") and Sonam Angrup ("B").

- (1) A: *dutɕi dardzi: rik-tɕum phantɕa.*

<i>dutɕi</i>	<i>dardzi:LN</i>	<i>rik-tɕum=jen</i>	<i>phan-tɕ-a.</i>
earlier	tailor	bring-TR-INF=EQ.CJ	sew-TR-SUP

"Back then, they used to bring tailors to sew clothes."

- (2) A: *thoŋ rik-tɕum dardzi:*

<i>thoŋ</i>	<i>rik-tɕum=jen</i>	<i>dardzi:LN</i>
inside	bring-TR-INF=EQ.CJ	tailor

"They used to bring the tailors inside (their homes)."

- (3) A: *dardzi: noj gwamen nwa:stok.*

<i>dardzi:LN</i>	<i>noj</i>	<i>gwa-men=jen</i>	<i>nwa:stok</i>
tailor	many	EX.PL-INF=EQ.CJ	at.that.time

"In those days, there were many tailors."

- (4) A: *wa kudzuŋtɕi ras jokdʒi rik-tɕum.*

<i>wa</i>	<i>kudzu=maŋ=tɕi</i>	<i>ras</i>	<i>jok-ø-dʒi</i>
FOC	Kullu.Valley=ALL=ABL	cotton	buy-TR-CVB.SG

rik-tɕum=jen
bring-TR-INF=EQ.CJ

"People used to buy cotton from the Kullu Valley and bring (the tailors to their homes)."

- (5) A: *wa nuŋ kjuma dardzi: rikdzala pʰantsum.*

wa nuŋ kjuma dardzi: rik-ø-dza=la
 FOC there home tailor bring-TR-PST=ANTER

pʰan-tə-um=jən
 sew-TR-INF=EQ.CJ

“Having brought tailors there, to their home, they used to sew clothes.”

- (6) A: *khjwazok dukpo koŋa berbu lasmizok dukpo betezok dukpo berbu soksum tsʰaŋtsʰaŋi pʰantsum.*

khjwa=si=tok dukpo koŋa berbu lasmi=si=tok dukpo
 man=PL=DAT robe coat trousers woman=PL=DAT robe

bete=si=tok dukpo berbu soksum tsʰaŋtsʰaŋi
 child=PL=DAT robe trousers shirt all

pʰan-tə-um=jən
 sew-TR-INF=EQ.CJ

“Robes, coats, and trousers for men, robes for women, robes, trousers, and shirts for children, all of that they used to sew.”

- (7) A: *noj surum pʰantsum.*

noj surum pʰan-tə-um=jən
 much tweed sew-TR-INF=EQ.CJ

“They used to sew a lot of (clothes from) tweed.”

- (8) A: *durek nuŋtsuk ras ramen men təuŋi ramen.*

durek nuŋtsuk ras ra-men men təuŋi
 earlier there=REL cotton come-INF NEG.EQ.CJ few

ra-men=jən
 come-INF=EQ.CJ

“Back then, there was no local cotton, there was just a little bit (of local cotton).”

- (9) A: *tsʰaŋtsʰaŋi elmen wa noj kja-men tʰaj gompə hoəmej mi noj kja-men.*

tsʰaŋtsʰaŋi *el-men=jen* *wa* *noj* *kja-men=jen*
all go-INF=EQ.CJ FOC many become-INF=EQ.CJ

tʰaj *gompə* *hoəmej* *mi* *noj*
up.there monastery very.many person many

kja-men=jen

become-INF=EQ.CJ

“Everybody used to go, any there would be many people up there at the monastery, so many people, there used to be many people.”

- (10) A: *daksam kjuma mi magwak.*

daksam *kjuma* *mi* *ma-gwak*
now home person NEG-EX.NON1PL

“Nowadays, people are no longer at home.”

- (11) A: *kʰa tsʰeəu mi gwaŋmen.*

kʰa *tsʰeəu* *mi* *gwaŋ-men=jen*
what Tshechu person come.PL-INF=EQ.CJ

“Who is going to the Tshechu these days?”

- (12) A: *tsunati kjamendzi.*

tsuna=tiki *kja-men=jendzi*
little.bit=INDEF become-INF=EQ.DJ.SG

“It has become a small amount (of people who go there).”

- (13) B: *tʰe bakta_{LN} nwak ma-de kan-a.*

tʰe *bakta_{LN}* *nwak* *ma-de* *kan-a*
this time thus EX.ATT.SG watch-IMP.SG

“These days it is not like that, you see?”

- (14) B: *tsʰaŋtsʰaŋi kudzumaŋ gwaŋtɕʰi loktɕa gwaŋtɕʰi kʰatɕik nokri liktɕa gwaŋtɕʰi kʰjak dʒotɕʰi kʰjak kjum mendʒi.*

<i>tsʰaŋtsʰaŋi</i>	<i>kudzu=maŋ</i>	<i>gwaŋ-tɕʰi</i>	<i>lok-tɕ-a</i>	
all	Kullu.Valley=ALL	come.PL-CVB.PL	study-TR-SUP	
<i>gwaŋ-tɕʰi</i>	<i>kʰatɕik</i>	<i>nokri_{LN}</i>	<i>lik-tɕ-a</i>	<i>gwaŋ-tɕʰi</i>
come-CVB.PL	some	officer	make-TR-SUP	come-CVB.PL
<i>kʰjak</i>	<i>dʒot-tɕʰi</i>	<i>kʰjak</i>	<i>kjum</i>	<i>mendʒi</i>
here	stay-CVB.PL	here	house	NEG.CJ.SG

“Everybody comes to Kullu for studying or to work for the government and stays here, (but back then) there were no houses here.”

- (15) B: *kʰjak kjum likɕtat kudzuŋ likɕtat.*

<i>kʰjak</i>	<i>kjum</i>	<i>lik-s-ɕ-dʒi=tat</i>
here	house	make-DETR-MID-CVB.SG=POSS.NON1PL
<i>kudzu=maŋ</i>	<i>lik-s-ɕ-dʒi=tat</i>	
Kullu.Valley=ALL	make-DETR-MID-CVB.SG=POSS.NON1PL	

“So they have built houses here, they have built houses in the Kullu Valley.”

- (16) B: *eraŋmaŋ gwaŋmen mej.*

<i>eraŋ=maŋ</i>	<i>gwaŋ-men</i>	<i>ma-ni:</i>
1PL.INCL=ALL	come.PL-INF	NEG-EX.NON1SG

“They do not come back to Lahaul.”

- (17) A: *wa.*

wa
FOC

“That’s how it is.”

- (18) B: *betezi gwaŋmen mej awaamazi gwaŋmen mej.*

<i>bete=ɕi</i>	<i>gwaŋ-men</i>	<i>ma-ni:</i>	<i>awa-ama=ɕi</i>
child=PL	come.PL-INF	NEG-EX.NON1SG	father-mother=PL
<i>gwaŋ-men</i>	<i>ma-ni:</i>		
come.PL-INF	NEG-EX.NON1SG		

“The children do not come (to Lahaul), the parents do not come (to Lahaul).”

- (19) A: *betezi tsemet tsʰaŋi butsa tsʰaŋi loktəa kudzuŋ.*

<i>bete=ɕi</i>	<i>tsemet</i>	<i>tsʰaŋi</i>	<i>butsa</i>	<i>tsʰaŋi</i>	<i>lok-tə-a</i>
child=PL	girl	all	boy	all	study-TR-SUP
<i>kudzu=maŋ</i>					
Kullu.Valley=ALL					

“The children, all the girls, all the boys, they (come) to study in Kullu.”

- (20) A: *tsemet tsʰaŋi butsa tsʰaŋi kudzuŋ loktəa.*

<i>tsemet</i>	<i>tsʰaŋi</i>	<i>butsa</i>	<i>tsʰaŋi</i>	<i>kudzu=maŋ</i>	<i>lok-tə-a</i>
girl	all	boy	all	Kullu.Valley=ALL	study-TR-SUP

“All the girls, all the boys, (they come) to study in Kullu.”

- (21) B: *kullutəi a loktəa gwaŋtəʰi.*

<i>kullu=təi</i>	<i>a</i>	<i>lok-tə-a</i>	<i>gwaŋ-təʰi</i>
Kullu=ABL	uhm	study-TR-SUP	come.PL-PST.INFER.DJ.PL

“From Kullu¹⁴² ... uhm ... they have come to study.”

- (22) B: *tʰadzu tʰopa.*

<i>tʰadzu</i>	<i>tʰopa</i>
that	like

“Like that.”

¹⁴² The ablative form *kullu=təi* does not make any sense in that context. The fact that the speaker made a long pause after the noun form and additionally uttered the filler *a* “uhm” indicates that this is a speech production error. Most probably, the speaker meant to say *eraŋ=maŋ=təi* “1PL.INCL=ALL=ABL”, i.e. “from Lahaul”.

(23) A: *rere kullu loktəa gwaŋmen.*

<i>rere</i>	<i>kullu</i>	<i>lok-tə-a</i>	<i>gwaŋ-men=jen</i>
everyone	Kullu	study-TR-SUP	come-INF=EQ.CJ

“Everyone comes to Kullu to study.”

(24) B: *wa.*

wa
FOC

“That’s how it is.”

(25) B: *thadzu ta butdži thirga eraŋkat the lwaətat kʰjak da nuŋtsuk magwaistaŋ kju-mamaŋ magwajstaŋ.*

<i>thadzu=ta</i>	<i>but-ø-dži</i>	<i>thir-ka</i>	<i>eraŋ-kat</i>	<i>the</i>
FOC=AVS	put.down-TR-CVB	send-PROG	1PL.INCL-language	this
<i>lwa-t-s-ø-dži=tat</i>		<i>kʰjak</i>	<i>da</i>	<i>nuŋ=tsuk</i>
forget-DETR-MID-CVB.SG=POSS.NON1PL		here	nowadays	there=REL
<i>ma-gwa-i-s=taŋ</i>	<i>kjuma=maŋ</i>	<i>ma-gwa-i-s=taŋ</i>		
NEG-EX.PL-ACT-NZR=CAUS	home=ALL	NEG-EX.PL-ACT-NZR=CAUS		

“But they are abandoning that, our language, they have forgotten it, here, nowadays, because they do not live there, because they are not at home.”

(26) B: *nwa:stok mendži nwak lotnaŋ eraŋmaŋ loktəumdži.*

<i>nwa:stok</i>	<i>mendži</i>	<i>nwak</i>	<i>lot=naŋ</i>	<i>eraŋ=maŋ</i>
at.that.time	EQ.DJ.SG	so	say=COND	1PL.INCL=ALL
<i>lok-tə-um</i>	<i>jendži</i>			
study-TR-INF	EQ.DJ.SG			

“In those days it was not like that, that is to say, one used to study in Lahaul.”

(27) B: *tʰadzu kʰa lottɕum?*

tʰadzu kʰa lot-tɕ-um=jen
that what say-TR-INF=EQ.CJ

“How shall I put it?”

(28) B: *kʰa liknaŋ re eraŋmaŋ liktɕumdʒi.*

kʰa lik=naŋ=re eraŋ=maŋ lik-tɕ-um=jendʒi
what do=COND=EXT 1PL.INCL=ALL make-TR-INF=EQ.DJ.SG

“Whatever one would do, one would do it in Lahaul.”

(29) B: *ɖawa tɕuŋi kʰartɕa re tʰadzu kam.*

ɖawa tɕuŋi kʰartɕa_{LN}=re tʰadzu kam_{LN}
money little expenses=EXT that low

“There was little money, and expenses were also low.”

(30) B: *tʰadzu ɖawa kʰoni ɖawa kʰoni jendʒi.*

tʰadzu ɖawa kʰoni ɖawa kʰoni jendʒi
that money rare money rare EQ.DJ.SG

“Money was rare, money was rare.”

(31) A: *wa da tʰoŋ jondaktsi danaŋ menaŋ madanaŋ mej jendʒi apa.*

wa da tʰoŋ jondak=dzi da=naŋ menaŋ
FOC now inside head.of.family=ERG.SG give=COND unless
ma-da=naŋ ma-ni-i=jendʒi apa
NEG-give=COND NEG-EX.SG-ACT=EQ.DJ.SG AUTH

“Now, apart from that (there was only money) if the head of the family at home would give it. If he did not give (it), there was no money.”

- (32) A: *qawa nwa:stok eraŋzok miṯʰa:j dzare tsutsuna datsum.*

<i>qawa</i>	<i>nwa:stok</i>	<i>eraŋ=ɕi=tok</i>	<i>miṯʰa:j_{LN}</i>	<i>dza-de</i>
money	at.that.time	1PL.INCL=PL=DAT	sweet	eat-SUP
<i>tsutsuna</i>	<i>da-tɕ-um=jen</i>			
very.little	give-TR-INF=EQ.CJ			

“In those days, they would give us very little money to buy sweets.”

- (33) A: *tɕa:r a:na: a:ṯʰ a:na: tanʃka nwak datsum.*

<i>tɕa:r_{LN}</i>	<i>a:na:_{LN}</i>	<i>a:ṯʰ_{LN}</i>	<i>a:na:_{LN}</i>	<i>tanʃka</i>	<i>nwak</i>	<i>da-tɕ-um=jen</i>
four	ānā	eight	ānā	money	so	give-TR-INF=EQ.CJ

“Thus, they would give us amounts of four ānā or eight ānā.”

- (34) B: *niskiŋ tanʃka ŋaj tanʃka henak da: da: tɕuj tanʃka nidzaj tanʃka ŋaptɕu tanʃka gja tanʃka kʰorek kʰorek ake?*

<i>niskiŋ</i>	<i>tanʃka</i>	<i>ŋaj</i>	<i>tanʃka</i>	<i>henak</i>	<i>da-ka</i>	<i>da-ka</i>
two	money	five	money	like.this	give-PROG	give-PROG
<i>tɕuj</i>	<i>tanʃka</i>	<i>nidzaj</i>	<i>tanʃka</i>	<i>ŋaptɕu</i>	<i>tanʃka</i>	<i>gja</i>
ten	money	twenty	money	fifty	money	hundred
<i>tanʃka</i>	<i>kʰorek</i>	<i>kʰorek</i>	<i>ake</i>			
money	later	later	QUE			

“Giving two rupees, five rupees, ten rupees, twenty rupees, fifty rupees, hundred rupees, and so on, wasn’t it like that?”

- (35) A: *wa apa wa durek durek a:na:naŋ do a:na: qawa ramen.*

<i>wa</i>	<i>apa</i>	<i>wa</i>	<i>durek</i>	<i>durek</i>	<i>a:na:_{LN}=naŋ</i>	<i>do_{LN}</i>
FOC	AUTH	FOC	earlier	earlier	ānā=CON	two
<i>a:na:_{LN}</i>	<i>qawa</i>	<i>ra-men=jen</i>				
ānā	money	come-INF=EQ.CJ				

“That’s right, that’s right, back then there were pieces of one ānā and two ānā.”

(36) A: *qawa tɕunji daɕum.*

qawa tɕunji da-s-ɕ-um=jen
money little give-DETR-MID-INF=EQ.CJ

“They gave us little money.”

(37) A: *thelek thelek tsore paru ramen.*

the=lek the=lek=tsore paru ra-men=jen
this=APP this=APP=ENR box come-INF=EQ.CJ

“There were boxes of approximately this size.”

(38) A: *paruŋ daɕi paruŋ tsakdʒi joktɕum wa.*

paru=kun da-s-ɕ-tɕhi paru=kun tsak-ø-dʒi
box=LOC give-DETR-MID-CVB.PL box=LOC put.inside-TR-
CVB.SG

jok-tɕ-um=jen wa
keep-TR-INF=EQ FOC

“In a box ... they gave us the money, we put it in the box and kept it there.”

(39) A: *kʰar kʰar mendʒi eraŋmaŋ.*

kʰa=re kʰa=re mendʒi eraŋ=maŋ
what=EXT what=EXT NEG.EQ.DJ.SG 1PL.INCL=ALL

“There was nothing at all in Lahaul.”

(40) B: *ʰadzu ɲartsɪ laŋɕum mej aru laŋɕum mej kʰarkʰar mej.*

ʰadzu ɲartsɪ laŋ-ɕ-um ma-ni: aru_{LN}
that peas sell-MID-INF NEG-EX.NON1SG potato

laŋ-ɕ-um ma-ni: kʰa=re kʰa=re
sell-MID-INF NEG-EX.NON1SG what=EX what=EX

NEG-EX.NON1SG

ma-ni:

“There was no selling of peas, there was no selling of potatoes, there was nothing.”

- (41) A: *rusta ketdzi tsuna lan̄ɛi jend̄zi.*

rusta ketdzi tsuna lan̄-s-ɛ-i=jend̄zi
 costus.root alone little.bit sell-DETR-MID-ACT=EQ.DJ.SG

“Only small amounts of costus root were sold.”

- (42) B: *qawa ramentsuk tʰadzu sampa lan̄zum mej.*

qawa ra-men=tsuk tʰadzu sampa lan̄-ɛ-um
 money come-INF=REL that crop sell-MID-INF

ma-ni:

NEG-EX.NON1SG

“There was no selling of crops that (were grown to) generate an income.”

- (43) B: *nunan̄ nwa:stok malokt̄ɛist̄an̄ mi jama tsʰan̄tsʰan̄i kjuma dzot tʰiɛi jent̄ɛʰok.*

nunan̄ nwa:stok ma-lok-t̄ɛ-i-s=t̄an̄ mi=jama
 then at.that.time NEG-study-TR-ACT-NZR=CAUS person=all

tsʰan̄tsʰan̄i kjuma dzot=tʰir-s-ɛ-i=jent̄ɛʰok
 all home stay=send-DETR-MID-ACT=EQ.DJ.PL

“Then, in those days, because nobody was studying (in Kullu), all persons stayed at home.”

- (44) B: *hamburwaktsi likka, kʰatɕik tʰoŋ likka, kʰatɕik riktok lenkja, kʰatɕik lamarwa^kipa, lamarwaktsi likka, kʰatɕik kakatsi rwakde, kʰatɕik mi nuŋ lenmi tsakɕi.*

<i>hambu-rwaktsi</i>	<i>lik-ka</i>	<i>kʰatɕik</i>	<i>tʰoŋ</i>	<i>lik-ka</i>	<i>kʰatɕik</i>
cow-herdsman	make-PROG	some	trade	make-PROG	some
<i>rik=tok</i>	<i>lent-ka</i>	<i>kʰatɕik</i>	<i>lama-rwak-i-pa</i>		
field=DAT	work-PROG	some	sheep-graze-ACT-NZR		
<i>lama-rwaktsi</i>	<i>lik-ka</i>	<i>kʰatɕik</i>	<i>kakatsi</i>	<i>rwak-de</i>	
sheep-herdsman	make-PROG	some	lamb	graze-SUP	
<i>kʰatɕik</i>	<i>mi</i>	<i>nuŋ</i>	<i>len-mi</i>	<i>tsak-s-ɕ-tɕʰi</i>	
some	person	there	work-person	put.inside-DETR-MID-CVB.PL	

“Some were working as cow herdsman, some were trading, some were working in the fields, some were sheep herdsman, some went to graze the lambs, some had found work as laborers.”

- (45) B: *da kama:j liktɕa bonʰtɕek tʰadzu liktɕa bonʰtɕek tʰruŋza bonʰtɕek wa da lotnaŋ kja-tɕʰi mi jama nuntsuk dotmen mej.*

<i>da</i>	<i>kama:j_{LN}</i>	<i>lik-tɕ-a</i>	<i>bonʰtɕek</i>	<i>tʰadzu</i>	
now	income	make-TR-SUP	for.the.sake	that	
<i>lik-tɕ-a</i>	<i>bonʰtɕek</i>	<i>tʰruŋ-ɕ-a</i>	<i>bonʰtɕek</i>	<i>wa</i>	
make-TR-SUP	for.the.sake	nourish-MID-SUP	for.the.sake	FOC	
<i>da</i>	<i>lot=naŋ</i>	<i>kja-tɕʰi</i>	<i>mi=ɲama</i>	<i>nuntsuk</i>	
now	say=COND	become-CVB.PL	person=all	that.kind.of	
<i>dot-men</i>	<i>ma-ni:</i>				
meet-INF	NEG-EX.NON1SG				

“Now, in order to make a living, in order to do that, in order to nourish themselves, now, because they performed all these different duties (lit. because they became), people would not meet that often.”

- (46) B: *wa tsʰeɕu kjadzala wa dzomraŋs kʰati kjadzala tsʰaŋtsʰaŋi kaŋŋa kjadzala wa datle tɕʰa: ʈaj kjamendzi.*

wa tsʰeɕu kja-dza=la wa dzomraŋs
 FOC Tshechu become-PST.DIR.SG=ANTER FOC festival

kʰa=tiki kja-dza=la tsʰaŋtsʰaŋi kaŋŋa_{LN}
 what=INDEF become-PST.DIR.SG=PSOT all together

kja-dza=la wa datle tɕʰa:=ʈa-i
 become-PST.DIR.SG=ANTER FOC just.now knowledge=POSS-ACT

kja-men=jendzi
 become-INF=EQ.DJ.SG

“When the Tshechu came up, when whatever festival came up, everybody got together and one would get known to each other.”

- (47) B: *gi tal tsʰaŋtsʰaŋi matlap phjamendzi nwa:stok.*

gi tal tsʰaŋtsʰaŋi matlap_{LN} phja-men=jendzi
 1SG 3[SG] all meaning speak-INF=EQ.DJ.SG

nwa:stok
 at.that.time

“Me, he, that is to say, everybody would talk (together).”

- (48) B: *han gujtsuk jen?*

han guj=tsuk jen
 2[SG] where=REL EQ.CJ

“Where are you from?”

- (49) B: *han suj jen?*

han su=ki jen
 2[SG] who=GEN EQ.CJ

“Of which family are you?”

(50) B: *henak henak lotdzala wa tɕʰa:taj kjamendzi.*

<i>henak</i>	<i>henak</i>	<i>lot-ø-dza=la</i>	<i>wa</i>
like.this	like.this	say-TR-PST.SG=ANTER	FOC

<i>tɕʰa:ʔa-i</i>	<i>kja-men=jendzi</i>
knowledge=POSS-ACT	become-INF=EQ.DJ.SG

“Having spoken like this, they became known to each other.”

21 Appendix B: Bunan word list

The following word list comprises the basic vocabulary of Bunan. Suffixes, clitics, postpositions, particles, and discourse coordinators have not been included, as exhaustive lists of these parts of speech are provided elsewhere in this thesis.

The word list does not only contain genuine Bunan vocabulary, but also incorporates borrowings from English and Indo-Aryan. The status of these vocabulary items as loanwords is indicated by the abbreviations (E) and (IA), respectively. There is a chance that I have not been able to identify all borrowings of Indo-Aryan origin. Accordingly, it is likely that the list contains some Indo-Aryan loanwords that have not been marked as such. Borrowings from Tibetan and other Tibeto-Burman languages are not designated, as it is impossible to identify such loanwords in a consistent manner. The only exception are Tibetan numerals, which are marked with the abbreviation (T).

Most derived lexemes are listed as separate entries rather than subentries of their underlying stem. The only exception to this rule are detransitivized verb stems with anti-causative, reciprocal, or reflexive meaning as well as nouns that have been derived from verb stems by means of the nominalizing suffix -s.

The alphabetical order used for this word list, which follows the tradition of South Asian scripts, is given in the following: *k, kʰ, g, ŋ, tɕ, tɕʰ, dz, ɲ, t̪, t̪ʰ, d̪, t̪ʰ, d, n, p, pʰ, b, m, ts, tsʰ, dz, j, r, l, ɕ, ʃ, s, h, a, i, u, e, o, wa*.

List of abbreviations

adj.	adjective	(E)	English loanword
adv.	adverb	(IA)	Indo-Aryan loanword
cop.	copula	(intr.)	intransitive
dem.	demonstrative	(pl.)	plural stem
intr.	intransitive conjugation	(refl.)	reflexive
mid.	middle conjugation	(tr.)	transitive
n.	noun	(T)	Tibetan loanword
pron.	pronoun	~	alternates with
tr.	transitive conjugation	↳	is derived from
v.	verb		

- kador** *n.* bowl, basin.
- kadẓu** *n.* tooled capital of a pillar.
- kaj** *adj.* difficult.
- kak-** *v. tr.* to stop, to block.
- kakatsi** *n.* lamb.
- kal-** *v. tr.* to load.
- kalak** *n.* (1) dough.
(2) plaster for re-coating.
- kaldẓor** *n.* cup.
- kali** *n.* sitting carpet. (IA)
- kalṭorpa** *n.* woman carrying the *ṭəʰaŋ* at the *gotsi* festival.
- kaltsi** *n.* window.
- kamkam** *n.* gap (small).
- kan-** *v. tr.* to watch.
- kan-** *v. tr.* to show.
- kanjan** *n.* imagination.
- kanjanmej** *adv.* very much, very many, extremely.
- kanʈi** *n.* necklace.
- kaŋ** *n.* leg.
- kaŋ-** *v. tr.* to add.
- kaŋliŋ** *n.* ceremonial thigh-bone trumpet.
- kapula** *n.* traditional shoes made of grass.
- kaput** *n.* hinge.
- kar-** *v. tr.* to smash, to hammer, to thrash.
- kar** *n.* sheep (male, castrated).
- kara** *n.* donkey.
- kari** *n.* crossbeam (big).
- karipa** *n.* ritual dancers at the *gotsi* festival.
- karma** *n.* star.
- kartak** *n.* silver plate.
- kartsi** *n.* male sheep (castrated, young).
- kat-** *v. intr.* to blow (wind), to turn, to whirl.
- kat-** *v. intr.* to call (for a meeting).
- kat** *n.* language, voice, noise.
- kaṭə** *n.* story (about real events).
- kaṭəʰa** *n.* underwear.
- kaṭəŋ** *adj.* near, close.
- katsi** *n.* walnut.
- katsi** *n.* wooden ladle used to ladle soup.
- kaʈi** *n.* (1) jaws.
(2) scissors.
- kekir** *n.* flat bread.
- keks** *n.* gift, present.
- keks** *n.* wooden stick.
- kela** *n.* banana.
- kelobotbot** *n.* fir tree.
- kelt-** *v. intr.* to carry on one's person.
- kem** *n. hon.* barley beer, liquor.
- ken** *n.* (1) breakfast.
(2) type of porridge consisting of tsampa mixed with water.
- ken** *n.* birth of animals.
- kendus** *n.* forenoon.
- kenkjatsi** *n.* little finger.
- kent-** *v. intr.* to give birth (of animals).
- kenkebotsi** *n.* little finger.
- kenjs** *n.* shame.
- keska** *n.* lie.
- ketdzi** *adj.* alone.
- ketpa** *n.* waist.
- kewa** *n.* rebirth.
- kewa sarasire** *n.* early morning.
- ki-** *v. tr.* to wash (dishes, floor).
- kil** *n.* center, middle.
- kil-** *v. tr.* to dam up water.
- kilbotsi** *n.* middle finger.
- kin** *n.* ibex.
- kin-** *v. tr.* to give birth.
- ✎ **kin-** *v. mid.* to give birth, to be born.
- kirka** *n.* (1) iron rings used to cover the opening of the oven.
(2) wreath made of willow twigs.
- kirna** *adj.* round (of flat things).
- kirti** *n.* basket (worn on back).
- kit** *n.* dirt.

kojotsi *n.* puppy.
kok *n.* feed.
kok- *v. tr.* to devour.
kokma *n.* (1) throat.
 (2) singing voice.
koko *n.* feces, excrements.
kokpa *n.* garlic.
kol *n.* peel, bark, shell.
kol- *v. tr.* to distill.
koldoŋ *n.* hole (dug by men).
kolom *n.* pebbles (big).
koni *n.* shortage.
kontso̯k *n.* god.
kontsi *n.* back part of foot sole.
koŋkoŋ *adj.* bent, crooked (of people).
kopkop *adj.* lying face down.
kopna *adj.* sitting face down.
kor *n.* subject, matter.
kora *n.* balustrade, railing.
korlam *n.* circambulation.
korna *adj.* round (of ball-shaped things).
korpan *n.* rhombic piece of wood used to
 lock doors.
koronkoron *n.* bell.
kra *n.* hair.
krak- *v. tr.* to fuck.
kraks *n.* wedge.
kraŋ- *v. tr.* to pile up, to heap up.
kraŋseij *n.* firewood (small pieces).
kranji *adj.* hard.
krektan *n.* ending (of stories, songs).
kret- *v. tr.* to sting, to bite.
kri- *v. tr.* to dress (with a belt, turban) (*tr.*).
 ↳ **kris-** *v. mid.* to dress (with a belt, tur-
 ban) (*refl.*).
krill- *v. tr.* to twist.
krim- *v. tr.* to spin a thread with your
 hands.
kriŋ *n.* beam (central).
krok *n.* soot on surfaces.
korok- *v. tr.* to dig out, to scrape off.


kruk- *v. tr.* to shake, to stir, to roar (of stomach).
ku- *v. intr.* to steal.
ku ɛu- *v. tr.* to re-coat the floor by covering it with a mixture of mud and cow manure.
kuɛu *n.* apple.
kudzu *n.* Kullu valley.
kukar *n.* cooker. (E)
kuks *n.* jackpot in a dice game.
kukuri *n.* chicken. (IA)
kulik *n.* key.
kundə *n.* statue, idol.
kunma *n.* thief.
kuns *n.* first week of the year
kunsla *n.* 2nd month of the traditional calendar.
kupat *n.* stone pot used to cook soup.
kupi *n.* bucket (traditionally made of hide, now also used for buckets made of plastic).

kur *n.* load.
kurim *n.* ritual.
kurkuŋik *n.* ant.
kurt- *v. intr.* to carry (a load).
kutul *n.* bag.
kwak- *v. tr.* to dip.
 ↪ **kwaks** *n.* gravy, stew.
kwake *n.* pebbles.
kwat- *v. tr.* to hang up.
kwalt- *v. mid.* to stumble over.
kwəŋkwəŋ *adj.* curly, crooked.
kwəŋna *adj.* bent (of things).
kwartsɪ *n.* clay pot.
kwas- *v. intr.* to become full, to become satiated (from eating or drinking).
kwat- *v. intr.* to boil (intr.).
kwat- *v. intr.* to wash away, to wash off.

/kʰ/

kʰa *pron.* what?.
kʰadze *n.* rake.
kʰaj *adj.* black.
kʰaksgan *n.* husk.
kʰalak *pron.* for what reason?.
kʰalma *n.* kidney.
kʰamdzan *adj.* fine, alright.
kʰamlɔks *n.* nausea.
kʰamoŋi *pron.* something.
kʰams *n.* appetite.
kʰanak *pron.* how?.
kʰandɔma *n.* fairy.
kʰantsuk *pron.* what kind of?.
kʰaŋgul *n.* neck.
kʰap- *v. tr.* to cover.
 ↪ **kʰaps** *n.* cover.
kʰar *n.* fort, castle.

kʰaras *n.* frost, hard snow on which one can walk.
kʰarɛot *n.* lid.
kʰarkjan *n.* habit.
kʰart- *v. intr.* to get stuck, to be trapped.
kʰartɛaŋ *adv.* continuously.
kʰaspa *n.* expert.
kʰat- *v. intr.* to be stuck.
kʰatak *n.* ceremonial scarf.
kʰatɛe *n.* Muslim.
kʰatɛik *pron.* someone.
kʰatʰa^kj *adj.* bitter.
kʰe *adj.* cheap.
kʰej *adj.* sweet.
kʰem *n.* balcony.
kʰemtsi *n.* small balcony.
kʰep *n.* needle (middle size).
kʰet- *v. tr.* to beat, to hit, to shoot.

khi *n.* latrine.
khik- *v. intr.* to stammer.
khikonj *n.* bathroom.
khilti *n.* puddle.
khimsa *n.* dirt, dust.
khintses *n.* neighbor.
khipe *n.* small pieces of firewood (smaller than *ɕugutsi*).
khir ka- *v. tr.* to turn (tr.).
khira *n.* cucumber.
khirkjak *n.* excrements of dogs.
khitiŋ *n.* penis.
khjak *dem.* here.
khjarka *n.* glans.
khjas *n.* itch.
khjo- *v. tr.* to make dry.
khjoj *adj.* dry.
khjokspo *adj.* active.
khjops- *v. intr.* to go numb.
khjot- *v. tr.* to become dry.
khjotsi *n.* spoon.
khju *n.* dog.
khju- *v. tr.* to make a thread by winding up wool on a stick.
khjuk- *v. intr.* to reverberate.
 **khjuk-** *v. mid.* to reverberate.
khjul- *v. tr.* to peel.
khjut *n.* (1) sourdough for *lwar* before letting it rest.
(2) plaster for re-coating.
khjutsi *n.* (1) arm.
(2) cubit with stretched hand (traditional length measure)
khjwa *n.* man.
khobanj *n.* hind leg.
khodzup *n.* thigh (of animal).
khøj *adj.* suitable, worth doing.
kholak *n.* tsampa dish consisting of roasted barley flour and butter tea.
kholdo *n.* wheel.

khon- *v. tr.* to finish.
khongjaks *adv.* in four days.
khor- *v. tr.* to repay.
khor- *v. intr.* to move in a circle.
khorek *adv.* after, later.
khorlo *n.* wheel.
khót *n.* grandchild.
khokjotsi ~ khotsi *adv.* behind.
khral *n.* tax.
khrempanj *n.* eyelid.
khres *n.* hunger.
khрил- *v. tr.* to embrace.
khritesa *n.* loom.
khruksi *n.* (1) elbow.
(2) cubit with fist (traditional length measure)
khru *n.* smoke.
khujsla *n.* 10th month of the traditional calendar.
khujt- *v. tr.* to thresh.
khuk- *v. tr.* to find.
khum *n.* pillow.
khum *n.* fulcrum (of a lever).
khunu *n.* Kinnaur.
khunukat *n.* Kinnauri language.
khunupa *n.* person from Kinnaur.
khur *n.* knife.
khurta *n.* horse (male, castrated).
khutsu *n.* semen.
khutup *n.* fist.
khwa *n.* broth, juice of food.
khwa- *v. intr.* to pluck (herbs), to cut off.
khwak *n.* crow.
khwame *n.* plant used to make red color.
khwanjeiŋ *n.* ox collar.
khwangs- *v. intr.* to go out (pl.).
khwarek *n.* pheasant.
khwartum *n.* egg.

- ga:** *n.* term of address for members of a petty chief family.
- gaɛʈa** *n.* stairs.
- gakgak** *n.* suffocation.
- gal-** *v. tr.* to cross.
- galt-** *v. intr.* to lie, to lie down.
- galtshik** *n.* spine.
- galtʰan** *n.* girdle (of traditional trousers).
- gam** *n.* chest, box.
- gamgam** *n.* gap (big).
- gamtsa** *n.* traditional festival.
- gamtsi** *n.* box (small).
- ganda** *n.* inflamed wound.
- ganj** *n.* hill on the side of a mountain.
- ganj-** *v. intr.* to swell, to rise.
- ganjdzuŋ** *adj.* thoughtless.
- gangjut** *n.* mountain range.
- ganri** *n.* snow mountain.
- gangsniŋ** *n.* glacier.
- ganstanj** *n.* glacier.
- gap-** *v. tr.* to incubate, to breed, to hold in one's arms.
- garaʈʰal** *n.* bundle of crops.
- garmo** *n.* crossbreed between *dzopo* and cow (female).
- garpo** *n.* crossbreed between *dzopo* and cow (male).
- gartsam** *n.* cold.
- gatdza** *n.* uproar, riot.
- gatpa** *n.* cliff, steep slope.
- gattok** *adv.* downhill.
- gej** *num.* eight.
- geliŋ** *n.* double reed shawm used in ceremonies.
- gelonj** *n.* monk.
- gen** *n.* spring.
- gentɕi** *n.* first grass in spring.
- genti** *n.* pick-axe.
- gerger** *adj.* ponderous, clumsy.
- ges-** *v. tr.* to accept, to take (only used if the relevant object is taken with folded hands or in a vessel).
- get** *num (T).* eight.
- gewa** *n.* funeral gathering.
- gi-** *v. mid.* to wash one's hands / face.
- gi** *pron.* 1SG.
- gil** *n.* fence.
- girmo** *n.* crossbreed between *garpo* and cow (female).
- girpo** *n.* crossbreed between *garpo* and cow (male).
- gja** *num.* hundred. (T)
- gjaduŋ** *n.* big trumpet used in ceremonies.
- gjak** *adv.* urgent.
- gjak** *n.* day.
- gjaks-** *v. intr.* to agree.
- gjakʰap** *n.* needle (small).
- gjal-** *v.* (1) to win.
(2) to recover.
- gjalap** *n.* rope made of leather.
- gjalsa** *n.* Kullu.
- gjamo** *n.* queen.
- gjanbiʂwatsi** *n.* oat.
- gjanjanj** *adj.* long (in size).
- gjap** *n.* back.
- gjapo** *n.* king.
- gjar** *n.* fear.
- gjar-** *v. intr.* to be afraid.
- gjaragire** *adj.* circular.
- gjasok** *n.* saw.
- gjaspa** *adj.* elaborate.
- gjatɕu** *num.* eighty. (T)
- gjatsi** *n.* newborn (female).
- gjatso** *n.* sea, ocean.
- gjathuk** *n.* type of soup.
- gjok(s)pa** *adj.* fast.
- gjotpa** *n.* regret.

- gjuks** *n.* income, gain.
- gjult-** *v. mid.* to come off in large pieces (e.g. skin), to fall out in bunches (e.g. hair).
- gjum** *n.* nose.
- gjuma** *n.* (1) guts, intestines.
(2) sausage made from intestines.
- gjumpʰuk** *n.* nose, nostril.
- gjundok** *adv.* always.
- gjuŋ-** *v. intr.* to cloud over.
- gjur-** *v. tr.* to translate.
- gjurt-** *v. intr.* to change.
- gjut-** *v.* to need.
- ↳ **gjuts** *n.* need.
- go-** *v. mid.* to have a party.
- go kuk-** *v. tr.* to adopt.
- goŋen** *n.* silk.
- goks** *n.* cough.
- gokʰaps** *n.* shelter for the stairs on the roof.
- golokmolok** *n.* riot, affray.
- golteʰak** *n.* chain used to close a door.
- gom-** *v. tr.* to meditate, to think of.
- gomak** *num.* first.
- gomner** *n.* peon of a monastery.
- gomtŋen** *n.* hermit.
- gonj** *n.* cost.
- goŋa** *n.* collar.
- gonggonj** *adj.* heap-like.
- gonjma** *adj.* upper, higher.
- gonjpo** *n.* envious man.
- gonjteŋ** *adj.* expensive.
- gopa** *n.* leader.
- gormo** *n.* cup (flat and wide).
- gorok** *n.* seat at the head of the sitting row.
- gort-** *v. intr.* to be late.
- got** *n.* waste, loss.
- gotma** *n.* mare.
- gotsi** *n.* traditional festival celebrated when the hair of one's son is cut for the first time.
- gra** *n.* salary.
- gral** *n.* sitting row.
- grampa** *n.* cheek.
- granj** *n.* stone (generic).
- greks** *n.* ceremonial song.
- grelt-** *v. intr.* to run.
- grik-** *v. tr.* to put together, to connect.
- ↳ **griks** *n.* joint.
- grokpo** *n.* river.
- grokt-** *v. tr.* to crumble off, to scale off.
- gronbu** *n.* weaver's shuttle.
- grot-** *v. intr.* to be finished, to be used up, to come to an end.
- grwa** *n.* lungs.
- gu** *num.* nine.
- gu** *num.* nine. (T)
- guj** *pron.* where?.
- gumtsi** *n.* (1) bow.
(2) traditional measure of length.
- gun** *n.* winter.
- gundiksla** *n.* 12th month of the traditional calendar.
- gundum** *n.* raisins.
- gunsa** *n.* room used in wintertime.
- guptŋu** *num.* ninety. (T)
- guram** *n.* sweets.
- gutsuk** *pron.* which?.
- gwa-** *cop.* existential copula (pl.).
- gwak-** *v. mid.* to embrace.
- gwaktsi** *n.* kind of pot.
- gwalba** *adj.* blind.
- gwanu** *n.* fox.
- gwanj-** *v. intr.* to take place, to happen.
- gwanj** *n.* snow cock.
- gwar-** *v. tr.* to dig out with a pick-axe.

/ŋ/

ŋa *n.* double-sided ceremonial drum.

ŋa *num.* five. (T)

ŋaj *num.* five.

ŋaj *adv.* early.

ŋal *n.* plough.

ŋaltsi *n.* pick-axe-like instrument
to dig a field.

ŋama *n.* tail.

ŋamɛn *adj.* excellent, paramount.

ŋams *n.* yawn.

ŋams- *v. intr.* to yawn.

ŋargjal *adj.* proud.

ŋaro *n.* morning.

ŋarodzun *n.* early in the morning.

ŋas *n.* udder.

ŋattɛan *adj.* strong.

ŋokma *n.* mane (of horses).

ŋonɛ *n.* foresight, ability to foresee things.

/tɕ/

tɕa *n.* cow dung.

tɕa- *v. tr.* to paint, to rub in (face) (tr.)

↳ **tɕa-** *v. mid.* to rub in (face) (refl.).

tɕaɕi *adv.* regularly.

tɕa:dar *n.* sheet.

tɕaga *n.* preparation, care.

tɕak- *v. tr.* to wash (clothes).

tɕakar *n.* plate used to roll out dough.

tɕakdar *n.* ladle (made of iron).

tɕakdzwa *n.* bucket (made of iron).

tɕakna *adv.* daily, every day.

tɕaks *n.* iron.

tɕaks *n.* knitting needle.

tɕakstap *n.* (1) oven.

(2) dwelling-room.

tɕakstrak *n.* chain made of iron.

tɕaku *n.* knife.

tɕakwal *n.* shovel made of iron.

tɕalak *n.* stuff, things.

tɕamna *adj.* whole, full.

tɕamteam *n.* aluminum.

tɕan *n.* snow leopard.

tɕandɕa *n.* pocket.

tɕaŋma *n.* willow.

tɕaŋti *n.* drop from the ceiling.

tɕap- *v. tr.* to combine, to put together.

tɕapandɕa *n.* ladder.

tɕapna *adj.* thin (of flat things).

tɕaptɕap *adj.* thin (of flat things).

tɕaptɕi *n.* spy.

tɕare *n.* bedbug.

tɕarik *n.* supporting wall of terraced fields.

tɕasga *n.* ginger.

tɕat- *v. tr.* to tear.

tɕataram *n.* sickle.

tɕataramla *n.* new moon.

tɕeldrik *n.* weasel.

tɕeli *n.* cow urine.

tɕeli *adj.* yellow.

tɕentsi *n.* claw (of cows).

tɕeŋna *adj.* standing upright.

tɕeŋtɕeŋ *adj.* standing upright.

tɕespa *n.* dear one, beloved one.

tɕet- *v. tr.* to pull, to eat (of cows).

tɕi *n.* grass.

tɕik *num.* one. (T)

tɕil *n.* marrow.

tɕini *n.* sugar. (IA)

tɕinol *n.* beam used in wall construction.

tɕinpa *n.* liver.

tsip- *v. tr.* to suck.
tsir- *v. tr.* to sharpen.
tsirtair *n.* murmur.
tsispen *n.* heap of grass.
tsitwasla *n.* 9th month of the traditional calendar.
tsɔ *n.* petty chief.
tsɔ- *v. tr.* to light, to kindle.
 ↪ **tsɔs-** *v. mid.* to burn (intr.).
tsok- *v. tr.* to cover (persons, animals).
tsoks *n.* headscarf.
tsoktsi *n.* sprout (of crops).
tsol- *v. tr.* to propose.
tsoltsɔm *n.* dowry for the bride.
tsom- *v. tr.* to rob.
tsomo *n.* nun.
tsɔŋa *num.* fifteen. (T)
tsɔŋɔ *n.* buttocks.
tsɔpgjat *num.* eighteen. (T)
tsot- *v. tr.* to beg.
tsotɔ *n.* brother (2nd oldest).
tsotpa *n.* mood, character.
tsotsi *n.* beggar.
tsu- *v. tr.* to squeeze, to wind out.
tsu *num.* ten. (T)

tsuɖuk *num.* sixteen. (T)
tsuj *num.* ten.
tsuktsik *num.* eleven. (T)
tsuli *n.* apricot.
tsuli ŋalmo *n.* apricot (dried).
tsuni *num.* twelve. (T)
tsunis *num.* twelve.
tsunji *quant.* little, less.
tsupdun *num.* seventeen. (T)
tsupɖzi *num.* fourteen. (T)
tsupgjat *num.* eighteen.
tsupi *num.* fourteen.
tsur- *v. tr.* to interrogate, to inquire, to ask repeatedly.
tsurgu *num.* nineteen. (T)
tsurgu *num.* nineteen.
tsurnis *num.* seventeen.
tsusdruk *num.* sixteen.
tsusum *num.* thirteen.
tsusum *num.* thirteen. (T)
tsutik *num.* eleven.
tsuttean *adj.* filling (of food).
tsɔwŋ *num.* fifteen.
tsɔwŋ *n.* full moon.

/tɕʰ/

tsʰa *n.* heat of a fire.
tsʰa: *n.* knowledge.
tsʰak *n.* fodder (especially prepared for animals).
tsʰak- *v. intr.* to stop (intr.).
tsʰaks- *v. intr.* to grow, to bear fruit, to become pregnant.
 ↪ **tsʰaks-** *v. mid.* to grow, to bear fruit, to become pregnant.
tsʰaktsi *n.* earring for men (small).
tsʰakwŋ *n. hon.* hand gesture of blessing.
tsʰam *n.* devil dance.
tsʰam- *v. intr.* to dance a mask dance.

tsʰapsken *n.* kettle for *tsʰaŋ*.
tsʰat- *v. intr.* to be exhausted.
 ↪ **tsʰats** *n.* exhaustion.
tsʰatɕʰat *adj.* poor, torn.
tsʰatkja *n.* promise.
tsʰatŋa *adj.* wretched.
tsʰatpa *n.* punishment.
tsʰe- *v. tr.* to warm up (tr.).
 ↪ **tsʰes-** *v. mid.* to warm up.
tsʰejtunŋa *adj.* lukewarm (of food).
tsʰejtuntunŋ *adj.* lukewarm (of food).
tsʰej *adj.* warm, hot.

- təherpa** *n.* spleen.
təheṭi *n.* water (warm).
təhewa *n.* mauler.
təhiga *n.* saddle.
təhigel *adv.* abroad.
təhil- *v. tr.* to choose.
təho- *v. tr.* to dye (wool etc.).
təhoj *adj.* healthy.
təhojboj *adj.* healthy.
təhok *adj.* enough.
təhok- *v. intr.* to be allowed to do something.
təhoks *n.* kind of religious ceremony.
təhoks *n.* direction.
təhol- *v. tr.* to pestle crops, to beat up and down.
təholgjan *n.* pestle.
təholo *n.* dice.
təhoms- *v. intr.* to be ornamented, to be prepared in a nice way.
təhoṅs- *v. intr.* to jump.
↳ **təhoṅs-** *v. mid.* to jump.
təhorten *n.* stupa.
təhos *n.* religion.
təhos- *v. intr.* to become healthy, to become strong.
təhot- *v. tr.* to offer (to gods).
təhot *n.* spraying of food and drinks into the air as an offering before eating and drinking.
- təhot-** *v. intr. hon.* to eat, to drink.
təhotkjan *n.* altar.
təhotme *n.* butter lamp.
təhotpa *n.* offering of dough.
təhoṭa *n.* knots of carpets and shawls.
təhu *n.* water.
təhu- *v. tr.* to fetch, to collect.
↳ **təhu-** *v. mid.* to fetch, to collect.
təhuba *n.* traditional dress of men.
təhuk- *v. intr.* to land.
təhulgjan *n.* mole.
təhumik *n.* fountain.
təhumpḥjar *n.* waterfall.
təhupəot *n.* stones on a rosary.
təhuput *n.* consecrated water.
təhun- *v. tr.* to bind around, to tie, to knot.
↳ **təhuns** *n.* binding wire, twig of young trees used to bind together heaps of firewood.
təhur- *v. tr.* to milk.
təhurlaps *n.* wave.
təhurpe *n.* dry cheese.
təhuskol *n.* water (boiled).
təhuta *n.* riverbank.
təhuto *n.* beak.
təhutsi *n.* plaited stand of hair.
təhutsḥot *n.* watch.
təhwa *n.* funeral ceremony.

/dz/

- dza** *n.* tea.
dzabra *n.* foot (of cups).
dzak *n.* fat (liquid).
dzak *n.* urine.
dzakkju *n.* chain.
dzakpa *n.* lasso, noose.
dzal- *v. intr. hon.* to visit.
dzalta *n.* command, order.
dzalu *n.* kind of pot.
- dzam** *n. hon.* soup.
dzami *adj.* smooth.
dzaṅ- *v. tr. hon.* to build, to erect.
dzaṅ *n.* north.
dzaṅ- *v. intr.* to get used to something.
dzar *n.* mortar bowl.
dzar- *v. tr.* to eat up, to clean.
↳ **dzars-** *v. mid.* to shave.
dzardun *n.* mortar.

dzatdzat *adj.* oval.
dzatsak *n.* tea sieve.
dzathəŋ *n.* black tea.
dzaw *n.* lame person.
dzawaj *adj.* lame.
dzəkdaŋ *n.* hatred.
dzəlsa *n.* festival.
dzert- *v. intr.* to rise.
dzɛi *num.* four. (T)
dzikt- *v. mid.* to collapse (of walls).
dzili *n.* light.
dzili *adj.* bright.
dzɪpɔdzɪp *adj.* blurred.
dzɪptɕu *num.* forty. (T)
dzoks *n.* shape, manner.
dzokstɕan *adj.* skillful.
dzoli *n.* bag (worn on back).

dzom- *v. tr. hon.* to cremate.
dzonta *n.* horse (for riding).
dzordzor *adj.* jutting (of ears).
dzot- *v. intr.* to sit, to sit down, to stay, to remain, to live.
dzu- *v. tr.* to digest.
dzu *n.* lips.
dzu- *v. tr. hon.* to request.
dzu *n.* greeting gesture (with one hand held against the forehead).
dzuks- *v. intr. hon.* to sit.
dzuŋ *n.* middle.
dzuŋ *adv.* straight ahead.
dzur- *v. tr.* to debranch.
dzut- *v. intr.* to be weak.
dzwalt- *v. mid.* to break off and hang down.

/ɲ/

ɲa *n.* fish.
ɲa *n.* nose ring (for animals).
ɲa- *v. tr.* to borrow.
ɲa *n.* gift given to the bride.
ɲasa *n.* meat (dried).
ɲakspu *n.* pubic hair.
ɲamlən *n.* experience.
ɲampo *adv.* together.

ɲartsɪ *n.* pea.
ɲoŋ- *v. tr.* to experience, to suffer.
ɲos- *v. intr.* to clear up (sky).
ɲugu *n.* pen, reed-pen.
ɲuktsɪ *n.* monkey.
ɲuŋ- *v. tr.* to swallow.
ɲuŋskar *n.* mustard.
ɲurtsɪ *n.* herbal plant with strong smell.

/t/

tabar *n.* family.
taɕiθaliŋ *n.* prayer flag.
takpo *adj.* strong, powerful.
taktak *adj.* dried up (of bread), hard, arrogant.
taŋska *n.* number.
tawna *adj.* deaf.
tawo *adj.* similar.
tel *n.* care.

tivi *n.* TV. (E)
toktoktsɪ *n.* elbow.
tol- *v. tr.* to explain.
toŋs- *v. hon.* to die.
toŋtoŋbujan *n.* bumble bee.
topi *n.* hat. (IA)
tops *n.* ear piercing.
tulku *n.* reincarnation.

tumtsi *n.* bud.

/tʰ/

tʰakluŋ *n.* anger.

tʰampa *adj.* hard-working.

tʰaw *n.* teapot.

tʰi *n. hon.* seat of high lamas.

tʰikna *adj.* sure.

tʰikspa *n.* gall bladder.

tʰikʂin *n.* migraine.

tʰimkʰaŋ *n.* court.

tʰimpon *n.* judgement.

tʰims *n.* judgement.

tʰolu *n.* hammer (small).

tʰopa *adj.* similar.

tʰot- *v. intr.* (1) to fit well, to suit.
(2) to be delivered.

tʰul *n.* demon, specter.

tʰultan *n.* sitting pillow, sitting mattress.

tʰums *n.* grief.

tʰuŋs- *v. hon.* to be born.

tʰup- *v. tr.* to be able, to accomplish.

tʰutəu *n.* fodder (food rests for animals).

/d/

də *n.* enemy.

də *n.* sound, word.

dəmpak *n.* mud.

dəmpakbu *n.* earth worm.

dəndə *adv.* equally.

dəŋdəŋ *adj.* full, satiated.

dəpna *adj.* big (flat things).

dətpa *n.* brain.

dəwa *n.* money.

dəmdəm *adj.* pondering.

dik- *v. intr.* to be suitable, to be appropriate.

↳ **diks** *n.* agreement.

dik *adj.* okay, suitable.

dilu *n.* bell used in ceremonies.

din *adj.* middle, medium (in size).

dipʰuk *n.* cave for meditation.

dju *n.* mule.

djiwa *n.* lamp.

doksa *n.* pasture land.

domba *n.* (1) blacksmith, goldsmith.
(2) Lohar (ethno-linguistic community of Indo-Aryan origin).

dən *n.* non-religious festival.

dənpo *n.* guest, customer.

dəŋdəŋ *adj.* deep.

dos- *v. mid.* to discuss.

doteə *n.* type of deep-fried pastry.

du *n.* edge, corner.

dubak *n.* gun.

duəiŋ *n.* match.

duk *num.* six. (T)

dukan *n.* corner (of walls).

dukbotsi *n.* sixth finger.

dukteəu *num.* sixty. (T)

dundo *n.* domestic animal.

dup- *v. tr.* to finish, to complete.

dwa *n.* taste.

- ta-** *cop.* possessive copula.
- ta** *n.* vein.
- tabap** *n.* platform to dismount from a horse.
- tago** *n.* door of a courtyard.
- tak-** *v. tr.* to stick, to stab, to pierce, to support.
- ↳ **taks** *n.* pillar.
- tak** *n.* tiger.
- tak** *n.* omen.
- tak- ~ taks-** *v. intr.* to smell (intr.).
- ↳ **taks** *n.* smell.
- taka** *adj.* sure.
- takar** *n.* axe.
- ta^kj** *adj.* medium (of saltiness / spiciness).
- taks** *n.* gift, present.
- taktsi** *n.* bundle, bunch.
- tal** *pron.* 3SG.
- taltsak** *n.* whip.
- tamak** *n.* cigarette.
- tambu** *n.* tent.
- tamjan** *n.* bad talking.
- tampa** *n.* board for cutting food.
- tampo** *adj.* reliable, firm.
- tams-** *v. intr. hon.* to be born.
- tan-** *v. tr.* to wake up (tr.).
- tanpo** *adv.* carefully.
- tant-** *v. intr.* to see.
- antan** *adv.* definitely, surely.
- tangata** *n.* offensive behavior.
- tanjar** *n.* threshold.
- tap-** *v. tr.* to fold, to bend, to bring back.
- tapcatapca** *adv.* again and again.
- tapna** *adj.* same, similar.
- taps** *n.* slope.
- tar-** *v. intr.* to do, to be industrious.
- tara** *n.* fence (for animals).
- tarakna** *adj.* proper.
- tarbanjs** *n.* excrements of horses and donkeys.
- tark^ha** *n.* manner, way.
- tart-** *v. intro.* (1) to be free.
(2) to behave wild.
- tasta** *n.* spatula used to turn *kekir* and *lwar*.
- tat-** *v. tr.* to prepare, to put, to distribute.
- tatmo** *n.* festival.
- tatna** *adj.* small, low.
- tattat** *adj.* small, low.
- teama** *n.* aunt (mother's oldest sister).
- teawa** *n.* uncle (father's oldest brother).
- tebu** *n.* snake.
- tedzi** *adj.* big, honest.
- tek** *n.* untanned hide of a cow.
- tela** *n.* oil.
- temdel** *n.* favorable circumstances, auspicious occasion.
- temna** *adj.* still, motionless.
- tempa** *n.* trap.
- temrel** *n.* blessing.
- temtem** *adj.* brimful.
- ten-** *v. tr.* to worship, venerate.
- tentsi** *n.* cushion.
- tepanbotsi** *n.* thumb.
- tepna** *adj.* wretched.
- teptep** *adj.* plain, flat.
- tet- ~ tets-** *v. intr.* to think.
- tets** *n.* thought, thinking.
- tete** *n.* grandfather.
- tibril** *n.* teapot.
- tik-** *v. tr.* to close (tr.).
- ↳ **tiks-** *v. tr.* to close (intr.).
- ↳ **tiks** *n.* lid.
- tika** *n.* *bindī*, dot of red color worn between the eyebrows. (IA)
- tiki** *num.* one.
- tikna** *quant.* little, few (of liquid objects).

tikpa *n.* testicles.
tikpa p^hon- *v. tr.* to castrate.
tinan *n.* Tinan Valley.
tinankat *n.* Tinan language.
tinanpa *n.* person from Tinan Valley.
tinji *adj.* blue/green.
tinpipili *n.* green chili.
tip- *v. tr.* to beat.
tiptsi *n.* tip, top, peak.
tiskar *n.* thirst.
tispu *n.* mill.
tit- *v. intr.* to irrigate.
tjal k^het- *v. tr.* to swim.
tjo- *v. intr.* to weep.
to- *v. tr.* to dress (with a cap) (tr.).
↳ **to-** *v. mid.* to dress (with a cap) (refl.).
to- *v. tr.* to lead.
to- *v. tr.* to beat a drum.
toba *n.* haste, hurry.
tok- *v. tr.* to recognize.
tok- *v. tr.* to take off (clothes) (tr.).
↳ **tok-** *v. mid.* to take off (clothes) (refl.).
tok- *v. tr.* to pluck.
toka *adv.* only.
tokna *adj.* correct, right.
tokom *n.* saddlecloth, colorful sitting carpet.
toks- *v. intr.* to be called.
tol- *v. tr.* to pierce.
tolmo *n.* crossbreed between bull and yak (female).
tolpo *n.* crossbreed between bull and yak (male).
ton- *v. tr.* to lift up.
tondz^uksla *n.* 11th month of the traditional calendar.
tonpa *n.* teacher.
tont^hok *n.* crops, harvest.
tonj *num.* thousand. (T)
tonpa *adj.* empty.
torma *n.* idol of evil spirits.
tot *n.* Tod valley.

tot- *v. intr.* to be affected by.
totpa *n.* person from Tod Valley.
totsi *n.* turban.
tottok *adv.* up the valley.
tra- *v. mid.* to sunbathe.
trak- *v. tr.* to scratch.
tral- *v. tr.* to tear (tr.).
trap *n.* bridle (to ride).
tre *n.* fermenting agent.
trinmo *n.* demon, specter (female).
trinpo *n.* demon, specter (male).
trok *n.* life.
troks- *v. intr.* to become frightened.
trons *n.* jewelry for the ear.
tru- *v. tr.* to light, to kindle (electric light and fire),
↳ **tru-** *v. mid.* to burn (intr.) (of electric light and fire)
truj *num.* six.
truk- *v. tr.* to knead.
trukna *adj.* together.
truks *n.* sweat.
trwa *n.* purse worn around your neck.
trwan- *v. tr.* to hang (tr.), to hang up.
tu- *v.* to light, to kindle (wood, candles)
↳ **tus-** *v. mid.* to burn (of wood, candles).
tuk- *v. tr.* to sew.
tuk *n.* parasitic worm living on sheep.
tukak *n.* red stone.
tukt- *v. mid.* to drip (from a full vessel).
tul *n.* dust.
tul- *v. tr.* to tame, to teach manners.
tum- *v. tr.* to sweep.
tum- *v. tr.* to assemble.
tumtsi *n.* berry.
tun- *v. tr.* to inhale.
tunik *adj.* short.
tunj- *v. intr.* to drink.
tunji *adj.* thick (flat things).
tup- *v. tr.* to cut.
turt- *v. intr.* to shake, to tremble.

twā- *v. intr.* to mow.

↳ **twas** *n.* harvest.

twan- *v. tr.* to borrow, to lend.

twaski sla *n.* month of harvest.

/tʰ/

tʰadzu *dem.* that.

tʰadzun *dem.* there.

tʰaj *dem.* up there.

tʰak- *v. tr.* to break (tr.).

tʰaksa *n.* weaving comb.

tʰaksa kʰet- *v. tr.* to batten (loom).

tʰakpa *n.* rope.

tʰaks- *v. intr.* to get ready.

tʰaks *adj.* ready.

tʰakʰap *n.* needle (big).

tʰalt- *v. mid.* to pass, to elapse.

tʰamathome *adj.* careless.

tʰami *dem.* down there.

tʰan *adv.* today.

tʰansun *adv.* this year.

tʰan *adj.* plain.

tʰan *n.* (1) plain.

(2) grazing grounds.

tʰan- *v. tr.* to see.

tʰap *n.* fire-place, hearth.

tʰapa *n.* Indian, person of Indo-Aryan origin.

tʰaptsan *n.* kitchen.

tʰar- *v. tr.* to forge, to beat metal.

tʰara *dem.* that other.

tʰaran *dem.* in that other place.

tʰaskat *n.* Hindi language.

tʰat- *v. intr.* to be happy.

tʰat- *v. tr.* to drop, to take down, to fell (trees).

↳ **tʰats** *n.* pleasure.

tʰat̚sa *n.* shepherd's camp in the high mountains. (IA)

tʰat̚sak *n.* seam.

tʰatin *n.* surrounding area.

tʰe *dem.* this.

tʰek- *v. tr.* to be able to carry, to be able to endure.

tʰe=lek *dem.* as much as this.

tʰempa *n.* stairs (made of stone).

tʰentsuk *dem.* this kind of, such.

tʰep- *v. tr.* (1) to catch.

(2) to check a herd of cattle for missing animals.

tʰetsoms *n.* doubt.

tʰi- *v. mid.* to melt, to dissolve.

tʰi: *adj.* (1) liquid.

(2) wet.

tʰikma *n.* tie-dye.

tʰiktsi *n.* crossbeam (small).

tʰil *n.* bottom, ground.

tʰin- *v. tr.* to take, to accept.

tʰip- *v. mid.* to fight, to quarrel.

tʰipna *adj.* dedicated, devoted.

tʰir- *v. tr.* to send (a person).

tʰjot- *v. intr.* to weep (pl.).

tʰohit *n.* notebook.

tʰoj *adj.* high.

tʰok *n.* ceiling.

tʰok- *v. intr.* to leak, to drip.

tʰok- *v. tr.* to announce.

tʰoktset *n.* story (of a building).

tʰombu *n.* ladle (big & cylindric).

tʰon- *v. tr.* to finish, to complete.

tʰon *n.* room.

tʰon *adv.* inside.

tʰopna *adj.* without giving thought.

tʰopo *n.* cup.

tʰopthop *adj.* mentally retarded.

tʰor- *v. tr.* to pour into (big vessels).

tʰos- *v. intr.* to be high.

tʰotpa *n.* skull.

thruŋ- *v. tr.* to nourish.
thu *n.* spittle.
thuk- *v. tr.* to crash into, to bounce against.
thukdzæ *n.* help, favor.
thukpa *n.* noodle soup.
thuktak *n. hon.* prophecy.
thum- *v. tr.* to wrap.
 ↪ **thums** *n.* wrapping.

thun *n.* meditation.
thunt- *v. intr.* to agree, to become friends.
thurgop *n.* headstall.
thurtsʰes *n.* waning phase of the moon.
thuru *n.* foal.
thwa- *v. tr.* to beg.
thwa *n.* hammer (big).

/d/

da- *v. tr.* to give.
da *adv.* now.
dagam *n.* arm's length (traditional length measure).
daka *n.* long and cylindric double-sided drum.
dakpo *n.* husband.
daksam *adv.* now.
dakt- *v. mid.* to break (*intr.*).
dal *n.* slowness.
daltok *adv.* slow, late.
dam- *v. tr.* to choose.
dampo *adj.* tight.
dan *n.* belly, stomach.
dana *n.* Manali.
dangjaks *adv.* in six days.
dang *n.* meadow.
danra *n.* cow shed.
danta *adv.* still.
daps *n.* side.
dar *n.* mountain ridge.
darpotʰe *n.* big prayer flags.
dart- *v. intr.* to emerge, to develop.
dartsook *n.* prayer flag on house roofs.
dartsa *n.* pan.
daru *n.* ladle (wooden).
da:stok *adv.* meanwhile.
dat- *v. intr.* to fall down.
datɕi *n.* pruning knife.
datle *adv.* right now, just now.

datpa *n.* belief, trust.
dawa *n.* Monday.
dej *adj.* beautiful, pleasant.
demtsi *n.* bridge (small).
densa *n.* pity.
deŋ- ~ deŋs- *v. intr.* to believe.
 ↪ **deŋs** *n.* belief.
deŋme *n.* belief.
depna *adj.* flat, plain (of land).
det- *v. intr.* to lead.
dik *n.* vase-shaped pot.
dikpa *n.* sin.
dikparatsa *n.* scorpion.
diksak *n.* sister-in-law.
dilak *adv.* on the right side of a valley (when looking downstream).
diŋski *adv.* always.
dip- *v. tr.* to tear down (roof).
dipt- *v. mid.* to collapse (of roofs) (*intr.*).
dir *n.* bolt, bar.
dirt- *v. intr.* to thunder.
djara *n.* season, period.
djwak *adv.* two days ago.
dok *n.* color.
dok waŋs- *v. intr.* to become successful, to become healthy.
dokmet *adj.* weak.
doktsi *n.* handle (of agricultural instruments).
dolam *n.* pair of kettle drums.

dole *n.* oval metal bowl.
dolt- *v. intr.* to be torn, to be pierced.
dolt- *v. mid.* to be torn, to be pierced.
dom *n.* bear.
dom- *v. mid.* to be busy.
don- *v. intr. hon.* to eat.
donthak *n.* skills of managing.
donbo *n.* log.
donmo *n.* churn.
dopna *adj.* plain, pure, uncooked.
dorok *adj.* free, for free.
dot- *v. intr.* to meet, to touch.
dralt- *v. mid.* to be torn.
dran- *v. tr.* to miss.
dras- *v. tr.* to chase away.
dril- *v. tr.* to roll out.
drilu *n.* bell (used for rituals).
du *n.* cloud, fog.
du- *v. tr.* to collect, to gather.
duban *n.* front leg (of animals).
duk *n.* poison.
duk- *v. tr.* to touch, to put together.

dukpo *n.* traditional dress of women.
dumbu *n.* small pieces.
dun *num.* seven. (T)
duntəu *num.* seventy. (T)
duntsar *n.* small bowl used for ceremonies.
dunthak *n.* week.
dupam *adv.* simultaneously.
duŋ *n.* pestle.
duŋ *n.* conch shell.
duŋal *n.* mourning.
duŋrutsi *n.* vitiligo.
dupa *n.* ancestor.
dupdup *adj.* blunt, edgeless.
dupna *adj.* blunt, edgeless.
dur- *v. mid.* to compete, to take on.
durek *adv.* earlier, before.
durna *adj.* running (of nose).
dutəi ~ duteuman *adv.* in front of, before.
dutpa *n.* knot.
dwan *adv.* two years ago.

/n/

na *n.* oath.
nak *n.* pus.
naka *n.* kind, sort.
naksa *n.* picture.
na^{kj} *adj.* flexible.
naksa *n.* ink.
nalma *n.* yarn.
nam *n.* sky.
nam *n.* daughter-in-law.
namdo *n.* meteorite.
namdzuk *n.* future, time to come.
namgan *n.* new moon.
namlans *n.* ritual performed in the early morning on a wedding day by the *qomba* (Lohar).
nams- *v. intr.* to burn off.

namtsamtsim *n.* dusk, twilight.
nan- *v. tr.* to press.
nan- *v. tr.* to bury stocks of food.
nan- *v. tr.* to control, to seize control of.
naŋ *n.* inside.
naŋdzin *adj.* like, similar.
naŋrek *adv.* into, inside.
naŋs *n.* thought, notice.
naŋsmettok *adv.* suddenly.
naŋtəi *adv.* inside.
naŋtsi *n.* bracelet.
napti *n.* mucus.
nas- *v. intr.* to be sick.
naspati *n.* pear. (IA)
nateŋma *n.* young woman.

natpa *n.* sick person, patient.
ne- *v. tr.* to rub in, to tan.
nego *n.* pilgrimage in holy years.
nej *adj.* thick (of liquids).
nek *adv.* last year.
nekor *n.* pilgrimage.
neme *adj.* tasty.
nen *n.* relative.
nenepunje *n.* Buddhist fasting festival.
nerpa *n.* manager of a monastery.
ni *num.* two. (T)
nieu *num.* twenty. (T)
nidza *num.* twenty.
nidzi *num.* seven.
nil *n.* gums.
nimaphet *n.* noon.
nimbu *n.* lemon. (IA)
nin *n.* daytime.
ninmun *adv.* day and night.
niŋ- *v. tr.* to rub oil into hair (tr.).
 ↪ **niŋ-** *v. tr.* to rub oil into hair (refl.).
niŋdzes *n.* compassion, pity.
niŋrus *n.* effort, industry.
niŋs *n.* wish.
nira *n.* afternoon.
nirma *n.* wrinkle.
nisdap *adj.* double.

niskinj *num.* two.
nispi *num.* two (for human beings).
nit- *v. mid.* to wither.
nitsi *n.* sun.
noj *quant.* (too) much, (too) many.
nomo *n.* sister (younger).
noŋs- *v. intr.* to be spoilt, to be destroyed.
nor *n.* jewelry.
norbu *n.* jewel.
nort- *v. intr.* to be confounded.
noskjal *n.* harm.
nospok *n.* truth.
not- *v. intr.* to be harmful.
notpa *n.* harm.
nubin *adv.* in two years.
nuj *adj.* new.
nu=lek *dem.* as much as that.
num *n.* oil.
num *adj.* greasy, oily.
num- *v. tr.* to smell.
numaŋ *n.* jade.
nuntsuk *dem.* that kind of, such.
nun *dem.* there.
nup *n.* west.
nupar *n.* cream, milk skin.
nusgjak *dem.* on that day.
nwa:stok *adv.* at that time.

/p/

pak- *v. tr.* to measure.
pak- *v. tr.* to put cow dung on a wall.
pakbu *n.* caterpillar.
paksgormo *n.* big cup (used in ceremonies).
paldzarak *n.* stones used to cover a roof.
pan- *v. mid.* to fly.
pan- *v. tr.* to scare away animals.
pant- *v. intr.* to spin.
paŋ *n.* spindle.

paŋkreks *n.* (1) hook (of a spindle).
 (2) kneecap.
paŋpo *n.* witness.
paŋs *n.* meadow.
papu *n.* sock.
pardaŋ *n.* excitement.
parget *n.* belt.
pari *adj.* wide, broad.
parindza *n.* bow-string.
parka *n.* will power.

paru *n.* small box.
pat *n.* letter. (IA)
paṭakna *adv.* immediately.
pawla *n.* shoe.
pe- *v. tr.* to pick up.
peltsi *n.* milk.
pera *n.* basket (carried with hands).
pes *n.* divination.
petal *n.* plate. (IA)
petsa *n.* book.
petsun *n.* father's sister's husband.
petse *n.* twins.
pi: *num.* four.
pil- *v. tr.* to sieve, to sift.
piltsi *n.* sift.
pimik *n.* hip, hip joint.
pin- *v. tr.* to fill, to load, to stuff.
pipili *n.* chilly. (IA)
piri *n.* border of a field.
pispiś *n.* engorgement.
pistok *n.* barter among relatives.
pitaŋ *n.* door.
piti *n.* Spiti.
pitikat *n.* Tibetan variety of Spiti.
pitsi *n.* rope (thin).
pjak- *v. tr.* (1) to hide (*tr.*).
 (2) to bury.
pjar- *v. tr.* to attach, to fix, to glue.
pjar- *v.* to winnow.
pjatsi *n.* bird.
pjonpjontsi *n.* uvula.
pju- *v. tr.* to see off, to drop (a person).
 ➞ **pju-** *v. mid.* to see off, to drop (a per-
 son).
pjutsi *n.* mouse, rat.
po- *v. tr.* to soak.
polqo *n.* ball.
pon *n.* artist, painter.
porotsi *n.* heap of grain in fields.
portsi *n.* navel.

- pha-** *v. tr.* to spray, to scatter.
phaḡu *n.* vagina.
phak- *v. tr.* to fuck.
phakphjas *n.* secret.
phala *n.* ploughshare.
phalanpjatsi *n.* bat.
pham- *v. tr.* to defeat.
phan- *v. intr.* to sew.
↳ **phans** *n.* seam.
phan- *v. intr.* to be beneficial, to be effective.
phandilbaṭi *n.* kind of pot.
phanḡu *n.* arrowhead.
phantsipa *n.* tailor.
phanthoks *n.* benefit.
phanphañ *adj.* light (of hollow things).
phañs *n.* sorrow.
phañs- *v.* be sorry, be miser.
phap- *v.* take down.
phardut *n.* knot.
phasna *adv.* suddenly.
phasta *adv.* by chance.
phat *n.* bag.
phat- *v. tr.* to undo, to free from a chain.
phatilbaṭi *n.* pot.
phel- *v. tr.* to increase, to multiply.
phen- *v. tr.* to pour out, to empty, to spill.
phet *n.* half.
phet- *v. tr.* to make a path in the snow.
phetarak *n.* (1) forehead.
(2) luck.
phetse ama *n.* aunt (mother's 2nd youngest sister).
phetse awa *n.* uncle (father's 2nd youngest brother).
phetsetsi *adj.* young (babies and small children).
phetṭel *adj.* half-done, half-finished.
- phi** *n.* outside, surface.
phi: *adv.* late.
phik- *v. tr.* to fuck.
philak *adv.* outside.
phimpa *n.* felt.
phinañ *adv.* inside and outside.
phirek *adv.* abroad, outside.
phiro *n.* night.
phisa *n.* feces.
phitok *n.* evening.
phitokdzun *n.* late evening.
phja- *v. intr.* to speak.
↳ **phjas** *n.* talk.
phja *n.* marmot.
phjar- *v. tr.* to raise, to lift up.
phjormo *adj.* pretty.
phjorpo *adj.* handsome.
phju *n.* fart.
phjukpo *adj.* rich.
phoj *adj.* moist.
phok- *v. intr.* to be hurt.
phokara *n.* donkey (male).
phokhju *n.* dog (male).
phon- *v. tr.* to twist, to take out.
phot *n.* dried stuff.
phot- *v. tr.* to dress (with a shirt) (tr.).
↳ **phot-** *v. mid.* to dress (with a shirt) (refl.).
↳ **phots** *n.* clothes.
photsomo *n.* hermaphrodite.
photsi *n.* idol made of flour.
phra *n.* rosary.
phrak- *v. tr.* to dismantle partially.
phral- *v. tr.* to separate.
phran- *v. tr.* to turn over.
phrek- *v. tr.* to cause to slide down in small portions (of hay, earth, etc.).
phremalik *n.* butterfly.

phrenna *adj.* standing in a row.
phrenphrenj *adj.* lying in a row.
phrettok *adv.* horizontal.
phri- *v. tr.* to take away, to diminish.
phrin *n.* message.
phrips *n.* sneezing.
phu *n.* puff of air.
phu- *v. tr.* to push.
phu *n.* big pot used for the distillation of liquor.
phu lot- *v. tr.* to blow (out).
phuk *n.* cave, hole in surfaces.
phuk *adj.* narrow.

phul- *v. tr. hon.* to present, to offer.
phulgobi *n.* cauliflower. (IA)
phuli *n.* nose piercing.
phundzi *adj.* hot (burning).
phunŋi *n.* water (hot).
phunŋ *n.* bundle of wool (not rolled up).
phunŋpo *n. hon.* dead body.
phup *n.* shield.
phur- *v. tr.* to shake.
phurpa *n.* dagger for ceremonies.
phus *n.* stroke, blow.
phut- *v. intr.* to be frostbitten.
phwa *n.* stomach.

/b/

ba *n.* wall.
baæi *n.* mixed breed of cow and yak.
bajaks *adv.* in three days.
bak *n.* mask.
bakæatsi *n.* deep-fried bread.
baklok *n.* party held one year after the wedding ceremony and organized by the bride's family.
bakma *n.* bride.
baksken *n.* first night of the bridal couple.
bakston *n.* wedding.
bakta *n.* period, time. (IA)
baktʰuk *n.* glue.
baktʰitpa *n.* best man.
bala *n.* rose.
balbo *n.* Nepal.
balpa *n.* frog.
balteonŋ *n.* lizard.
balŋi *n.* bucket. (IA)
bamt- *v. mid.* to become insane.
ban- *v. tr.* to construct.
bande *n.* cow that does not give milk (because of pregnancy or sickness).
banŋʰa *n.* share of heritage.
banŋ *n.* foot.

banbotsi *n.* toe.
banŋa *n.* marihuana.
bangjap *n.* dorsum of the foot.
banŋthil *n.* sole.
bap- *v. intr.* to be forced to do.
baps- *v. intr.* to come down.
↳ **baps-** *v. mid.* to come down.
baptsa *n.* socks (short).
bar- *v. intr.* (1) to bloom.
(2) to flame (up).
bar *adv.* often, sometimes.
barawa *n.* uncle (father's middle brother).
barbargunŋ *adv.* often, sometimes.
bardo *n.* trouble, hardship.
barlak *n.* gap.
barlakkunŋ *adv.* sometimes.
bart- *v. mid.* to come undone.
bartsa *n.* spear.
bat *n.* bark.
batak *n.* root.
batsi *n.* (1) skin.
(2) leather.
baŋi *n.* pot.
baŋo *n.* goat (male).

bawa *n.* goiter.
be *n.* rock.
bema *n.* sand.
bent- *v. intr.* to be spilled.
 ↪ **bent-** *v. mid.* to be spilled.
berjberj *adj.* unconscious.
berjna *adj.* unconscious.
berbu *n.* trousers.
berka *n.* stick, threshing flail.
berkjak *n.* excrements of birds.
bertsot *n.* naughty child, rascal.
bes *n.* mutual help.
bes- *v. mid.* to help one another.
bet *n.* brother (younger).
bet- *v. tr.* to add.
bete *n.* child, baby.
beṭa *n.* Mon, traditional musicians and petty-traders travelling in around in North India.
bidzil *n.* electricity. (IA)
bik *adj.* full.
bila *n.* cat. (IA)
biṇ- *v. intr.* to become full.
biṇ *n.* years (of age).
bitsi *n.* thread.
bjaj *adj.* thin (of flat things), light (of alcohol).
bjak- *v. intr.* to hide oneself.
bjanmo *n.* wife.
bjantṣa *n.* piece of wood used in the distillation of arak.
bjart- *v. mid.* to be attached to, to stick to.
bjonbjon *adj.* dangling.
bjonṇa *adj.* dangling.
bohik *n.* Tibetan script.
boj *adj.* thick (of long things), fat.
bok *n.* undulating part of a path.
bokbok *adj.* undulating (long distance).
bokna *adj.* undulating (short distance).
bolpotsi *n.* excrements of goats and sheep.
bolok *n.* cow dung.

bont- *v. mid.* to become twisted.
bont- *v. mid.* to start going.
bor *n.* shrub.
bora *n.* bag.
bortsa *n.* shrub.
boskat *n.* Tibetan language.
bospa *adj.* vain.
bot *n.* Tibet.
boti *n.* whey.
botkjuṇ *n.* Tibet.
botsi *n.* finger.
botsibi *n.* index finger's breadth (traditional length measure).
boṭul *n.* kind of pot.
boṭhak *n.* index finger's breadth (traditional length measure).
brak *n.* (1) rock.
 (2) wall.
brak- *v. tr.* to arrange, to tie up.
brakna *adj.* shining (sun).
brakteṣhal *n.* echo.
bralt- *v. mid.* to break off and fall down.
brant- *v. mid.* to fall.
braṇbraṇ *adj.* full, satisfied.
braṇṣikpa *n.* tick-like insect.
braṇsa *n.* apartment, dwelling place.
braṇsi *n.* honey.
braṇsibujan *n.* honey bee.
braṇsibupa *n.* bee-keeper.
braṇsitsṣaṇ *n.* bee hive.
bras *n.* rice.
bras- *v. mid.* to disperse, to separate.
braw *n.* buckwheat.
brawmjosla *n.* 7th month of the traditional calendar.
brekt- *v. mid.* to slide, to slip.
brēl- *v. tr.* to join together, to intertwine.
bret- *v. intr.* to slip.
bril- *v. tr.* to include.
brilbril *adj.* shapeless.
bris- *v. tr.* to write.

bro- *v. tr.* to mix.

↳ **bro-** *v. mid.* to interact

broks- *v. intr.* to rise (of water level).

bromolalatsi *n.* rainbow.

bronj- *v.* make fun of.

↳ **brongs-** *v. intr.* to prance, to romp.

↳ **brongs-** *v. mid.* to banter, to tease one another.

bru- *v. tr.* to rub, to clean.

bruk *n.* dragon.

bruk- *v. intr.* to overflow, to boil over.

brut- *v. intr.* to wipe off.

bu *n.* insect.

bu juk- *v. mid.* to become foggy.

bubu *n.* owl.

bujanj *n.* fly.

bul *n.* log, firewood (big pieces).

bulon *n.* loan, debts.

bultʰuk *n.* stripes of dough put into soup.

bumpa *n.* cup for religious offerings.

bumskʰor *n.* annual ceremony in Keylong for a good harvest.

buŋ *n.* ankle.

bunjs- *v. intr.* to inflate due to chilblain.

bup- *v. intr.* to stumble.

bur *n.* ear of grain.

buras *n.* silk.

but- *v. tr.* to put, to place, to leave.

butsa *n.* boy, son.

buʈa *n.* tree.

bwa *n.* bubble.

/m/

ma *n.* boil, ulcer.

mabap *n.* bad talk.

mak *n.* fog.

makpa *n.* bridegroom, son-in-law.

makʰa *n.* wound (healing).

mal *n.* place.

malams *n.* laziness.

mama *n.* breast (female).

mamo *n.* sheep (female).

mamoj *adj.* wild growing.

man *n.* medicine.

mane *n.* stone carved with mantras.

manedunḡjur *n.* payer mill (big).

manelakkʰor *n.* prayer mill (small).

mankʰaŋ *n.* hospital.

manpʰot *n.* spices.

mantei *n.* medical plants.

maŋbala *n.* wild rose (red).

maŋbuj *adj.* dark red.

maŋdu *n.* red sky at morning, afterglow.

maŋi *adj.* red.

maŋs *n.* dream.

mapdza *n.* peacock.

mar *n.* butter.

maraj *adj.* bad.

marap *adj.* bad.

marbotsi *n.* index finger.

marɕik *adj.* different.

mardej *adj.* ugly.

mardzwa *n.* tsampa dish made from tsampa, butter and tea.

marektsi *n.* tick-like insect.

masa *n.* bed.

mat *n.* lower valley.

mataj *adj.* poor.

mathem *n.* threshold.

me *n.* fire.

meɕiŋ *n.* firewood.

melaps *n.* flame.

melok *n.* Pattan Valley.

melokkat *n.* Pattani language.

melokpa *n.* person from Pattan Valley.

meluŋ *n.* hearth.

meme *n.* monk.
mentok *n.* flower.
mentsi *n.* lump of dough.
mert- *v. intr.* to become bright.
metɕi *adv.* lower (in a seating arrangement), a little downwards.
metɕun *n.* mother's brother's wife.
metsaksa *n.* vessel for hot ash.
mewa *n.* mole, birthmark.
mi- *v. mid.* to think about, to reflect.
mijul *n.* earth.
mik *n.* eye.
mik- *v. tr.* to count.
mik tshaps- *v. mid.* to wink (eyes).
mikbur *n.* painful infection of the eye.
mikkʰa *n.* evil eye.
mikpa *n.* horseshoe.
mikpho^{kj} *n.* evil eye.
mikra *n.* glasses.
mikrutsʰam *n.* eyebrow.
miks *n.* story.
mikspu *n.* eyelash.
mikti *n.* tear.
miktsi *n.* (1) eye of a needle.
 (2) eye of a millstone.
min *n.* name.
mint- *v. intr.* to ripen.
mintɕan *n.* famous.
mingjaks *adv.* in two days.
mir *n.* milk skin.
mirkja *n.* lay-man.
mitsʰe *n.* life.
mjaj *adj.* low.
mjan- *v. tr.* to taste.
mjo- *v. intr.* to plough.
mjonba *n.* shaman, medium.
mjon *adv.* downstairs.
mjosla *n.* 6th month of the traditional calendar.
mjun *n.* brother.

mo- *v. tr.* to roast.

munsi *n.* teacher. (IA)

mok- *v. tr.* to cut hair (tr.).

↳ **mok-** *v. mid.* to cut hair (refl.).

mokali *n.* turnip.

mokara *n.* donkey (female).

moksa *n.* mushroom.

moktsi *n.* boil.

mokṭa *n.* bowl used to make *momok*.

mok^hju *n.* bitch.

molam *n.* prayer.

momok *n.* dumplings.

moms *n.* satisfaction.

moms- *v. intr.* to become full, to become satiated (from drinking).

mot *n.* face.

moṭor *n.* car, truck. (E)

mu *n.* snow.

mudarsa *n.* school.

mudjwak *adv.* three days ago.

mudwaŋ *adv.* three years ago.

muk *n.* desire.

mukpa *n.* fog.

mukpoj *adj.* dark blue, brown.

mul *n.* silver.

muli *adj.* dark in color, greyish.

mulmul *adj.* lukewarm (liquids).

mulna *adj.* lukewarm (liquids).

mundak *n.* darkness.

munpa *n.* in dark night.

munphet *n.* midnight.

munt- *v. intr.* to get unconscious.

muntsi *n.* field (small).

mur murs- *v. mid.* to grumble.

murt- *v. intr.* to snore.

musulqu *n.* big pestle (used to separate grain and husk).

mutik *n.* flea.

mutik *n.* pearl.

mutshā *n.* moustache.

/ts/

tsak- *v. tr.* to put inside.

tsakatsoke *adj.* in small pieces.

tsalatsele *adj.* fuzzy.

tsani *adj.* (1) pointed.

(2) burning hot.

tsanisla *n.* 3rd month of the traditional calendar.

tsap- *v. tr.* to cut into pieces, to work on wood (of a carpenter).

tsaps *n.* yeast.

tsaptsap *adv.* sometimes.

tsar- *v. tr.* to lay down, to lay out.

tsarkha *n.* spinning wheel.

tseu *n.* religious festival, "Devil Dance".

tseltsel *adj.* round.

tsemet *n.* girl.

tsiknan *n.* swearing.

tsimta *n.* tongs.

tsir- *v. tr.* to squeeze out.

tsirtsir *n.* drizzle.

tsitsi *n.* child.

tsok- *v. tr.* to pick, to carve.

tsokbotsi *n.* index finger.

tsokna *adj.* cross-legged.

tsokse *adj.* alike, similar (for animates).

tsokskjoj *n.* span from the thumb to the index finger (traditional length measure).

tsoms *n.* courtyard.

tson *n.* onion.

tsonna *adj.* upright.

tsontson *adj.* upright.

tsopna *adj.* slight.

tsuk- *v. tr.* to begin, to plant, to educate.

tsuk- *v. tr.* to dress (with trousers) (tr.).

↳ **tsuk-** *v. mid.* to dress (with trousers) (refl.).

tsukna *adv.* straight, directly.

tsukskisla *n.* 1st month of the traditional calendar.

tsuktuk *n.* sitting carpet (thin).

tsum- *v. tr.* (1) to seize, to hold, to catch.
(2) to chase.

tsums *n.* handle.

tsuna *quant.* few, little (solid objects).

tswar- *v. tr.* to strew, to scatter.

/tsh/

tsha *n.* salt.

tshak *n.* sieve.

tshak- *v. tr.* to filter.

tsha^{kj} *adj.* useless.

tshaks *n.* trouble.

tshaks el- *v. intr.* to be disarticulated, to be dislocated.

tshal- *v. tr.* to split, to saw.

tshale *n.* glaze.

tsham *n.* (1) fur of goats and sheep.
(2) wool.

tshamik *n.* chilly.

tshamo *n.* sister-in-law.

tshams *n.* retreat.

tshan *n.* resin.

tshan- *v. tr.* to throw away, to drop.

tshan *n.* nest, burrow, den, cobweb.

tshani *adj.* all.

tshaps *n.* aim, goal.

tshaps *n.* substitute.

tshas *n.* garden.

tshaskan *n.* flower bed.

tshat *n.* fever.

tsʰat *n.* limit.
tsʰatpa *n.* heat.
tsʰattʰattok *adv.* from time to time.
tsʰaw *n.* brother-in-law, nephew.
tsʰe *n.* life.
tsʰek *adj.* filthy, dirty.
tsʰengjaks *adv.* in five days.
tsʰepa *n.* calendar's day.
tsʰer *n.* sadness.
tsʰer- *v. intr.* to be sad.
tsʰeril *n.* tsampa pills.
tsʰikpa *n.* anger.
tsʰikspa *n.* joint.
tsʰims- *v. intr.* to become full, to become satiated (from eating).
tsʰir *n.* turn.
tsʰo *n.* lake, sea.

/dz/

dza- *v. intr.* to eat.

dzakdzak *n.* backache.

dzaktsi *n.* coiling.

dzak^haj *n.* storeroom for food.

dzambuliŋ *n.* universe.

dzamenliksa *n.* kitchen.

dzampa *n.* bridge.

dzanare *quant.* very many, very much.

dzanɟzan *n.* insincere refusal.

dzanɟi *adj.* (1) sharp.
(2) holy.

dzanɟpo *adj.* clear, good.

dzanɟs- *v. intr.* to get dark.

dzanɟsma *n.* copper.

dzanɟstar *n.* tripod (made of iron).

dzaradzore *n.* stumps (of cut off branches), tree trunk.

dzat *n.* barley.

dzat- *v. tr. hon.* to do, to make.

dzaw *n.* friend.

dzeba *n.* small cracks in wall.

dzomo *n.* crossbreed between yak and cow (female, 1st generation).

dzomraŋs *n.* meeting, festival.

dzonjdzon *adj.* long (of manufactured things).

dzonjs *n.* gift of money for newly married couples.

dzopo *n.* bull (castrated).

dzorabare *adj.* meaningless, without any reason.

dzordzor *adj.* standing out (of nails, branches, etc.).

dzordzor *n.* bulge.

dzorna *adj.* standing out (of nails, branches, etc.).

dzot *n.* store-room.

dzot- *v. intr.* to resist.

dzuk *n.* pain, sickness.

dzuk- *v. tr.* to begin.

dzuks *n.* body.

dzult- *v. intr.* to bark.

dzumdzum *n.* uneasy feeling.

dzunji *n.* pair.

dzural *n.* vent on the sides of a *dukpo* (traditional dress).

dzuṯhu *n.* plait.

dzwa *n.* bucket.

/j/

ja- *v. tr.* to serve (drinks and liquid food).

ja *n.* bad food.

ja: *adv.* yesterday.

jak *n.* yak.

jaks- *v. intr.* to make fun of, to talk badly.

jamtsʰan *adj.* strange, different.

janthondok *adv.* surrounding.

jan- *v.* to serve (solid food).

jan- *v.* to draw (sword), to strike out.

janji *adj.* light (in weight)

janla phok- *v. intr.* to get a sunburn.

janphet *num.* quarter.

janjsken *n.* dinner.

janstok *adv.* last night.

janṯete *n.* great-grandfather.

janṯhek *n.* roof top.

jap- *v. tr.* to split (with a saw).

jarap *adj.* noble, well-behaved.

jartok *adv.* above.

jartshes *n.* waxing phase of moon.

jas *adv.* right(side).

jato *n.* friend, help.

jathem *n.* upper doorframe.

jen- *cop.* equative copula.

jo- *v. tr. hon.* to cook.

joj *adj.* askew.

jok- *v. tr.* to buy.

jok- *v. tr.* to keep.

jokmo *n.* servant, slave (female).

jokpo *n.* servant, slave (male).

joldzi *n.* early afternoon.

jolt- *v. intr.* to fade.

jomjom *adv.* back and forth.

jon *adv.* left(side).

jondak *n.* head of a household (male).

jondakmo *n.* head of the household (female).

jorok *adv.* upstairs.

jos- *v. intr.* to become drunk.

↳ **jos** *n.* drunkenness.

jot- *v. intr.* to get lost.

jot- *v. tr.* to lose.

jotsei *adv.* higher (in a seating arrangement), a little bit upwards.

ju- *v. tr.* to grind.

juṯi *n.* tsampa (roasted flour).

juj *adj.* old (of things).

juk- *v. tr.* to throw away, to throw down, to roll (stones).

jukna *adv.* right now, immediately.
jul *n.* country, village.
juparan *n.* turquoise stone.
jur *n.* water channel.

juspa *n.* whistling.
justa *adv.* for a short while.
jwanj- *v. intr.* to grow up.

/r/

ra- *v. intr.* to come.
rabarobe *adj.* rough.
raša *n.* goat meat.
raši *n.* rope (thick).
ragan *n.* brass.
ral *n.* roasted barley flower used to thicken soups.
ral- *v. tr.* to dissolve (of liquids) (tr.).
ralak *adv.* on the left side of a valley (when looking downstream).
ralđi *n.* sword.
ramne *n.* consecration.
ran *n.* hard snow on which one can walk.
ra:na *adj.* often coming.
rant- *v. intr.* to weave.
ranğa soso *pron.* each their own.
ranđsi *n.* sleeve.
ras *n.* cloth (made of cotton), towel.
ratsi *adv.* other side.
rařabul *n.* mill wheel of a water-mill.
rawa *n.* hoof.
re *n.* umbilical cord.
reks- *v. intr.* to shiver.
rektsi *n.* kernel.
reks *n.* shivering, trembling.
rek^holak *n.* earwax.
remo *n.* line.
repak *n.* Triloknath.
rere *pron.* each.
retsi *n.* ear.
rewa *n.* hope.
ri *n.* (1) avalanche.
(2) glacier.
ribonj *n.* rabbit.

ridaks *n.* game, wild animals.
rik- *v. tr.* to fetch, to bring.
rik *n.* field.
rikdanlenipa *n.* farmer.
rintšenbu *n.* spider.
riŋ- *v. intr.* to tell, to say.
ritš^haŋ *n.* crevasse.
ro *n.* corpse, dead body.
ro- *v. tr.* (1) to roast.
(2) to cremate.
rol *n.* furrow.
rolaŋs *n.* zombie.
rolmo *n.* cymbals.
ronğa *n.* bean.
ronj^haŋ *n.* cremation ground.
ronj^haŋme *n.* funeral pyre.
ropdakpa *n.* carrier of the dead body during a funeral.
ropotsi *n.* musk deer.
roptšan *adj.* arrogant.
roras *n.* shroud.
rotsō *n.* horn.
rotsok *n.* hayloft.
rotsi *n.* plank.
ruk- *v. tr.* to chew.
↳ **ruks** *n.* cud.
ruks nilt- *v. mid.* to chew the cud.
rult- *v. intr.* to rot.
rup- *v. mid.* to crowd, to come together.
rus *n.* lineage, clan.
rus- *v.* to be destroyed by a flood.
ruspa *n.* bone.
rut *n.* flood.

rwak- *v. intr.* to graze (*intr.* / *tr.*).

↳ **rwak-** *v. mid.* to graze (*intr.*).

rwaksa *n.* grazing ground.

rwaktsi *n.* shepherd.

rwal- *v. mid.* to doze off.

rwanj *n.* mountain pasture.

//

la *n.* goat (female).

la *n.* reed.

la *n.* moon.

la *n.* mountain pass.

la *n.* speed of walking.

ladaks *n.* Ladakh.

laja *n.* month.

lajoks *n.* sin.

lak *n.* hand.

lak- *v. tr.* to lick.

laksa *n.* leg of animals.

laksup *n.* glove.

lakgjap *n.* back of the hand.

la^kj *adj.* thin (of long things).

lakma *n.* leftovers (eatable).

laks- *v. intr.* to be lost.

laks- *v. intr.* to grow well, to thrive.

lakskor *n.* millstone.

lakthil *n.* palm (of hand).

lala *n.* song.

lala thir- *v. tr.* to sing.

lalatsi *n.* goat (young).

lam- *v. tr.* to rinse.

lam- *v. mid.* to like, to enjoy.

lam- *v. tr.* to fry.

lama *n.* Lama, monk.

lama *n.* sheep (female).

lan *n.* air, wind.

lan *n.* answer.

lan da- *v. tr.* to answer.

lanj- *v. tr.* to sell.

lanj *n.* fire wood (medium sized pieces).

lanj *n.* manure, dung.

lanj- *v. tr.* to raise (of fermenting agent).

↳ **lanjs-** *v. intr.* to rise (of leaved dough),
to become alive (of zombies).

↳ **lanjs-** *v. mid.* to rise (leaved dough).

lanjsa *n.* beef.

lanjsi *n.* sourdough for *lwar* after resting.

langjak *n.* branch.

lanjesla *n.* 5th month of the traditional
calendar.

lanpotshe *n.* elephant.

lanjsa *n.* vapor.

lanjsi *n.* bull.

lanjo *n.* bull.

lap *n.* leaf.

lap *n.* lightning.

lapdza *n.* advice.

lapsi *n.* handkerchief.

laphjar *n.* avalanche falling over a
precipice.

lardze *n.* doctor.

lare *n.* centipede.

larlar *adj.* slippery.

las *n.* price.

lasap *n.* ring (for finger).

lasmi *n.* woman.

lati *n.* saliva.

latmo *n.* imitation, fake.

latsi *n.* mountain peak.

lathot *n.* crown.

law *n.* sheep shed, goat shed.

le *n.* tongue.

lebala *n.* wild rose (yellow).

lej *adj.* yellow.

lek- *v. tr.* to change, to transfer.

leks *n.* village, valley.

lekspa *n.* villager.
lekwartum *n.* egg yolk.
len *n.* work.
lenipa *n.* worker.
lenmi *n.* worker.
lent- *v. intr.* to work.
lep- *v. tr.* to reach, to arrive.
lepteandok *adv.* upside down.
let- *v. tr.* to teach.
letsok *adj.* envious.
li *n.* bronze.
li: *adj.* heavy.
liəi *n.* cardamom seeds.
lik- *v. tr.* to do, to make.
limbuṭa *n.* pine tree (Himalayan pine).
linḍa *adj.* naughty, faulty.
liṅs *n.* hunt.
liṅṭhan *n.* island.
lis- *v. intr.* to freeze.
lis *n.* (1) ice.
 (2) egg white.
lo *n.* calendar year.
lo *n.* mattress.
lo *n.* south.
lodzuṅ *adv.* every year.
loj *adj.* easy.
lok- *v. tr.* to read, to study.

lok *n.* lightning.
lok- *v. mid.* to climb up.
lo^kj *adj.* sick, weak, incapable.
lokos *n.* curse.
lomna *adj.* soft (solid).
loṅ- *v. mid.* to vomit.
loṅ *n.* free time.
lops- *v. intr.* to become accustomed.
lorke *n.* brass pot.
lot- *v. tr.* to say.
lotok *n.* crops.
luḱea *n.* mutton.
lukna *adj.* moist.
luks *n.* custom.
lumpa *n.* side valley.
luṅ *n.* autumn.
luṅ *n.* depression.
luṅ *n.* breath.
luṅtabar *n.* prayer flag.
luṅṭei *n.* last grass in autumn.
lus- *v. intr.* to fall behind, to be left over.
 ↳ **lus-** *v. mid.* to be stuck.
lutsi *n.* calf.
lwar *n.* omelet made from sourdough.
lwat- *v. tr.* to forget.
 ↳ **lwats-** *v. intr.* to be forgotten.
 ↳ **lwats-** *v. mid.* to be forgotten.

/ɕ/

ɕa *n.* meat.
ɕabu *n.* maggot.
ɕadza *n.* water pipe.
ɕaj *n.* mustard.
ɕak- *v. tr. hon.* to immerse.
ɕakbuṭa *n.* birch.
ɕal- *v. intr.* to suffer from diarrhea.
ɕal *n.* diarrhea.
ɕama *n.* afterbirth.
ɕandum *n.* muscle ache.

ɕanpa *n.* butcher.
ɕaṅ *adj.* eagerly.
ɕaṅ tsak- *v. mid.* to watch eagerly.
ɕaṅdzi *n.* old woman.
ɕaṅdzi *adj.* old (of women).
ɕaṅji *adj.* old (of animals).
ɕaṅku *n.* wolf.
ɕaṅmo *adj.* clever (of women).
ɕaṅpo *adj.* clever (of men).
ɕaṅs *n.* old age.

- saŋs-** *v. intr.* to grow old.
↳ **saŋs-** *v. mid.* to grow old.
- saŋtean** *adj.* noticing.
- saŋte** *n.* old man.
- saŋte** *adj.* old (of men).
- saportsi** *n.* hangnail.
- sar** *n.* east.
- sarba** *n.* young man.
- sarba** *adj.* young (of men).
- sarna** *n.* cattle shed.
- sarul** *n.* scar.
- sas** *n.* tenure.
- sat-** *v. tr.* to narrate.
- sat-** *v. tr.* to clean water channels.
- satgju** *n.* story.
- satpa** *n.* explanation.
- sawa** *n.* deer.
- səl** *n.* summer.
- səlgo** *n.* glass.
- səlkar** *n.* crystallized sugar, *mišrī*.
- selsa** *n.* room used in summertime.
- sema** *n.* queen.
- semteuŋ** *n.* princess.
- sen-** *v. tr.* to raise.
- ↳ **sens-** *v. mid.* to rise, to get up.
- set** *n.* power, strength.
- set-** *v. intr.* to flee, to steal away silently.
- settean** *adj.* strong.
- sei:** *adj.* white.
- sik-** *v. tr.* to tear down (walls).
- sika** *n.* net.
- silti** *n.* rain.
- sindat** *n.* hard work.
- siŋ** *n.* timber.
- siŋkan** *n.* carpenter.
- sipi** *n.* Chanaḷ (ethno-linguistic community of Indo-Aryan origin).
- sirkaṭak** *n.* coarse-grained sand.
- siskarapa** *n.* idol prayed to in wintertime.
- sit-** *v. mid.* to die.
- soṣa** *n.* heart.
- sok-** *v. tr.* to dress (with underwear) (tr.).
- ↳ **sok-** *v. mid.* to dress (with underwear) (refl.).
- soksum** *n.* shirt.
- sokpa** *n.* wing, feather.
- sor-** *v. tr.* to miss, to drop.
- sot** *n.* lunch.
- sotees** *n.* acidity, eructation.
- sotni** *n.* late afternoon.
- su** *n.* blood.
- su-** *v. tr.* to skin.
- subu puk-** *v. mid.* to become chapped (of skin).
- sugu** *n.* paper.
- suk-** *v. tr.* to comb (tr.).
- ↳ **suk-** *v. mid.* to comb (refl.).
- sukṣu** *n.* demon statue.
- sukṣuk** *adj.* difficult to tame (of young horses).
- sukna** *adj.* (1) thin (of long things).
(2) in a hurry.
- sukpuk** *n.* dirt under your skin.
- suktsi** *n.* comb.
- sukur** *n.* apricot (dried without kernel).
- sukutsi** *n.* willow twigs for fire.
- sul** *n.* dregs.
- sul-** *v. tr.* to rinse.
- sulgjut** *n.* flour.
- sum** *n.* secret visit of a boy to a girl's room at night.
- sun** *n.* nail (finger).
- sundut** *n.* knot.
- suŋisūŋi** *n.* snuffle.
- sup-** *v. tr.* to push together, to telescope.
- sups** *n.* (1) cover.
(2) sheath.
- surbuṭa** *n.* cedar.
- suri** *adj.* sour.
- surtum** *n.* slingshot.
- surum** *n.* tweed (made of wool).
- swakna** *adj.* good (in taste).
- swant-** *v. intr.* to rest.

/ʃ/

ʃak *n.* shame, shyness.

ʃaŋs *n.* horse.

ʃaŋspa *n.* horseman.

ʃap- *v. tr.* to ford.

ʃet- *v. intr.* to laugh.

↳ **ʃets** *n.* laughter.

ʃi- *v. tr.* to roll up (a ball of threads).

ʃik *n.* louse.

ʃim *n.* arrow.

ʃimtsaŋ *n.* the distance of an arrow shot (traditional length measure).

ʃin *n.* epilepsy.

ʃinbu *n.* tapeworm.

ʃiŋ *n.* sister.

ʃip *n.* rib.

ʃok- *v. tr.* to send (letters, etc.).

ʃol *n.* narrow passage, corridor.

ʃot- *v. intr.* to set (sun).

ʃot *n.* sunset.

ʃu- *v. tr.* to ask.

ʃu kʰet- *v. tr.* to churn.

ʃul- *v. tr.* to drive.

ʃunt- *v. intr.* to guard.

↳ **ʃunt-** *v. mid.* to wait.

ʃuŋ- *v. tr.* to observe.

ʃutsi *n.* nit.

ʃwantsi *n.* pigeon.

/s/

sa *n.* earth, ground.

sa *n.* pulse.

sagun *n.* seed.

sak *n.* (1) breath.

(2) vapor.

sak- *v. tr.* to store, to put aside.

sak tʰin- *v. tr.* to breathe.

sakjat *n.* land.

saksak *n.* grasshopper.

sal- *v. tr.* to make space, to clear away.

salbaŋ *adj.* bare-foot.

samen *n.* stock, things stored.

sampa *n.* crops.

san- *v. tr.* to repair, to fix.

saŋʒur *n.* incense made of pine trees.

saŋgul *n.* earthquake.

saŋji *adj.* pure (in a religious sense).

saŋma *n. hon.* food.

saŋna *adj.* well (physical condition).

saŋsasaŋ *n.* centipede.

sapsap *adj.* burning (of eyes).

sar *n.* wick (made of cotton).

sarka *n.* road.

sasa *adj.* different.

sat *n.* indigenous deities of Lahaul.

se- *v. tr.* to recognize.

sej *adj.* dirty.

sekor *n.* dirty dishes.

sem *n.* heart, mind.

sem *n.* barrel.

sembura *n.* pomegranate.

ser *n.* gold.

ser *n.* time(s).

serna *adj.* avaricious.

set- *v. intr.* to ride.

sew *n.* apple. (IA)

si *n.* butter fat (liquid).

signal *n.* big cymbals.

singe *n.* lion. (IA)

sipi *n.* pipe, flute.

sirikna *adj.* all, everything.
siruk *n.* interest, care.
siske *n.* bundle of thin sticks used to stir soup.
so- *v. tr.* to cool down (tr.), to turn off.
 ↳ **sos-** *v. intr.* to cool down (intr.).
soj *adj.* cold.
sok- *v. tr.* to fit in, to push in.
sol *n.* onyx.
sol *n.* grain of crops.
soldza *n. hon.* tea.
solpon *n.* cook.
soltak *n.* table.
sonam *n.* merit.
sonna *adv.* slightly.
sonpo *adj.* alive.
sonsna *adj.* idle.
sont- *v. intr.* to be alive, to survive.
sops- *v. intr.* to heal (intr.).
 ↳ **sops-** *v. mid.* to heal.
sotekdzi *adj.* careful.

soti *n.* water.
su *pron.* who?.
su- *v. tr.* to wash (tr.), to give a shower.
 ↳ **su-** *v. mid.* to wash (refl.), to take a shower.
su- *v. tr. hon.* to welcome.
suk- *v. tr.* to move.
sul *n.* plait, fold, wrinkle.
sum *num.* three. (T)
sumi *num.* three.
sums *n.* boredom.
sunj *n. hon.* teaching.
sunj- *v. tr. hon.* to say, to teach.
sur *n.* weed.
suri *n.* larva living inside the nasal cavity of cattle.
surmo *n.* pick-axe (small).
sursla *n.* 8th month of the traditional calendar.
surt- *v. intr.* to weed.
swa *n.* tooth.
swal *n.* coal

/h/

ha *n.* sweets.
ha: go- *v. tr.* to understand.
ha: las- *v. intr.* to be astonished.
habar *n.* common land of a village.
halam *adv.* some, quite.
haldi *n.* saffron.
halda *n.* traditional festival held on new year.
hambu *n.* cow.
han *pron.* 2SG.
handan *adj.* deaf-mute.
handu *n.* pot for boiling liquids.
haŋi *n.* shop, market, bazaar. (IA)
hek *n.* vulture.
hel- *v. tr.* to take away, to bring away.

helata *adv.* for the time being.
hen- *v. tr.* to hear, to listen, to obey.
henak *dem.* like this, in this manner.
hikuk *n.* hiccup.
hiŋ *pron.* 1PL.EXCL.
hit *n.* memory.
hosmej *quant.* very much, very many, extremely.
hoptsen *n.* stirrup.
hot *n.* light.
honak *dem.* like that, in that manner.
hukna *adj.* very tasty.
hun *n.* news, information.
hura *n.* ram.

/a/

abi *n.* grandmother.

adzəŋ *n.* uncle (mother's brother, father-in-law, wife's/husband's brother (only appropriate if elder than wife/husband)).

ajna *quant.* much, a lot.

ak *n.* mouth.

aka *n.* excrements.

akap^huktsi *n.* ass hole.

aks *n.* edge, blade.

aks tak- *v. tr.* to call.

aku *n.* uncle (father's sister's husband).

al- *v. tr.* to open (tr.).

↳ **als-** *v. tr.* to open (intr.).

alkjotsi *n.* chin.

along *n.* earring.

alts^ham *n.* beard (chin).

am- *v. intr. hon.* to come.

ama *n.* mother.

ama kjuktsi *n.* aunt (mother's youngest sister).

amaawa *n.* parents.

amdzambaŋi *n.* kind of pot.

amphet *n.* middle of a road.

amt- *v. mid.* to walk.

amtsi *n.* road, way, path.

ane *n.* aunt (father's sister, mother-in-law, wife's/husband's sister).

aŋ- *v. tr.* to filter butter.

aŋmik *n.* snow blindness.

aŋtean *adj.* bossy, arrogant

apa *n.* grandmother.

apskor *n.* beard (full).

apu *n.* sister (second oldest).

arak *n.* alcohol.

arəi *n.* glass, mirror.

artsi *n.* kind of grass used to make traditional shoes.

aru *n.* (1) potato.

(2) testicles.

ats^he *n.* sister (oldest).

ats^henomo *n.* sisters.

ats^ho *n.* brother (oldest).

ats^hobet *n.* brothers.

atuk *n.* newborn (male).

aw *n.* kiss.

awa *n.* father.

awa kjuktsi *n.* uncle (father's youngest brother).

/i/

i *n.* lynx.

ika *pron.* when?.

indzi *pron.* herself, himself, oneself.

ini *pron. hon.* you.

ini *pron.* yourself.

ingi *pron.* myself.

ips *n.* shape.

ipsa *n.* room for sleeping.

ipt- *v. mid.* to sleep.

↳ **ipts** *n.* sleep.

is *n.* big, flat pan used to fry barley.

itbiŋ *pron.* how many years?.

itsaik *pron.* how many?.

itgjak *pron.* how many days?.

/u/

uks *n.* soul, breath.

ukstuks *n.* heavy breathing.

umdzat *n.* performer of funeral rites.

utə^huŋ *n.* performer of funeral rites
(substitute for *umdzat*).

/e/

eana *adj.* often going.

el- *v. intr.* to go.

epo *adj.* good.

eraŋ *pron.* 1PL.INCL.

etek *n.* kind of bird.

/o/

obar *n.* hole in the floor / in the ceiling to
go up and down.

ok *n.* boulder.

oræk *adv.* in one year.

orok *n.* Adam's apple.

oron *n.* snack (eaten with alcohol).

otə^hak *n.* early morning.

otəi *adv.* tomorrow.

otok *adv.* in the future.

/wa/

waj *adj.* far (away).

wajak *adv.* on the next day.

wal *n.* shovel (wooden).

wampu *n.* bear.

wan- *v. tr.* to take out, to unload,
to bring out.

wanjs- *v. intr.* to come out, to drip out,
to leak.

waŋ *n.* blessing.

war *n.* belching.

war- *v. tr.* to fence in.

↳ **wars** *n.* fence.

warna *n.* animal sacrifice.

warpa *n.* hearth.

wart- *v. intr.* to belch.

waru *n.* pot to boil liquids.

watəu *n.* drainage on the roof.

watsi *n.* ball (of threads)

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